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Pat Wood, III
Chairman

Judy Walsh
Commissioner

January 12, 1999

Honorable Members of the Seventy-Sixth Texas Legislature:

We are pleased to submit our 1999 Report on the Scope of Competition in Telecommunications Markets, as required by Section 52.006 of the Public Utility Regulatory Act (PURA).

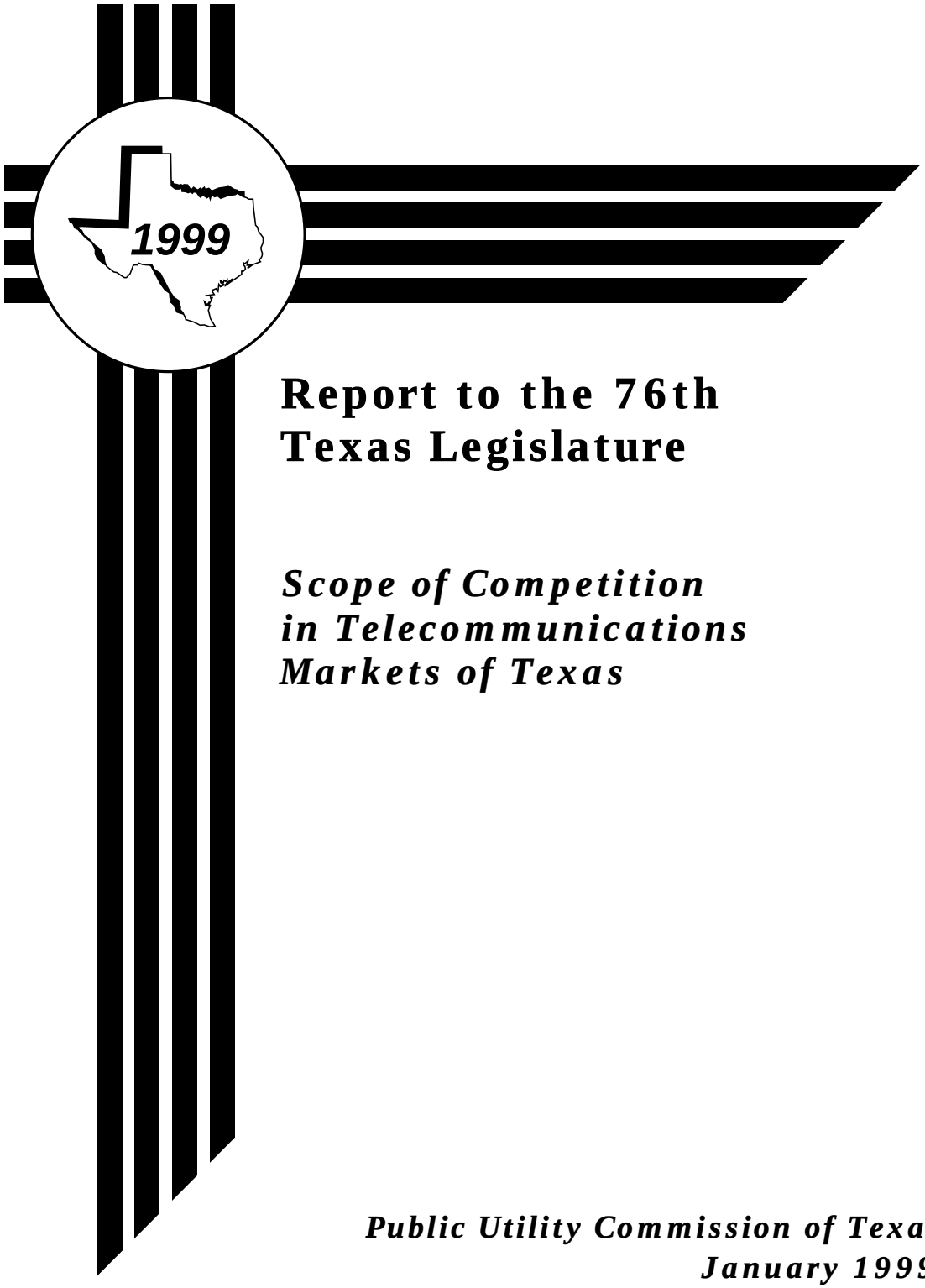
Since we issued our previous report on telecommunications competition in January 1997, the Commission has continued to make significant progress in managing the transition to competitive local telecommunications markets. Although progress has been made toward accomplishing our mission, our job is not yet finished.

We anticipate that during this legislative session, certain sections of PURA addressing telecommunications policy will be revisited based on our collective experience with the transition to competition since 1995. We hope that the information contained in this report will assist you in meeting your public-policy objectives. If you need additional information about any issues addressed in the report, please call on us.

Sincerely,

Pat Wood, III
Chairman

Judy W. Walsh
Commissioner



Report to the 76th Texas Legislature

Scope of Competition in Telecommunications Markets of Texas

Public Utility Commission of Texas
January 1999

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EXECUTIVE SUMMARY

The *1999 Report on the Scope of Competition in Telecommunications Markets of Texas* provides a detailed discussion of telecommunications issues with corresponding actions taken by the Public Utility Commission of Texas (PUCT or Commission). This executive summary will discuss the major issues that have developed as we move to a more competitive market in all telecommunications services, as well as policy issues the Legislature may wish to consider.

FOSTERING COMPETITION IN THE LOCAL EXCHANGE MARKET

Both the 1995 revisions to the Public Utility Regulatory Act (PURA) and the federal Telecommunications Act of 1996 (FTA) mandated that the monopoly in local exchange service be opened to competition. Incumbent providers (principally Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated (GTE-SW)), as mandated by these two acts, must allow other companies to interconnect with their phone networks and buy facilities from them. These steps are critical for competitors to solicit customers with the assurance that they will receive quality service.

During the past two years, the Commission has spent an enormous amount of resources arbitrating interconnection agreements between incumbents (SWBT and GTE-SW) and potential competitors (AT&T Communications of the Southwest, Inc. (AT&T), MCI Telecommunications Corporation (MCI), Sprint Communications Company, L.P (Sprint), and a host of smaller companies). Even though the statutes mandated that these companies negotiate agreements, there was little incentive for the incumbents to negotiate the terms of very complex agreements that, in the end, would allow others to begin to take their customers away. These very detailed arbitrated agreements between SWBT and major competitors were completed, then appealed, and just recently affirmed by federal district court. The GTE-SW agreements remain on appeal.

Many potential competitors have been granted licenses to provide service in the local market. The actual level of competition in the market, and the number of customers who have a realistic choice of provider, however, is limited. One of the most difficult and contentious issues has been developing an operations support system (OSS) that ensures the ability of competitors to use their computers to communicate with the incumbent company's computers. A working OSS system is necessary so that orders can be processed electronically rather than manually, and so that customers choosing a competitor can be connected with the same quality as the incumbent company provides. The good news is that much progress has been made; SWBT's computer systems will be tested in the early part of 1999. As a result, the level of competition should increase in the future. It is still uncertain, however, when the level of competition will be sufficient both to provide most customers a choice and discipline prices.

In 1995, the Legislature determined that the local market should be opened to competition. As part of the compromise, legislation allowed the incumbent local companies to elect to cap their rates, and prohibited the Commission from reducing their rates for four years. The expectation was that, by the time the rate freeze ended, the market would be sufficiently competitive that prices would be disciplined without regulation. To date, competition has been slow to develop. For calendar year 1997, incumbent providers such as SWBT and GTE-SW had greater than a 98% market share by any significant measure (access lines or revenues, residential or business). During the period of time that rates have been frozen, the demand for second lines, voice mail, caller ID and other customized services has burgeoned. Because of the rate freeze, and the growth in subscribership for services, during 1997 SWBT earned $288 million in excess of a traditional regulated profit, and GTE-SW overearned by $22 million.

The 1999 legislative session marks the end of the four-year rate cap. The major issue for consideration is whether there is sufficient competition in the market today to discipline prices, and to provide a real opportunity to switch providers if prices are high or service is not good. For prices and service quality to be disciplined, there must be sufficient competition to do the job; otherwise, regulation is necessary to control prices when a near-monopoly continues to exist.

Current law provides sufficient tools for the Commission to remove regulation when the monopoly power no longer exists. The 1995 revisions to PURA set up a "basket" structure that permits service-by-service and market-by-market deregulation where and when competition develops. For example, today business local service in Houston is a Basket I (regulated) service. Some competition is already being seen in this particular service, so it is possible that under current law Houston business lines could be moved to Basket III (competitive), while residential services remain regulated until sufficient competition exists in that market.

COMPETITION IN THE LONG-DISTANCE MARKET

The long-distance market has a number of large and small competitors; customers do have a choice of providers, and many service packages to choose from. The major issue in long-distance competition has been whether SWBT has met the qualifications to provide long-distance service in its own territory in Texas. The Federal Communications Commission (FCC) will make this decision, but the Texas Commission provides a letter of recommendation when, in its opinion, all the conditions have been met. There is a 14-point checklist that must be met, and also a public interest standard. Most of the conditions concern whether the local market is irreversibly open to competition.

To date, six petitions have been filed at the FCC by Bell companies in other states. While these had received the recommendation of their respective state commissions, none of the petitions has met all of the FCC's standards.

On March 2, 1998, SWBT filed such an application with the Texas Commission. On May 23, 1998, after lengthy hearings, the Commission found that SWBT had met

some of the conditions, but not all of them. SWBT was invited to participate in a collaborative process to work through all of the issues, so that the Commission could then send an affirmative letter of recommendation to the FCC. That collaborative process is nearing an end, a majority of the issues have been cleared, and specific requirements are set out to resolve all other issues. Testing of SWBT's OSS system to make sure it works remains a big issue. The best test would be for large competitors to enter the market and process a volume of real orders; however, that has not yet happened. In order to move the process forward, the Commission, in consultation with an independent consultant, is designing a test for the OSS. The goal is to have the test completed in the first quarter of 1999; if the OSS systems work, and the other remaining issues have been resolved, the Commission can write a letter of recommendation to the FCC. Barring unforeseen difficulties, this process should be complete by mid-year 1999.

UNIVERSAL SERVICE FUND (USF) AND ACCESS CHARGES

Most Texans have seen the advertisements that "It costs more to call from Midland to Marfa than from Midland to Honolulu." It is true that the access charges are higher on calls within Texas (about 12-13 cents/minute for SWBT and GTE-SW) than for calls to someone outside Texas (about 2-5 cents/minute). Access charges are paid by long-distance companies to local companies for handling each long-distance call. Long-distance companies pass through these costs to their retail customers.

Of the total 12 cent/minute rate, the actual cost of providing access (the use of switching and transport) is about 1 cent/minute. The 11 cent/minute difference falls into three other categories: (1) universal service support for rural Texas, (2) residential local rate support, and (3) additional profits.

Unlike electric rates, which are usually closely linked to the underlying cost of the service, local and long-distance telephone rates have historically been set with certain policy objectives in mind. Chief among these has been the universal provision of affordable service to higher cost, rural areas of Texas, where the actual cost of providing service can exceed $100/month per line. A certain amount of the revenue recovered through access charges has been used by local telephone companies to offset these high costs of serving rural Texans. Identifying the level of this revenue has been the focus of the Commission's Universal Service Fund (USF) project discussed below.

Another principal objective of historic rate design has been the maintenance of low local residential rates in all parts of Texas, both urban and rural. (Texas residential rates are around 70% of the national average). Allocating some of the local telephone company's costs to access rates also helped attain this objective.

Finally, since current access rates were set many years ago, it is likely that access rates also include additional profits to the local companies. In 1995, these rates were frozen for four years by certain revisions to PURA. The Legislature may wish to address the appropriate level of intrastate access charges in 1999.

Driven by the need to ensure that future competition does not adversely affect infrastructure investment in rural Texas, the Commission and interested parties have spent considerable time in the past year identifying the approximate level of high-cost, rural support that exists in telephone rates today. Consistent with state and federal law, the goal of this process has been to remove this support from being borne only by long-distance customers and to spread the responsibility for high-cost, rural support evenly across the industry, including new competitor companies. Addressing this problem resolves the concerns about the potential negative impact competition may have on the provision of universal service in rural Texas. Although the current level of competition has not yet placed these revenue streams under notable stress, it is important to rural Texans and rural phone service providers that there be certainty for future investment decisions in advance of competition. The USF also provides a genuine fiscal incentive to new companies to invest in rural parts of Texas that otherwise may be uneconomic to serve.

In the USF project dealing with the four largest local exchange companies, the Commission has identified, by specific geographic area, the amount of subsidy that would be required for each residential and small business phone line in high-cost areas. This annual sum is approximately $360 million. Consistent with PURA, the USF program must be revenue neutral. In other words, any local company receiving subsidy money from the USF must reduce its access rates (or other rates) by an equal amount. The access-rate reduction for USF will vary by company, based on its proportion of rural lines (the greater the percentage of rural lines, the greater the access reduction).

The access charge is paid by the customer's long-distance company to the local companies on either end of the long-distance call. It is not paid directly by the customer. For that reason, the Commission has been interested in ensuring that any reductions in access charges are passed through to all customers. But, because the rates of long-distance companies are not regulated in Texas, the Commission cannot mandate that those companies flow through these access-charge reductions equally to all customers. The three largest long-distance companies have indicated to the Commission and to the Legislature that they would flow through the total amount of access charge reductions to Texas customers, but not all of them have indicated that they would flow through the reductions on a proportional basis.

It is likely most companies will choose to pass through their USF assessments on their bills; therefore, all customers would see these USF "costs." The Commission believes all customers should realize the USF "benefits." Without the solid commitment from the three major long-distance companies on this issue, the Commission in December 1998 deferred implementation of a significant part of the planned USF until summer 1999, pending consultation with the Legislature. (An $86+ million dollar USF went into effect on January 1, 1999, consolidating existing low-income, high-cost, rural-company toll-pool, and hearing-impaired customer programs under one mechanism). The Commission seeks guidance on whether long-distance companies should be required to pass through access reductions to all customers, or whether it is sufficient to rely on the present long-distance market to deliver these benefits to customers.

CUSTOMER PROTECTION

With the advent of competition in the telecommunications market, the Commission's role is changing from regulation of prices to education and protection of customers, along with oversight of the marketplace. In July 1997, the Commission created the Office of Customer Protection, which has taken on an expanded role in handling customer complaints, penalizing telecommunications carriers for deceptive practices, and developing and disseminating educational materials. This role of the Commission is likely to continue to expand.

With more competitors entering the telecommunications business, there is a greater frequency of deceptive practices and of failure to advise customers of rate or service changes. In 1997, the Legislature passed a law making it illegal for a carrier to change the customer's long-distance provider without permission ("slamming"). The Commission has been active in protecting customers from this abuse, and in pursuing companies who have a record for slamming. Since that law passed, another abuse, of charging customers for services they did not authorize and often are not actually receiving ("cramming"), has become a major issue. The Commission asks the Legislature for more authority to protect customers from these and other abuses, and to extract penalties from violators so that the practice of abusing customers in Texas is not profitable. These recommendations are set forth in detail in Chapter 7 of the report.

With more and more service providers and an expanded choice of services, the telephone bill has become very long, with many charges, and terms that are difficult for customers to understand. A confusing bill makes it easier for unauthorized charges to go unnoticed. The Commission has limited authority in this area, but is continuing to work with the FCC and with telecommunications companies to develop a clear and simple bill.

AREA CODES AND NUMBER CONSERVATION

After a period of relative stability in the assignment of area codes, the last several years have seen an alarming acceleration in the exhaust of area codes, particularly in the metropolitan areas. The phone number exhaust is due in part to the growth in demand for cellular, pagers, and second lines. A second major reason for exhaust is the inefficient manner in which the industry assigns phone numbers to new competitors as they enter a market. Each competitor is assigned a block of 10,000 numbers for each rate center served, regardless of the number of actual customers.

In 1996, Dallas and Houston were geographically split, and assigned new area codes, which the industry estimated would last for years. Because of the reasons described above, both Dallas and Houston were threatened with number exhaust less than 2 years later. Dallas and Houston will receive an additional area code and begin mandatory 10 digit dialing in December 1998 and January 1999, respectively. New area codes with geographic splits were also implemented for San Antonio, Ft. Worth, Corpus Christi and Austin.

The Commission has been aggressively working with the industry to implement number conservation measures, including assigning numbers in 1000 rather than 10,000 number blocks, and reducing the number of rate centers. These efforts are designed to delay the proliferation of area codes, and the expense and inconvenience to customers when a new area code is required.

EXPANDED LOCAL CALLING AREAS

Expanded calling areas allow customers to call a larger area at a flat rate, rather than paying a long-distance per-minute-of-use rate. These plans have been popular, particularly in more rural areas and in areas surrounding a metropolitan area. There are two policy issues concerning expanded local calling. The legislation which created this opportunity set a maximum charge that will be paid by the users of the service. The lost revenue to the company (the flat rate compared to minute of use rates) can be surcharged to all of the other customers. These surcharges have resulted in numerous complaints, and in some cases, the surcharge to customers who do not benefit from the service approximates the charge to subscribing customers. The capping of rates to subscribers, and the right to surcharge all other customers, are issues the Legislature may wish to address.

When there was only one local company, the offering of expanded calling was fairly easy. However, as other competitors enter the market, their customers also want this benefit. It is more difficult to negotiate the interconnections and financial arrangements between competing companies so that all customers have the same rights to the expanded service. A policy issue exists about whether the continuation of expanded local calling is a practical option in a competitive market, and what legislation may be required to implement it.

THE STATUS OF LOCAL COMPETITION TODAY

Chapter 6 details the magnitude of competition for various services in the market today. It has been nearly three years since the 1995 revisions to PURA mandated opening the local telecommunications market to competition. As noted earlier, the market penetration by competitors to date has not been great. But it probably was overly optimistic to expect that all of the preconditions to competition and wholesale entry into the market could be accomplished in so short a time. The amount of effort involved in getting interconnection agreements in place, in setting prices for network parts, making sure emergency 911 service is not compromised, and many other details, is well documented in this report.

Competition is developing in some areas, and the final steps necessary to facilitate entry into the market by major competitors will be completed in 1999. While the Commission and the industry participants have been working to make sure that all competitors have access to the local network and customer phone lines, several other ways of reaching customers have been developing. Also, the use of wireless, or fixed wireless, satellite connections and cable are being explored as ways to bring voice and

data services to customers. The explosive growth in usage of the Internet and of data services suggests that data will greatly outstrip voice in the communications world of the future. While the benefits of robust competition have not yet been realized, the bulk of the work to make it possible has been done, thus putting Texas in the front of the line among the United States. Customers in Texas should soon have the benefit of choice in local service providers, and the opportunity to buy a variety of services from a one single provider.

LEGISLATIVE RECOMMENDATIONS

Legislative recommendations are set forth in Chapter 7 for your consideration. We look forward to working with you on these and other issues during the legislative session.

CHAPTER 1
INTRODUCTION

Local telecommunications service competition has begun in Texas. For the first time, a number of business and residential customers have a choice of providers to use in buying basic local telecommunications service. This competitive market, however, is limited in scope. Most of these customers are confined to urban areas. Most competitive providers of local service resell the services of the incumbent phone company serving the local exchange, rather than employ their own facilities to provide service independently of the incumbent. Many of these resellers charge prices sufficiently high that they are attractive only to individuals who have no other alternatives because of their poor credit histories. It is not yet clear when a more broad-based competitive market in local telecommunications service will emerge, although progress toward establishing such a market is being made.

Until the sixth *Scope Of Competition in Telecommunications Markets* report was issued in 1997[1] by the Public Utility Commission of Texas (PUCT or Commission), previous editions of the report focused on the relatively isolated emergence of competition in limited markets such as customer premises equipment (CPE) and long-distance services. However, events that occurred in Texas and across the nation[2] from 1995 to 1997 accelerated the removal of barriers to local service competition and spurred efforts to require interconnection among competing telecommunications networks. The *1997 Scope Report* focused largely on the changes in rules and legislation enacted to bring about local telecommunications competition. It identified the different providers potentially entering competitive telecommunication markets and established a baseline for measuring service offerings as those competitive telecommunications markets emerge. Because it was so early in the transition from a monopolistic to a competitive environment, however, the *1997 Scope Report* identified few changes in the state's telecommunications markets.

This document, the *1999 Scope Report*, provides an updated view of which kinds of firms are offering what variety of telecommunications services to which constituencies of customers. Explanations concerning state and federal regulatory and judicial events that have affected the telecommunications industry in Texas are included.

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[1] *Report to the Seventy-Fifth Texas Legislature on the Scope of Competition in Telecommunications Markets*, Public Utility Commission of Texas, January 1997 (herein called *1997 Scope Report*).

[2] The most prominent examples of such events are the enactment of the 1995 revisions to the Public Utility Regulatory Act, TEX. UTIL. CODE ANN. §§ 11.001-63.063 (Vernon 1998) (PURA), and the federal Telecommunications Act of 1996, Pub L. No. 104-104, 110 Stat. 56 (codified as amended in scattered sections of 15 and 47 U.S.C.) (FTA).

This report provides a snapshot perspective of competition in Texas' telecommunications markets as 1998 draws to a close. It will be several more years before we can gain a truly comprehensive perspective on the scope of the state's telecommunications markets and their progress towards competition.

The organization of this report parallels the business plan that the PUCT has developed to focus on its priorities and determine the most efficient and effective strategies to use in meeting these priorities. The four themes of the PUCT business plan are fostering competition, protecting the customer, promoting high quality infrastructure, and streamlining agency procedures. While each of the above functions focuses on a different task, each one relates in some manner to the development of competition in the Texas telecommunications market.

Fostering Competition

The PUCT has a strong role in fostering competition in Texas telecommunications markets. This report discusses the PUCT proceedings targeted to facilitate a competitive market in Texas and the status of competition for various types of telecommunications services in various areas in Texas.

More than ever before, companies from outside the local telecommunications industry, including cable TV companies, Internet service providers (ISPs), and wireless providers, are becoming involved with the marketing and provision of local telecommunications services. The Commission has overseen an increase in both number and type of proceedings as a result. The five different types of Commission proceedings that predominantly concern competition in the Texas local telecommunications market, and that are discussed throughout this report, are as follows:

- ***Arbitration Proceedings*** - Arbitrations are held pursuant to section 251 of the federal Telecommunications Act of 1996 (FTA). In these proceedings, the PUCT evaluates evidence on issues necessary to complete interconnection agreements between incumbent local exchange carriers (ILECs) and potential competitors. These agreements spell out the rates, terms, and conditions under which the potential competitors can buy services or network components from the ILECs. Without the ability to make such agreements, few, if any, entrants would consider it worthwhile to try to enter the capital-intensive local telecommunications market.
- ***Certification*** - The PUCT must determine which companies qualify to compete in the Texas local telecommunications market in evaluating applications for certificates of convenience and necessity (CCNs), certificates of operating authority (COAs), and service provider certificates of operating authority (SPCOAs). To provide local telecommunications service in Texas, potential local service providers must meet certain technical and financial qualifications. Qualifications include, in general, the

ability to provide reliable service without impairing the telecommunications network and the ability to invest in necessary network upgrades. Furthermore, the degree and types of complaints from customers are considered in deciding whether certification should be granted.

- ***Rulemakings*** - In order for a healthy competitive local market to develop in Texas, there must be a set of ground rules. In the last two years, the Commission has adopted numerous rules, such as the Telecommunications Pricing Rule, that focus on fostering and preserving such a market. Other rules, such as the Interconnection Rule, are continually being reviewed and revised when necessary to foster competition.
- ***ILEC InterLATA Service Dockets*** - With so many entities seeking certification to break into the local service market in Texas, it is sometimes easy to forget that established local service providers are attempting to enter the long-distance telecommunications market as well. The Commission has been involved in docketed proceedings concerning both GTE Southwest Incorporated (GTE-SW), which has an affiliate in the interLATA long-distance market, and Southwestern Bell Telephone Company (SWBT), which is attempting to gain permission from the Federal Communications Commission (FCC) to enter the interLATA long-distance market by showing that it has opened its local markets to fair and irreversible competition.
- ***Number Portability*** - While relatively few Commission projects have focused on number portability, it is important in helping to create a competitive market. Understandably, many customers of local telecommunications services are deterred from changing their local service providers if they have to change their telephone numbers. This resistance to changing numbers can especially be expected of high-usage, low cost customers, such as entrepreneurial enterprises and certain urban customers, which provide the first foothold for competitive market development. In other words, without the ability to port their numbers (and thus avoid the inconvenience and expense of reprinting business cards, for example), many local service customers will not switch providers.

Protecting the Customer

To the Commission, protecting the telecommunications service customer goes hand in hand with fostering competition. While competition generally benefits customers, competition in the interLATA long-distance market has illustrated the negative behavior that a competitive market also can breed. For example, slamming, which is the changing of a customer's telecommunications provider without the customer's permission, is expected to become more prevalent as increasing numbers of local service providers compete for Texans' local service business.

This report discusses many of the actions the Commission has undertaken to ensure that the emerging competitive market benefits those it was intended to benefit — the customers. Through its Office of Customer Protection (OCP), the Commission receives customer complaints and does what it can to remedy them. In addition, the Commission initiates rulemakings and establishes policy in contested proceedings to ensure customers are not harmed during the development of local telecommunications competition. Such rulemakings and contested proceedings are necessary to provide both providers and customers guidance regarding how OCP responds to customer complaints.

Promoting High Quality Infrastructure

Without an efficient, reliable network of switches, trunks, and lines, the Texas telecommunications market cannot experience the full benefits of competition. If competition means more service outages due to faulty interconnections, then Texans may wonder whether competition is actually worth the cost and effort. Protection of the telecommunications infrastructure is not limited to preserving only the equipment necessary to provide services, but also to preserving the structure of Texas communities and institutions. Issues that must be considered when protecting the infrastructure include universal service availability, 911 and public safety, service quality requirements, area code and number conservation, and the definition of local calling scopes.

- ***Universal Service*** - Both the Commission and the FCC recently have been immersed in universal service restructuring. Described in this section are many of the rulemakings and implementation proceedings the Commission has undertaken to ensure reliable telephone service for high-cost customers, educational institutions, hearing-impaired customers, and low-income customers.
- ***911 Issues*** - In the summer of 1998, the Commission initiated a 911 rulemaking, and since then has been involved in numerous 911 projects. Such projects are not only necessary to update the current 911 network so it can meet Texans' needs today, but to enable the network to evolve toward the more competitive Texas telecommunications market of tomorrow.
- ***Service quality requirements*** - Even before the new competitive market began to emerge, the Texas Legislature and the Commission required local exchange carriers to meet certain service quality standards. With the onset of competition, these standards must be monitored even more closely. Besides oversight through the certification process, the Commission also must deal with service quality concerns in every interconnection agreement, whether negotiated or arbitrated, and must continually monitor the service quality of existing local service providers.
- ***Area codes and number conservation*** - An explosive growth in demand for telephone numbers has been generated by a wave of new technological demands. In addition, as competition gets under way, new local service

providers are requesting substantial blocks of numbers to provide local telephone service. All of the major urban areas of Texas have seen revisions to their area codes or dialing habits in recent years. The Commission continues to investigate this problem and strives to work with industry to develop innovative solutions. This section discusses the necessity for and ramifications of Commission decisions over the last several years.

- ***Local calling scopes*** - The concepts of extended area service (EAS), extended metropolitan service (EMS), and expanded local calling service (ELCS) all deal with expanding the local calling scope of an ILEC's exchange to include certain customers that would otherwise have to be reached through a long-distance call. Although the rates, terms, and conditions may differ depending on the specific service offered, such arrangements allow for a "community of interest" to gain local calling privileges to another exchange for flat monthly fees. This section describes many of the issues and proceedings relating to local calling scopes that the Commission has addressed or is addressing.

Streamlining Agency Procedures

Over the past few years, the Commission has made an effort to become more accessible to both customers and other stakeholders in the telecommunications industry. With the onset of competition, it is even more imperative that the Commission have rules that customers can easily understand and procedures that are less burdensome and costly to companies whose resources should be spent trying to compete in the telecommunications market. To this end, the Commission recently has initiated proceedings that make it easier for companies to bring complaints of anti-competitive behavior before the Commission and have them resolved in the timely manner a competitive market demands. In addition, the Commission has undertaken an accelerated and broad review of its procedural and substantive rules to ensure that they are readily understandable by the customers and companies to which they apply, and that they are still necessary to foster competition, protect the customer, and promote a high quality infrastructure.

Conclusion

As can be seen from the preceding paragraphs, the Commission's business plan is a road map of actions designed to bring about and protect, whether directly or indirectly, a healthy, competitive telecommunications market in Texas. However, a plan, no matter how comprehensive it is, is not enough to ensure that local telecommunications competition becomes a reality and stays that way. Cooperation is needed from all parties involved, from incumbents like SWBT and Lufkin-Conroe Telephone Exchange, to the newcomers, like BasicPhone, Inc. and GTE-Long-distance (GTE-LD). In addition, customers must have enough of a desire for a competitive market to use the resources that

the Commission has provided to get the greatest benefits from competition. With such cooperation and involvement, sustainable competition in the Texas local telecommunications market is a possibility in the foreseeable future.

CHAPTER 2
FOSTERING COMPETITION

In the two years since the *1997 Scope Report*, much has changed in the telecommunications market as well as in the regulatory bodies that oversee the transition of the monopolistic market of the past to the actively competitive market of the future. This chapter introduces duties required of the Public Utility Commission of Texas (PUCT or Commission) by the Public Utility Regulatory Act (PURA) and the federal Telecommunications Act (FTA), and then describes some of the major actions the PUCT has taken in order both to bring about this competitive market and to ensure that the future market becomes one sustained by healthy competition.

Interconnection arbitrations required by PURA and the FTA dominated the Commission's telecommunications workload in recent years. Because these proceedings establish the "nuts and bolts" of creating fair rates, terms, and conditions for interconnection agreements (allowing for the entry of competitors into the local service market), considerable Commission effort has been made toward their facilitation.

Arbitrations involve hammering out interconnection agreements between companies wishing to provide competitive local telephone services and the two predominant incumbent local exchange carriers — Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated (GTE-SW). The Commission treated the many petitions to each carrier in combined fashion, which became known as the "mega-arbitrations." The job of establishing fair terms and conditions was complex and involved meticulous detail, addressing methodology for pricing unbundled network elements (UNEs), the extent to which network elements needed to be unbundled, and the basis for establishing retail rates. The SWBT and GTE-SW mega-arbitrations, and some other significant arbitrations, are explained below. Commission decisions in the mega-arbitrations generally have been upheld in court.[3]

In addition to its duty to arbitrate interconnection agreements, the Commission is charged with granting certificates of operating authority (COA) and service provider certificates of operating authority (SPCOA). These certificates are granted on the basis of a company's financial and technical qualifications, including its size, its complaint history, and other factors. This chapter describes several significant certification dockets considered by the Commission during the last two years.

Pursuant to PURA requirements, the Commission undertook several rulemaking projects designed to provide a toehold for competition in the local telecommunications market. Described more fully below, rules adopted by the Commission precluded

[3] Decisions on these appeals are detailed further in Appendix D.

predatory pricing, precluded packaging of monopoly basic services with non-basic services, and developed measures for determining whether competitive safeguards for eliminating barriers to competition were working.

Finally, the Commission engaged in two investigations related to incumbent local exchange carrier (ILEC) interLATA services. In the first, the Commission found that GTE-SW and GTE-Long-distance (GTE-LD) were unfairly violating the "arms-length" criterion necessary in a competitive market. In the second, the Commission developed a collaborative process by which SWBT could work toward meeting its FTA § 271 requirements for entry into the in-region interLATA service market.

Arbitrated Interconnection Agreements

As discussed in the *1997 Scope Report*, the Commission is charged with arbitrating agreements between ILECs and competitive local exchange carriers (CLECs) for rates, terms, and conditions regarding the resale of services and/or facilities necessary to provide consumers with a choice of providers for local telecommunications services. Many of the issues involved in these agreements had been decided by the Commission at the time of the *1997 Scope Report*. However, the rates and many costing and pricing conditions set in 1997 were meant to be only temporary and were intended to be changed once more information was available. In addition, once the companies actually started working through the interconnection process, it became clear that more issues needed to be arbitrated.

This section gives a brief overview of some of the important arbitration proceedings in which the Commission has been involved, and describes the issues, reasoning, and decisions made in these proceedings. Summary information concerning appeals in Federal District Court is provided here, while detailed information concerning litigation of the Commission's arbitration decisions may be found in Appendix D.

Most of the Commission's arbitrated results have been appealed to federal district court. To date, only the appeals in SWBT's arbitration dockets have been decided by the district court. However, when the appealing party has sought an injunction against enforcement of the interconnection agreement, requests for injunctive relief have been denied. The Commission anticipates that more of these federal district court cases will conclude in 1999. Although it is always difficult to predict the outcome in a court case, the consistent denial of injunctive relief and the many district court opinions in other states that are favorable to the decisions made by this Commission, increases the likelihood that the Commission's arbitrated decisions largely will be upheld.

ORIGINAL SWBT ARBITRATIONS

PUCT Docket Nos. 16189, 16196, 16226, 16285 and 16290.[4]

In July 1996, Metropolitan Fiber Systems, Inc. (MFS) filed for arbitration of interconnection issues with SWBT, as allowed by FTA. Teleport Communications Group (TCG), AT&T, MCI, and American Communications Services, Inc. (ACSI) soon followed suit. For administrative ease, the petitions by each of these companies were consolidated into one proceeding and informally termed the "SWBT mega-arbitration." Over the course of three weeks of hearings in September and October 1996, the Commission heard testimony on issues that included performance standards, terms and conditions of reselling services and purchasing unbundled network elements (UNEs), services and elements that are subject to wholesale, reciprocal compensation, discounts for resold services, and prices for UNEs.

Many disputes were resolved by the Commission in an award issued in December 1996, but it became apparent that there were numerous other issues for which arbitration had not been requested. Additionally, based on the lack of evidence in the record, only interim decisions could be made on many of the costing and pricing issues raised by the parties. Thus, the Commission determined that there would need to be at least two "phases" of the SWBT mega-arbitration process. Phase I, which effectively ended with the approval of interconnection agreements drafted pursuant to the December 1996 award, came to a close in the Spring of 1997. Hearings for Phase II began in August of 1997 and proceeded (in segments) until December of 1997. The final Phase II awards were issued on September 30 and December 19, 1997. Clarifications on the awards also were issued at later dates. All interconnection agreements arising from Phase II had been approved by July 1998. Some of the major issues decided in the SWBT mega-arbitration are as follows:

The use of Total Element Long Run Incremental Cost (TELRIC) is the appropriate methodology for pricing UNEs.

The Commission determined that when retail-related costs such as advertising and billing were not considered, the total forward-looking economic costs recovered by a company with prices equal to TELRIC plus an allocation of economic common costs would be equal to the total forward-looking economic costs recovered by a company with prices equal to the total service long run incremental cost (TSLRIC) plus an allocation of

[4] *Petition of MFS Communications Company, Inc., for Arbitration of Pricing of Unbundled Loops,* Docket No. 16189 (Feb. 27, 1998)*; Petition of Teleport Communications Group, Inc. for Arbitration to Establish an Interconnection Agreement*, Docket No. 16196, (Feb. 27, 1998)*; Petition of AT&T Communications of the Southwest, Inc. for Compulsory Arbitration to Establish an Interconnection Agreement Between AT&T and Southwestern Bell Telephone Company*, Docket No. 16226, (Feb. 27, 1998)*; Petition of MCI Telecommunication Corporation and Its Affiliate MCI Metro Access Transmission Services, Inc. for Arbitration and Request for Mediation Under the Federal Telecommunications Act of 1996*, Docket No. 16285, (Feb. 27, 1998); *Petition of American Communications Services, Inc. and Its Local Exchange Operating Subsidiaries for Arbitration with SWBT Pursuant to the Telecommunications Act of 1996*, Docket No. 16290 (Feb. 27, 1998).

economic common costs. Because the Commission has a cost rule that provides guidelines for calculating TSLRIC and forward-looking economic common costs, and this standard is referred to multiple times in PURA, the Commission determined that it would be appropriate to mandate the use of TELRIC in calculating prices for UNEs. For this reason, the decision in July 1997 by the 8th Circuit Court of Appeals in *Iowa Utilities Board*[5] that states are able to choose their own pricing methodology, rather than be required to use that of the Federal Communications Commission (FCC) methodology, had no effect on the pricing methodology used by the PUCT. This determination was made in Phase I of the SWBT mega-arbitrations. The Commission used this reasoning to set permanent TELRIC-based prices in Phase II.

The loop UNE should be further unbundled into distribution and feeder portions.

The Commission exercised the option given by the FCC to further unbundle the loop element into feeder and distribution portions. Because these portions of a loop are generally readily identifiable as separate parts and the Commission could envision many scenarios in which a CLEC could provide one of these two parts for itself, the Commission decided it would be economically prudent and competitively beneficial to allow subloop unbundling. Specifically, SWBT was required to offer as unbundled elements (1) in the distribution segment, the loop segment extending between a remote-terminal site and the end-user's premises; (2) in the feeder segment, only the dark fiber and the 4-wire copper cable conditioned for DS-1 service; and (3) the digital loop carrier (a device for multiplexing, or combining, communication channels).

SWBT should perform the work necessary to connect combinations of UNEs ordered by CLECs,[6] and should be compensated for this work.

As discussed in Appendix C, one of the rulings that the 8th Circuit made in October 1997 was that when selling combinations of UNEs to CLECs, the ILEC has the right to disconnect the UNEs from each other and have the CLEC reconnect them. However, this ruling was predicated on the specific assumption that most ILECs would prefer the CLECs to actually do the work. In the Phase II hearing that took place after the initial ruling in July 1997, SWBT had stated that it preferred to perform the reconnecting of UNEs itself. The petitioners believed this plan to be reasonable assuming reasonable rates would be set for SWBT's performance of this work. While SWBT later contested the Commission's ruling that it perform the disconnecting and connecting of UNEs after the October 1997 order on rehearing, the Commission ruled that there was no evidence in the record on which to base a decision regarding terms and conditions that would apply for CLECs to perform the work in SWBT's central offices. Moreover, the Commission held SWBT to its voluntary commitment to perform the combination of UNEs in lieu of

[5] *Iowa Utilities Board v. FCC*, 109 F.3d 418 (8th Cir. 1996) (The U.S. Supreme Court heard oral arguments on the appeals from the *Iowa Utilities Board* case in October 1998. A decision is expected early in 1999.)

[6] For purposes of this report, the term "CLEC" includes SPCOA holders, even though they are not, by PURA's definition, LECs. The CLEC term also includes companies that are ILECs in some territories but that have obtained COA or SPCOA certificates to provide local exchange services in other specified territories.

providing CLECs direct access to its network. Therefore, the Commission set rates that recovered the forward-looking economic cost of SWBT's performing the work for the CLECs.

SWBT must offer all retail services for resale at a 21.6% avoided cost discount.

In Phase I of the mega-arbitration, the Commission determined that if SWBT were to provide service on a wholesale basis only, it would avoid an average of 21.6% of its current costs due to the lack of a necessity to advertise and explain service offerings to end user customers, efficiencies gained from handling large wholesale orders instead of smaller retail orders, and the avoidance of certain other functions that would be unnecessary for SWBT to provide to a reseller of its services. In addition, the Commission determined that this discount should apply to all retail telecommunications service offerings, except promotional offerings of 90 days or less. Also, the Commission determined that SWBT was not obligated to allow a customer currently under contract to cancel that contract to become a customer of a competing provider.

Each local service provider, including SWBT, should absorb its own costs of providing interim number portability (INP).

In Phase I of the mega-arbitrations, it was determined that no rates would be set for costs associated with INP, which is the technology that allows a customer to change local service providers (within a locality) without changing his or her telephone number. The Commission decided that INP will benefit all local service providers, including SWBT, because without it, few customers would be willing to change local providers. The Commission also recognized that all facilities-based local service providers would have to incur (or already had incurred) costs related to implementing INP.

SWBT must provide real-time electronic interfaces for operation support system (OSS) functions.

The Commission determined in Phase I that to level the competitive playing field, the CLECs needed access to the same types of electronic billing, ordering, and provisioning systems that SWBT uses for itself in interactions with its own customers on a real-time basis at parity with SWBT's access. Making such systems available to CLECs was extraordinarily controversial because it required modifications to SWBT's systems to handle orders from outside parties using different computer applications. There were no cost studies filed or rates set for the necessary systems in Phase I of the mega-arbitrations because such systems did not yet exist in SWBT's OSS network. At the close of Phase II of the arbitrations, SWBT had worked with the petitioners to develop new systems and modify existing ones to give CLECs billing, ordering, and provisioning parity with SWBT. Rates, terms, conditions, and implementation schedules were set for certain functions, weighing forward-looking economic concerns with the difficulties of designing the necessary systems.

The company using the switch port is entitled to all toll revenue associated with that switch port.

The Commission determined in Phase II that when a CLEC purchases a switch port or other UNEs from SWBT, the CLEC is entitled to all access revenues associated with the UNEs purchased, along with toll revenues. SWBT was ordered to provide CLECs with the information necessary to determine the magnitude of these revenues, if possible.

CLECs who opt into another CLEC's agreement with SWBT cannot "pick and choose" provisions to opt into.

Most favored nation (MFN) provisions allow a CLEC to choose to place parts of an agreement another CLEC may have made with SWBT into its own agreement with SWBT. Although the FCC interpreted such provisions as allowing a CLECs to select small bits and pieces from other contracts, this interpretation was stayed by the 8th circuit in October 1996. Instead, in the Commission's arbitration negotiations, SWBT offered to allow a CLEC to choose to opt into another CLEC's contract with SWBT so long as it opted into large sections of the contract, rather than only individual rates, terms. or conditions. The Commission incorporated this provision into its order. On June 27, 1997, the 8th circuit ruled against the FCC's pick-and-choose interpretation.

Other Commission rulings in the SWBT Mega-Arbitration:

- The Commission ordered a number of new performance standards. Most of these were agreed to by SWBT, AT&T, and MCI in mediation.
- In Phase I, the Commission determined that Customer Proprietary Network Information (CPNI), such as customer phone usage, should be shared among companies when a customer transfers from one local service provider to another. However, customer credit history was determined not to be CPNI and need not be transferred between local service providers without the customer's permission.
- In Phase II, the Commission ordered SWBT to provide physical collocation in controlled environmental vaults, huts, and cabinets, as well as in central offices. Rates for physical collocation were ordered to be tariffed and made available to all local service providers through the MFN process.

Commission Rulings Upheld

In the SWBT mega-arbitrations, rounds one and two, the district court upheld the Commission's rulings including, but not limited to, the use of the TELRIC methodology for pricing UNEs, the appropriateness of the permanent UNE rates developed by the Commission, and the appropriateness of the resale discount developed by the Commission. Also, the Commission's determination that dial-up, Internet traffic should be deemed jurisdictionally local, rather than interstate, was upheld by the federal district court in Midland, Texas. That decision has been appealed to the Court of Appeals for the 5th Circuit. Details of the court challenge are explained in Appendix D.

GTE MEGA-ARBITRATIONS

Docket Nos. 16300 and 16355[7]

In August 1996, AT&T filed for arbitration of interconnection issues with GTE-SW, as allowed by FTA. MCI, Sprint Communications Company (Sprint), and ACSI filed petitions soon thereafter. Over the course of three weeks of hearings in October and November 1996, the Commission staff heard testimony on issues that included performance standards, terms and conditions of reselling services and purchasing UNEs, services and elements that are subject to wholesale, reciprocal compensation, discounts for resold services, and prices for UNEs. Many issues were decided upon by the Commission in an Award issued in December of 1996, but, as in the case of the SWBT mega-arbitration, TELRIC costing and pricing issues were set only on an interim basis.

Similarly, the Commission determined that there would need to be at least two "phases" of the GTE mega-arbitration process. Phase I, which effectively ended with the approval of interconnection agreements drafted pursuant to the December 1996 award, came to a close in the Spring of 1997. Hearings for Phase II have not yet commenced. One of the reasons for the delay has been GTE-SW's filing of a new cost model to replace the cost models the Commission approved for use in Phase I of the GTE mega-arbitrations. Petitioners have requested numerous continuances to familiarize themselves with the model and its results in order to determine the extent of necessary changes, if any. Many of the issues determined in Phase I of the GTE mega-arbitration are similar to those discussed for the SWBT Mega-arbitration above.

Commission Ruling on Appeal

A decision has not been issued in the GTE mega-arbitration appeal. The Commission anticipates that this case, which is before the federal district court in McAllen, Texas, will conclude in 1999. While outcomes of court cases cannot be predicted, the similarity between the issues in the SWBT mega-arbitration and those in the GTE mega-arbitration suggests a likelihood that the Commission's arbitrated decisions in the case largely will be upheld. A description of the appeal is provided in Appendix D.

[7] *Petition of AT&T Communications of the Southwest, Inc. for Compulsory Arbitration to Establish an Interconnection Agreement Between AT&T and GTE Southwest, Inc. and Contel Of Texas, Inc.*, Docket No. 16300 (Pending)*; Petition of MCI Telecommunications Corporation and its Affiliates Including MCI Metro Access Transmission Services, Inc., for Arbitration and Mediation Under the Federal Telecommunications Act of 1996 of Unresolved Interconnection Issues with GTE Southwest, Inc.*, Docket No. 16355 (Pending).

OTHER ARBITRATIONS

Docket No. 17922, Petition of Waller Creek Communications, Inc. for Arbitration with Southwestern Bell Telephone Company

In August 1997, Waller Creek Communications, Inc. (WCC) filed for arbitration of interconnection issues with SWBT. The issues in this arbitration included two major pricing issues that had not been addressed in previous arbitration proceedings. One of these issues centered on an attempt by WCC to unbundle the distribution portion of SWBT's loop further so that WCC could interconnect with SWBT's network closer to a customer's residence, rather than at a SWBT central office or at a point where the loop feeder cable interfaces with the loop distribution cable. Using this type of interconnection, WCC could avoid paying SWBT for parts of the loop distribution UNE that it did not need. SWBT argued that to allow such an interconnection would compromise network security and may not be feasible in many cases. The Commission ultimately determined, based on current technological limitations, that WCC's request was not in the public interest.

Another issue addressed in Docket No. 17922 concerned reciprocal compensation rates for Internet traffic.[8] In the proceeding, SWBT stated that Internet traffic, whether local or long-distance, used the same equipment as voice telephone traffic but usually used it for substantially longer periods of time. SWBT thus argued that local reciprocal traffic rates should not apply to Internet traffic. The Commission disagreed, determining consistent with the FCC's determination that Internet services are information services rather than telecommunications services, and that Internet traffic, from the end user to the Internet service provider (ISP), is local traffic.

The interconnection agreement between WCC and SWBT was approved by the Commission in April 1998.

Docket No. 17626, Application of Golden Harbor of Texas, Inc. for Compulsory Arbitration of Disputed and Unresolved Issues Between Golden Harbor of Texas, Inc. and Southwestern Bell Telephone Company

In June 1997, Golden Harbor of Texas, Inc. (GHT) filed for arbitration of interconnection issues with SWBT. While GHT had already arbitrated an interconnection agreement with SWBT, there were additional issues relating to 1+ intraLATA toll service that it wished to arbitrate. Specifically, GHT maintained that it is anti-competitive for SWBT to be able to tie the sale of 1+ intraLATA toll and local service.[9] The

[8] For the purposes of the hearing, the Internet traffic issue was consolidated with *Complaint and Request for Expedited Ruling of Time Warner Communications,* Docket No. 18082 (February 27, 1998).

[9] Under FTA § 271(e)(2) and P.U.C. SUBST. R. 23.103(d)(2), SWBT is not required to provide intraLATA equal access (the ability of other carriers to carry intraLATA long-distance calls made by dialing 1+ the area code and number) until it begins to provide interLATA telecommunications services. SWBT may not provide such interLATA services until it receives authorization from the FCC.

Commission determined that at this time, both the FCC and PURA permitted the tying of local service and 1+ intraLATA toll. The Commission realized that, given the current transitional market structure, making a decision to "untie" the services would have a broad and far-reaching impact on the industry, and that such a decision could not be made without much more evidence concerning the consequences to the public interest. However, the Commission noted that in future, more competitive environments, such as when equal access to 1+ intraLATA toll is available, this tying arrangement may not be appropriate.

Certification of CLECs

In addition to its duty to arbitrate interconnection agreements among local service providers, the Commission has the duty to grant COAs and SPCOAs to companies that desire to provide local telecommunications service in Texas. In deciding whether to grant a certificate, the PUCT must consider many different factors, including the technical and financial qualifications of the applicant,[10] the size of the applicant, and whether the applicant has other certificates in Texas (such as a certificate of convenience and necessity (CCN)). Some of the proceedings concerning COA and SPCOA applications with important policy implications are discussed below.

Project No. 16800, Application of Sprint Communications Company L.P. for a Certificate of Operating Authority

In December 1996, Sprint applied for a COA in the service territories of many Texas ILECs, including those of United Telephone Company of Texas, Inc. (United) and Central Telephone Company of Texas (Centel). Although United and Centel are local exchange affiliates of Sprint, no parties intervened in this project to argue against granting Sprint's COA in United and Centel service territories. The Commission ruled in the spring of 1997 that Sprint should obtain its requested COA in the affiliate's territory. However, after further analysis of COA/CCN affiliate issues and anti-competitive behavior in Docket Nos. 16495 (*see* next paragraph) and 15711 (described later in this chapter), the Commission decided that it violates PURA to allow an entity to have more than one type of certificate in a service territory. To date, Sprint's COA has not been amended to exclude the areas for which its affiliated ILECs hold CCNs. However, Sprint has not provided any services under its COA in these areas.

Docket No. 16495, Application of GTE Communications Corporation for a Certificate of Operating Authority

In October 1996, GTE Card Services, Inc. (GTE-CS) (renamed GTE Communications Corporation in July 1997), d/b/a GTE Long-Distance, Inc., applied for a COA in the service territories of many Texas ILECs, including those of SWBT and GTE-

[10] The technical criteria include the history of the applicant's behavior in Texas and other states relating to such actions as changing a customer's telecommunications service provider against his or her will.

SW. AT&T intervened and argued that to allow GTE-CS to obtain a COA in service territory for which GTE-SW had a CCN would have serious anti-competitive impacts. One such anti-competitive impact, AT&T argued, would be the ability of GTE, Inc., the parent company of GTE-SW and GTE-CS, to introduce new local telecommunications services solely through GTE-CS, thereby relieving GTE-SW from having to resell these new services to non-affiliated competitors. In addition, AT&T cited anti-competitive behavior by GTE companies that was the subject of Docket No. 15711, *Complaint of AT&T Communications of the Southwest, Inc. Against GTE Southwest, Inc.* (see discussion of this docket in the section of this chapter entitled *ILEC InterLATA Service Proceedings*).

GTE-CS stated that AT&T's argument was based on a fear of actions that it could not prove would happen, and that neither PURA nor the FTA gave the Commission the authority to deny GTE-CS the COA in GTE-SW territories. However, in November 1997, the Commission cited provisions in PURA that state that an entity (in this case GTE, Inc.) may apply for a COA in lieu of a CCN.[11] In addition, the Commission read PURA so as not to have an absurd result. Thus, GTE-CS's COA request was denied in GTE-SW territories so as to prevent the undermining of the competitive provisions of PURA. GTE-CS was granted a COA in all other ILEC service territories requested. As a result of this ruling, GTE-CS is suing the Commission in state district court in Travis County, Texas.

Docket No. 16666, Application of Time Warner Connect of San Antonio for a Service Provider Certificate of Operating Authority.

In November 1996, Time Warner Connect of San Antonio (TWC-SA) filed an application to obtain an SPCOA in Texas. General Counsel determined that TWC-SA had the qualifications needed to obtain a certificate to operate in Texas as a CLEC. Soon thereafter, however, concerns arose as to whether PURA § 54.152 would be violated if TWC-SA's certificate were to be granted. Specifically, this section of PURA states that "the holder of a certificate of operating authority or certificate of convenience and necessity shall not be granted a service provider certificate of operating authority as to the same territory." In the case of TWC-SA, it was noted that Time Warner Austin, a subsidiary of Time Warner, Inc., the sole owner of TWC-SA, also held a COA in part of the territory for which a certificate was being sought by TWC-SA in its application. Because Time Warner, Inc. held a controlling interest on both companies, TWC-SA was ultimately granted a certificate to operate only in areas not served by Time Warner Austin.

Docket 18373, Application of Group Long-Distance, Inc. for Service Provider Certificate of Operating Authority.

In November 1997, Group Long-Distance (GLD) filed an application to obtain an SPCOA in Texas. The scope of this request encompassed the reselling of telephone

[11] PURA § 54.102(a)

service in territories served by SWBT, GTE-SW, and Sprint/United. In December 1997, Commission staff recommended denial of GLD's application because of GLD's long history of slamming, fraud, and billing complaints in Texas.[12] Staff additionally noted that GLD was under investigation by the Florida Office of the Attorney General because of several allegations of misconduct, mostly involving slamming and other deceptive practices. Given the difference in positions, a hearing was set for resolving this issue. In January 1998, the hearing was canceled after GLD decided to withdraw its application.

Docket No. 16542, Application of Southwestern Bell Telephone Company for a New Intrastate Pricing Flexibility Plan Tariff

In October 1996, Southwestern Bell Telephone Company filed an application for a pricing flexibility tariff pursuant to § 3.2571 of PURA95 (now PURA § 54.007). MCI, AT&T, and Sprint intervened in the proceeding, arguing that the filing of a tariff pursuant to PURA95 § 3.2571 was inappropriate for an ILEC that elected to be regulated under Subtitle H of PURA95 (now Chapter 58 of PURA). The Commission ruled that the promotion of basic network monopoly services by offering adjustments to recurring rates, volume discounts, term discounts, reductions and/or waivers of installation charges, and price reductions for service package is prohibited for a company electing under Chapter 58. Furthermore, the Commission held that once the rate for a basic network monopoly service is lowered pursuant to PURA § 55.055, a company that has elected to be regulated under Chapter 58 may not later increase that rate to the initial cap while it is still regulated under Chapter 58. The Commission found that the Legislature excluded such electing companies from executing pricing flexibility for basic network monopoly services even though it expressly provided such authority for discretionary monopoly and competitive services. To interpret the statute otherwise would be inconsistent with the broader framework of Chapter 58. For the foregoing reasons, the Commission dismissed SWBT's application. However, at a later date, the Commission opened Project No. 18886, described in the following section, to address the possibility that, in a changing competitive market, some packaging restrictions may be eased for companies regulated under Chapter 58.

Rulemakings to Foster Competition

In the last two years, the Commission has initiated multiple rulemakings to make the transition to competition as efficient and fair as possible for the Texas telecommunications industry as a whole. This section describes the most important telecommunications rulemakings, and the issues involved in them, that the Commission has undertaken in these two years to foster and maintain competition in this industry.

[12] Under P.U.C. SUBST. R. 23.38(d)(1)(C), customer complaints must be considered in determining whether an applicant is technically qualified to receive an SPCOA. GLD did, however, satisfy the financial qualifications set forth in P.U.C. SUBST. R. 23.38(d)(1)(B).

Project No. 12771, Pricing Rule

In April 1997, The Public Utility Commission of Texas adopted P.U.C. SUBST. R. 23.104, relating to Telecommunications Pricing. The rule was necessary to comply with PURA § 60.101, which requires the Commission to adopt a pricing rule. The purpose of the rule was to establish principles to promote economic efficiency and protect the public welfare in the pricing of telecommunications services. More specifically, this rule mandated subsidy-free pricing in the provision of telecommunications services, so that there is no occurrence of predatory pricing (arising from pricing below cost to drive competitors out of the market), which could jeopardize the developing competitive local telecommunications service market. In addition, the rule prevented the packaging of basic network monopoly services, such as basic local telephone service, with non-basic and/or non-monopoly services, such as call waiting or speed dialing.

Allowing a dominant certificated telecommunications utility (DCTU) to engage in such packaging in a nascent competitive market may lead to anti-competitive behavior in the form of tying arrangements or predatory pricing. As discussed below (with Project No. 18886), the Commission has reviewed the original packaging restrictions in the rule, given the changing nature of the local telecommunications market. The pricing rule also established the procedures for interested parties to petition the Commission to reclassify a basic network service as a discretionary or competitive service or to reclassify a discretionary service as a competitive service.

Also in April 1997, the Commission adopted a companion rule in Project No. 12771: P.U.C. SUBST. R. 23.105, Services Provided to Other Telecommunications Utilities. This rule contains wholesale-pricing (as for UNEs and call transport and termination) and other provisions to be applied in an arbitration proceeding involving a CLEC and a DCTU serving at least 31,000 lines.

Project No. 17636, Report on the Status of Competitive Safeguards

On June 26, 1997, the Commission initiated an investigation into the status of the competitive safeguards (and related proceedings) set forth in PURA Chapter 60.[13] The resulting report, issued on August 1, 1997, provided an overview of the duties imposed by the competitive safeguards on the Commission and on Chapter-58 electing ILECs. The report, however, did not provide conclusory statements regarding the Commission's or the ILECs' fulfillment of any or all of the competitive safeguards. The Commission resolved that a final determination should be made pursuant to relevant filings submitted by the electing ILECs. Days later, SWBT filed an application, Docket No. 17775, to

[13] Implementation of the competitive safeguards is a prerequisite for reclassifying service offerings or raising price ceilings of ILEC electing incentive regulation pursuant to PURA Chapter 58, formerly known as "Subtitle H."

increase price ceilings for certain discretionary services and to raise the prices of four of these services.[14]

In an order dated February 6, 1998, the Commission set forth specific criteria against which fulfillment of the safeguards would be measured. Foremost, the Commission found that the safeguard provision concerning infrastructure sharing was not satisfied. The infrastructure-sharing safeguard requires the Commission to prescribe rules requiring a local exchange carrier (LEC) to share public switched-network infrastructure and technology with a requesting LEC that lacks economies of scale or scope, enabling the requesting LEC to fulfill its carrier-of-last-resort obligations. Because the Commission had not yet adopted an infrastructure sharing rule when it issued its preliminary order in Docket No. 17775, the Commission abated this proceeding until 20 days after the infrastructure-sharing rule became effective.

The infrastructure sharing rule became effective on May 13, 1998.[15] Pursuant to an order issued on July 23, 1998, the Commission found that SWBT fulfilled six of the eight competitive safeguards in PURA Chapter 60. The two safeguards that SWBT had not yet satisfied were resale and interconnection. The Commission noted that the resale provision in PURA § 60.044 will be complete once all of SWBT's remaining resale prohibitions have been lifted from its tariffs. As to the interconnection safeguard, the Commission concluded, as it did in its FTA § 271 proceedings, that several interconnection issues remained outstanding. In order to meet the PURA Chapter 60 competitive safeguard provision concerning interconnection, SWBT must implement, consistent with the Commission's § 271 findings, (1) completion of its operational support services (OSS) and (2) a cost-based virtual collocation tariff available to all competitive local exchange companies. Ultimately, the Commission abated Docket No. 17775 until such time as SWBT supplements the record with evidence indicating fulfillment of the two unsatisfied safeguards.

Project 18377, Commission Inquiry Regarding Compliance with Competitive Safeguards by Incumbent Local Exchange Carriers

In November 1997, the Commission commenced an inquiry to determine the level of competition in areas served by the ILECs and whether competitive safeguards are effectively eliminating barriers to competition in these areas. The Commission conducted a workshop on January 15, 1998, and solicited comments from the affected parties.[16] The Commission sent out further questions to the parties (the relevant ILECs and certain CLECs) on October 14, 1998, seeking information on compliance by the ILECs with the competitive safeguards. Initial and reply comments were due on November 13, 1998, and

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[14] *Application of Southwestern Bell Telephone Company to Increase Ceiling Prices Pursuant to PURA Chapter 58*, Docket No. 17775 (filed Aug. 8, 1997).

[15] *Rulemaking - New Rule Pursuant to PURA 1995 Paragraph 3.463 - Infrastructure Sharing*, Project No. 17296 (effective May 13, 1998).

[16] The ILECs subject to review are those serving greater than 31,000 access lines and fewer than 5,000,000 access lines.

December 11, 1998, respectively. How the Commission will proceed with this project will depend on the nature of the information received by the parties.

Project No. 18886, Investigation and Possible Amendment of the Basic Network and Discretionary Service Requirements of Subst. R. 23.104.

In February 1998, the Commission opened a rulemaking project to examine the extent to which (if any) LECs subject to the Commission's pricing rule and Chapters 58 and 59 of PURA should be able to package basic network services (which are services, such as basic local exchange service, that are both provided by a monopoly and vital to ensuring a minimum level of quality phone service) with discretionary services (services, such as call waiting and call forwarding, that are provided by a monopoly, but are not vital in ensuring a minimum level of quality phone service). In both written comments and workshop discussions, LECs subject to the pricing rule argued that PURA places no restrictions on such packaging, and that the Commission is overstepping its boundaries by restricting such packaging. Potential competitors to these LECs, such as AT&T and MCI, generally opposed the idea of allowing such LECs to package basic network and discretionary services together, stating that such packaging would give such LECs too much of an advantage in a market that is still a monopoly market. However, these potential competitors were not opposed to *limited* packaging of basic network services and discretionary services. In addition, consumers' advocates like Consumers Union and Office of Public Utility Counsel (OPC) were concerned that only more affluent consumers would benefit from the packaging. The Commission decided not to modify the current rule on November 4, 1998.

ILEC InterLATA Service Proceedings

Docket No. 15711, *Complaint of AT&T Communications of the Southwest, Inc. Against GTE Southwest, Inc. and GTE Long-Distance.*

In April 1996, AT&T filed a complaint against GTE-SW and its interexchange affiliate GTE-LD, alleging that the discount offered by GTE-LD through its "Easy Savings Plan" (Plan), which discounted both interLATA usage (the long-distance service provided by GTE-LD) and intraLATA usage (including the 1+/0+ intraLATA services provided by GTE-SW), was anti-competitive and discriminatory. This discount was accounted for on only the GTE-LD books, and GTE-SW did not figure the amount into its calculation of wholesale rates for resale of the service to other carriers. Although the Commission agreed with the GTE companies that the two GTE affiliates are legally separate companies, it found that the arrangement between them did not meet the "arm's length" criterion because the effect of the affiliate relationship was an intra-corporate arrangement that confers improper advantages to both GTE companies at the expense of competition in both the intra- and interLATA markets. Specifically, the Commission ruled that the arrangement (1) confers an improper advantage to GTE-LD in the interLATA market and (2) allows GTE-SW to circumvent its obligations under FTA §§ 251 and 252 to offer the resale of its retail services at wholesale rates to competing

telecommunications carriers.[17] The Commission thus ordered GTE-LD to cease and desist from bundling its services, through the Plan, with the 1+/0+ intraLATA services provided by GTE-SW. The Commission found this prohibition necessary to prevent GTE-LD from providing end users a joint offering, which included GTE-SW's monopoly 1+/0+ intraLATA services, that was not available in a comparable manner to competitors. The Commission further required that if GTE-LD chooses to provide a discount to its end-use customers on the intraLATA and/or local services purchased from GTE-SW, that the discount shall be attributed to GTE-SW's retail rates for the purpose of establishing the wholesale rates at which GTE-SW must sell such services to competing carriers.[18]

As a result of this ruling, the Commission faced challenges in court from GTE-SW and GTE-LD.[19] On December 16, 1998, the district court remanded the case to the Commission for further explanation of its ruling. The Commission can appeal the ruling or accept the remand.[20]

Project No. 16251, Investigation into Southwestern Bell Telephone Company's Entry into In-Region InterLATA Service Under Section 271 of the Telecommunications Act of 1996.

SWBT initiated its FTA § 271[21] process in Texas on March 2, 1998, seeking the Commission's support for its application to the FCC to offer in-region interLATA long-distance service. The Commissioners directly conducted many of the hearings to develop the record in that proceeding to determine whether SWBT has opened its local markets for competition. Participants presented extensive evidence indicating their difficulty in working with SWBT to interconnect, purchase UNEs, and provide resale. On June 1, 1998, the Commission issued a list of additional steps SWBT must take to open its local market sufficiently that the Commission can support the company's petition at the FCC. Commission staff, SWBT, and the participants are working steadily in a collaborative process to satisfy the Commission's recommendations and appear to have completed

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[17] *Complaint of AT&T Communications of the Southwest, Inc. Against GTE Southwest, Inc. and GTE Long Distance*, Docket No. 15711, Order on Rehearing (Jun. 25, 1997).

[18] Purchasing GTE-SW's 1+/0+ intraLATA services for resale became an option in August, 1997, when GTE-SW implemented intraLATA equal access. (As provided for in PURA §§ 58.051 and 58.101, with the implementation of intraLATA equal access, GTE-SW's 1+ intraLATA service was reclassified from a basic to a discretionary service.)

[19] *GTE Southwest Inc. v. PUC*, M-97-220, (S.D. Tex. filed Sept. 5, 1997); *GTE Communications Corporation d/b/a GTE Long Distance v. PUC*, No. 97-10253 (261st Dist. Ct., Travis County, Tex. (Sept. 5, 1997).

[20] At press time, the Commission has not yet acted to appeal the ruling or accept the remand.

[21] FTA § 271 allows an RBOC to offer long distance service inside its home service area if there is irreversible competition for local telephone service in the region in question, as measured by the existence of facilities-based competition and the satisfaction of all interconnection requirements (a 14-point checklist). FTA requires the FCC to review the § 271 interLATA application in consultation with the state commission and the U.S. Attorney General; it is the state commission's role to develop the written record of the RBOC's compliance with the requirements and to offer a formal recommendation to the FCC.

several of FTA's 14-point checklist items. If the collaborative process continues in this fashion, the Commission anticipates that it will be able to provide an affirmative recommendation on SWBT's § 271 application in mid-1999.

Number Portability Project

Project No. 16091, Implementation of Local Number Portability.

The provision of local number portability (LNP) is one of the obligations that the FTA imposes on all LECs in order to facilitate a pro-competitive, deregulatory national policy framework. Thus, LECs are required to provide LNP in accordance with FCC orders;[22] it will be funded by end-user surcharges. Such a requirement ensures that customers will have the ability to change local telephone service providers while retaining the same phone numbers. Unless customers are permitted to take their old number with them when they move to a new local service provider (and thus avoid the inconvenience and expense, especially for businesses, of changing their phone number), it is unlikely that many will change providers. Long-term LNP must be provided by all LECs in the 100 largest Metropolitan Statistical Areas (MSAs) according to a phased deployment schedule.[23] In Texas, these MSAs are Houston, Dallas, Fort Worth, San Antonio, Austin, and El Paso. In Project No. 16091, the Commission determined that LNP is required to be deployed in each of these MSAs by the end of 1998. For areas outside of MSAs, LECs must provide number portability within six months of a specific request by another telecommunications carrier.

[22] *In the Matter of Telephone Number Portability*, CC Docket No. 95-116, Third Report and Order, FCC 98-82 (May 12, 1998).

[23] An MSA, as defined by the United States Office of Management and Budget, is a relatively freestanding area of a large population nucleus, together with adjacent communities that have a high degree of economic and social integration with that nucleus.

CHAPTER 3
PROTECTING THE CUSTOMER

In the transition to a fully competitive telecommunications market in Texas, the most important participant in the marketplace is the customer. The U. S. Congress and the Texas Legislature have determined that it is in the public interest to bring competition to the local telecommunications market. Likewise, these bodies have decided that allowing competition in the long-distance market will benefit the public welfare. However, the test of whether increased competition is in the public interest is how the customers of telecommunications services fare. If rates rise or if customers experience more frustration and wasted money from increased "slamming" and "cramming," then the public interest has not been well-served. This chapter describes the most important customer protection issues the Public Utility Commission of Texas (PUCT or Commission) has had to deal with in the last two years, as well as the key proceedings the Commission has undertaken to ensure that the customer is not exploited.

Customer Issues

THE EMERGING ROLE OF THE COMMISSION

As the electric and telecommunications industries move toward competition, the responsibilities of the Commission are changing. As the 1996 Texas Performance Review (TPR) report *Light Years*[24] noted, utility regulatory agencies nationwide are recognizing that their major role inevitably will shift from traditional rate-setting regulation to customer outreach, education, and protection.

Since the TPR's review of the agency's operation, the Commission has added a stronger customer information and protection element to its traditional role of regulator. The Commission's Office of Customer Protection (OCP) was established in July 1997 with funds appropriated by the 75th Texas Legislature.

A call center administered by OCP handles phone inquiries and takes complaints on the toll-free customer hotline. An investigation staff attempts to resolve customer complaints and works with utilities to ensure compliance with Commission rules. The information and education staff handles media inquiries and conducts customer education. The combination of these functions in one division allows OCP to quickly

[24] Texas Performance Review, *Light Years: The Future of the Public Utility Commission in Texas.* Austin, Tex.: Texas Comptroller of Public Accounts (1997).

identify abuses and inform and educate consumers of the issues surfacing in the competitive market.

The Commission expanded and publicized its toll-free consumer information line. Six staff members handle incoming calls in English and Spanish. In Fiscal Year 1998 (FY98), call volume increased almost five-fold over the levels experienced in 1997. Calls from Spanish-speaking customers account for 8.5% of those calls. Many of these calls are inquiries, but, with information about how the Commission can assist them, more customers are filing complaints about their utility problems.

Complaint caseloads have more than doubled from their FY97 levels. To help manage the caseload more efficiently, OCP increased its investigative and enforcement staff to a total of nine, including a bilingual investigator. Investigations of customer complaints have resulted in almost $500,000 in refunds to Texas customers, far exceeding the $150,000 projection for FY98.

More than 75% of the complaint caseload involves telecommunications issues. In contrast, complaints about electric utility issues comprise only about 8% of total caseload. Complaints about non-jurisdictional utility services like water, gas, and cable television make up the remaining 17 percent.

The most frequent customer complaints received by OCP concern billing issues (local and long-distance), slamming, cramming, customer service, and telephone solicitation. Each of these types of complaints is discussed more fully below.

BILLING

More than half of the telecommunications complaints received by OCP involve long-distance billing, and many of those complaints stem from customer confusion. Marketing strategies of service options, the sheer volume of company and service choices available, and new state and federal fees confuse customers and make it difficult for them to make informed decisions. In an effort to address these issues, the Federal Communications Commission (FCC) in October 1998 published a Notice of Proposed Rule Making on Truth-in-Billing and Billing Format issues.[25] To provide the best possible comments to the FCC on this proceeding, OCP conducted a customer focus group. Customers discussed billing issues, evaluated bill formats, and completed an exit survey. Essentially, customers said they want “clear and simple” bills that allow them to quickly identify their providers, the services they are receiving, and the fees and charges they are paying.

Simplification of customer bills is not entirely within the realm of Commission authority. Besides new itemizations required by federal law, several provisions of both

[25] *In the Matter of Truth-in-Billing Format,* CC Docket No. 98-170, Notice of Proposed Rulemaking (Sept. 17, 1998).

the Public Utility Regulatory Act (PURA) and the Texas Health and Safety Code mandate that certain surcharges be itemized separately on customer bills. Examples are recovery of municipal fees, Texas Universal Service Fund uniform charges, and 911 service.[26] Other required surcharges are treated similarly for consistency, such as tax liability recovery and poison control. Because the Commission continuously receives calls from customers concerning confusion about their telephone bills, the Commission recommends that the appropriate statutory provisions be amended to allow the foregoing mandatory surcharges to be consolidated and streamlined with the billing for basic local service.[27]

SLAMMING

"Slamming" is the practice of changing a customer's local or long-distance telecommunications provider without the customer's knowledge or consent. A law effective September 1, 1997, made slamming illegal in Texas.[28] The Commission developed rules to prevent unauthorized switches with penalties up to $5000 a day for each slamming violation. However, the Commission's ability to assess administrative penalties is limited because there is an automatic 30-day "cure" period after the first offense. Penalties can be levied only after subsequent offenses.

P.U.C. SUBST. R. 23.106 requires a telecommunications provider to obtain customer authorization to change a customer's service. A company may change service by one of the following three methods:

1. A signed letter of authorization (LOA). The LOA must be separate from any inducements (*e.g.,* contest forms or checks). The LOA must be limited to authorizing a change in service and must be clearly identified as a letter authorizing a change of service.
2. A customer's verbal authorization must be verified by an independent third party.
3. A negative option welcome packet can be mailed to a customer to verify a request for a change in service. These packets advise a customer to return a postage-paid postcard to the company if he or she chooses not to switch carriers.

If a company fails to obtain proper authorization, the law requires the slamming company to pay the cost of switching customers back to their original provider and to provide billing records to that provider to ensure that customers do not pay higher rates. Customers are due a refund of any charges they would not have paid if they had not been

[26] *See* PURA § 54.206, PURA Subchapter B, and Texas Health and Safety Code § 771.073.

[27] *See also* Chapter 7 of this report for additional discussion of this legislative recommendation.

[28] Act of May 23, 1997, 75th Leg., R.S., ch. 919, § 1, 1997 Tex. Gen. Laws 2906. (Amended PURA95 by adding §§ 3.312 and 3.313.)

slammed as well as any other benefits they would have received had they not been slammed. While the Commission has been successful in securing refunds for many customers and in developing several settlement agreements, a problem confronting the Commission is that the enforcement timeline under current law is long enough that some slamming offenders can make quick profits and cease Texas operations before being liable for penalties.

OCP has launched an aggressive educational campaign about the new slamming law. Customer awareness has resulted in a 1,215% increase in slamming complaints since the law went into effect. OCP has helped Texas customers collect more than $157,000 in refunds in the 12 months ending August 31, 1998. Forty-three companies have been issued initial violation notices, and two companies reached settlement agreements with the Commission and the Office of the Attorney General totaling almost $500,000.

CRAMMING

The "cramming" of unauthorized charges on a customer's local phone bill is a fast-growing problem. Often these charges are for services the customers does not want, did not agree to, and is not receiving. Customers often pay these charges because they do not notice them or they simply trust their local phone company to bill them correctly. Other customers might pay the charges because they worry their credit ratings will suffer, or that their local phone service will be disconnected as a result of not paying these charges.

Unauthorized charges appear in many forms:

- Monthly access or network charges from companies other than chosen long-distance carriers--many provide no service
- Charges that resemble state or federal fees
- Telecommunications services such as voice mail, debit cards, 800 services, and calling cards
- Non-telecommunications services such as psychic club memberships and travel services.

An OCP fact sheet advises customers to avoid potential scams by observing the following safeguards:

- ⇒ Read their phone bills carefully each month. Call their phone companies and report unfamiliar charges.
- ⇒ Never sign anything without reading it thoroughly.
- ⇒ When called by a telemarketer, obtain the name of the solicitor and the purpose of the call before providing their name and any other information.
- ⇒ Be cautious about leaving their names and phone numbers on automated message systems since this information may be used without their consent to bill them later.

Cramming accounts for 18.2% of the complaints received by OCP. This number represents an increase of 768% over FY97. While the Commission currently has no jurisdiction over providers of non-telecommunications services, such as travel clubs, psychic hotlines, and debit card providers, OCP helped Texas customers collect more than $34,000 in refunds related to cramming in the 12 months ending August 1998.

The Commission has taken additional steps to bring this problem under control. In November 1997, OCP conducted a workshop seeking cooperation in controlling cramming, inviting the major long-distance companies, local phone companies, and independent billing agents (all of whom also incur costs as a result of cramming) to participate. OCP also attempted to remedy the problem via informal agreements with the two largest local phone companies, Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated (GTE-SW). Both companies have made efforts to credit all cramming charges from complaints received by the Commission. However, cramming still is a major customer abuse, and there are no penalties for most of the companies who make fraudulent charges.

Through a customer focus group conducted in June 1998, OCP asked customers for their input on how they wanted the problem of cramming addressed. Based on input from the focus group, OCP created a mail survey, which was sent to more than 600 customers. An overwhelming 75% of the customers responded to the survey asking for a Commission rule or state law to end the abuse. A rulemaking on cramming was initiated in August 1998. Adoption could occur in early 1999.

CUSTOMER SERVICE

In a fully competitive market, companies should try to maintain high levels of customer service to attract and retain customers. However, in this transition period, the Commission continues to receive numerous customer-service complaints about both regulated and non-regulated providers.

Although the Commission has only limited regulatory jurisdiction over long-distance carriers, it recognizes consumers' need for information on these issues and has created several fact sheets addressing long-distance issues. Long-distance rate comparisons are also a regular feature of the OCP quarterly consumer newsletter, "Public Utility Connection."

In June 1998, AT&T raised intrastate long-distance rates for Texas customers. Many customers, especially those in rural areas, were unaware of this 50-percent increase because the only notice was a small advertisement published in seven urban newspapers. The OCP call center was flooded with calls from angry customers, who were told incorrectly by AT&T customer-service representatives that the increase was the result of a Commission mandate. Commissioner Judy Walsh noted that the company did not give its customers the notice they needed of the higher prices. As a result, AT&T decided to credit customers at their original rates through September 1998, and to provide bill notices to customers about the increase. It also gave customers an opportunity to shop for an alternative.

Since customer service is increasingly important in a competitive market, OCP is conducting a series of utility provider workshops to help the Commission speed its response time to customers, and ultimately reduce customer complaints concerning telecommunications providers. Non-regulated utilities are also being invited to these workshops.

TELEPHONE SOLICITATION

Because customer scams often originate with telephone solicitations, the Commission uses its authority to protect telephone customers from unwanted solicitations. The Commission's rules[29] require that telemarketers abide by the wishes of customers asking to be placed on a "Do Not Call" list, that calls be placed only during certain hours, that specific information be provided by the solicitor, and that automated message machines meet various requirements. Most of the solicitation-related complaints to the Commission concern violations of these rules.

The Commission advises customers to take the following actions:

⇒ Obtain the name of the solicitor and purpose of the call before giving any information or providing their names.

⇒ Ask for the name and phone number of the solicitor, so the customer can call back with any questions.

⇒ Be cautious when leaving their name and phone number on the message portion of an automated solicitation call, to prevent unauthorized charges from appearing on their phone bill.

[29] P.U.C. SUBST. R. 26.125 and 26.126, pursuant to PURA §§ 55.151, 55.125, and 55.127.

⇒ Use caller identification to assist in obtaining the name and phone number of telephone solicitors.

Beginning September 1, 1998, solicitors cannot use any device blocking their name and telephone number from caller identification devices.[30] This requirement should assist customers in terminating calls from unwanted solicitors. OCP enforcement staff has also issued 16 notices of violation to companies who have violated the Commission rules relating to caller ID blocking. Four companies have been issued second notices warning of potential fines.

Other Issues

Despite generating relatively few customer complaints, other changes in the telecommunications industry concern customers and highlight the need for education about deregulated services. These issues include pay-telephone deregulation, changing area code assignments, informed customer choice, service quality, and customer outreach.

PAYPHONES

In October 1997, the FCC further deregulated payphones.[31] The changes removed state rate caps on the price of local phone calls and allowed providers to charge for directory assistance calls from a payphone. New rates for local calls from payphones range from 35 cents to $1.00. Additionally, private payphone owners are now allowed to charge long-distance carriers for any calls placed to the long-distance company's toll free numbers from payphones. Although the caller will not pay for this call at the payphone, customers who use long-distance access codes to make calling card calls will see the fees on their long-distance calling card bills to facilitate understanding their bills and documenting any inappropriate charges.

To remove another potential for abuse, the Commission approved a plan to assign long-distance operators.[32] In the past, when a customer dialed the operator to make a long-distance call, the customer was asked which long-distance company should carry the call. If the caller said, "It Doesn't Matter," the customer might be billed by a company with that name. Or, if the caller actually had no preference, the call might be carried by an unknown long-distance carrier, with potentially higher rates, because the operator used a random list to assign the carrier. With new technology approved by the Commission,

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[30] P.U.C. SUBST. R. 26.126(C)(3)&(4), pursuant to Act of May 28, 1997, 75th Leg., R.S., ch. 1402, § 1, 1997 Tex. Gen. Laws 5257 (amending PURA95 § 3.302(e)).

[31] Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunications Act of 1996, CC Docket No. 96-128, Report and Order, FCC 96-388, (Adopted Sept. 20, 1996).

[32] *Application of Southwestern Bell Telephone Company for Revision to Access Service Tariff Relating to Operator Transfer Service*, Docket No. 17278, Order (October 27, 1998).

the operator can now identify the long-distance company subscribed to the payphone and assign the call to that company, eliminating the use of a random list.

AREA CODES AND NUMBER CONSERVATION

Because new companies are requesting blocks of numbers to mitigate consumer demand for a burgeoning number of telephone based services, the Commission has been forced to apply geographic splits and overlay codes to existing areas. Examples of the two approaches include the following:

- The Commission approved an industry recommendation to implement new area codes in Fort Worth and San Antonio in November 1996. In both areas, the area codes were split three ways, divided geographically.
- Dallas and Houston, two cities that also received new area codes in 1996, will begin dialing 10 digits to make local calls beginning in December 1998 in Dallas and January 1999 in Houston. The boundaries between the existing area codes will be erased and a third area code added as an overlay.

Additional efforts in number conservation have also been aggressively pursued by industry, consumer groups, and the Commission to minimize the costs associated with these difficult changes. A more extensive discussion of area codes and number conservation is given in Chapter 4.

INFORMED CUSTOMER CHOICE

To benefit directly from competition, consumers must have a choice of competitive services and providers, and must have sufficient information to make educated choices based on their needs. The information should also be adequate and appropriate to allow comparison and choices to be manageable.

In the last fiscal year, the number of companies granted authority to compete in the local phone market has doubled. In June 1998, OCP began actively participating in the Commission's process of granting certification. OCP submits complaint histories on applicants seeking entrance into the marketplace as well as applicants requesting amendments to existing certificates. The OCP report identifies any history of complaints and violations by applicants in the telecommunications industry. This information aids in keeping "bad actors" out of the local phone market and prevents potential customer abuses.

Some customers, specifically those who have lost service because of non-payment, are targets for companies that offer local service at high rates. Because local telephone service is a necessity for many persons who are elderly or ill, or who have disabilities, the Commission implemented a prepaid local telephone service (PLTS) rule,

P.U.C. SUBST. R. 23.40, in September 1997.[33] The new rule requires incumbent local exchange carriers (ILECs) to provide PLTS to eligible customers as a one-time alternative to disconnection for nonpayment of services. The PLTS plan allows customers that are able and willing to pay for local telephone services to receive those services even when they cannot pay their past debts for services other than local service (payment of long-distance debts, which may be the most sizable debt for some customers, is not a condition for receiving the service). However, PLTS is a restricted service (*e.g.*, customers have no access to toll services), so customers continue to have some incentive to pay their past due charges. OCP has worked closely with the Texas Department of Housing and Community Affairs (TDHCA) as well as grass roots organizations such as Valley Interfaith (in the Rio Grande Valley) to spread the word about this program.

SERVICE QUALITY

In addition to its efforts to curb such abuses as cramming and slamming, the Commission has made an effort to improve quality of service through prompt attention to these complaints. Many of these complaints are on outages, lack of dial tone, and poor sound transmission. For example, Sprint's recent outage in Athens and Karnack caused intermittent service interruptions to 80,000 access lines for six days, prompting a large number of complaints at one time.

In June 1997, the Commission initiated a three-month complaint-resolution pilot project with GTE-SW, which serves approximately two million Texas customers. The goal of this pilot project was to enhance customer service provided by GTE-SW and for OCP and to speed complaint resolution for GTE-SW customers. Under Commission rules, all utilities are allowed 30 days to provide an initial response to a complaint received by the Commission. During the pilot project, GTE-SW committed to resolving complaints within 10 business days. In cases where the need for investigation made compliance with the 10 day deadline impossible, GTE-SW was to provide the customer a full status report on the investigation of the complaint within 10 days. Customers would receive final responses from the Commission and GTE-SW in all cases no later than 30 days after the receipt of the complaint by GTE-SW. GTE-SW and the OCP staff consider the pilot project a success. It gave both organizations a chance to develop new ways to improve service to their customers. GTE-SW initiated a special toll-free executive complaint-resolution number to allow for faster handling of complaints. Also, the Commission streamlined its complaint handling process so that complaints were forwarded to GTE-SW as quickly as possible. Finally, it opened up the channels of communication between the Commission and GTE-SW customer-service staffs so that issues could be addressed a more proactive basis.

[33] *Investigation into Issues Relating to Disconnection of Local Telephone Service*, Project No. 16804, (Sept. 15, 1997).

CUSTOMER OUTREACH

In its first year of existence, OCP has greatly expanded customer education, including the production of more than a dozen publications, in both English and Spanish, and available on the Commission's web page.[34] OCP also has produced its first customer newsletter, the *Public Utility Connection*, published quarterly and distributed to approximately 4,000 customers across the state. In a newsletter column titled "Wrong Numbers," the Commission identifies utilities with the highest Commission complaint records. A list of "Right Numbers" indicates those utilities that have provided customers with above-average service quality.

Other outreach efforts include staff and Commissioner visits to various parts of the state. In FY98, Commission representatives visited Waco, Amarillo, the Rio Grande Valley, Tyler, Abilene, Midland, Beaumont, and Laredo. These trips have been successful because local media helped spread the message about the importance of customer awareness.

The Commission has the responsibility for educating providers as well as customers. Toward that mission, OCP produces a monthly *Utility Advisory* newsletter. Each issue highlights issues that are important to utility providers. Additionally, the *Commission Update* is a weekly publication that provides a weekly agenda of Commission events and summaries of open meeting decisions. Provider workshops also provide a forum to exchange information.

[34] *See* the customer information section of the PUCT Web page located at http://www.puc.state.tx.us.

CHAPTER 4
PROMOTING HIGH QUALITY INFRASTRUCTURE

Some of the major potential benefits of competition in any market include lower prices, a choice of many convenient products, and greater innovation of products and services. However, these benefits of competition are of no value to customers who, for one reason or another, are prevented from receiving these benefits. Whether a customer lives in a large city or in a high-cost rural area, problems with the telephone network infrastructure can cause many or all customers not to realize any benefits of competition. In fact, problems with the infrastructure have the potential to cause more harm to customers in a competitive market than in a regulated market. In addition, where there are problems with the infrastructure, certain competitors may be placed at an unfair disadvantage relative to other competitors in the market. Thus, for a healthy competitive market to emerge and both benefit the customer and give companies an opportunity to succeed financially, the network infrastructure must be constructed and maintained very carefully.

Maintaining the integrity of the telephone network is critical to preserving high service quality, which is a key component of universal service. This chapter explains many of the proceedings and concerns relating to the infrastructure and universal service with which the Public Utility Commission of Texas (PUCT or Commission) has been involved over the last few years.

Universal Service

AN OVERVIEW OF UNIVERSAL SERVICE

The definition of universal service in telecommunications has its foundation in the Communications Act of 1934.[35] The Act's preamble calls for a "rapid, efficient, nationwide and world-wide wire and radio communication service with adequate facilities at reasonable charges." The term has been interpreted to mean the universal availability of adequate service at affordable rates. The Public Utility Regulatory Act (PURA) includes a policy directive that the Commission should protect and maintain the "wide availability of high quality, interoperable, standards-based telecommunications services at affordable rates."[36]

[35] 47 U.S.C. § 151.

[36] PURA § 51.001(b)(3).

During the past several decades, the universal availability of telephone service has increased markedly due to the existence of implicit subsidies, support payments (including lifeline rate programs), and low-interest construction loans, as well as the declining cost of telephone service relative to other goods and services. The current subscribership level is in excess of 93% of the nation's households. However, the emergence of competition within local exchange telecommunications markets has focused attention on the impact of existing universal service programs and subsidies on customers and potential competitors, in addition to incumbent local exchange carriers (ILECs) and interexchange carriers (IXCs). The existence of improperly targeted support programs and implicit subsidies has led to the concern that some carriers may be competitively disadvantaged by the traditional system.

The term "universal service" means different things to different people. Some parties argue that the goals of universal service already have been reached, and that the existing support arrangements can be discontinued without serious social impact. Others insist that subsidies must be continued to allow current low-income subscribers and those living in high cost rural areas to continue to receive affordable service. Yet other parties support the expansion of universal service to include two-way interactive broadband services.

Universal Availability

The most widely used measure of telephone availability is the percentage of households with telephone service, or telephone "penetration." Continuing analysis of telephone penetration statistics allows us to examine the aggregate effects of regulatory actions on households' decisions to maintain, acquire, or discontinue telephone service. Census Bureau figures show that the percentage of households subscribing to telephone service on a nationwide basis averaged 93.9% in 1997, while for Texas the level averaged 91.3%.[37] Texas historically has had a lower subscribership percentage than the nation as a whole.

The Federal Communications Commission (FCC) has found that, in general, the following trends apply in telephone subscribership:

- the highest rates of non-subscribership are among the young, the unemployed, and minority households with children;[38]
- most nonsubscribers are former subscribers, many of whom have been disconnected because of inability to pay toll charges;[39]

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[37] Alexander Belinfante, FCC Common Carrier Bureau, *Telephone Subscribership in the United States* (July 1998). The most recent monthly figures, for March 1998, were 94.1% for the US and 92.9% for Texas.

[38] Jorge Reina Schement et al., *Telephone Penetration 1984-1994*, pp. 10-11; and Alexander Belinfante, FCC Common Carrier Bureau, *Telephone Subscribership in the United States* (1994), at 4. (Data through July 1994.)

- the vast majority of nonsubscribers are renters and persons in non-permanent living situations;[40] and
- many low-income minority households choose not to have telephone service in order to avoid being reached by the outside world.[41]

Service Adequacy

The second fundamental aspect of universal service is that telephone service must be adequate to provide reliable access to the network. Service that is not reliable and continuous can jeopardize public safety and the functioning of society.

The basic set of services that must be available and adequate to every telecommunications customer in Texas is defined in PURA § 51.002 as including flat rate residential and business local exchange service, including primary directory listings, tone dialing service, access to operator services, access to directory assistance services, access to 911 service where provided by a local authority, and dual-party relay service. In addition, basic service includes the ability to report problems seven days a week, and the ability for qualifying consumers to receive lifeline and tel-assistance services. Further, the Commission is given authority to determine, after a hearing, other services that should be included in the definition of basic local telecommunications service. As discussed elsewhere in this report, the Commission also has established service quality standards, which must be maintained by dominant certificated telecommunications utilities (DCTUs) in categories such as dial-tone speed and digital connectivity. The Commission monitors ILEC service through the review of performance measure reports and the analysis of customer complaints.

Affordability of Rates

Over the last half-century, subsidies or support mechanisms have been used by regulators to promote universal telephone service in the United States.[42] As competition emerges in local telecommunications service markets, many entities, including the FCC

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[39] Field Research Corp., *Affordability of Telephone Service,* pp. S-7, S-19 to S-20 (1993) (survey funded by GTE and Pacific Bell, available from Pacific Telesis, Federal Regulatory Relations, 1275 Pennsylvania Ave., Suite 400, Washington, D.C. 20004).

[40] Milton Mueller and Jorge Reina Schement, Rutgers University Project on Information Policy, *Universal Service from the Bottom Up: A Profile of Telecommunications Access in Camden, New Jersey* (1995), at 7; Scott J. Rubin, *Telephone Penetration Rates for Renters in Pennsylvania* (1993), at 1 (available from Pennsylvania Office of Consumer Advocate, 1425 Strawberry Square, Harrisburg, PA 17120); New York State Department of Public Service, *Universal Service Issues--A Staff Draft Report* in Module 1 Case 94-C-0095--The Telecommunications Competition II Proceeding (May 16, 1995), at 31 (available from New York State Department of Public Service, Three Empire State Plaza, Albany, NY 12223); and Field Research Corp., *supra.*, note, at S-1.

[41] Mueller & Schement, *supra.*, at 9.

[42] Portions of this discussion are excerpted from a report by the FCC Common Carrier Bureau, *Preparation for Addressing Universal Service Issues: A Review of Current Interstate Support Mechanisms* (February 26, 1996).

and the Commission, are trying to change the current system of revenue support mechanisms. One of the factors complicating this attempt in the newly competitive telecommunications environment is that changes that promote competition may have a detrimental effect on existing subscribers unless effective safeguards are employed. In considering the rules and procedures under which competition is introduced into local service markets, regulators must pay attention to whether the price and service benefits of competition will reach, for example, low-income or mobile citizens or those living in rural or high-cost areas.

The debate regarding subsidies in telecommunications most often focuses on the recovery of the cost of the local subscriber access line, or local loop. The investment in the local loop generally constitutes 40% or more (in high-cost rural areas, much more) of the overall investment in telecommunications network plant. The debate centers on whether the cost of the local loop put in place to provide service to a customer should be recovered from that customer on a non-usage-sensitive basis (*e.g.*, as part of the fees for basic local service), or whether it should be recovered from the revenues of the many services that are provided using that loop. Traditionally, rates have been designed to recover a portion of the cost of the loop directly from the customer via flat monthly charges, with the remainder of the costs of the loop recovered from services that utilize the loop (*e.g.*, from access and toll charges and charges for optional local services such as call waiting).

Parties who advocate a reduction in access or toll charges generally assert that access or toll charges subsidize local service rates, and that a greater percentage of the common loop cost should be borne by the end user through flat monthly rates. Parties arguing against such an increase in local rates (or, more generally, non-usage-sensitive charges) typically argue that the costs are more equitably recovered from the many services that use the loop. While this debate has continued for over 40 years without resolution, the introduction of competition and the accompanying efforts to establish unbundled service costs and cost-based rates have amplified the importance of resolving this controversy. In the last two years, both the FCC and the Commission have undertaken massive proceedings to obtain answers to questions regarding how the costs of service will be determined and how the level of support moneys will be determined, collected, and distributed among providers.

The following sections describe in greater detail the different types of federal (or interstate) and state (or intrastate) universal service funds (USFs) as well as some of the more important USF proceedings that have been undertaken at the Commission in the last two years. However, in order to better understand the workings of interstate universal service support programs, one must examine the complex relationships between costs and prices in the intrastate and interstate jurisdictions. The FCC regulates the recovery by ILECs of the portion of their total network costs allocated to the provision of interstate services. The states regulate the recovery of costs allocated to intrastate services (local service and intrastate long-distance services).

Federal USF

The federal USF consists of three programs: low-income lifeline assistance programs, telecommunications relay services for the deaf, and the high-cost assistance program.

Lifeline Assistance Programs

Lifeline Assistance[43] and Link Up America[44] reduce the monthly rate and initial connection charge, respectively, for elderly or low-income telephone subscribers. The programs are managed by the states, but are funded through charges ultimately paid by interstate-service ratepayers.

In 1997, the FCC significantly revised the Lifeline and Link Up programs to better reflect the universal service aspects of the federal Telecommunications Act (FTA).[45] Acting upon the recommendations of the Federal-State Joint Board on Universal Service, the FCC agreed to expand Lifeline and ensure that it would be available in all states, to modify the state matching requirement, and to increase the federal Lifeline support amount. The FCC further agreed to require carriers to maintain service when Lifeline customers elect toll-limitation services, and to prohibit disconnection of local service for non-payment of charges incurred for toll calls.

In the 1997 action, the FCC revised the Lifeline program to ensure that all Lifeline customers would receive increased federal support without a matching requirement. Beginning January 1, 1998, the federal Lifeline program provides funding of up to $7.00 per low-income subscriber per month, consisting of a baseline amount of $3.50, an additional $1.75 per subscriber per month if the state Commission authorizes a reduction in local rates equal to that amount, and up to an additional $1.75 from the federal program if the state provides support for the low-income subscriber as well.

The federal Link Up America program provides for discounts and other support for service connection charges for qualified low-income individuals. The customer may receive a discount of up to one-half (up to $30.00) of the service connection fees, or for interest foregone from a deferred schedule of payments (up to $200) for which the low-income customer pays no interest. The Link Up program has added 6.8 million new telephone subscribers to the telecommunications network since 1987. The FCC estimates that, based on January through August 1998 data, 5.4 million subscribers will pay reduced local rates under the low-income provisions of the federal Lifeline programs.[46]

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[43] 47 C.F.R. §§ 69.104(j)-(l), 69.117, 69.203 (f)-(g).

[44] 47 C.F.R. §§ 36.701 - 36.741, 69.117.

[45] Federal-State Joint Board on Universal Service, Report and Order, CC Docket No. 96-45, FCC 97-157, 12 FCC Rcd 8776, 8952-94, ¶¶ 326-409 (1997).

[46] Federal-State Joint Board Staff, *Monitoring Report*, CC Docket No. 96-45 (Dec. 1998).

Telecommunications Relay Service

Telecommunications relay service (TRS) provides a communication link between persons with and those without hearing or speech disabilities. TRS relies on communications assistants to relay the content of calls between users of text telephones (TTYs) and users of traditional handsets. TRS is required by Title IV of the Americans with Disabilities Act and, to the extent possible, must be "functionally equivalent" to standard telephone service. The cost of interstate TRS is recovered from all providers of interstate telecommunications services, as a percentage of their gross revenues and a "contribution factor" determined annually by the FCC. The FCC has established an interstate TRS Fund Advisory Council to advise the TRS Fund Administrator on funding issues.

Interstate High-Cost Assistance

The interstate high-cost assistance program involves the allocation, between the state and interstate jurisdictions, of non-traffic sensitive (NTS) "local loop costs" -- a term that refers to the costs of outside telephone wires, poles, and other facilities that link each telephone customer's premises to the public switched telephone network. These costs are allocated between the state and interstate jurisdictions based on the rationale that all local loops can be used for making and receiving state and interstate telephone calls.

The FCC's rules outline a program that is designed, in part, to reimburse ILECs for a portion of the cost of providing service to very high-cost regions, thus reducing the amount of revenue that must be recovered from each customer in such regions. This reimbursement occurs through a special mechanism in the jurisdictional separations process. On a nationwide average basis, approximately 27% of ILEC local loop cost is allocated to the interstate jurisdiction, and 73% is allocated to the state jurisdiction. The average cost per loop, however, varies significantly among ILECs, and so does the percentage of loop costs allocated to interstate.[47] In this manner, the high-cost assistance program operates to hold down local rates and thereby promotes one of the most important goals of federal and state regulation -- the preservation of universal telephone service. The FCC's program assists ILECs with high NTS costs with payments from the USF. Interstate IXCs pay into the federal USF to provide this support. As detailed further in Appendix B, the FCC, advised by a federal-state joint board, is considering massive changes to this program.

Texas' Universal Service Fund (TUSF)

The 70th Texas Legislature established a Universal Service Funding mechanism for Texas through amendments to PURA in 1987, although the statute has been amended since then. The current intrastate USF funds three major programs, similar to the

[47] This percentage varies from the standard 25% to significantly higher for high-cost areas of certain companies. An ILEC with under 200,000 loops per study area has 100% of its average loop costs above 150% of nationwide average loop costs allocated to interstate.

interstate USF: a high-cost assistance program, the Relay Texas program, and the Tel-Assistance program.[48]

Tel-Assistance and Other Lifeline Programs

Tel-Assistance Service is a telecommunications service assistance program that provides low-income residential customers with a reduction in the price of basic local exchange access service. Eligible customers receive a reduction of 65% off the applicable local exchange monthly rate for the local service provided. The Tel-Assistance program was created by the Texas Legislature in 1987 and is now codified in PURA §§ 56.071-.078. As of October 1998, there were 52,404 clients receiving Tel-Assistance support;[49] the amount of revenue support in 1997 was $4,359,520.[50]

Lifeline Assistance programs (discussed in more detail in the description of the interstate lifeline assistance programs) are offered by many ILECs in Texas to allow eligible low-income customers to receive credit for a total of $10.50 from the basic local service rate.[51] More than 216,000 Texas subscribers take advantage of these programs, with support revenues of over $10.6 million annually from the interstate universal service fund.[52]

Link-Up Texas is a program to help households become connected to the network through a partial waiver of the non-recurring installation charge for local exchange service. Link-Up Texas is the state companion program of Link-Up America, also described in the interstate portion of this chapter. More than 90,000 Texas subscribers take advantage of this program, with support revenues of over $1.6 million annually from the interstate universal service fund.[53]

Relay Texas Program

In 1989, the Legislature authorized TRS in Texas and directed the Commission to supervise its provision.[54] The name "Relay Texas" was coined for the Texas TRS. Relay Texas is available 24 hours a day, 365 days a year, with no restrictions on the length or number of calls placed. In September 1990, the first month of operation, Relay Texas

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[48] Pursuant to a contract with the Commission, the Texas USF is administered by the Texas Exchange Carrier Association (TECA). Beginning in 1999, the restructured Texas USF will be administered by the National Exchange Carrier Association (NECA).

[49] TECA Activity Report No. 8200, October 30, 1998.

[50] TECA Statement of USF Revenue and Expenses for the year ending Dec. 31, 1997.

[51] Company-specific lifeline programs (*i.e.*, those other than Tel-Assistance) have not been supported by the intrastate USF through 1998; pursuant to P.U.C. SUBST. R. 23.142(d)(2), however, the expanded TUSF will provide some support for these programs.

[52] Federal-State Joint Board Staff, *Monitoring Report, supra.*, Table 2.5A.

[53] *Id.*, Table 2.8A.

[54] Now codified in PURA §§ 56.101-112.

processed nearly 50,000 relay calls; by August 1998, the number of calls had increased to over 400,000 per month. Relay Texas has led the nation in improving the quality of TRS, with such enhancements as voice-carry-over, time-stamping, a customer database, and Spanish interpreting. Pursuant to PURA, TRS is provided by a designated carrier and funded by a surcharge on local and long-distance telecommunications providers through the USF. The Commission awarded a five-year contract to Sprint Communications Company, L.P. (Sprint) for Texas in 1990 and again in 1995; the current contract, which expires in 2000, may be amended annually.

A model for competition in the provision of TRS is difficult to discern, but interest in creating a competitive market in this area has increased. AT&T, Sprint, and MCI provide the vast majority of TRS at both the state and national level, although some other telecommunications providers have expressed an interest. At present, there appear to be several barriers to creating a competitive TRS market, in Texas and elsewhere. The most practical barriers in Texas are the current (Commission-initiated) five-year contract term and the statutory requirement of a single TRS provider. Based on experience thus far, it is unclear whether the TRS market in any one state can support multiple TRS providers.

Intrastate High-Cost Assistance Program

The High-Cost Assistance (HCA) portion of the intrastate USF is used to provide financial assistance to ILECs in high-cost rural areas that have demonstrated a need for additional revenue support to keep basic local telecommunications service affordable. The guidelines for allowing ILECs to obtain this support are contained in P.U.C. SUBST. R. 23.53. This rule will become obsolete with the implementation of the new Texas high-cost programs, scheduled for January 1999. After beginning as a very small fund to support only a handful of high-cost companies, the HCA has grown in response to actions that phased out the interexchange carrier access charge. In 1997, eleven ILECs received annual payments totaling over $6.2 million from the state HCA program.[55]

COMMISSION USF PROCEEDINGS

As discussed above, both the Commission and the FCC have been heavily involved in multiple proceedings with the aim to restructure the intrastate and interstate USFs over the last few years. Key proceedings before the PUCT for restructuring the intrastate USF are discussed below.

Project No. 14929, Review of Universal Service Fund Pursuant to PURA and the FTA

In Project No. 14929, the Commission initiated a universal service rulemaking to expand and restructure the intrastate USF, in accordance with PURA § 56, FTA § 251(b),

[55] Texas ILECs, Earnings Monitoring Reports (Schedule IV) for the period ending December 31, 1997.

and the FCC's orders *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45. The rules resulting from this proceeding replace the Commission's former universal services rules and complement the federal universal service rules. The state USFs mandated by the previous rules, like the federal funds, were not appropriate for the changing telecommunications industry for many reasons. They were based on the embedded (historical) cost of an outdated telephone network, rather than on the forward-looking economic costs an efficient competitor would incur. The previous state funds were based on average statewide service rates rather than rates that reflected differences in costs between rural and urban areas. Also, some previous funds were paid into only by IXCs, rather than all companies that provide telecommunications services. The fact that local-service (or loop) subsidies in previous funds were implicit rather than explicit led to the potential for over- or under-recovery of USF funds (and left ILECs vulnerable to losing their most profitable customers to competitive local exchange carriers (CLECs)).

Some of the universal service rules adopted by the Commission on December 7, 1997, are as follows:

- *Education Percentage Discount Rates (E-Rates),* P.U.C. SUBST. R. 23.107 — This rule establishes discounted rates for use by educational institutions (schools, libraries, and consortia) of intrastate telecommunications services, Internet access, and internal connections that are equivalent to those adopted by the FCC for interstate services. The e-rate an educational institution receives is based on the percentage of students that are eligible for the national school-lunch program.
- *Texas High-Cost Universal Service Plan (THCUSP),* P.U.C. SUBST. R. 23.133 — This rule initially applies to eligible telecommunications providers (ETPs) other than ETPs serving small or rural ILEC study areas. Through this rule, ETPs receive support for eligible lines they serve in high-cost service areas. The support they receive is based on the difference between the forward-looking economic cost of providing the supported services in the area and the benchmarks established by the Commission. ILECs must reduce other rates, as determined by the Commission, to offset THCUSP support.
- *Small and Rural ILEC Plan,* P.U.C. SUBST. R. 23.134 — This rule requires a monthly per-line support amount to be calculated to replicate the amount of support small and rural ILECs received from the toll pool before 1999 and to replace revenues resulting from any access and/or toll revenue reductions. The amount each ETP receives per line is calculated by the Commission for a given ILEC study area.
- *Reimbursements for Texas USF (TUSF) reductions due to policy changes,* P.U.C. SUBST. R. 23.136 — This rule specifies the circumstances, set forth in PURA § 56.025-.026, under which an ILEC serving fewer than five million access lines may seek to recover funds from TUSF. These funds are

to offset a reduction in the ILEC's high-cost assistance stemming from regulatory actions by the Commission or another governmental entity.

- *Designation of certain telecommunications providers as Eligible Telecommunications Providers and Eligible Telecommunications Carriers to receive USF*, P.U.C. SUBST. R. 23.147 and 23.148 — Rule 23.147 establishes the requirements for LECs to be eligible to receive funds from the Texas USF. Rule 23.148 applies to common carriers (including local exchange carriers (LECs)) and designates eligibility requirements for the receipt of funds from the federal USF.
- *Lifeline and Link Up Service*, P.U.C. SUBST. R. 23.142 — Lifeline service, as established by this rule, provides a monthly discount of up to $10.50 per qualifying customer off of the local telephone bill. Link Up provides a reduction of half (or $30 off, whichever is less) of the customary charge for hooking up telecommunications service to qualifying customers.
- *Tel-Assistance Service*, P.U.C. SUBST. R. 23.143 — This rule requires reimbursement to LECs for the provision of Tel-Assistance Service, which provides eligible customers with a 65% reduction in the tariffed rate for certain basic services.
- *Telecommunications Relay Service* (TRS), P.U.C. SUBST. R. 23.144 — This rule establishes a statewide TRS for people who are hearing-impaired or speech-impaired. Such a network is made of specialized telecommunications devices and operator translations and is provided statewide by one provider. The rule also establishes the Relay Texas Advisory Committee, including its composition and responsibilities.
- *Administration of Texas USF*, P.U.C. SUBST. R. 23.150 — This rule provides for the transition from existing USF programs to the new TUSF, provides for determining the size of the fund, calculating and collecting TUSF assessments, and disbursing payments to carriers and other entities.
- *Additional Financial Assistance (AFA)*, P.U.C. SUBST. R. 23.138 — This rule establishes guidelines under which an ILEC serving high-cost and rural areas may seek further assistance, in addition to that provided by P.U.C. SUBST. R. 23.133, 23.134, and 23.136.

On December 3, 1998, the Commission approved an order in *Implementation of P.U.C. SUBST. R. 23,150(f) and (g)*, Project No. 19655, that established an interim TUSF fund size of nearly $87 million[56] annually and an associated assessment percentage of 0.79% of each telecommunications provider's total taxable telecommunications receipts. These providers are likely to pass on this surcharge to their customers.

[56] The figure of $86,827,274 includes over $51 million for the Small and Rural ILEC Universal Service Plan, discussed below.

Docket No. 18515, Compliance Proceeding for Implementation of the Texas High-Cost Universal Service Plan (THCUSP)

In March 1998, the Commission initiated a hearing to rule on the implementation of P.U.C. SUBST. R. 23.133, relating to the THCUSP. The hearing in this proceeding was organized and run in a similar manner as the Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated (GTE-SW) mega-arbitrations, with interested parties and ILECs testifying and being asked clarifying questions by Commissioners and staff. Much of the controversy in this proceeding centered on the size of THCUSP support. In turn, this support level depended on both the appropriate revenue benchmark and the appropriate area-specific, forward-looking economic costs.[57] Other hotly contested issues involved the types and sizes of rate reductions to offset THCUSP support, the flow-through of access reductions to end users, and the sharing of THCUSP support when an ETP provides supported services using unbundled network elements (UNEs) purchased from an ILEC.

On December 3, 1998, the Commission issued an interim order with the following rulings:

- The initial size of the THCUSP will be $359,543,246 annually.
- The wire center will be the geographic basis for calculating area-specific, forward-looking economic costs per line.
- The revenue benchmarks will be $38 and $52 for residential and single-line business service, respectively.
- THCUSP support will be shared only when an ETP provides service solely through UNEs purchased from an ILEC. (As specified in the order, this support sharing is meant to compensate, to the extent feasible, both the ETP and the ILEC for the costs they incur to provide service to an end user.)

The Commission decided to postpone the implementation of THCUSP support, which it had considered including in the new TUSF in return for requiring the largest ILECs[58] to grant equivalent rate reductions to customers. These rate reductions could apply to such services as switched access. (Switched-access charges, which currently average about $0.12 per minute for Texas intrastate calls, are paid to local phone companies by IXCs to originate and terminate long-distance calls.) However, not all large IXCs have agreed to specify their plans for ensuring that each class of long-distance customers receives the benefit of these access-rate reductions. Consequently, the Commission deferred the implementation of THCUSP support.

[57] ILECs such as SWBT and GTE supported the use of the Benchmark Cost Proxy Model (BCPM), while non-ILEC parties such as AT&T and MCI supported the use of the Hatfield Associates, Inc. Model (HAI).

[58] These ILECs are SWBT, GTE-SW, Sprint-Centel, and Sprint-United.

At their open meeting on December 1, 1998, the Commissioners commented further on their interest in alerting the Legislature to this issue. For a discussion on the Commission's legislative recommendation, see Chapter 7.

Docket No. 18516, Compliance Proceeding for Implementation of the Small and Rural ILEC Universal Service Plan

In December 1997, the Commission initiated a docket to rule on the implementation of P.U.C. SUBST. R. 23.134, relating to the Texas small and rural ILEC USF. The Commission held a hearing in this docket on October 19, 1998, and issued an interim order on December 3, 1998. This order set the annual support amount for the Small and Rural ILEC Universal Service Plan at $51,202,987. Of this total, $32,941,082 is to compensate small and rural ILECs for the dissolution of the intraLATA toll pool, to be effective on January 1, 1999; the remaining $18,261,905 is to compensate these ILECs for reducing their intraLATA toll rates to a level no higher than $0.20 per minute for any call.

911 Issues

The Commission has established many rules and proceedings to ensure that the safety of the citizens of Texas is protected through a 911 network that works efficiently and effectively in a competitive environment. P.U.C. SUBST. R. 23.97(e)(1)(B), relating to Minimum Interconnection Arrangements for Enhanced 911 Services (E911), details the requirements that must be met as a prerequisite to providing local exchange telephone service to any customer. In addition, in every order granting a certificate of operating authority (COA) or a service provider certificate of operating authority (SPCOA) to a local service provider, there is language that orders the new provider to provide 911 emergency telephone service at a level required by the applicable regional plan followed by local telephone service providers under Chapters 771 and 772 of the Texas Health and Safety Code. Further, certificate recipients are directed to work diligently with the Advisory Commission on State Emergency Communications (ACSEC), local 911 entities, and any other agencies or entities authorized by appropriate legislation to ensure that all 911 emergency services are provided in a manner consistent with the applicable regional plan.

Numerous CLECs have successfully implemented 911 service provided through resale arrangements with an ILEC. Some facilities-based CLECs have successfully implemented 911 service through negotiated or arbitrated interconnection agreements. Each interconnection agreement contains general terms for interconnection necessary to provide 911 services. However, much work needs to be done to ensure that the 911 network remains viable in a more competitive market. Both ILECs and CLECs still complain about the timeliness of the updates to the 911 database and the difficulties in arranging the desired 911 network configuration. SWBT's application for entry into the interLATA toll market was reviewed in light of the requirement that it provide

nondiscriminatory access to 911 services.[59] The Commission found that SWBT had not provided sufficient evidence to show that the timeliness and accuracy of the 911 database updates were at parity with the updates provided for SWBT's own customers. The Commission found that, upon provision of the aforementioned evidence, SWBT would be in compliance with this section of FTA. However, the Commission believes that satisfactory 911 interconnection arrangements have been implemented in most cases. The Commission has worked closely with the ACSEC in recent years to effectively address regulatory solutions to current and potential issues relating to 911 services.

Service Quality Requirements

SINGLE-PARTY SERVICE

P.U.C. SUBST. R. 23.61(e)(1), which contains service quality provisions, requires that an ILEC provide single-party service to all requesting subscribers located in its service area.[60] In order to comply with the requirements, most Texas ILECs have upgraded their outside plant to eliminate open wire and analog carrier systems. Single-party service is required to ensure privacy and to provide limited data communications via modems or facsimile machines. As of this date, more than 99% of the lines in Texas have single party line service. In addition, the Commission grants COAs and SPCOAs only to those (potential) CLECs that state that they will comply with the single-party service requirement of the service quality rule. However, the Commission has not yet had to deny an applicant for a COA or an SPCOA a certificate because of the applicant's inability to provide single-party service.

DIGITAL NETWORKS

PURA requires that all subscriber lines served by the ILECs be capable of handling end-to-end digital service. End-to-end digital connectivity means that a customer has the ability to use digital services such as Integrated Services Digital Line (ISDN) Basic Rate Interface (BRI), ISDN Primary Rate Interface (PRI), Switched 56 kilobits per second (kbps), Frame Relay, Switched Multi-megabit Digital Service (SMDS) High-Speed Digital Subscriber Line (HDSL), and Asymmetric Digital Subscriber Line (ADSL), either through direct connection with a switch capable of providing these services, or through an overlay or other indirect connection to such a

[59] FTA § 271(c)(2)(B)(vii)(I).

[60] PURA § 55.007 requires all holders of a CCN or COA to provide single-party service by December 31, 2000.

switch. As of December 31, 1997, end-to-end digital connectivity was available to over 95% of the access lines in Texas.[61]

SS7 NETWORKS

The SS7 signaling system is a state-of the-art signaling technology that enables LECs to provide advanced services and 1-800 services. SS7 signaling uses an out-of-band signaling network, *i.e.,* a network that is dedicated to signaling and is separate from the network over which voice is carried. In such a network, signals traveling on the SS7 network are not slowed down by excess traffic on the non-signaling telephone network, nor do such signals cause excess traffic on the network. PURA §§ 58.204(b)(1) and 59.052(f) require that ILECs electing to be regulated under Chapters 58 or 59 of PURA deploy Signaling System 7 (SS7) in their networks.

CLECs that are switch-based must indicate in their applications for certification that they will deploy SS7 in their networks. In addition, in approving the sale/transfer/ merger (STM) applications[62] of the small ILECs that purchased GTE exchanges, the Commission required the acquiring companies to comply with the PURA requirement for infrastructure commitment as related to electing companies, including the requirement to comply with SS7 standards.

FIBER CONNECTIVITY

PURA §§ 58.203(e) and 59.052(e) require that ILECs electing to be regulated under Chapters 58 or 59 of PURA deploy inter-office broadband facilities that operate at 45 megabits per second (Mbps) at a minimum. This requirement can be met by deploying fiber-optic technology in the interoffice network. Fiber-optic cables that are deployed in the network by the ILECs operate at various speeds ranging from DS-3 (45 Mbps) to OC-48 (2.4 Gigabits per second). Very high bandwidth interoffice facilities are required to accommodate increased traffic resulting from Internet, telemedicine, and interactive educational network services. In addition to the above, electing ILECs are required to provide fiber-optic facilities to public entities at rates based on long-run incremental cost (LRIC). The Commission, in approving the above-mentioned STM applications of the

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[61] PUCT Infrastructure Survey of ILECs (July 1998). Such connectivity is available to 100% of the customers of seven ILECs, including SWBT. It is available to 81% of GTE-SW customers, and to many of the customers of three other ILECs.

[62] *Application for Sale, Transfer, or Merger to Purchase the Crowell Exchange from GTE Southwest, Inc.,* Docket No. 15034 (May 20, 1996); *Application for Sale, Transfer, or Merger to Purchase the Dickens, Matador, Paducah and Roaring Springs Exchanges from GTE Southwest, Inc.,* Docket No. 15035 (May 20, 1996); and *Application for Sale, Transfer, or Merger by Grazos Tel. Coop., Inc., to Purchase the Archer City, Bryson, Jermyn, Newcastle and Olney Exchanges from GTE Southwest, Inc.,* Docket No. 15231 (Aug. 12, 1996).

small ILECs that purchased GTE-SW exchanges, required the acquiring companies to comply with the Chapter 58 PURA requirement for fiber connectivity.

Area Codes and Number Conservation

HISTORY OF TEXAS AREA CODE ASSIGNMENT

As discussed above, the number of area codes in Texas is growing. This growth is not a new issue, however, as the chart below shows. With the origination of the area code in 1947, Texas had four area codes. This number grew to 11 in about 50 years, or at the average rate of a new code about every seven years. However, in reality, nine of these eleven area codes have been added in the last 15 years, and more are soon to come. The rate at which Texas is adding area codes is increasing rapidly, as its increasing population take advantage of the pagers, fax machines, second phone lines, and cellular phones that changing technology and market conditions have brought about.

Table 1 - Area Code Chronology in Texas

1947: 4 codes:
- 214 - Dallas and Northeast Texas,
- 512 - Central and South Texas,
- 713 - Houston and Southeast Texas, and
- 915 - El Paso and West Texas.

1953: 5 area codes:
- 817 - Fort Worth and North Texas.

1962: 6 area codes:
- 806 - a geographic split of the Amarillo/Lubbock area from 915.

1983: 7 area codes:
- 409 - a geographic split from 713.

1990: 8 area codes:
- 903 - a geographic split of the Longview area from 214.

1992: 9 area codes:
- 210 - a geographic split of San Antonio from 512.

1996: 11 area codes:
- 972 - a geographic split of the Dallas 214 area code on 9/14/96, and
- 281 - a geographic split of the Houston 713 area code on 11/2/96.

1997: 15 area codes:
- 254 and 940 - a 3-way geographic split of Waco and Wichita Falls from the Fort Worth area code (817) on 5/25/97, and
- 830 - a geographic split in the San Antonio area code (210) on 7/2/97.

1998: 15 area codes:
- 214 & 972 - The geographic boundary between 214 and 972 in Dallas will be erased and every local call will require dialing of all 10 digits as of Dec. 5, 1998.

1999: 18 area codes
- 713 and 281 - The geographic boundary between 713 and 281 in Houston will be erased and every local call will require dialing of all 10 digits as of Jan. 16, 1999.
- 832 - will be added to 713 and 281 as an overlay to the Houston area as of Jan. 16, 1999.
- 512 & 361 - A geographic split of the Corpus Christi and Austin LATAs will begin in Feb. 1999 and will be completed by Oct. 16, 1999. The new area code of 361 will be assigned to the Corpus Christi LATA.
- 469 - will be added as an overlay to the Dallas area (214 and 972) in July 1999.

Prior to implementation of the latest set of area codes, *Petition of MCI Telecommunications Corporation for an Investigation of the Practices of Southwestern Bell Telephone Company Regarding the Exhaustion of Telephone Numbers in the 214 Numbering Plan Area,* Docket No. 14447, was initiated. In this docket, complaints were filed by MCI and the Office of Public Utility Counsel against SWBT's proposed area code plan for Dallas and Houston. After a hotly contested hearing, the Administrative Law Judge recommended a geographic split of 214 (Dallas) and an overlay in 713

(Houston). The Commission then held a series of public meetings in Dallas and Houston in February 1996 and, after analysis of the public comments, recommended geographic splits for Dallas and Houston along with adding a wireless overlay in both areas. The wireless overlay order was appealed by MCI to the administrator of the North American Numbering Plan, and the FCC rejected wireless overlays as anti-competitive and discriminatory. Consequently, only the geographic splits were completed.

Within months of the implementation of the new area codes, the Commission became informed that the new area codes were going to exhaust much sooner than expected and that new area codes would have to be implemented before companies were unable to get number assignments in areas that they planned to serve. Upon learning that it was the industry number assignment practices that were causing the area codes to exhaust so soon, the Commission decided to require the industry to examine methods of conserving central office 3-digit prefixes (NXX codes).

Why are the area codes exhausting so soon?

With Texas' continuing population growth and the advent of competition in the telecommunications industry, growth in types of phone use (cellular, pagers, second lines, faxes, and computers) and inefficient industry number assignment practices have contributed to the rapid exhaust of area codes nationwide. One area code has a potential 729 NXX codes. On the surface, that should translate to 7,290,000 numbers. However, current telecommunications industry architecture requires one NXX code to be assigned per rate center, and an area code can have many rate centers.[63] Therefore, each time a new company is certified to serve an area code, it may need one NXX code per rate center, even if it will be serving only 500 customers in the entire area code. In the case of the 972 area code, one company serving the 972 area code would need 37 NXX codes with 370,000 numbers, but may have only 100 customers in each rate center. Complicating the assignment matter even further is that the 911 emergency answering systems were designed to be NXX-driven, so any changes toward more efficient use of numbers or adding additional area codes potentially will require 911 entities to upgrade their equipment.

Project No. 16899, Numbering Plan Area Code Relief Planning for the 214/972 Area Codes; Project No. 16900, Numbering Plan Area Code Relief Planning for the 713/281 Area Codes; Project No. 16901, Numbering Plan Area Code Relief Planning for the 512 Area Code

The Texas Number Conservation Task Force was created by the Commission in September 1997 to identify, evaluate, and recommend number conservation measures for implementation in Texas that will facilitate an uninterrupted supply of telephone numbers for telecommunications customers while minimizing the need for new area codes within the state. While the industry was examining number conservation methods, it became necessary for jeopardy plans to be instituted by the industry to effectively manage the

[63] For example, the 972 area code had 37 separate rate centers after the split from area code 214.

potential exhaust by limiting the assignment of NXX codes to requesting service providers. Jeopardy plans were implemented for the 972 code (Dallas), the 281 and 713 codes (Houston), and the 512 code (Austin/Corpus Christi), all of which projected exhaustion of numbers by February 1999.

Project No. 18438, Number Conservation Measures in Texas

The Commission initiated Project No. 18438, in December 1997, to address the number conservation issues discussed above. The Commission held a series of workshops in this project, inviting the participation of the Advisory Council on State Emergency Communications and members of the telecommunications industry. Some of the number conservation measures that have been approved by the Commission at this date are as follows:

- *Sequential number assignment*, which ensures that the maximum number of thousand-number blocks is available for number pooling by requiring companies to assign numbers sequentially within an NXX code rather than randomly throughout the entire code of 10,000 numbers.
- *Local number portability* was deployed in Houston in May 1996, in Dallas in June 1998, in Fort Worth in July 1998, and in San Antonio and Austin in August 1998, and will be deployed in El Paso by the end of 1998. · Local number portability will allow customers to keep their existing telephone numbers when they are simply changing service providers within a rate center, and is also the platform for number pooling.
- *Rate center consolidation*, which was ordered to be implemented by SWBT by September 1998, reduced the number of rate centers in the Austin, Dallas, Fort Worth, Houston, and San Antonio metropolitan exchanges from 108 to 31. These approved consolidations do not affect local calling scopes, but create larger rate centers by the elimination of exchange boundaries. This consolidation permits a reduction in NXX code allocation for that area. In addition, it potentially extends the life of an area code because new providers need only one NXX code to serve an area that previously may have required many more.
- A v*oluntary NXX code give-back* was implemented. Although industry guidelines require that a company activate an NXX code within six months of assignment or return it to the number administrator, companies are permitted to keep a code with no customers in it because it is activated in their switch. The Commission recognized that, in view of the rate center consolidation, companies with no customers in their assigned NXX codes may no longer require all of them, and requested that they be returned to the number administrator for use by other companies. As a result, many companies returned unused NXX codes, which can now be used to extend the life of the area codes in Austin, Dallas, and Houston.

In addition to the above number conservation measures that have been implemented or are being implemented in Texas, the Commission also is considering the implementation of number pooling. Number pooling permits greater flexibility in the allocation of numbering resources by assigning numbers in blocks of one thousand rather than allocating an entire code of 10,000 numbers to one provider if it does not need it. The goal of the Commission is to introduce number pooling by July 1999 in a metropolitan area to be selected after analysis of detailed data requests.

The Commission is committed to continuing its efforts nationally and in Texas to establish standards for the industry that will permit more efficient numbering practices, which in turn will extend the life of area codes in a competitive telecommunications environment. Although number conservation measures delayed the need for area code relief in Dallas, Houston, and Austin/Corpus Christi, plans for new area codes had to be approved in order to meet the demand for NXX codes in these areas. Currently, boundaries are being changed to meet the needs in these areas (see Table 1 in this chapter).

CHAPTER 5
STREAMLINING AGENCY PROCEDURES

The Public Utility Commission of Texas (PUCT or Commission) has an important role in the transition of the current telecommunications market into a more competitive one. Decisions are made every day that have the potential to spur or chill the development and maintenance of competition. In order for the Commission to best serve the public interest in bringing about competition and ensuring its benefits are available to all, it must be both accessible and effective. It does not matter that a firm can complain about illegal anti-competitive behavior by other firms in the market if it takes too long for a regulatory body to find a solution to the problem. Likewise, efficiency and effectiveness in solving problems does not have much value to customers and companies who have a hard time understanding the rules and procedures that are in place to protect them. In order to facilitate the transition to a competitive market, the Commission has initiated many procedures to review its internal processes and make the agency more accessible to parties who require action.

Rulemakings

Project No. 17329, Inquiry into Potential Revisions to the PUCT's Dispute Resolution Rules

The onset of competition in the local exchange telecommunications market spawned a new breed of disputes regarding the implementation of competition. To prevent these disputes from becoming justifications to delay competition, the Commission instituted procedures to give parties the opportunity to resolve their differences on a more expedited basis than traditional complaint procedures or litigation would allow. As a result, two umbrella rulemaking procedures were established under which parties may seek expedited relief at the Commission. The first, for which rules were adopted in October 1997, specifically addresses disputes arising under or pertaining to the implementation of telecommunications interconnection agreements.[64] Under these new procedural rules, parties have various options to seek resolution of their post-interconnection disputes, such as requesting an informal settlement conference with Commission staff, seeking an expedited hearing with a Commission arbitrator, or requesting an interim ruling pending a hearing on the merits. In addition, procedural rules were established for approval of amendments to existing interconnection agreements and

[64] Subchapter Q, PUC PROC. R. § 22.321-22.328.

agreements adopting terms and conditions available under federal Telecommunications Act (FTA) § 252(i).[65]

Project No. 17709, Review of Agency Rules in Accordance with HB 1, Section 167, 75th Legislature

In August 1997, the Commission began a comprehensive review of its substantive rules, in part to satisfy the requirements of the Appropriations Act, HB 1, Article IX, Section 167, 75th Legislature, R.S. 1997 (Section 167). Section 167 requires the Commission to review and consider for readoption, by August 31, 2001, each rule adopted pursuant to Subchapter B of the Administrative Procedure Act,[66] and assess whether the reason for adopting or readopting the rule continues to exist. The Commission has adopted a more aggressive schedule than required and expects to have its comprehensive review completed by June 1, 1999. The comprehensive review is integrated with the Commission's other rulemaking activities, which are undertaken to implement the Commission's statutory regulatory duties. In addition to fulfilling the requirements of Section 167, the Commission intends to use this project to achieve the following goals:

- update existing rules to reflect changes in the industries regulated by the Commission;
- delete rules that are no longer necessary;
- do clean-up amendments made necessary by changes in law and Commission organizational structure and practices;
- reorganize the rules into new chapters to facilitate future amendments and provide room for expansion; and
- reorganize the rules according to the industries to which they apply.

Other Streamlining Projects

Project No. 18000, Informal Dispute Resolution

Another procedure established to streamline resolution of competitive issues is a catch-all project for both the telecommunications and electric industries. Disputes that involve competitive issues, but do not involve telecommunications interconnection agreements, may be filed with the Commission under Project No. 18000. This generic project serves as a procedural vehicle by which parties may seek expedited resolution of disputes that directly affect their abilities to enter and compete in the telecommunications or electric markets.

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[65] Subchapter R, P.U.C. PROC. R. § 22.341-22.342.

[66] Administrative Procedure Act, TEX. GOV'T. CODE ANN. §§ 2001.021-038 (Vernon 1998).

Project No. 19000, Relating to the Implementation of Southwestern Bell Telephone Company Interconnection Agreements with AT&T and MCI.

Docket No. 19000 is an outgrowth of the arbitrated proceedings between Southwestern Bell Telephone (SWBT) and petitioners AT&T and MCI. To facilitate effective implementation of SWBT's agreements with AT&T and MCI, the Commission issued an implementation order listing milestones that must be accomplished, such as further development on SWBT's various operation support systems (OSS) and mapping out the various actions necessary to accomplish the various milestones. The Commission has followed the parties' progress by having its staff schedule weekly conference calls with the parties, in which any party can raise a variety of concerns, such as clarifications of milestones and revisions to needed actions. Although the Commission does not generally use such a "hands-on" approach, this implementation docket has been successful at keeping the implementation process moving forward, as problems are addressed before they become roadblocks.

CHAPTER 6
SCOPE OF EXISTING COMPETITION

This chapter reviews telecommunications services that exist today and analyzes existing revenue streams and the scope of competition within these classes of services. In the past, many of these services (including those falling within the definition of "basic local telecommunications service") were provided exclusively by incumbent local exchange companies (ILECs). This is the first edition of the Scope of Competition Report in which the Public Utility Commission of Texas (PUCT or Commission) is able to analyze the extent to which local exchange services are provided by telecommunications providers other than ILECs.

Unless otherwise indicated, the data on which the analysis is based were provided in response to data requests that were sent to all incumbent local exchange carriers, certificate of authority (COA) holders, and service provider certificate of authority (SPCOA) holders. The data requests covered the three calendar years ending December 31, 1997, herein called "the data period." Much of the information was provided under a condition of confidentiality; therefore, the data in this report are presented in an aggregated form.

The chapter presents data and analysis regarding services critical to establishing competition in the local exchange market. Data concerning additional services that are not as closely associated with competition in the local exchange are detailed in Appendix B.

Data Profile

Service and customer data presented here were collected from telecommunications providers offering services in Texas at any time during the calendar years of 1995, 1996, and 1997. Surveys were mailed to all ILECs, both investor-owned and cooperatively owned, and to all holders of COA or SPCOA certificates. Together, these three groups are referred to as certificated telecommunications utilities (CTUs). The data requests were sent to 210 CTUs; with follow-up calls from Commission staff, 101 of those entities supplied data by December 1, 1998. Response was strong from ILECs, all of which provided at least some data, but less so from the recently certificated COA and SPCOA holders.

The data request asked the CTUs to list their affiliates that also provided telecommunications services, the affiliates' certification or provider type, and the requested revenue and line information corresponding to which entity provided the services. For this reason, the data request produced information on some providers that are not CTUs. However, because providers that are not CTUs could not be included in

the data request on a comprehensive basis, such providers are not included comprehensively in this data set. Moreover, some companies that did report did not list or provide data for their affiliates. For these two reasons, in some cases the category of "non-ILECs" is significantly under-represented in this report.

Interpreting the Data

As its name implies, an ILEC is the company that provided basic local exchange telecommunications service to a local exchange prior to competition being allowed on the local level (*i.e.*, the company had a certificate of convenience and necessity (CCN) as of September 1, 1995). Therefore, there is only one ILEC per exchange.

Any company seeking to compete with the ILEC in providing basic local exchange services must obtain a COA or SPCOA from the Commission. For purposes of this report, the term "competitive local exchange carrier (CLEC)"[67] includes SPCOA holders, even though they are not, by definition of the Public Utility Regulatory Act (PURA), local exchange carriers (LECs). As used in this report, the CLEC term also includes companies that are ILECs in some territories, but that have obtained COA or SPCOA certificates to provide local exchange services (as CLECs) in other specified territories.

In past scope of competition reports, most data were displayed in terms of services provided by ILECs, as such data were received from and concerned ILECs. To demonstrate the emergence of other competitors in the marketplace, this 1999 report displays information to show contrast among provider types. Unless more detail is warranted, information is displayed as provided by either ILECs (investor-owned utilities and cooperatives) or "non-ILECs" (any other reporting entities that provide the service in question).

There are two critical facts to remember about what is encompassed by the term "non-ILEC" in this report:

- First, some non-ILECs are not certificated. Because data requests could not be sent to all non-certificated providers, the data displayed do not include all possible non-ILEC activity in the service category. Rather, beyond CTUs, the non-ILEC category encompasses other provider types only to the extent that they were affiliated with a CTU and happened to be included in the CTU's data response.
- Second, some non-ILECs are affiliates of ILECs or ILECs that are operating outside of their CCN territories, in areas for which they have obtained a COA or SPCOA certificate.

[67] The term CLEC, long used in the telecommunications industry, is a narrower term than local service provider or CTU; the latter terms include ILECs, whereas CLEC does not. For purposes of this report, CLEC is used to include those ILECs competing outside their CCN service areas, *i.e.,* where they have obtained COAs or SPCOAs to provide local telecommunications services outside their ILEC territories.

Local Exchange Services

BASIC LOCAL SERVICE

To consumers, basic local service constitutes the heart of telecommunications service. It also accounts for over 34% of all ILEC intrastate revenues. Thus it is appropriate to begin our review of the status of intrastate competition with a look at basic local services. As set forth in PURA § 51.002(1), "basic local telecommunications service" includes the following:

A) flat-rate residential and business local exchange telephone service, including primary directory listings;

B) tone-dialing service;

C) access to operator services;

D) access to directory assistance services;

E) access to 911 service where provided by a local authority or dual party relay service;

F) the ability to report service problems seven days a week;

G) lifeline and tel assistance services; and

H) any other service the Commission, after a hearing, determines should be included in basic local telecommunications service.

Residential

As may be seen in the accompanying tables, on a statewide basis ILECs still overwhelmingly dominate the residential market in Texas, with over 98% of both revenues and access lines in 1997. From a different perspective, however, the growth of competitors is significant. Non-ILECs increased their share of residential revenues from a mere 0.03% in 1996 to over 1.45% in 1997, and increased their share of residential access lines from 0.03% to 1.58% in the same period. In other words, the non-ILEC market shares increased by a factor of about 50, though these shares are still minimal compared to the ILEC shares.

Table 2 - Basic Local Exchange - Residential

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$850,260,197	100.00%	$941,723,827	99.97%	$976,178,035	98.55%
Non-ILECs	$0	0.00%	$323,630	0.03%	$14,375,823	1.45%
Total	$850,260,197		$942,047,457		$990,553,858	
Lines						
ILEC	7,091,762	100.00%	7,395,781	99.58%	7,619,269	98.42%
Non-ILECs	0	0.00%	2,213	0.03%	122,450	1.58%
Total	7,091,762		7,397,994		7,741,719	

Source: Responses to 1998 Data Requests

Business

ILECs likewise still dominate the basic local business market. The reported non-ILEC share of revenues rose from 0.65% in 1996 to 1.69% in 1997, while the corresponding non-ILEC share of access lines rose from 0.33% to 0.89%.[68] Given the great percentage increase in non-ILEC revenues for basic local residential service, it is actually somewhat surprising that non-ILEC revenues for basic local business service rose by a factor of less than three from 1996 to 1997. The absolute increase in non-ILEC business revenues was also slightly less than that for non-ILEC residential revenues (roughly $11.8 million versus $13.4 million).

Table 3 - Basic Local Exchange Services - Business[69]

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$909,420,413	99.92%	$1,003,136,077	99.35%	$1,068,486,286	98.31%
Non-ILECs	$711,145	0.08%	$6,598,117	0.65%	$18,359,970	1.69%
Total	$910,131,558		$1,009,734,194		$1,086,846,256	
Lines						
ILEC	2,769,110	99.71%	3,002,232	99.67%	3,147,904	99.11%
Non-ILECs	8,000	0.29%	8,530	0.33%	23,735	0.89%
Total	2,777,110		3,012,034		3,176,277	

Source: Responses to 1998 Data Requests

Total service resale[70] appears to be the only significant way competitors were providing basic local exchange service in 1997. Data provided in response to the

[68] This non-ILEC share of business access lines may be understated by several multiples, based on the fact that ILECs reported 1997 *wholesale* sales to non-ILECs of basic local service for about 170,000 business lines (along with over 32,000 residential lines.) Part of this discrepancy (170,000 lines vs. 23,735 lines) may result from differing interpretations of "access lines." For example, some of the business lines reported by non-ILECs are for high-capacity lines such as DS1 and DS3, which can carry up to 24 and 672 voice channels, respectively.

[69] Provider types that reported revenues for basic local service, both residential and business, included cooperative and investor-owned ILECs, and CLECs.

Commission's questionnaire suggest that the large majority of the increase in non-ILEC revenues in this service category was by means of reselling ILEC services. Specifically, ILECs reported that their revenues from total-service sales to non-ILECs rose from under $3 million in 1996 to over $32 million in 1997; the latter sum is nearly as large as the combined retail revenues reported by non-ILECs for business and residential basic local service.

Other Comparisons

Another indication that non-ILEC activity is far more heavily concentrated in very large exchanges can be seen in Table 4 (below), showing ownership of switches by exchange size.

Table 4 - Switches Owned[71]

Exchange - size Group	Very Small	Small	Medium	Large	Very Large
ILECs	631	245	184	135	343
Non-ILECs	15	2	9	0	117

Source: Responses to 1998 Data Requests

In general, the basic local exchange rates charged by non-ILECs are considerably higher than those charged by ILECs, as suggested by the table below. The gap probably is less than that indicated by the table, however, because certain mandatory fees were not included when the ILECs' rates were calculated, but were included when the non-ILECs' rates were calculated.[72]

The basic local rates of most ILECs have not changed in the last five years. The basic local rates of ILECs do vary across exchange sizes; typically, customers in larger exchanges pay higher rates than do those in smaller exchanges.[73]

The data submitted for this report do not provide a basis for inferring any changes over time or variation across exchange sizes in the basic local rates of non-ILECs.

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[70] Total service resale involves the purchase of a service from a LEC at a negotiated and/or Commission-approved wholesale discount and the subsequent resale of the service to retail customers.

[71] Exchange groupings are based on the number of working access lines in a local calling scope, as follows:

Very small -- up to 3,000 lines;
Small -- 3,001 to 31,000 lines;
Medium -- 31,001 to 100,000 lines;
Large -- 100,001 to 300,000 lines; and
Very large -- over 300,000 lines.

[72] These fees are for mandatory Extended Area Service (EAS) and Expanded Local Calling Service (ELCS).

[73] This pattern exists because basic local rates historically have been based on "value of service" principles, rather than costs.

However, the data do provide preliminary evidence that the rates of facilities-based non-ILECs tend to be lower than the rates of non-ILECs that are strictly resellers.

Table 5 - Comparison of Basic Local Exchange Rates[74]

Category	Residential		Business	
	Low	High	Low	High
ILEC Average Basic Access Rate (unweighted)	$8.21	$9.63	$14.33	$17.63
ILEC Average Basic Access Rate (weighted by access lines)	$7.86	$10.49	$18.59	$26.64
Non-ILEC Average Basic Access Rate (unweighted)	$19.4		$30.48	

Sources: ILECs: Telecommunications Industry Analysis Division, PUCT; non-ILEC: Responses to 1999 Data Request. (Non-ILEC averages shown are based on only a limited subset of non-ILEC rates, because many non-ILECs did not report their average rates).

CUSTOM CALLING SERVICES

Custom calling features are services that the customer has the option of purchasing as adjuncts to basic local telephone service. The service classifications formerly known as "Basket I," "Basket II," and "Basket III" are now referred to as "basic network," "discretionary," and "competitive" services by PURA §§ 58.051, 58.101, and 58.151. Basic services include dial tone and other services essential to accessing the network; discretionary services are non-essential services that are provided largely by ILECs; and competitive services are non-essential services that are considered more subject to competition. In general, the three categories range from most important to least important with regard to simple access to the network, and from least feasible to most feasible with regard to provision by non-ILEC providers.

Call waiting and call forwarding are, historically, the most readily available and popular optional custom calling features. They were among the first calling options to be available from most switching offices. Both are deemed by law to be discretionary services and represent substantial revenue streams for ILECs and competing providers. As shown in the table below, ILECs still provide nearly all of the discretionary custom calling features requested by customers. However, the small portion of the market served by competing providers has developed almost entirely within the last year, as seen in the growth in both revenues of and lines served by competing providers.

[74] The "High" columns for ILEC residential and business indicate the average of the highest basic local rates charged by the various ILECs; similarly, the "Low" columns indicate the average of the lowest basic local rates charged by the ILECs.

Table 6 - Custom Calling - Discretionary Services[75]

Total Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$188,900,731	100.0000%	$204,680,058	99.9995%	$209,555,107	99.8994%
Non-ILECs	$0	0.0000%	$1,000	0.0005%	$211,005	0.1006%
Total	$188,900,731		$204,681,058		$209,766,112	
Residential Lines						
ILECs	5,368,766	100.0000%	4,254,818	99.9991%	5,467,648	99.9720%
Non-ILECs	0	0.0000%	37	0.0009%	1,530	0.0280%
Total	5,368,766		4,254,855		5,469,178	
Business Lines						
ILECs	487,308	100.0000%	501,754	100.0000%	519,399	97.5582%
Non-ILECs	0	0.0000%	0	0.0000%	13,000	2.4418%
Total	487,075		501,379		532,016	

Source: Responses to 1998 Data Requests

Call control options comprise another group of advanced custom calling services. Also classified by law as discretionary, they are features that control the initialization, direction, or blocking of a call, including auto redial, call blocker, priority call, personalized ring, voice dial, call return, call trace, caller ID, and selective call forwarding. In contrast to call waiting and call forwarding, provision of these services relies on the transmission of the calling party's number or on other technical capabilities that are not readily available from all switching offices. Competitive providers have only a tiny portion of the market, though this portion has grown in the last year.

Table 7 - Call Control Options[76]

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$164,892,961	100.0000%	$311,666,413	99.9975%	$455,624,396	99.9833%
Non-ILECs	$0	0.0000%	$7,810	0.0025%	$75,989	0.0167%
Total	$164,892,961		$311,674,223		$455,700,385	
Residential Lines						
ILECs	5,438,060	100.0000%	12,649,610	99.9998%	14,409,823	99.9977%
Non-ILECs	0	0.0000%	31	0.0002%	329	0.0023%
Total	5,438,060		12,649,641		14,410,152	
Business Lines						
ILECs	331,831	100.0000%	2,199,189	100.0000%	2,348,940	99.9992%
Non-ILECs	0	0.0000%	0	0.0000%	18	0.0008%
Total	331,831		2,199,189		2,348,958	

Source: Responses to 1998 Data Requests

[75] Provider types that reported revenues for custom calling - discretionary included investor-owned ILECs and CLECs.

[76] Provider types that reported revenues for call control options included cooperative and investor-owned ILECs, and CLECs.

Two custom-calling control features, speed calling and three-way calling, can be achieved readily through the use of customer premises equipment and multi-line telephone systems. Therefore, they are classified by law as competitive services. Non-ILEC providers make a somewhat stronger showing in the competitive services market. While revenues have grown only modestly over the period, the number of lines increased more significantly (by a factor of over 20 for business customers). During the period, ILEC revenues decreased, resuming the trend documented for 1992-1994 in the *1997 Scope Report.*[77]

Table 8 - Custom Calling - Competitive Services[78]

Total Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$50,795,900	99.75%	$40,239,593	99.62%	$38,450,424	99.39%
Non-ILECs	$127,755	0.25%	$152,759	0.38%	$235,105	0.61%
Total	$50,923,655		$40,392,352		$38,685,529	
Residential Lines						
ILECs	2,514,902	100.00%	2,408,217	99.97%	2,506,810	99.94%
Non-ILECs	0	0.00%	635	0.03%	1,486	0.06%
Total	2,514,902		2,408,852		2,508,296	
Business Lines						
ILECs	144,371	100.00%	155,187	99.99%	174,854	99.73%
Non-ILECs	0	0.00%	22	0.01%	473	0.27%
Total	144,371		155,209		175,327	

Source: Responses to 1998 Data Requests

PAYPHONES

In 1996, the Federal Communications Commission (FCC) determined that all ILEC payphones would be deregulated and removed from the ILEC's investment base, and that the rates for local services from payphones must be deregulated.[79] The impact of the FCC's decision on Texas consumers is still evolving. While the number of ILEC-provided payphone lines steadily decreased during the last data period,[80] the number held steady during this period. The portion of the market shown to be held by non-ILEC

[77] *1997 Scope Report, supra.,* at 118-119.

[78] Provider types that reported revenues for each of these custom calling services included ILECs (investor-owned and cooperatives) and CLECs. Revenue and line figures for non-ILECs in 1997 for each of these services probably are under-represented due to the partial, unusable data often reported for this service.

[79] *Implementation of the Pay Telephone Reclassification Compensation Provisions of the Telecommunications Act of 1996,* CC Docket No. 96-128, Report and Order, FCC (rel. Sept. 20, 1996) at ¶ 15.

[80] *1997 Scope Report, supra.,* at 119.

providers is artificially low, however, because this data set did not include payphone service providers (PSPs) on a comprehensive basis.

Table 9 - Retail Payphone Revenues[81]

Revenues	1995	%	1996	%	1997	%
ILECs	$135,440,523	99.78%	$138,834,311	99.76%	$182,119,540	99.63%
Non-ILECs	$293,233	0.22%	$329,816	0.24%	$685,162	0.37%
Total	$135,733,756		$139,164,127		$182,804,702	

Source: Responses to 1998 Data Requests

Arguably, a stronger indication of increasing competition in the payphone market is the growth in ILEC revenues in wholesale sales of payphone services. These data can be compared to the information collected and displayed in the *1997 Scope Report*.[82] The trend of increasing revenues for the sale of payphone services to other telecommunications providers for resale continued in this data period and at a faster rate than in the last. In the previous period, the revenue for competitive payphone access lines grew more than 80%; in this period, the revenues more than doubled. With the PUCT's registration program, which began in 1996, over 500 non-ILEC PSPs have registered to provide service in Texas.

Table 10 - Wholesale Payphone Revenues[83]

Revenues	1995	%	1996	%	1997	%
ILECs	$20,086,845	100.00%	$22,478,682	100.00%	$54,200,237	100.00%
Non-ILECs	$0	0.00%	$0	0.00%	$0	0.00%
Total	$20,086,845		$22,478,682		$54,200,237	
Lines						
ILECs	10,146	100.00%	10,648	100.00%	23,399	100.00%
Non-ILECs	0	0.00%	0	0.00%	0	0.00%
Total	10,146		10,648		23,399	

Source: Responses to 1998 Data Requests

[81] The 1995 revenues for non-ILECs include only data reported by providers that are affiliated with ILECs or CLECs. Stand-alone PSPs and IXCs were not specifically sought out for inclusion in the data set for this report.

[82] *1997 Scope Report, supra.*, at 119.

[83] Provider types that reported revenues for retail payphone services included investor-owned and cooperative ILECs, non-facilities based CLECs, PSPs, and IXCs. Wholesale revenues were reported by investor-owned and cooperative ILECs.

Access

SWITCHED ACCESS

As may be seen in the table below, ILECs still provide all but the tiniest fragment of intrastate switched-access services: they received approximately 99.996% of aggregated switched-access revenues in 1997. These services continue to constitute a major share (about 19%) of ILEC intrastate revenues. As a group, switched-access service revenues showed modest increases during these years. The apparent dramatic fall in local-transport revenues for ILECs from 1996 to 1997 is easily explained: the majority of what had been local-transport revenues were replaced on January 1, 1997, by revenues from the new residual interconnection charge (RIC).[84] If the over $100 million in RIC revenues are added to the local-transport revenues instead of to carrier-common-line (CCL) revenues,[85] the sum is nearly as large as the local-transport figure for 1996. The reason we nevertheless are showing RIC revenues combined with CCL revenues is that the CCL and RIC are not based on usage-related costs; rather, both recover non-traffic-sensitive costs of the telephone network, perhaps along with excess profits.

Table 11 - Switched Access[86]

Revenues – Carrier Common Line + Residual Interconnection Charge						
	1995	**%**	**1996**	**%**	**1997**	**%**
ILEC	$696,792,428	100.0000%	$731,297,648	100.0000%	$862,935,819	99.9979%
Non-ILECs	$0	0.0000%	$0	0.0000%	$18,150	0.0021%
Total	$696,792,428		$731,297,648		$862,953,969	
Revenues – Local Transport						
	1995	**%**	**1996**	**%**	**1997**	**%**
ILEC	$160,820,945	100.0000%	$183,266,111	99.9995%	$57,967,630	99.9642%
Non-ILECs	$0	0.0000%	$1,000	0.0005%	$20,784	0.0358%
Total	$160,820,945		$183,267,111		$57,988,414	
Revenues – End office local switching						
	1995	**%**	**1996**	**%**	**1997**	**%**
ILEC	$183,154,888	100.0000%	$203,687,575	100.0000%	$210,501,880	99.9982%
Non-ILECs	$0	0.0000%	$0	0.0000%	$3,771	0.0018%
Total	$183,154,888		$203,687,575		$210,505,651	

[84] The RIC was established in accordance with P.U.C. SUBST. R. 23.23(d)(5)(D), which mandated the restructuring of local-transport rates.

[85] Carrier-common line revenues are intended to offset the considerable costs associated with the local loop, discussed in Chapter 4 above.

[86] Provider types that reported revenues for Switched Access services included cooperative and investor-owned ILECs, and facilities-based CLECs.

Total Revenues						
	1995	%	1996	%	1997	%
ILEC	$1,040,768,260	100.0000%	$1,118,251,334	99.9999%	$1,131,405,329	99.9962%
Non-ILECs	$0	0.0000%	$1,000	0.0001%	$42,705	0.0038%
Total	$1,040,768,260		$1,118,252,334		$1,131,448,034	

Source: Responses to 1998 Data Requests

SPECIAL ACCESS

As seen in Table 12, ILECs continue to dominate the market for intrastate special-access services, which normally involve a direct connection between a business and its interexchange carrier (IXC). (A direct connection enables the IXC to avoid paying originating switched-access charges to the LEC, so that the IXC can charge lower long-distance rates to its business customer.) ILEC revenues showed no trend during 1995-1997: they rose, then fell. This erratic movement was likewise noted for the years 1992-1995 in the Commission's *1997 Scope Report*.[87] (In contrast, ILEC interstate special-access revenues rose significantly between 1995 and 1997, from over $230 million to over $300 million.)

Table 12 - Special Access[88]

Revenues	1995	1996	% Change - 1995 to 1996	1997	% Change - 1996 to 1997
ILECs	$50,134,745	$63,965,542	22%	$49,135,512	-30%
Non-ILECs	$0	$258,583	100%	$202,441	-28%
Total	$50,134,745	$64,224,125	18%	$49,337,953	-30%

Source: Responses to 1998 Data Requests

[87] *1997 Scope Report, supra.,* at 130.

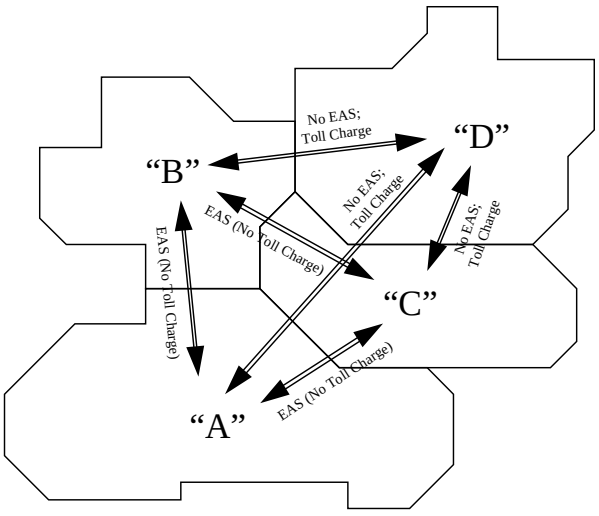
[88] Provider types that reported revenues for Special Access services included cooperative and investor-owned ILECs, and facilities-based CLECs.

Expanded Local Calling Areas: EAS, EMS, and ELCS

For many years, local telephone operating areas have been geographically divided into exchanges. These areas are used primarily to group subscribers for purposes of applying tariffed rates and to determine the central office from which a customer will be served. The simplest exchange architecture contains one switching center and a spoke-like arrangement of lines radiating out to customers. Metropolitan exchanges often contain many switching offices, called wire centers, arranged in a pattern of zones. The exchange provides an area within which local (toll-free) calls may be placed. Calls placed to a point outside the exchange would normally be subject to a usage-sensitive long-distance charge.

Although administratively efficient, exchange boundaries tend to create inequities for residents on either side of an exchange boundary line. Next-door neighbors may have different local rates, different toll-free calling scopes, and different local exchange carriers, solely because of their geographic location. The Commission has approved alterations in exchange boundaries to reflect more properly the locations and exchange-calling preferences of customers. However, customers historically have desired to maximize the benefit from their monthly telephone bill, and often have a specific interest in calling persons or businesses in nearby communities; thus they have exerted pressure for toll-free calling areas beyond their immediate exchange.

Extended Area Service (EAS) is an arrangement in which subscribers in one exchange are able to call subscribers in an adjoining exchange without paying usage-sensitive toll charges. In some cases, a flat monthly rate additive is charged in lieu of long-distance charges; in other instances, the EAS service is considered to be a part of the basic local rate. Extended Metropolitan Service (EMS) is a similar service in which customers in exchanges surrounding a metropolitan exchange may choose to pay a flat monthly rate to make calls into (and normally receive calls from) the metropolitan area. EAS and EMS arrangements involve the fundamental pricing question of whether the rate for such services should be flat-rated, usage-sensitive, or something in between. EAS issues can also evoke strong emotional reactions from consumers; first, because there is a natural tendency to try to obtain the best value for the rate, and second, because of the negative perception of being required to pay long-distance charges for calls to neighbors, schools, and other community services.



Most EAS filings are for optional EAS, in which customers in an exchange have the option of subscribing to the larger calling-scope arrangement. If a community demonstrates that over 50% of the customers favor a mandatory arrangement, however, it may be considered for mandatory EAS, the charge for which is considerably lower than for optional EAS.[89]

Consumer interest in the expansion of calling scopes in more rural areas led to heightened activity in the 73rd Texas Legislature in 1993, including the enactment of new provisions in PURA. Now codified as PURA §§ 55.041-55.048, these sections require the provision of Expanded Local Toll-Free Calling Service (ELCS). This statutory language establishes a new framework for the approval of applications to expand a small exchange's local calling area to include one or more nearby exchanges. Many communities sought and now have gained the ability via ELCS to call nearby communities at flat rates.[90] Only non-metropolitan exchanges with fewer than 10,000 access lines are eligible to petition for ELCS, and telephone cooperatives and small investor-owned telephone companies may be exempt from providing this service. As of December 3, 1998, 1,016 applications for ELCS had been filed, and the Commission had approved 783 of them.[91]

Calling scopes are important to an evaluation of competition in two ways — the impact on local exchange competition and the impact on short-haul long-distance competition. To attract customers, a local exchange competitor must meet or beat the ILEC's prices or its service features. Historically, customers have clamored for larger toll-free calling areas, and in some areas of Texas the toll-free calling scope exceeds one million customers and may be more than 50 miles in diameter. The pressure is on competitors, then, to match these large calling areas or, in the alternative, to offer a different package of services at a more attractive price. In a similar manner, competing long-distance carriers must address the impact of expanded calling scopes in the marketing of their services. Therefore, a linkage exists among EAS, local calling scopes, toll rates, and emerging competition in these markets.

As discussed in the *1997 Scope Report*,[92] the Commission addressed the issues surrounding the competitive impact of EAS in Docket No. 14686,[93] which involved

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[89] Much of the reason for the lower rate is that with mandatory EAS the costs of providing for the increased switching and trunking required to carry the greater calling volume associated with EAS are spread over a larger number of customers. Moreover, in 1993 the Legislature required GTE-SW and SWBT to charge no more than $3.50 and $7.00 for residential and business subscribers to mandatory EAS. This requirement is now contained in PURA § 55.024(a).

[90] Consistent with PURA § 55.048, a monthly additive of up to $3.50 for residential customers and $7.00 for business customers typically is charged to ELCS petitioning customers. (In addition, a surcharge may be applied to all of the ILEC's customers statewide. This surcharge currently is not capped.)

[91] Appendix C contains a discussion of SWBT's interLATA ELCS petitions, which required approval by the FCC.

[92] *1997 Scope Report, supra.,* at 115-116.

petitions by ILECs for the expansion of EAS in the Houston, Dallas-Fort Worth, and Longview areas. MCI and AT&T opposed the applications, arguing that the expanded EAS service would be anti-competitive and that EAS would reduce their ability to offer competitively priced intraLATA toll service. The Commission examined the apparent conflict between EAS and the imputation requirements of PURA §§ 60.061-60.065, as well as the competitive ramifications of EAS. The Commission concluded that the EAS petitions should be approved, and would not be anti-competitive, since competitors are able to purchase (for resale) EAS at wholesale rates under the federal Telecommunications Act (FTA) or PURA. In this manner, all carriers can compete in the retail EAS market.

An examination of the table below permits the following conclusions:

- EAS and ELCS continued to be provided overwhelmingly by ILECs, although some non-ILECs evidently have begun to provide these services on a resale basis.
- ELCS and optional EAS grew substantially in this period: ELCS revenues increased by over 60%, while optional EAS revenues nearly doubled (and in each case the number of lines more than doubled). Much of the upsurge in optional EAS revenues may be attributed to the implementation of the plans approved in Docket No. 14686 for the Dallas-Fort Worth, Houston, and Longview areas. The strong growth in ELCS revenues was due to the continuing, regular examination and approval by the Commission of a steady stream of petitions for this highly popular service.
- The decline in revenues for mandatory EAS services from 1995 to 1996 might have been expected because of the 1993 legislative requirement that GTE Southwest Incorporated (GTE) and Southwestern Bell Telephone Company (SWBT) charge no more than $3.50 and $7.00 for residential and business subscribers to mandatory EAS, so that some mandatory EAS rates were reduced. (The availability of ELCS and optional EAS has likely contributed also to this decline.) Still, the 36% rise in mandatory EAS revenues for ILECs from 1996 to 1997 is puzzling, because the number of access lines reported to be receiving mandatory EAS actually fell slightly.

[93] *Petitions of Southwestern Bell Telephone Company, et al, for Extended Area Service,* PUC Docket No. 14686 (July, 6, 1996).

Table 13 - EAS/ELCS[94]

EAS Optional						
Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILEC	$57,790,201	100%	$68,470,712	100%	$112,710,392	99.994%
Non-ILECs	$0	0%	$0	0%	$6,726	0.006%
Total	$57,790,201		$68,470,712		$ 112,717,118	
Access Lines						
ILEC	193,690	100%	340,209	100%	393,815	99.720%
Non-ILECs	0	0%	0	0%	1,104	0.280%
Total	193,690		340,209		394,919	
EAS Mandatory						
Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILEC	$83,371,029	100%	$50,634,940	100%	$68,237,890	100%
Non-ILECs	$0	0%	$0	0%	$0	0%
Total	$83,371,029		$50,634,940		$68,237,890	
Access Lines						
ILEC	1,395,790	100%	1,465,169	100%	1,343,622	99.984%
Non-ILECs	0	0%	0	0%	214	0.016%
Total	1,395,790		1,465,169		1,343,836	
ELCS						
Revenues	1995	%	1996	%	1997	%
ILEC	$15,016,502	100%%	$21,057,279	100%%	$26,992,901	100%%
Non-ILECs	0	0%	0	0%	0	0%
Total	$15,016,502		$21,057,279		$26,992,901	
Access Lines						
ILEC	171,454	100%	275,891	99.998%	366,047	99.715%
Non-ILECs	0	0%	5	0.002%	1,046	0.285%
Total	171,454		275,896		367,093	

Source: Responses to 1998 Data Requests

[94] Non-ILEC lines are displayed in this chart to show that some customers in mandatory and optional expanded calling areas are provided with basic local service by non-ILECs. However the revenues gained by non-ILECs for these services generally are bundled with those for basic local service and not attributed to the expanded calling program, and hence are not available separately for this report.

Long-Distance

With the divestiture of the Bell system in 1984, the nation was divided into serving areas known as Local Access Transport Areas, or LATAs. Bell Operating Companies (BOCs) such as SWBT were not allowed to provide long-distance calling services between LATAs, but were allowed to provide intraLATA toll service. A separate consent decree created similar geographic areas, called Service Market Areas (SMAs), in the GTE-SW operating area. There are 16 LATAs and two SMAs in Texas. At divestiture, interLATA long-distance calls were to be provided by interexchange carriers (such as AT&T, MCI, or Sprint), but not by SWBT or GTE-SW.

In order to promote fair competition, "equal access" features, which would allow callers to select the long-distance company to carry their calls, were installed in increasing numbers of switching offices. Customers were asked to presubscribe to the interexchange carrier of their choice for 0+ and 1+ interLATA long-distance calling. Nearly all telephone customers in Texas now have equal access to long-distance companies for interLATA calls.

This equal access and presubscription process was not mandated for intraLATA long-distance calls, which in most cases are carried less than 200 miles. The ILECs were allowed to retain their role as the carriers of intraLATA toll calls for "default" traffic; that is, unless the caller used special codes to access another carrier, the 0+ or 1+ call would be handled by the ILEC. In order to use a long-distance carrier other than the ILEC (or competitive carrier, if such carrier provides a customer's local service) for an interLATA call, in most parts of Texas the caller still must dial at least five extra digits — usually an access code of the form 10-10-XXX.

With the implementation of intraLATA equal access, callers are able to select a long-distance carrier other than the local service provider to carry 0+ or 1+ intraLATA calls. In accordance with P.U.C. SUBST. R. 23.103, intraLATA equal access recently has been implemented in GTE's exchanges, and local service providers other than SWBT must implement intraLATA equal access by February 8, 1999.[95] SWBT must implement such equal access when it begins to provide interLATA telecommunications service.[96]

The Commission's data request sought a breakdown of revenues between intraLATA and interLATA services, but some large IXCs were unable to provide such a

[95] P.U.C. SUBST. R. 23.103 allows a local service provider serving fewer than two percent of the nation's subscriber lines to petition the Commission for a suspension or modification of the rule.

[96] FTA § 271 allows SWBT and other BOCs to provide interLATA service after they meet certain specified conditions. (These conditions were enumerated in the Commission's *1997 Scope Report* (at Appendix D-4,5); the Commission's currently pending related proceeding, Project No. 16251, is discussed in chapter 3 of this report.) The FTA gave authorization to GTE to provide interLATA service upon its enactment.

breakdown. Consequently, this report cannot provide an accurate estimate of the current intraLATA market shares of ILECs and IXCs.[97]

INTRALATA TOLL SERVICES

Despite of the lack of an estimate of intraLATA market shares, some conclusions can be drawn from the long-distance revenue data received. As the table below shows, ILECs continued to dominate the 1+ intraLATA toll market, with a share of nearly 98% in 1995 and nearly 97% in 1997. Quite striking, however, is the 21% decline in ILEC revenues, from nearly $611 million in 1995 to just under $481 million in 1997.

Table 14 - Long-Distance Service: 1+ IntraLATA Toll Service[98]

Revenues	1995	%	1996	%	1997	%
IXCs	$13,750,075	2.20%	$14,426,057	2.47%	$14,034,127	2.83%
ILECs	$610,856,437	97.76%	$568,132,232	97.39%	$480,948,425	96.92%
Others	$225,650	0.04%	$791,324	0.14%	$1,240,484	0.25%
Total	$624,832,163		$583,349,613		$496,223,036	

Source: Responses to 1998 Data Requests

Because of above-noted inability of some IXCs to separate their intraLATA and interLATA long-distance revenues, the following table combines non-1+ intraLATA toll revenues with interLATA, intrastate revenues. More than 80% of the ILECs' revenues within these two groups was from non-1+ intraLATA services (such as calling-card, collect, person-to-person, and billed-to-third-number calling); very likely, the large majority of the IXCs' revenues came from interLATA services.

Table 15 - InterLATA, Intrastate + non-1+ IntraLATA Toll Service[99]

Revenues	1995	%	1996	%	1997	%
IXCs	$1,293,336,671	97.16%	$1,372,338,425	97.91%	$1,311,051,304	97.89%
ILEC	$27,521,029	2.07%	$20,424,928	1.46%	$18,994,316	1.42%
Others	$10,280,275	0.77%	$8,823,300	0.63%	$9,209,324	0.69%
Total	$1,331,137,975		$1,401,586,653		$1,339,254,944	

Source: Responses to 1998 Data Requests

[97] The revenue data from IXCs are not comprehensive: only those IXCs that held COAs or SPCOAs in April 1998 were sent data requests, and not all of these companies provided data.

[98] Provider types that reported revenues for 1+ IntraLATA toll services included cooperative and investor-owned ILECs, facilities-based and non-facilities-based IXCs, and facilities-based and non-facilities based CLECs.

[99] Provider types that reported revenues for non-1+ IntraLATA toll services included cooperative and investor-owned ILECs, facilities-based and non-facilities-based IXCs, competitive access providers (CAPs), and facilities-based and non-facilities based CLECs.

A partial explanation for the substantial decline in ILEC intraLATA revenues (mostly for 1+ calling, and especially between 1996 and 1997) and the lesser decline in IXC revenues between 1996 and 1997 is that EAS and ELCS proliferated in this period. Particularly noteworthy were several large optional EAS plans that were implemented in the Dallas-Fort Worth, Houston, and Longview areas.[100] This expansion of toll-free calling scopes for optional EAS subscribers significantly eroded the volume of intraLATA toll calling (1+ and otherwise) in these areas.

The increased provision of ELCS and EAS is not a complete explanation for the revenue drop, however, especially for the IXCs. As seen in the table in the interLATA section below, IXCs' switched-access minutes of use continued to rise between 1996 and 1997. Provided the IXCs' revenue totals are reasonably accurate, some decline in average rates (revenue per minute) seems to have taken place.[101]

If we consider the intrastate long-distance market as a whole, it is apparent that the ILEC share of revenues decreased, from 32.6% in 1995 to 27.2% in 1997. The importance of this decrease easily can be overemphasized, however, partly because the intraLATA and interLATA markets are still largely segregated. Moreover, as noted above, part of the ILECs' revenue decline was replaced in increased EAS and ELCS revenues, especially the former.

Table 16 - Total Intrastate Toll Revenues

Revenues	1995	%	1996	%	1997	%
IXCs	$1,307,086,746	66.83%	$1,386,764,482	69.86%	$1,325,085,431	72.19%
ILEC	$638,377,466	32.64%	$588,557,160	29.65%	$499,942,741	27.24%
Others	$10,505,925	0.54%	$9,614,624	0.48%	$10,449,808	0.57%
Total	$1,955,970,138	100.00%	$1,984,936,266	100.00%	$1,835,477,980	100.00%

Source: Responses to 1998 Data Requests

INTERLATA TOLL SERVICES

The interLATA long-distance market continues to become more competitive, but it still is characterized by an extremely high degree of market power. Not counting ILECs (which, as discussed above, still primarily carry only intraLATA calls), on a statewide basis the four largest IXCs continue to form what economists call a "tight oligopoly," so that the largest players can use significant discretion in setting prices (as with tacit price-leadership strategies). A market may be considered a tight oligopoly if its four largest

[100] These EAS plans were approved by the Commission in *Petitions of Southwestern Bell Telephone Company, et al., for Extended Area Service*, Docket No. 14686 (July 10, 1996). The Commission's ruling in this consolidated docket was discussed in the previous section of this report.

[101] A cursory analysis of the tariff filings of the three major long-distance companies indicates that their long-distance rates converged towards a more even rate structure during the data period, thus decreasing the spread between the highest and the lowest rate charged.

firms serve at least 60% of the market (as measured by revenues, minutes of use, presubscribed lines, or some other measure).[102] As shown below, the "Big Four's"[103] share of Texas intrastate originating access minutes declined from 87.25% of the market in 1995 to 80.21% in 1997.[104] Another market-power measure, the Hirschman-Herfindahl index (HHI), declined from a lower bound of 3370 in 1995 to a lower bound of 2724 in 1997. These figures compare to a threshold of 1800 needed to deem a market tightly oligopolistic.[105]

Table 17 - Texas Intrastate Originating Switched-Access Minutes of Use

	1995		1996		1997	
	Minutes	**%**	**Minutes**	**%**	**Minutes**	**%**
Top Four IXCs	9,705,517,905	87.25%	9,997,331,510	82.78%	10,228,166,275	80.21%
All Other IXCs	1,418,340,309	12.75%	2,079,208,320	17.22%	2,526,227,364	19.79%
Total	11,123,858,213	100.00%	12,076,539,830	100.00%	12,751,393,639	100.00%

Source: Responses to 1998 Data Requests

Data from the FCC show that the picture is similar at the national level. For example, as shown in the table below, the interstate-revenue market share of the Big Four declined from 86.2% in 1995 to 80.2% in 1997; during this period the estimated HHI of the interstate market fell from 3197 to 2508.[106]

[102] William G. Shepard, *The Economics of Industrial Organization*, second edition (Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1985), p. 4.

[103] With the FCC's approval on Sept. 14, 1998, of the merger between MCI and WorldCom, the "Big Four" became the "Big Three": AT&T, MCI WorldCom, and Sprint.

[104] A minority of these access minutes would have been for intraLATA calls carried by IXCs.

[105] Department of Justice, *1992 Merger Guidelines*. The HHI is formed by summing the squares of each firm's market share (expressed as a percentage). It ranges from a theoretical minimum of just above 0 (with no firm having a meaningful market share) to a maximum of 10,000 (reflecting a complete monopoly).

[106] FCC Common Carrier Bureau, Industry Analysis Division, *Long Distance Market Shares, Second Quarter 1998* (Sept. 1998) at 16.

Table 18 - Long-Distance Carrier Market Share Based on Operating Revenues

YEAR	AT&T	MCI	SPRINT	WORLDCOM	ALL OTHER LONG - DISTANCE CARRIERS	HERFINDAHL-HIRSHCHMAN INDEX
1984	90.1%	4.5%	2.7%		2.6%	8,155
1985	86.3	5.5	2.6		5.6	7,479
1986	81.9	7.6	4.3		6.3	6,783
1987	78.6	8.8	5.8		6.8	6,298
1988	74.6	10.3	7.2		8.0	5,720
1989	67.5	12.1	8.4	.2%	11.8	4,778
1990	65.0	14.2	9.7	.3	10.8	4,527
1991	63.2	15.2	9.9	.5	11.3	4,321
1992	60.8	16.7	9.7	1.4	11.5	4,074
1993	58.1	17.8	10.0	1.9	12.3	3,795
1994	55.2	17.4	10.1	3.3	14.0	3,466
1995	51.8	19.7	9.8	4.9	13.8	3,197
1996	47.9	20.0	9.7	5.5	17.0	2,823
1997	44.5	19.4	9.7	6.7	19.8	2,508

Source: FCC Common Carrier Bureau, Industry Analysis Division, *Long-Distance Market Shares, Second Quarter 1998* (Sept. 1998) at 16.

Emerging Markets

The rapid development of new technology and the competitive structure of local and long-distance telephony exists within the context of a growing demand for data, voice, and video transmission. Newer "non-traditional" carriers of voice include cellular, personal communications services (PCS), Internet service, cable television, and electric-utility providers. While lacking the market penetration in voice technology of ILECs, each emerging provider brings its own strengths to this market.

The relative potential of this market is demonstrated by the rapid increase in subscribership to cellular/PCS services. Industry and FCC estimates indicate a five-fold increase in subscribership from 11 million to 55 million subscribers since 1992 (and from fewer than 100,000 subscribers in 1984).[107] Though wireless service currently is largely complementary to the traditional wirebound provider, a growing number of digital, cellular, and PCS providers are developing the infrastructure to provide quality service at reasonable prices, perhaps in lieu of, rather than as a complement to, traditional landline services.

[107] L. Vanston and R. Hodges, *Wireless vs. Wireline for Voice Services*, Technology Futures, Inc. (1998) at 9.

Indications are that changing technology and the unpredictability of customers may lead to the substantial development of a growth market for full-service providers of voice, data, and video services. The volatility of this market is demonstrated by the increase in COA and SPCOA applications, the growing number of provider affiliates, and the entry of various players into "non-traditional" areas of technology. The mix of infrastructure development and technological expertise of each of these providers demands that traditional telephone providers, as well as regulatory agencies, closely monitor on-going efforts.[108]

[108] For a more comprehensive discussion of this subject, see Appendix B.

CHAPTER 7
RECOMMENDATIONS TO THE LEGISLATURE

In the three years since the Public Utility Regulatory Act (PURA) was revised to allow incentive regulation, and the more than two years since the federal Telecommunications Act of 1996 (FTA) was enacted by the U.S. Congress, the Public Utility Commission of Texas (PUCT or Commission) has been taking an active role in fostering the transition to local competition in the state. The Commission has faced many competitive issues such as arbitration of interconnection agreements, mergers and acquisitions, and market power analysis of new service offerings. Simultaneously, the Commission has remained sensitive to upholding customer service quality, customer education, and customer privacy rights. As competitive pressures increase, the Commission must continue to balance differing responsibilities: to foster increased participation in the local exchange market and to stymie preferential, discriminatory, and anti-competitive practices, and to ensure the availability of high-quality telecommunications services for all Texans at reasonable rates, while remaining responsive to customer needs and education.

The Commission's ability to effectively uphold the public interest while promoting a more dynamic local telecommunications market would be enhanced with the following legislative recommendations.

Customer Protection

1. AUTHORIZE THE PUCT TO PENALIZE AND PREVENT "CRAMMING" VIOLATIONS.

In fiscal year 1998 (FY98), the Commission received 4,945 complaints concerning "cramming," *i.e.*, unauthorized charges inserted on customer bills. Based on the complaints received during FY98, the Commission estimates the cost to affected individuals, many of them low-income customers, averages $6.27 per customer annually. Although seemingly a small amount, the aggregate cost reaches approximately $31,000. Many providers making unauthorized charges on customer bills are not traditional telecommunications providers, and although the PUCT has general authority to "protect the public interest," it lacks specific authority to assess penalties for cramming violations. The Commission recently proposed a rule on cramming, which raised concerns about its jurisdiction to prevent or deter cramming. The practice of cramming can be curbed most effectively if the PUCT is granted clear authority to implement the following measures:

- enforcing penalties against all providers of services or products who levy unauthorized charges through telecommunications bills;
- requiring that local exchange companies that bill on behalf of other providers of services or products give prompt credits or refunds to customers for unauthorized items on the bill;
- requiring verification by and notification to customers before the provider bills for any new product or service;
- prohibiting the termination of local telephone service for failure to pay any charges for telecommunications services sold by means of unfair, misleading, or deceptive practices;
- protecting customers against unfavorable credit reports unless a cramming dispute is ultimately resolved against the consumer;
- imposing administrative penalties up to $5,000 per day for each cramming violation;
- requiring that all telecommunications providers offering telecommunications products or services, as well as the corresponding billing agencies, provide detailed and conspicuous contact information on customer bills, including a toll-free number for customers to call and an address for customers to write;
- imposing requirements concerning retention of customer records relating to the charges made and the customers billed;
- suspending, restricting, or revoking a telecommunications utility's certificate or registration for repeated violation of the cramming rule; and
- prohibiting all negative-option packages, sweepstakes, and contests that cause customers unknowingly to subscribe to a service or to purchase a product.

2. STRENGTHEN PUCT AUTHORITY TO LEVY ADMINISTRATIVE PENALTIES.

The PUCT did not have enforcement capabilities until 1995. The Commission recommends strengthening current PUCT authority to levy administrative penalties, as recommended by the January 1997 Texas Performance Review publication, *Light Years: The Future of the Public Utility Commission in Texas,*[109] and previously proposed

[109] Texas Performance Review, *Light Years: The Future of the Public Utility Commission in Texas.* Austin, Tex.: Texas Comptroller of Public Accounts (1997). In particular, Recommendation 8.A, at 48, noted as follows: "Under current law, PUC cannot impose a penalty if a violation is corrected within 30 days regardless of how often the violation reoccurs. Without the ability to impose penalties based on a utility's history of violations, PUC has little real compliance authority. Giving PUC greater discretion to impose penalties would discourage repeated violations."

legislative bills. The penalty-assessment procedure set forth in PURA is lengthy, cumbersome, and permits transgressing providers to cease operations before actually incurring fines. For example, in FY98 the PUCT received 12,562 slamming complaints, yet the PUCT has entered into only two settlement agreements with violating companies, representing payments of approximately $460,000. The PUCT believes that customers and companies that operate according to the law and Commission rules deserve prompt, effective action against offenders. Therefore, the Commission recommends streamlining the assessment procedure and shortening the period during which companies must remedy their faulty operational practices.

3. AUTHORIZE THE PUCT TO REVOKE SPCOAS FOR NONCOMPLIANCE WITH PURA.

In 1998, sixty-five companies doing business as service provider certificate of authority (SPCOA) holders became the subject of customer complaints for such offenses as slamming (the unauthorized switching of a customer's local or long-distance company), cramming, overbilling, failure to deliver service adequately, and poor customer service. Although the Commission has authority to revoke certificates of authority (COAs), it does not have the authority to revoke SPCOAs under current PURA provisions.[110] Consequently, SPCOA holders sometimes refuse to respond to or act on complaints forwarded by the Commission. Revoking SPCOAs for noncompliance with PURA provisions and PUCT rules would deprive these certificate holders of a profitable market. Therefore, if the Commission has authority to revoke their certificates, SPCOA holders likely would be more sensitive to the need to provide quality service to their customers.

4. REQUIRE ALL CERTIFICATED TELECOMMUNICATIONS COMPANIES TO FULFILL SPECIFIC CUSTOMER PROTECTION RESPONSIBILITIES.

Changes to various sections of PURA are needed to protect telecommunications and electric customers, as recommended by the state comptroller's *Light Years*[111] and previously proposed legislative bills. Current PURA provisions generally limit PUCT

[110] PURA § 54.111 grants the PUC the authority to revoke a COA if the certificate holder fails to comply with the requirements of PURA. PURA contains no provision regarding the revocation of SPCOAs; instead, subchapter D of PURA § 54 contains provisions regarding only the initial granting or denying of an SPCOA.

[111] *Light Years*, *supra* note 109 at 38-41. For example, Recommendation 4.B, at 41, advises amending PURA to authorize the Commission to apply minimum service-quality standards to all telecommunications service providers, including SPCOA holders. (PURA § 54.251(a) currently requires CCN and COA holders to provide continuous and adequate service to all customers requesting service in the utility's certificated area).

telecommunications customer-protection oversight to local exchange carriers and telephone cooperatives who are CCN or COA holders (not SPCOA holders). The Commission recommends amending a number of PURA sections to make explicit some authorities now implicit in PURA's grant of broad regulatory powers.[112] Such adjustments would guarantee customer protection for telecommunications services, clarify PUCT authority over customer-protection issues, and extend PUCT customer-protection jurisdiction to new providers of telecommunications service, including SPCOA holders.

Specifically, the Commission recommends holding responsible all certificated telecommunications utilities, including those holding COAs or SPCOAs, for satisfying minimum customer service standards. Further, the Commission recommends requiring all certificated telecommunications utilities to provide customers advance notice of changes to rates and service, and requests express authority to protect customers from unfair, misleading, and deceptive practices regardless of provider type.

5. CONSOLIDATE ALL MANDATED SURCHARGES ON CUSTOMER BILLS.

Customer bills have become more complicated and harder to decipher, especially with the addition of newly itemized federal charges. The Commission continually receives calls from customers concerning confusion about their telephone bills, which now reflect numerous itemized charges that are ancillary to basic telecommunications service. These itemized surcharges pertain to municipal fees, 911, poison control, the Telecommunications Infrastructure Fund Board, and tax liabilities resulting from HB 11.

Amendment of the statutory provisions referenced above would allow utilities to consolidate all unavoidable charges. The amendment could specify that the consolidated charge be listed singly or be combined into the basic telephone service rate. If rolled into the basic local service rate, the new rate would not reflect a rate increase but instead a streamlined consolidation of the existing basic rate and the foregoing surcharges.

[112] The Commission has identified the following sections of PURA for possible adjustment in this regard: PURA § 51.001, § 51.002, § 52.001, § 52.051, § 52.103, § 52.104, § 52.108, § 52.152, § 52.251, § 54.001, § 54.052, § 54.154, § 54.158, § 54.251, § 54.255, § 55.001, § 55.002, § 55.003, § 55.004, and § 55.007. For example, one of the effects of such revisions would be to extend Commission customer-protection authority to all certificated telecommunications utilities (*i.e.*, holders of a CCN, a COA, or an SPCOA), rather than to CCN holders only, or to CCN holders in combination with only COA holders.

Universal Service Fund (USF)

6. ALLOW REIMBURSEMENT TO PAYPHONE PROVIDERS FOR THE UNCOMPENSATED COSTS OF PROVIDING PUBLIC-INTEREST PAYPHONES.

FTA § 276(b)(2) directed the FCC to "determine whether public interest payphones, which are provided in the interest of public health, safety, and welfare, in locations where there would otherwise not be a payphone, should be maintained, and if so, ensure that such public interest payphones are supported fairly and equitably."

To comply with its congressional mandate, the FCC issued its Report and Order in CC Docket No. 96-128, FCC 96-388, on September 20, 1996. The FCC adopted the definition of a public-interest payphone (PIP) as a pay telephone that "(1) fulfills a public policy objective in health, safety, or public welfare, (2) is not provided for a location provider with an existing contract for the provision of a payphone, and (3) would not otherwise exist as a result of the operation of the competitive marketplace."

Finding that states are generally in a better position to evaluate the need for PIPs, the FCC concluded in its Report and Order that primary responsibility for administering and funding PIPs is best left to the states. Accordingly, the FCC required each state to determine whether any measures need to be taken to ensure the existence of PIPs. Discretion is left to each state as to how to fund its own PIP program, so long as the funding mechanism fairly and equitably distributes the costs of such a program and does not involve the use of subsidies prohibited by FTA § 276(b)(1). A state may choose to fund PIPs (1) from its general revenues; (2) by requiring pay-telephone service providers to provide PIPs as part of a voluntary, contractual agreement for the installation of competitive payphones on public property; or (3) by adopting PIP rules consistent with state responsibility for ensuring universal service pursuant to FTA § 254(f).

PURA does not explicitly address the provisioning and funding of public-interest payphone service.[113] The Commission recommends that PURA § 56.021 be changed to reflect the PUCT's authority to fund a PIP program through the USF. Once changed, the PUCT will be able to adopt PIP rules consistent with state responsibility to ensure the provisioning and funding of PIPs through the USF. Through the USF, payphone service providers will be able to be reimbursed for the costs associated with installation and placement of public-interest payphones.

[113] Currently, PURA § 56.021 lists four specific activities for which universal service funds may be allocated. These include the provision of (1) basic local telecommunications service in high-cost rural areas, (2) tel-assistance service, (3) statewide telecommunications relay service, and (4) reimbursement of commission costs incurred in implementing universal service programs.

7. CLARIFY THAT ALL TELECOMMUNICATIONS PROVIDERS CAN BE ELIGIBLE FOR USF REIMBURSEMENT.

The Commission recommends that PURA § 56.021(1) and (2) be modified so that all telecommunications providers can be eligible to be reimbursed from the universal service fund (USF), rather than just local exchange carriers.[114] Correspondingly, other sections in Chapters 56 and 57 may need to be revised to reference eligible telecommunications providers that have elected to contribute to the universal service fund, in addition to local exchange companies.

This change would allow wireless providers and SPCOA holders to receive support from the USF for providing basic network service in high-cost rural areas. Moreover, the change would make the USF technologically neutral, encouraging telecommunications providers to offer services, perhaps at costs lower than traditional landline services, in high-cost rural areas of the state.

8. CLARIFY CONFLICTING SOURCES OF RELAY TEXAS FUNDING (INCLUDING FUNDING OF TTYS).

Clarification is needed as to whether Relay Texas funding (including funding of TTYs) should be recovered from telecommunications utilities only (as prescribed in PURA § 56.106(a)) or from the broader category of telecommunications providers (in accordance with the USF funding provision, PURA § 56.022(a)).

PURA §§ 56.106 and 56.107 permit funding for relay access service to flow from the USF assessments. PURA § 56.106(a), which dates from 1989, states specifically that the assessments for relay access service are to be levied on telecommunications utilities. P.U.C. SUBST. R. 23.150(g)(1), however, requires that a USF assessment be imposed on all telecommunications providers, which includes not only telecommunications utilities, but also payphone and wireless providers. The Commission's rule does not segregate telecommunications "utilities" from "providers" for the purpose of levying assessments for relay access services because doing so would complicate significantly USF administration, and therefore increase costs. In adopting its USF rules, the Commission interpreted the broader class—telecommunications providers—to be required to pay into the fund for all programs, including Relay Texas. This interpretation is consistent with PURA § 56.022, which originated in 1995. Still, PURA § 56.022, which mandates USF

[114] PURA § 56.021(1) and (2) limits reimbursement to only local exchange companies (LECs) for (1) providing basic local telecommunications service in high-cost rural areas and (2) providing Tel-Assistance services. However, in § 56.022(a), all telecommunications providers are required to pay into the fund. PURA § 51.002(3) defines a LEC as a telecommunications utility that has a certificate of convenience and necessity or a certificate of operating authority. PURA § 51.002(10) defines a telecommunications provider to include providers of commercial mobile service and SPCOA holders (as well as other uncertificated telecommunications utilities, such as IXCs and payphone providers).

funding by all telecommunications providers, should be revised to explicitly include Relay Texas.

PURA § 3.613, an amendment to PURA95 not yet codified in the Texas Utility Code, also reflects inconsistencies in regard to the new specialized telecommunications device assistance program. PURA § 3.613 permits the Commission to grant telecommunications utilities an opportunity to recover, through imposition of a customer surcharge, their respective USF assessment related to this program. USF provisions in § 56.022 require contribution from a broader set of companies, *i.e.*, all telecommunications providers. Accordingly, the Commission adopted rules requiring all telecommunications providers to pay into the USF program, and recommends that PURA § 56.022 be revised to apply specifically to the specialized telecommunications device assistance program.

9. ENSURE THAT IXCS PASS THROUGH DECREASES IN INTRASTATE ACCESS CHARGES TO CUSTOMERS.

Intrastate switched-access charges are paid by IXCs to the ILECs so that long-distance customers can access the local telecommunications network. Historically, switched-access service has been priced higher than cost, in part to recover the ILECs' costs of providing basic local telecommunications service in high-cost rural areas of the state. In effect, long-distance customers have been subsidizing the cost of basic local telecommunications service through high rates paid to IXCs.

If the Commission were to determine that ILECs' switched-access rates should be reduced, and that the reduction should be replaced by USF support, then the rate reduction experienced by the IXCs should be passed through to the customers of those same IXCs. If this pass-through is not guaranteed, then long-distance customers could pay twice for supporting basic local telecommunications service, once through high long-distance rates and a second time through the USF charge on their bills.

In its current form, Subchapter C of Chapter 52 describes the Commission's limited authority over telecommunications utilities that are not dominant carriers. In order for the Commission to have authority to require IXCs to pass through access charges, § 52.102 would need to be amended to clarify the PUCT's limited authority over IXCs in this regard. Clarification as to which customers and customer classes would receive pass-through reductions could be addressed by Commission rules.

10. REVISE PURA § 56.025 USF ELIGIBILITY FOR ELECTING OR OVEREARNING COMPANIES.

To achieve the goal of directing the USF moneys as fairly and efficiently as possible, the Commission recommends amending PURA § 56.025 in two ways:

1) Remove its applicability to ILECs electing regulation under Chapters 58 or 59, and

2) Allow the Commission in a rate case to offset excess profits against any USF requests under § 56.025.

This section currently allows any LEC serving fewer than 5 million access lines to receive offsetting compensation from the TUSF (or through higher rates) in the event of policy changes by governmental entities that adversely affect the LEC.

As indicated in Table 19 below, the Commission staff estimates that six of the seven ILECs electing regulation under Chapters 58 or 59 of PURA reaped overearnings during calendar year 1997. The Commission believes that electing companies (which are not subject to a Commission-initiated rate case), especially those that appear to be overearning, should not be entitled to receive support because ILECs electing incentive regulation must be expected to assume some risk as a cost of selecting a form of price-cap regulation.

Table 19 - Earnings Reports Data for Companies Electing Incentive Regulation

Review of Earnings Reports for the Year Ending 12/31/97
Summary of PUCT Staff Findings
Investor-Owned Telephone Utilities Electing Incentive Regulation[115]

Telephone Company	Access Lines	Reported Rate of Return (ROR)	Staff Adj. ROR	Cost of Capital		Overearning Dollars	Over-earning Dollars per Line	State High-Cost Assistance Dollars
				High	Low			
Century San Marcos‡	28,913	21.37%	21.23%	10.59%	9.94%	3,658,465	127	791,292
Central Telephone‡	204,214	9.15%		9.76%	9.20%			0
GTE†	2,104,291	10.73%	10.57%	9.81%	9.25%	22,380,758	11	0
Lufkin-Conroe‡	97,925	18.54%	16.45%	10.59%	9.94%	8,225,157	84	787,248
Southwestern Bell†	9,343,711	11.82%	12.50%	9.47%	8.92%	288,373,673	31	0
Sugarland‡	65,305	21.43%	21.69%	10.04%	9.48%	8,304,847	127	1,136,202
United‡	149,501	17.06%		10.08%	9.50%	12,934,531	87	0

† Indicates company elected incentive regulation under PURA, Chapter 58
‡ Indicates company elected incentive regulation under PURA, Chapter 59

Source: PUCT 1997 Earnings Monitoring Reports

Secondly, for ILECs that have not elected incentive regulation under Chapters 58 or 59, the Commission should have discretion to reduce any TUSF requests made under PURA § 56.025 (and P.U.C. SUBST. R. 23.136) by any overearnings that are established

[115] SWBT data are included here because SWBT is an electing company; due to its size, however, it cannot access replacement revenue via PURA § 56.025.

in a rate case. Allowing the Commission to offset TUSF requests in this manner enhances the Commission's ability to protect customers from unnecessarily increasing rates and to prevent unnecessary demand on USF moneys.

General PURA

11. ALLOW A CCN HOLDER'S AFFILIATE TO HAVE A COA IN THE SAME TERRITORY UNDER LIMITED CIRCUMSTANCES.

Section 54.102(a) of PURA states as follows: "In lieu of applying for a certificate of convenience and necessity, a person may apply for a certificate of operating authority." The PUCT, in its November 1997 final order in Docket No. 16495,[116] interpreted this language to mean that an affiliate of an incumbent local exchange carrier (ILEC) may not receive a COA in the areas covered by the ILEC's certificate of convenience and necessity (CCN).

Issues such as certification need to be considered in light of the resale and unbundling requirements of FTA. In its analysis of the treatment of new and advanced services pursuant to FTA, the FCC may authorize incumbent carriers to have advanced services affiliates that would operate in the incumbent's territory pursuant to the same terms and conditions as a competitive local exchange carrier (CLEC). The PUCT proposes the adoption of a new subsection that would provide explicit authority to the Commission to implement such a policy if adopted by the FCC. Another proposed subsection would provide the Commission with explicit authority to provide narrowly tailored "dual certification" for CCN holders if the FCC allows the states the ability to implement exceptions to FTA's resale and/or unbundling requirements at the state's discretion.[117]

12. REVISE THE COST-RECOVERY MECHANISMS FOR ELCS.

PURA currently caps only the fees for Expanded Local Calling Service (ELCS) subscribers in petitioning exchanges, but not the surcharges levied on all other local-exchange service subscribers in the state served by the LEC. The Commission has seen an increasing number of cases where so many exchanges petition for ELCS to a given area that the fees for non-beneficiary subscribers in the area threatened to become higher

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[116] *Application of GTE Communications Corporation for a Certificate of Operating Authority*, Docket No. 16495 (Nov. 20, 1997).

[117] In FCC and Commission proceedings the term "new and advanced" services has been used. The Commission proposes to use the term "advanced" services in amendments to PURA in this regard to mean "newly created or deployed" advanced services. This way, confusion with the generic use of the term "new" can be avoided when defining discretionary services.

than the fees for the benefiting subscribers. The Commission has altered its rules to clarify that any surcharge necessary beyond the ELCS fee charged to the petitioning exchanges should be spread among all subscribers in the affected ELCS area, including the subscribers in the petitioning exchange.

The Commission offers the following three options for legislative consideration:

1. Cap the combination of ELCS fees charged to members of the petitioning exchange and surcharge imposed on all ratepayers.

Cap the ELCS beneficiary fee at $3.50 (for up to five exchanges)[118] and the surcharge at $1.50. This approach would result in a maximum fee plus surcharge of $5.00 for ELCS beneficiaries, and a maximum surcharge of $1.50 to reciprocal exchange ELCS customers and non-beneficiaries. Another variation to this option would require the surcharge be applied only to ELCS users (in petitioning and reciprocal exchanges), prohibiting an ELCS surcharge on non-beneficiaries. A possible rate structure:

- Beneficiaries: $3.50 + $1.50
- Reciprocal exchange customers: $1.50
- Non-beneficiaries: $1.50 or $ 0.00

For larger local exchange carriers (LECs) with a high proportion of non-beneficiaries, the inability to capture ELCS surcharge from non-beneficiaries could significantly increase the level of the surcharge to ELCS users. Smaller LECs with a small proportion of non-beneficiaries relative to ELCS users may not be able to recover the total of ELCS-provision costs plus lost toll revenues that is authorized by statute.

2. Eliminate "shall" in PURA 55.048 and require an ILEC to demonstrate its need to recover costs and lost toll revenue in order to impose an ELCS surcharge.

In order to recover costs incurred and lost toll revenue, a telecommunications company must prove the amount of cost incurred and lost toll revenue. Under this proposal, a telecommunication company would also have to prove a need for such cost recovery.

3. Place a time limit on how long an ILEC may recover the fee and surcharge and institute a phase-out mechanism to ratchet down the fee and surcharge over time.

Impose a phase-out over a specified time for an ILEC to continue recovering lost toll revenues from ELCS provisions. Define the total time over which ELCS lost toll revenues could be collected (*e.g.*, nine years from the date when ELCS is first implemented for the petitioning exchange) and establish a phase-out mechanism that reduces the level of allowable ELCS fees and surcharges over the latter years of the phase-out period (*e.g.*, fees and surcharges would be set at 100% for years 1 through 6 of

[118] When an exchange petitions for ELCS in more than five exchanges, an amount of $1.50 for each petitioned exchange in excess of five would be added to the $3.50, as provided for in PURA § 55.048(b).

ELCS provision, and drop by 25% per year through years 7 through 9, going to zero on the 10th anniversary of ELCS provision). Provide an exception to the fee and surcharge reductions for smaller LECs that can demonstrate that significant financial harm would result from the phase-out and elimination of ELCS fees and surcharges.

13. GRANT AUTHORITY TO THE COMMISSION TO COLLECT CERTAIN INFORMATION FROM TELECOMMUNICATIONS PROVIDERS.

PURA § 52.207 permits the Commission to collect and compile information from COA and SPCOA holders, and maintains the confidentiality of certain information for competitive purposes. Certain non-dominant telecommunications providers, such as wireless and paging companies, do not fall within the definition of "telecommunications utilities" and therefore are not covered by this provision. Instead, wireless carriers are classified as "telecommunications providers," a broader category of companies that are not all subject to PUCT oversight.

In its number conservation and optimization efforts, essential to facilitating number portability, the Commission has ordered NXX (3-digit central office code) utilization information from all NXX code holders in the state. Some wireless carriers have refused to provide the requested information because they fear that such sensitive information could be released to the public under an open records request. Such an open records request was made in one contested case concerning area code revisions, but was withdrawn before the Office of the Attorney General could rule on its confidentiality.

Due to the extensive amount of numbering resources used by wireless carriers, utilization studies are inaccurate without wireless data. Without accurate data, it is difficult to make complete and accurate recommendations on potential number conservation measure plans. To alleviate this concern, PURA § 52.207 should be amended to include information provided by all telecommunications providers to include wireless carriers and other providers active in the marketplace.

14. ALLOW LIMITED COMMISSION DISCRETION IN PRICING FLEXIBILITY FOR BASKET I SERVICES.

Although PURA §§ 58.103 and 58.152 allow pricing flexibility[119] for discretionary and competitive services, respectively, no such language exists for basic network services. In *Application of Southwestern Bell Telephone Company for a New Intrastate Pricing Flexibility Plan Tariff*, Docket No. 16542, the Commission determined that when considering the statute as a whole, pricing flexibility is not available for basic

[119] Pricing flexibility is defined in PURA § 51.002(7) to include customer-specific contracts; packaging of services; volume, term and discount pricing; zone-density pricing; and other promotional pricing.

network services as long as a company is in its electing period. The Commission generally concurs with the limitation placed in PURA by the Legislature to make pricing flexibility less available for basic network services.

The Commission expressed interest in considering narrowly tailored packaging of basic network services with discretionary services and other forms of pricing flexibility for basic network services as a matter of policy, but felt constrained by PURA.[120] To facilitate emerging competition in the local exchange market, the Commission may need the discretion to allow electing companies to engage in some narrowly tailored forms of pricing flexibility for basic network services, short of service reclassification. Specifically, the Commission should be able to ensure that the benefits of pricing flexibility are available to customers who may not see the immediate benefits of competition, *i.e.*, residential and small-business customers. With this ability, in circumstances where competition exists but is not sufficient to warrant reclassification of a service, the Commission would be able to implement certain narrowly tailored flexibility options to maintain a level playing field until a service reclassification is appropriate.

Federal Issues

15. Recombination of Unbundled Network Elements.

If it determines that service in a particular exchange has deteriorated to the point of unreliability or inadequacy, the Commission has the authority to require the serving LEC(s) to upgrade such service to the extent necessary to protect the public interest, including the interests of customers in that exchange.

For service quality purposes, the Commission recommends that PURA § 52.106 be amended to allow it to require an ILEC to combine unbundled network elements when requested by a competitive local exchange carrier (CLEC) and to leave combined elements together when a CLEC orders them on an unbundled basis. The Commission would develop an administratively determined rate that considers the costs of the ILEC as well as other factors necessary to ensure that unbundled element providers do not have an undue competitive advantage relative to the ILEC and switch-based providers.

[120] *Investigation and Possible Amendment of the Basic Network and Discretionary Service Requirements of Subst. R. 23.104*, Project No. 18886 (Aug. 12, 1998).

16. CLARIFY COMMISSION ENFORCEMENT AUTHORITY RELATED TO FTA ORDERS.

The Legislature should augment the current PURA enunciation of the Commission's general authority to carry out public policies by specifying its authority to require LECs to comply with the Commission's orders pursuant to FTA §§ 252 and 271. This change would clarify that the Commission has the ability to enforce its orders issued pursuant to the FTA provisions in the same manner that the Commission can enforce its orders issued pursuant to PURA.

The Commission recommends adding to PURA clarifying language consistent with federal court decisions stating that the Commission has the ability to implement the authority delegated to it under FTA § 252 and to use the Commission's general enforcement authority over LECs to investigate and levy administrative penalties against carriers that violate the Commission's orders pursuant to FTA § 252 or fail to comply with commitments made to the Commission during FTA § 271 compliance proceedings.

APPENDIX A
EXISTING INDUSTRY STRUCTURE

When defining the structure of the telecommunications industry in Texas, it is hard to know where to begin. The telecommunications industry in Texas encompasses many different types of services, providers, markets, customers, and participants. It includes telephone networks, some components of which are decades old, providing services that have been invented only in the last few years. It includes service providers that operate under government regulation as well as those that operate under almost no regulatory supervision. It includes companies providing telephone service by using their own equipment, by using the equipment of other companies, and by reselling other companies' retail services. There are many different companies in the newly competitive Texas telecommunications market, and now more than ever the distinguishing lines between those companies are blurred. Is GTE an incumbent local exchange company (ILEC) or a commercial mobile radio service (CMRS) provider? Is AT&T a provider of long-distance service or local service? Questions that easily could be answered a few years ago are more difficult to answer in the new market. As the competitive market develops, these lines will become increasingly blurry, if not erased altogether. This appendix gives a brief description of the different types of telecommunications companies competing in Texas's telecommunications-services markets.

Incumbent Local Exchange Carriers

As its name implies, an ILEC is the company that provided basic local exchange telecommunications service to a local exchange prior to competition being allowed on the local level (*i.e.*, the company had a certificate of convenience and necessity (CCN) by September 1, 1995). Therefore, there is only one ILEC per exchange. Any company that seeks to compete with the ILEC in providing basic local exchange services must obtain a certificate of authority (COA) or a service provider certificate of authority (SPCOA) certificate from the Commission, and is generally referred to as a competitive local exchange carrier (CLEC).[121] This includes companies that are ILECs in other territories as well as new entrants to the basic local exchange services market.

A total of 58 ILECs currently provide service to over 12 million basic business and residential access lines in Texas.

Historically, ILECs were allowed to serve specific geographic areas of the state — known as exchanges — under certification by the Texas Commission. Although certain

[121] PURA § 51.002(4) defines only CCN holders and COA holders to be LECs.

niche resale markets have appeared in recent years, customers in a specific exchange generally have not been able to choose the company that provides their basic local service dial tone. As is discussed in detail throughout this report, the historical monopoly landscape is being reshaped by competitive forces. In order to understand the competitive environment for which we are working, it is helpful to understand the monopolistic market from which we came.

ILECs' revenues experienced substantial growth during the period from 1992 to 1997. As is described in more detail in Chapter 6, the revenue growth appears to be the result of increased sales and usage in almost all service categories.

A listing of ILECs, including their 1997 year-end intrastate revenues and access lines, can be found in Appendix C of this report.

Large Incumbent Local Exchange Carriers

Southwestern Bell Telephone (SWBT) is the largest ILEC in Texas; as of December 31, 1997, it served 9,343,711 access lines in both urban and rural areas. SWBT's local exchanges include the major metropolitan areas of Texas: Houston, Dallas, San Antonio, Austin, Fort Worth, El Paso, Waco, and other highly populated areas.

GTE Southwest Incorporated (GTE-SW) is the second-largest ILEC in Texas, serving over 2.1 million access lines. GTE-SW serves fewer urban areas than does SWBT, and serves a large number of medium-sized and smaller communities. Many of these communities are in suburban areas surrounding large metropolitan areas.

Together, SWBT and GTE-SW serve over 93% of the access lines in Texas that are served by ILECs. The remaining 56 ILECs serve the remaining 7% of ILEC-served access lines. However, these smaller ILECs serve about 40% of the land area of Texas.

Small and Rural Incumbent Local Exchange Carriers

PURA defines a small ILEC as an ILEC that either is a cooperative corporation or is an investor owned company serving fewer than 31,000 access lines.[122] This definition essentially includes cooperative ILECs and all investor-owned ILECs with the exception of Alltel/Sugarland, Fort Bend, Lufkin-Conroe, the Sprint ILECs (Sprint/Centel and Sprint/United), GTE-SW, and SWBT. Small ILECs, as defined under PURA, are allowed to introduce new services and make minor rate changes with more regulatory flexibility than before 1995. In addition, small ILECs are protected to some extent against the entry into their service areas by competitors. Further, they are not required to interconnect with competitors in the same manner as are the large ILECs.

Small ILECs possess several operating characteristics that distinguish them from the larger companies. They typically serve the more rural, less densely populated areas of

[122] PURA § 53.304(a).

the state. Because they serve these higher-cost areas, small ILECs generally rely more heavily on revenue support mechanisms such as the intraLATA toll pool and the interstate universal service fund. small ILECs also traditionally have had access to more favorable funding for infrastructure development from the Rural Utilities Service and the Rural Telephone Bank. Due in part to those mechanisms, many small ILECs have been able to construct infrastructure improvements beyond those built by the larger companies.

The federal Telecommunications Act of 1996 (FTA) provides a definition of "rural" telephone companies for purposes of applying certain portions of that statute. According to FTA, a rural telephone company is one that:

- does not serve an area that includes:
  - ⇒ any incorporated place of 10,000 inhabitants or more, or
  - ⇒ any territory included in an "urbanized" area;
- provides exchange service to fewer than 50,000 access lines;
- provides exchange service to a combined study area with fewer than 100,000 access lines; or
- has less than 15% of its lines in communities of more than 50,000.

Rural telephone companies are afforded specific protections from competitors under FTA. Rural telephone companies include all small ILECs in Texas, plus certain larger ILECs.

Another distinguishing characteristic of small ILECs is their reliance on residential customers rather than business customers for their service revenues. Small ILECs generally have a much smaller base of business customers, and thus a smaller percentage of business local service revenue, than do the large ILECs.

Cooperative Telephone Companies

Twenty-five of the ILECs in Texas are organized as cooperative corporations. These cooperatives share many characteristics similar to those of small investor-owned ILECs, as described above. The Public Utility Regulatory Act (PURA) has recognized the special status of cooperatives in allowing their partial deregulation after an affirmative vote of the cooperative's membership. This partial deregulation allows the cooperative to make changes in its rates or tariffs or offer extended local calling services, without regulatory approval, in accordance with the requirements in the statute.

Competitive Local Exchange Carriers

The CLEC is a relatively new type of competitor in the telecommunications industry. While certain types of local telecommunications services (*e.g.*, private lines) have been sold competitively for years, it has been only recently that Texas has seen

competitors providing basic local exchange service or vertical features such as call waiting or call forwarding. CLECs include companies as large as AT&T or MCI, as well as smaller telecommunications companies operating as affiliates of companies in other businesses (*e.g.,* to a locally owned rent-to-own business). While the differences in size and technical sophistication among these CLECs may be significant, each CLEC must be certified to provide telecommunications service in Texas through one of three certificates: CCN, COA, or an SPCOA.

The vast majority of CLECs will never try to obtain a CCN. The obligations placed upon a CCN holder, including the obligation to serve as a carrier of last resort, are usually associated with established ILECs. For this reason, the PUCT has had no applications for CCNs from potential CLECs since passage of PURA95.

Certificates of Operating Authority (COAs)

COAs were originally intended to apply to larger, more established companies in the telecommunications industry, such as AT&T, MCI, and Sprint, which desired to compete in the local telecommunications market. PURA requires certain obligations that COA holders must fulfill, including the obligations to build out a certain amount of their service territory within six years and to fulfill all requests for service from customers in the COA holder's designated service area. Actions by the FCC have preempted PURA's build-out requirements relating to COA holders, however. This preemption allows COA holders to install fewer of their own facilities to provide service, and to rely more on a competing local service provider's (usually the ILEC's) underlying unbundled network elements (UNEs) or resale of another local service provider's services.

Service Provider Certificates of Operating Authority (SPCOAs)

The SPCOA was designed for use by smaller telecommunications providers who may not be able to meet the capital-intensive build-out requirements and other obligations that COA holders originally faced. To be eligible to receive an SPCOA, a provider must have less than six percent of the intrastate access minutes of use. Thus, only the three largest interexchange carriers (IXCs) could not obtain an SPCOA. SPCOA holders can provide service either by using their own facilities, using the UNEs of other local service providers, or using total service resale. Because of the fewer obligations an SPCOA provider must face, as well as the small size of many upstart telecommunications companies, there are many more SPCOAs applied for and granted than COAs. As of December 10, 1998, there were 108 companies holding SPCOAs for resale only, and 94 companies holding SPCOAs for facilities-based provision (perhaps along with resale).

Long-Distance (Interexchange) Carriers

With the divestiture of the Bell Companies from AT&T and the introduction of access charges — both of which occurred in 1984 — a new breed of carrier began to thrive. Interexchange carriers IXCs, such as AT&T, MCI, and Sprint, transport and

switch calls over long distances between ILEC exchanges. Since 1984, the IXC service market has become increasingly competitive. In 1993, the Texas Legislature determined that the market was sufficiently competitive to designate the largest carrier, AT&T, as non-dominant, and therefore exempt from rate regulation by the PUCT.

Since the divestiture of AT&T, neither of the two largest ILECs (SWBT and GTE-SW) or their affiliates have been permitted to provide interLATA interexchange long-distance service. However, with the passage of the FTA, this situation is changing. GTE-SW's affiliate GTE Long-Distance, Inc. (GTE-LD), like the affiliates of some smaller ILECs, is now providing interexchange services to retail customers. SWBT has petitioned the Federal Communications Commission (FCC) to permit it to offer such services. The proceedings relating to this change in the industry structure are discussed in Chapter 2 of this report.

Other Providers

COMPETITIVE ACCESS PROVIDERS

Competitive Access Providers (CAPs) were relegated in the past to the provision of private line and access-bypass services. Companies such as Teleport Communications Group, Inc. (TCG) have been providing competitive access service for more than a decade to customers who desired an alternative to long-distance services or other services in which access charges were built into rates. For example, if a company has offices in two separate locations, the company may find it worthwhile to have a private line installed between the two locations to connect internal company communication systems. In such instances, a CAP would be an alternative to an ILEC and an IXC for providing that service. However, there were generally restrictions on what types of services CAPs could provide, so as not to allow them to attract too many highly desirable customers from the regulated ILECs. CAPs now have the opportunity to become full-fledged CLECs, however.

ENHANCED SERVICE PROVIDERS

Enhanced service providers (ESPs) emerged to fill a niche in the telecommunications market that was left after the breakup of AT&T in 1984. Regional Bell Operating Companies (RBOCs) such as SWBT were not allowed to manipulate signals and provide features such as voice mail and burglar-alarm services. An ESP traditionally has been allowed to provide such value-added services to end users, without being able to compete with the ILEC in providing basic local exchange services. However, any ESP with a certificate to operate in Texas now has the opportunity to provide local service as a CLEC.

OPERATOR SERVICE PROVIDERS

Operator service providers (OSPs) are another type of telecommunications provider that came into existence to fill a rather small niche. Such companies exist for the sole purpose of using live or automated operators to provide such services as collect toll calling or calling card services. Many OSPs also provide directory assistance. Large companies such as SWBT usually provide OSP services, but payphone providers, small investor-owned LECs, and rural cooperatives often rely on services sold to them by an independent OSP. In some places in Texas, the OSP market is extremely competitive and has been for awhile. An example would be at a privately owned (*i.e.*, non-ILEC) payphone where a user has a choice of many different OSPs. In other areas, the only OSP available is the ILEC. OSPs, like ESPs, are eligible to become CLECs with the proper certification.

PAYPHONE PROVIDERS

Payphones can be operated by an ILEC (public payphone) or by a non-ILEC (private payphone). Payphones have been deregulated by the FCC; the main authority the PUCT has over them is to ensure that providers post necessary information (*e.g.*, emergency numbers, operator service numbers) somewhere on or near the phone, provide rates upon request, and observe certain other requirements outlined in P.U.C. SUBST. R. 23.54. There is debate as to how competitive the payphone market really is. While many people point out that business owners often have a choice of the payphone company they allow to install a phone on their property, others say that once a phone is installed, users of the phone have little choice in the matter (especially if the phone is in an isolated area far away from other payphones). Unscrupulous payphone providers have been known to charge extremely high rates to unsuspecting users. PSPs also are eligible to become CLECs with the proper certification.

INTERNET SERVICE PROVIDERS

Internet service providers (ISPs) are companies that provide access to the Internet and all of the advantages it gives, and are in no way regulated by the Commission unless the ISP also obtains a COA or SPCOA.[123] ISPs range from familiar household names like America Online to smaller companies who provide more specialized Internet service (*e.g.*, high speed access) to businesses only. Even SWBT offers Internet access through an affiliate. Consumers in many areas of the country are already able to get lower rates for long-distance calls made over the Internet by ISPs, such as those that provide voice service over a packet-switched network rather than a traditional circuit-switched voice

[123] The Commission and the FCC regulate only telecommunications service providers, not information service providers. The FCC considers Internet access to be an information service rather than a telecommunications service.

network. In the future, as more telecommunications service providers offer Internet services and ISPs offer voice services, the differences between ISPs, local service providers, and other traditional telecommunications providers may become non-existent.

WIRELESS SERVICE PROVIDERS

Providers of wireless service, or CMRS providers, traditionally have been known as cellular and/or paging companies. However, as with everything else in the telecommunications industry, the wireless-service sector is changing rapidly. While the use of pagers and analog cellular phones is increasing exponentially, personal communications services (PCS) have been introduced recently by companies such as Sprint. PCS is a digital, shorter-range cellular service that purportedly features better service quality and more features than traditional cellular service. Many people believe that the true future of telecommunications is through wireless technologies that allow a provider to bypass the capital-intensive local loop when providing telecommunications service. Wireless phone usage prices are quickly decreasing and quality of service is increasing to levels where more people are choosing to use this service as an alternative to traditional basic local service from their ILEC.

CABLE TV PROVIDERS

The convergence of technologies is becoming more evident in the progress of the cable companies' ability to provide telephone, data, and video services on a single network platform. Touted since the early 1980s, the concept of using a single network for multiple services has become a reality in many parts of the nation. Along the way, providers have faced technological and regulatory challenges such as network and electronics limitations and interconnection battles. The generally accepted platform for the future appears to be a hybrid fiber-optic/coaxial cable network that uses high-speed digital technologies. Many cable companies are rebuilding their serving areas to upgrade to digital services above 750 MHz. Scientific Atlanta and other manufacturers of set-top boxes are now producing components that allow simultaneous transmission of video, voice, and high-speed data. Furthermore, many cable companies have been active in obtaining interconnection agreements with local telephone companies.

Hybrid fiber/coaxial systems are capable of delivering a wide range of services to customers throughout the state, when upgraded systems are completed. The current level of competition in local exchange telecommunications service by cable companies is not high. However, the potential exists for cable companies to begin competing with incumbent local carriers on a large scale in the next few years. The potential also exists for additional mergers and acquisitions involving cable carriers and telecommunications companies in the near future.

ELECTRIC AND TELECOMMUNICATIONS SERVICE PROVIDERS

A few telecommunications companies that are affiliated with electric utilities (known as exempt telecommunications companies or ETCs) are using the extensive network of fiber-optic cable that many electric companies have laid to monitor electric power transmission and distribution. Such networks often are widespread, so that it is easier for a CLEC to use this network in providing telecommunications services rather than install a separate telecommunications network or negotiate extensive interconnection agreements with ILECs.

APPENDIX B
EXISTING COMPETITION IN OTHER SERVICES

In Chapter 6 of this report, those services critical to establishing a competitive local exchange market were analyzed. This appendix contains additional data analysis collected from the same sources (*see* the introductory paragraphs of Chapter 6 for a descriptions of the data set). Its purpose of Appendix B is to present information on those services which also are open to competition, but that may not be critical for creating a competitive local-service market.

PBX-TYPE SERVICES

A PBX, or Private Branch Exchange, is a small-scale, privately owned telecommunications switch serving extensions within a business complex and providing access from those extensions to the public network. Features typically provided by a PBX system are call forwarding, call hold, conferencing and voice mail.

When customers were allowed to own and interconnect their own customer premises equipment (CPE) to the telephone network starting in the 1970s, provision of PBX systems rapidly became very competitive. Many technically proficient CPE vendors stepped up efforts to gain the respect and business of large and small commercial customers by offering desirable features. When CPE was deregulated in 1983, the PBX units formerly owned and operated by ILECs on customers' premises were either sold or leased to customers.

Following the deregulation of CPE, ILECs continued to offer Centrex service, an arrangement of exchange access located within the central office of the ILEC designed to emulate the features of a PBX. By subscribing to Centrex and Centrex-type services like Plexar™ and Centranet™, end users are afforded the opportunity to have PBX-type communications features without incurring the capital investment associated with the purchase of PBX equipment. With today's technology, Centrex features are software-defined services, but continue to use subscriber loop wiring and cabling from the switching office to the customer location. Centrex service is often described as "PBX-type" service to avoid the confusion that may arise from the different configurations and trade names used by Centrex systems.

Southwestern Bell Telephone Company (SWBT) and GTE Southwest Incorporated (GTE-SW) are the primary providers of central-office based Centrex services in Texas. While the non-ILEC providers show revenue growth for these services for 75 stations or fewer, they are losing their market share for systems of more than 75

stations. Revenue trends indicate that ILECs are focusing on larger companies while non-ILECs are concentrating on smaller companies.

Table 20 - PBX Type Services[124]

Revenues > 75 Stations	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$23,107,963	98.78%	$29,270,197	98.77%	$40,194,570	99.38%
Non-ILECs	$286,000	1.22%	$365,000	1.23%	$249,000	0.62%
Total	$23,393,963		$29,635,197		$40,443,570	
Revenues < 75 Stations						
ILECs	$2,828,504	94.61%	$3,500,302	94.37%	$3,784,873	90.46%
Non-ILECs	$161,000	5.39%	$209,000	5.63%	$399,000	9.54%
Total	$2,989,504		$3,709,302		$4,183,873	

Customers and Lines	**1995**		**1996**		**1997**	
> 75 Stations	**Customers**	**Lines**	**Customers**	**Lines**	**Customers**	**Lines**
ILECs	3,409	308,661	3,668	304,168	4,056	339,125
Non-ILECs	828	828	924	924	466	465
Total	4,237	309,489	4,592	305,092	4,522	339,590
< 75 Stations						
ILECs	4,259	114,041	4,370	115,583	4,415	107,784
Non-ILECs	0	0	0	0	0	0
Total	4,259	114,041	4,370	115,583	4,415	107,784

Source: Responses to 1998 Data Requests

ENHANCED SERVICES

The FCC considers a service to be "enhanced" if at least one of the following criteria is met: a) the service entails a substantial amount of data processing; b) the content of a communications message is altered or manipulated, even though the service is primarily communications in nature; or c) any portion of the communications is stored for a period longer than that incidental amount of time needed for its transmission, and the user is able to interact with the stored portion. Some examples of enhanced services are voice mail and messaging systems, auto attendant, fax mail and fax broadcasting, and conference calling.

The chart below illustrates the tremendous growth in both lines and revenues for these services during the reporting period. This market growth is fueled by the increase in mobile phones and consumer preference to manage a variety of activities through their touch-tone telephones. There is a potential for growth for non-ILECs in the enhanced

[124] Provider types that reported revenues for PBX type services included cooperative and investor-owned ILECs, and facilities-based CLECs. The latter companies reported no data for customers and lines for systems with fewer than 75 stations, even though they did report revenues for such systems.

services market by offering niche services to business and residential consumers. ILEC figures shown below are incomplete since some ILECs did not report basic data on affiliates.

Table 21 - Enhanced Services[125]

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$8,005,484	99.58.%	$11,997,262	98.75%	$15,241,910	98.54%
Non-ILECs	$33,728	0.42%	$151,920	1.25%	$225,665	1.46%
Total	$8,039,212		$12,149,182		$15,467,575	
Lines						
ILECs	28,403	100.00%	36,559	92.54%	47,736	89.13%
Non-ILECs	0	0.00%	2,946	7.46%	5,819	10.87%
Total	28,403		39,505		53,555	

Source: Responses to 1998 Data Requests

BILLING AND COLLECTION SERVICES

Billing and collection services are services provided by an ILEC to other telecommunications providers in which the ILEC bills and collects from end-user customers for services provided by another telecommunications utility. Billing and Collection services include several categories: recording services, billing services, billing analysis services and billing information services. Billing and Collection services were detariffed on an interstate level by the FCC in 1985. On an intrastate basis, ILECs can apply for approval of customer-specific contracts pursuant to P.U.C. SUBST. R. 23.27, Rate-Setting Flexibility for Services Subject to Significant Competitive Challenges.

A large ILEC such as SWBT may have several dozen customer-specific billing and collection contracts that, in some cases, are customized to the specific requirements of SWBT's customer.[126] SWBT has stated that the larger carriers typically bill their own business customers, but that SWBT still generally retains the billing function for residence customers.

Billing and collection services have provided a nearly constant revenue source for ILECs, the only entities to report revenues for this service category. ILEC totals went from $44,135,871 in 1995, to $44,915,830 in 1996, to $46,921,528 in 1997.

[125] Provider types that reported revenues for PBX type services included cooperative and investor-owned ILECs, facilities-based and non facilities-based CLECs.

[126] *Application for Billing and Collection Services; Southwestern Bell Customer Specific Pricing Plan Tariff*, Tariff Control No. 16511 (Nov. 22, 1996) at Section 4, Sheet 6.

Table 22 - Billing and Collection[127]

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$44,135,871	100.00%	$44,915,830	100.00%	$46,921,528	100.00%
Non-ILECs	$0	0.00%	$0	0.00%	$0	0.00%
Total	$44,135,871		$44,915,830		$46,921,528	
Lines						
ILECs	32,517	100.00%	33,252	100.00%	35,015	100.00%
Non-ILECs	0	0.00%	0	0.00%	0	0.00%
Total	32,517		33,252		35,015	

Source: Responses to 1998 Data Requests

ISDN

Integrated Services Digital Network (ISDN) is a service that utilizes the existing twisted-pair copper wire infrastructure to provide a switched digital architecture, allowing higher quality data and video transmission than is possible on the normal network. To operate, both the calling and the called party must use special equipment that facilitates the ISDN transmission, and the network switching office must be equipped with features that allow ISDN service to operate. A 4-wire configuration, called primary rate interface, allows for more complex operations than the basic rate interface.[128]

The rapid growth noted in the *1997 Scope Report*[129] continued at an exponential rate in this data period. The jump in 1997 revenues is attributed to the upsurge in popularity of the higher capacity, primary rate interface technology.

[127] Provider types that reported revenues for Billing and Collection included cooperative and investor-owned ILECs.

[128] ISDN's basic rate interface (BRI) consists of two "B" channels, each with a data rate of 64 kilobits per second (kbps), along with a third channel, the "D" channel, that is used for call control at a data rate of 16 kbps. The BRI configuration is often known as "2B+D", as it contains the two B channels plus one D channel. Primary rate interface (PRI) is available for more complex applications. PRI consists of 23 B channels along with the D channel for call control, and is sometimes referred to as the 23B+D architecture. The PRI configuration does not function via a standard twisted-pair copper loop, but must be transported on a four-wire T-carrier system.

[129] *1997 Scope Report, supra*. at 125

Table 23 - ISDN[130]

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$14,165,547	100.000%	$21,235,380	99.387%	$95,301,707	99.837%
Non-ILECs	$0	0.000%	$130,884	0.613%	$155,544	0.163%
Total	$14,165,547		$21,366,264		$95,457,251	
Lines						
ILECs	59,698	100.000%	119,137	100.000%	360,250	99.998%
Non-ILECs	0	0.000%	0	0.000%	9	0.002%
Total	59,698		119,137		360,259	

Source: Responses to 1998 Data Requests

PRIVATE LINE SERVICES

Private Line and Special Access Services provide a non-switched, direct transmission path connecting customer designated locations. The connections may be either analog or digital and may connect the locations directly to one another or through an ILEC hub where some network management function is performed (*e.g.*, multiplexing).

These services are used by business customers to provide direct telecommunications links between and among business locations and from business locations to selected interexchange carriers (IXC) for the provision of long-distance services. The latter function is known as bypass, as it uses directly connected facilities to bypass the normal switched-access network of the ILEC and thus avoid payment of access fees to the ILEC.

Private line services have been the focus of competitive activity in Texas for several years. Individual companies often see an advantage in providing their own circuits between buildings, as it may save money and provide greater control than facilities leased from the ILEC. Companies may install their own equipment, or may lease private line facilities from carriers, including CAPs. CAPs are common providers of "fiber rings" in metropolitan areas to provide competitive private line and access services. Table 24 illustrates the quickly changing results of competition among ILECs and non-ILECs in the market. Although revenues from private line services did not change considerably for the ILECs, revenues for these services increased dramatically for non-ILECs. To the extent information on the provision of private line service was captured by replies to the data request, the information indicates that non-ILECs are capturing a rapidly increasing share of the private line services market.

[130] Provider types that reported revenues for ISDN services included cooperative and investor-owned ILECs, and facilities-based CLECs. None of the CLECs reported any lines for 1996, and only one CLEC reported lines for 1997.

Table 24 - Private Line Service[131]

Revenues	1995	%	1996	%	1997	%
ILECs	$92,072,245	82.47%	$84,988,009	52.41%	$83,385,258	39.35%
Non-ILECs	$19,576,321	17.53%	$77,182,235	47.59%	$128,498,528	60.65%
Total	$111,648,566	100%	$162,170,244	100%	$211,883,786	100%

Source: Responses to 1998 Data Requests

NON-VOICE SWITCHED DATA SERVICES

The non-voice switched data service category is a generic category, including several different services that allow the customer to send data at speeds of 56 kbps or greater over a switched line. Each of the following services may be considered non-voice switched data services:

- Switched 56 kbps, or PSDS (Public Switched Digital Service)
- FR (Frame Relay)
- Packet switching, or PPSS (Public Packet Switched Service)
- SMDS (Switched Multi-megabit Data Service)

For ILECs electing incentive regulation, services in this category are designated in the competitive category. As in the past biennium, total revenues and lines served are slowly declining. Non-ILECs listed neither revenues nor lines for the reporting period. The decline shown in Table 25 illustrates a migration out of this category to other services.

Table 25 - Non-Voice Switched Data Service Revenues[132]

Revenues	1995	%	1996	%	1997	%
ILECs	$28,489,668	100.00%	$31,306,218	100.00%	$24,631,700	100.00%
Non-ILECs	$0	0.00%	$0	0.00%	$0	0.00%
Total	$28,489,668		$31,306,218		$24,631,700	
Lines						
ILECs	23,836	100.00%	22,943	100.00%	21,722	98.66%
Non-ILECs	0	0.00%	0	0.00%	0	0%
Total	23,836		22,943		22,017	

Source: Responses to 1999 Data Requests

[131] Most of the non-ILEC revenue for private line services shown here was reported by facilities-based CLECs, and the remainder was reported by IXCs.

[132] Provider types that reported revenues for Non-Voice services included investor-owned ILECs.

DARK FIBER

ILECs and other providers place fiber-optic cable in new installations where bandwidth and capacity needs dictate that it be used. When a cable is placed, there typically are "idle" strands of fiber that are not connected to transmission circuit equipment, but are available for future use. These strands that are not lit by optical electronics are referred to as dark fiber.

Beginning in 1990, SWBT offered to lease its spare dark fiber strands to customers at customer-specific contract rates. Then in 1994, the company withdrew the offering, continuing to provide service to existing customers on a grandfathered basis for the amount of time remaining on their contracts. Provision of dark fiber became contentious during the negotiations and arbitration hearings for competitive interconnection. Competitors were interested in obtaining dark fiber strands in order to place their own optical electronics on each end and thus provide competitive services without redundant facility placement.

In the Commission's Arbitration Award in Docket 16189 *et al*,[133] SWBT is required to provide dark fiber in the feeder segment of the loop as an unbundled network element for purchase by competitive local service providers under specific conditions. In addition, SWBT must provide dark fiber in the dedicated interoffice transport segment of the network as an unbundled network element for lease by local service providers under specified conditions. Competitive LECs now resell dark fiber from SWBT. The responses to the 1999 Data Requests indicate an overall decrease in revenues during the reporting period for dark fiber services. However, some large ILECs did not report data on dark fiber revenues. It is likely that they deemed these revenues interstate.

Table 26 - Dark Fiber[134]

Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$0	0%	$0	0%	$0	0%
Non-ILECs	$8,143,716	100%	$5,809,956	100%	$3,803,022	100%
Total	$8,143,716		$5,809,956		$3,803,022	

Source: Responses to 1998 Data Requests

OPERATOR SERVICES/OSPS

As defined in PURA § 55.081, an operator service is any "service using live operator or automated operator functions to handle telephone service such as toll calling using collect, third-number billing, and calling card services." An operator service

[133]Docket No. 16189 *et. al.*, footnote no. 4, *supra* at 9.

[134] Provider types that reported revenues for Dark Fiber services included investor-owned ILECs, facilities based CAPs and facilities-based CLECs.

provider (OSP) is any entity that provides operator services. In this strict sense, most ILECs and IXCs are OSPs.[135]

As seen in the table below, reported retail operator service revenues held roughly constant, in the range of $68 million to $74 million, during 1995-1997.[136] Non-ILECs (primarily IXCs) received the lion's share of these revenues, though this share declined while ILECs' revenues rose.

In the considerably smaller wholesale market, overall revenues approximately doubled during this period, to over $16 million. Interestingly, the ILEC and non-ILEC market shares were opposite in trend to that in the retail market. While ILEC revenues dropped by about 38%, non-ILEC revenues more than tripled, so that in 1997, non-ILEC revenues were more than six times as large as ILEC revenues.

Table 27 - Operator Services[137]

Retail Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$6,171,235	8.30%	$7,211,995	10.65%	$15,290,846	21.84%
Non-ILECs	$68,141,946	91.70%	$60,515,981	89.35%	$54,735,747	78.16%
Total	$74,313,181		$67,727,976		$70,026,592	
Wholesale Revenues						
ILECs	$3,581,258	43.69%	$2,829,977	25.28%	$2,226,118	13.61%
Non-ILECs	$4,615,005	56.31%	$8,366,416	74.72%	$14,130,465	86.39%
Total	$8,196,263		$11,196,393		$16,356,583	

Source: Responses to 1998 Data Requests

DIRECTORY ASSISTANCE

Many carriers were unable to separate their directory-assistance (DA) revenues between interstate and intrastate; consequently, the following discussion relates to the combined interstate and intrastate revenues of reporting companies.

The combined retail DA revenues of $65 million to $68 million were remarkably similar to the aggregate intrastate revenues for operator services, described in the preceding section. With retail DA revenues, however, the ILEC share held relatively steady at more than three-quarters of the market.

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[135] The term "OSP" is often used to refer to a specific type of company that specializes in providing operator services to payphones or other telephones serving the transient public, such as phones in hotels and hospitals. Most of these OSPs are also IXCs.

[136] Again, revenues for non-ILECs likely are understated, because not all OSPs received a data request from the Commission.

[137] The 1995 revenues for non-ILECs include an estimate based on data reported in 1996 and 1997 for providers that reported only partial data.

Wholesale DA revenues declined by about 24% during the period from their 1995 level of over $29 million. As shown in the accompanying table, ILECs continue to receive the overwhelming share (about 98%) of these revenues.

Table 28 - Directory Assistance[138]

Retail Revenues	**1995**	**%**	**1996**	**%**	**1997**	**%**
ILECs	$49,655,328	76.49%	$52,754,219	77.28%	$50,887,995	76.53%
Non-ILECs	$15,258,869	23.51%	$15,506,003	22.72%	$15,604,723	23.47%
Total	$64,914,197		$68,260,222		$66,492,718	
Wholesale Revenues						
ILECs	$28,483,832	97.75%	$25,054,871	98.14%	$21,774,581	97.91%
Non-ILECs	$655,635	2.25%	$475,328	1.86%	$464,362	2.09%
Total	$29,139,467		$25,530,199		$22,238,943	

Source: Responses to 1998 Data Requests

PCS/CELLULAR[139]

Though wireless services, including cellular and Personal Communication Services (PCS), are exempt from PUCT regulation by PURA 51.003(5), the relative growth of these services may have significant long term impact on the emergence of telecommunications competition within the state.

PCS/Cellular technology has emerged from its inception as a niche market for the elite professional to a customer-responsive mass market. Technological advances, the market entry of numerous competitors, and a decline in the pricing structure for wireless services have opened a veritable floodgate of customer demand.

These wireless services essentially "hand-off" low power transmissions from station to station as a customer moves from the calling area of one station to the next. Cellular networks are developing from their roots as analog technology into digital networks to better compete with the digital services offered by PCS. Analog transmissions, while providing for longer range transmissions, offer only one third to one fifth the capacity of digital networks. As mobile services evolve, increased competition between cellular and PCS producers should enhance the availability of services as well as encourage price competition.

Consumers are embracing this new technology. Year-end 1997 industry and FCC estimates of wireless usage subscribership indicate that there are more than 50 million

[138] The 1995 revenues for non-ILECs include an estimate based on data reported in 1996 and 1997 for providers that reported only partial data.

[139] For a more comprehensive treatment of this subject, see pages 148-158 and Appendix G in the *1997 Scope Report*.

consumers of PCS/Cellular technology in the United States.[140] Also, the Cellular Telecommunications Industry Association reported approximately $27.5 billion in cellular telephone service revenues in 1997, compared to about $19.1 billion in 1995 and $7.8 billion in 1992.[141]

Though wireless service currently is complementary to the traditional wirebound provider, a growing number of digital cellular and PCS providers are developing the infrastructure to provide quality service at reasonable prices, in lieu of, rather than as a complement to, traditional landline services. The addition of bundled services including video, long-distance, paging and high-speed data transmission suggest that the wireless industry has the potential to compete with incumbent carriers. Industry trade journals tout the emergence in the early 2000s of a third generation of PCS systems that will include wireline voice quality, higher levels of security, and other features, perhaps enabling a further degree of competition.[142]

CABLE[143]

According to the National Cable Television Association, providers of cable television in Texas currently serve over 3.3 million subscribers, pass by approximately 6.7 million homes, and boast an infrastructure of over 80 thousand miles of co-axial cable/optical fiber.[144]

Though industry observers are mixed in their assessment of the ability of cable television to compete within the local telephony market, clearly these companies are pursuing the regulatory foundation necessary for entry into this market. This positioning is reflected in Cable Television Industry Association reports that note that cable companies have established interconnection agreements in 37 states and the District of Columbia.[145]

Examples of competitive entry of cable providers into the telephony market include:[146]

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[140] *See*, *e.g.*, Cellular Telephone Industry Association or L. Vanston and R. Hodges, *Wireless vs. Wireline for Voice Services*, Technology Futures, Inc. (1998) at 9.

[141] FCC Common Carrier Bureau, Industry Analysis Division, *Trends in Telephone Service* (July 1998) at 9 (Table 2.2). This table also shows an average monthly bill of $42.78 in December 1997.

[142] *Wireless vs. Wireline for Voice Services*, *supra*., at 2.

[143] For a more comprehensive treatment of this subject, see pages 158-161 in the *1997 Scope Report.*

[144] *Cable Television Developments*, National Cable Television Association, vol. 21. no. 2, (Fall 1997) at 13.

[145] Cable Television Industry Overview provided by the National Cable Television Association at <http://www.ncta.com/overview982.html>.

[146] *Id*. at 2.

- TCI entry into the telephone market in Arlington Heights, IL, offering rates 10-12% below Ameritech's comparable service
- Cablevision Systems Corp.'s offering of local, regional and long-distance service to households in Long Island, NY

With the passage of the FTA and revisions to PURA, media service providers of all types (long-distance, cable, wireless, and ILECs) are positioning themselves to become the *multi*-media providers of the future. Together with this enabling legislation, the demand for broadband services, high speed Internet connectivity, and basic services have led both LECs and cable providers to expand beyond the traditional boundaries of service.

Both ILECs and cable television providers are able to provide this multi-media service through aggressive upgrades of their current physical plant. Upgraded cable networks can provide video, voice, and high-speed data services. Without upgrades, ILEC networks can provide voice and low-speed data services. Interestingly, ILECs have been able to create instant networks by acquiring or maintaining an interest in a cable company. ILECs also are pursuing upgrades in their infrastructure to meet consumer demand for "one stop shopping," where bundled packages of cable, data, and dial tone services would be the norm rather than an anomaly.[147]

As reported in the *1997 Scope Report*, barriers to entry for cable television providers continue to include the need for fair interconnection agreements, and competitively neutral treatment. Research indicates that cable television providers also face the additional burden of overcoming a reputation for unresponsive customer service and network outages in their quest to compete with local ILECs.[148]

INTERNET[149]

The current popularity of the Internet belies the fact that five years ago it was used almost exclusively within academic settings. Emerging from its "ARPAnet" roots, it has evolved at an astounding pace. Though previously used by academics for e-mail and information exchange, communication in the rest of the world largely occurred through telephone or fax over switched connections provided by the LEC.

Emerging as a competitor in the telecommunications market, Voice Over Net (VON) technology allows individuals to place interLATA or interstate calls for the price of a local telephone call. More directly competitive to the traditional long-distance market than e-mail, "chat-rooms," and non verbal Internet research, VON technology

[147] *1997 Scope Report* at 160.

[148] *Id*. at 160.

[149] For a more comprehensive treatment of this subject, see pages 162-168 in the *1997 Scope Report*.

provides audio in real time. Industry estimates range from 46 to 62 million users of accessing the Internet in 1997 with increases expected over the next 5 years.[150]

Certain technological barriers inhibit VON's ability to compete with LECs and IXCs, however. Barriers include the need for high-end multimedia computers, Internet access and compatible software. Additionally, since both participants must be logged on, calls must also be prearranged. Despite these barriers, companies are entering this market. For example, ICG has recently launched IP-based long-distance and data services in 31 cities in Colorado, California, and Ohio.[151] The company's goal is to increase this number to 166 cities by the end of 1998, covering approximately 90% of the U.S. market.[152] The announced rate is 5.9 cents per minute 24 hours a day, 7 days a week.[153]

An additional issue is the upcoming FCC decision that will attempt to clarify the federal government's position on the status of Internet traffic as inter- or intrastate traffic. This decision will affect interconnection agreements between carriers as well as the rate at which Internet calls are tariffed.

Internet entry into the telecommunications market demands that legislatures and regulatory agencies exercise vigilance in the observation of new technologies' effect on market structure.

ELECTRIC COMPANIES IN TELECOMMUNICATIONS[154]

The FTA lifted several restrictions of the Public Utilities Holding Company Act of 1935, which governs the activities of certain electric utilities. Registered utility holding companies can now offer telecommunications and information services if they establish separate subsidiaries, called "exempt telecommunications companies" (ETCs), that provide only telecommunications, information or related services.[155]

In the Texas market some examples of utility companies entering or attempting to enter the telecommunications market include TU Electric, CoServe (affiliated with Poka-Lambro), and C3 Communications (a former affiliate of CSW). Nationwide, Hartz

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[150] *See, e.g., The Emerging Digital Economy,* U.S. Department of Commerce (April, 1998) at <http://www.ecommerce.danc2.htm>.

[151] ICG Launches 1st Phase of Telephony Rollout," *Telecommunications Reports Daily,* Volume 64, No. 35, (Aug. 31, 1998) at 21.

[152] *Id*. at 21.

[153] *Id*. at 21.

[154] For a more comprehensive treatment of this subject please see pages 168-173 in the *1997 Scope Report*.

[155] *1997 Scope Report* at 169.

Energy Markets reports figures indicating that 16 of the top 100 largest energy companies are providing local telephone services.[156]

The electric industry includes a number of assets which make it a potentially viable competitor for telecommunications in the near term.[157] These assets include, for example:

- **Fiber Optics** Extensive network of cable
- **PCS Tower Sites** 40,000,000 utility poles which make ideal microcell tower sites
- **Rights of Way** Competitive LECs, IXCs and PCS can use electric utilities rights of way and conduits
- **Penetration** Virtually 100% customer penetration, customer lists, billing meter and collections capability
- **Reputation** Electric utilities have a reputation for reliability exceeded only by that of phone companies

With the lifting of restrictions on entry into the telecommunications market, industry leading utilities are increasingly affiliating with telecommunications companies or creating subsidiaries in an attempt to provide telephony and communication services. The mix of infrastructure development and technological expertise indicate that traditional telephone providers as well as regulatory agencies should pay attention to these potential competitors.

OTHER SERVICES

Wide Area Telecommunications Service (WATS) is a toll service that enables a subscriber to make or receive long-distance calls at a discounted rate. Typically, a WATS rate plan involves a flat-rate component and a lower per-call charge than those faced by regular toll users. WATS is often considered to include both "out-WATS" (or WATS more narrowly defined) and "in-WATS," or "800" services; the latter allow subscribers to pay for long-distance calls they receive.

Non-ILECs (largely IXCs) received approximately 98% of the reported intrastate WATS revenues during 1995-1997.[158] Non-ILEC revenues fell from about $247 million

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[156] D. Kerr, *A Marriage of Convenience,* Hartz Energy Markets Report, Volume 3, No. 10 (Nov. 1998) at 23.

[157] For a more comprehensive treatment of this subject, see pages 168-173 in the *1997 Scope Report*.

[158] The Commission's data request did not clarify whether 800-service revenues were to be included in the WATS category, and, unlike previous data requests, it did not specifically request 800-service revenues in a separate listing. Judging by a comparison with data included in the *1997 Scope Report*, the WATS revenues included in the current report for the most part do not include 800-service revenues.

in 1995 to under $193 million in 1996, but rebounded to nearly $249 million in 1997. During this time, ILEC revenues fell from over $6.3 million to just under $4.4 million.

Only ILECs reported any revenues for foreign exchange (FX) service, which enables a subscriber to receive local phone service from a central office outside his or her own exchange. FX service is a relatively minor revenue source for ILECs, in the $10 million - $15 million range; revenues were somewhat lower in 1997 than in 1995**.**

A few carriers reported retail revenues in the miscellaneous "Other" category. These totals were approximately $182 million in 1995, $183 million in 1996, and $237 million in 1997; ILECs accounted for well over 90% of these totals. Many of the itemized listings in this category were bundled-service offerings (as of custom-calling features); others were uncollectible revenues and relatively specialized services, such as toll restriction for residential customers and trunks for direct inward dialing to businesses.

More carriers reported wholesale revenues in the "Other" category, but the total dollar amounts were far less significant: about $15 million in 1995, $21 million in 1996, and $11.3 million in 1997. IXCs had the largest share; most of their revenues may have been for leased trunks or purchased services sold to long-distance resellers.[159]

[159] Very likely, some of the reported private-line and WATS revenues, which were listed in the retail table in the data request, also were from sales to long-distance resellers.

APPENDIX C
LEGISLATIVE AND FEDERAL ACTIONS

The work of the Public Utility Commission of Texas (PUCT or Commission) is affected by the actions of many government bodies, particularly the Texas Legislature, the US Congress, the Federal Communications Commission (FCC), and the federal courts. This appendix provides an overview of important state legislative and federal actions that relate to the Commission's efforts to promote fair competition and protect customers.

PURA Codification

In the 1997 Legislative Session, the Public Utility Regulatory Act (PURA) was codified into the newly created Texas Utilities Code. The Code now serves as the location for all utility-related statues within the state. This codification is part of a comprehensive effort undertaken by the Legislative Council to reclassify and rearrange all Texas statutes in a more logical order. The goal is to make the statutes more accessible and understandable without altering the sense, meaning, or effect of the law. However, certain areas of the new code appear to be inconsistent with PURA95. Consequently, the Commission is preparing comments for the Legislative Council that describe these problem areas and provide suggestions as to how these inconsistencies might be revised in the 1999 Legislative Session.

FCC Orders and Rules

PAYPHONES

Implementation of the Pay Telephone Reclassification and Compensation Provisions of the Telecommunication Act 1996.

The FCC's Payphone Orders, *Report and Order* (FCC 96-388, September 20, 1996) and *Order on Reconsideration* (FCC 96-439, November 8, 1996) centered on three major issues: 1) the implementation of a dial-around compensation rate; 2) the reclassification of LEC-owned pay telephones; and 3) the establishment of public interest payphones.

The dial-around compensation for payphone owners was one of the most controversial aspects of the FCC's payphone order. The FCC found that payphone owners should be compensated for the use of the instrument for each and every completed call. After setting a rate and having it appealed to the Washington, D.C., Circuit Court by

several IXCs, the Court determined that the appropriate rate of compensation should be 28.4 cents for each completed call. IXCs are required to compensate the payphone owner 28.4 cents for each completed call from a payphone and are passing this cost through to either the person using the credit card or to the "800" number subscriber.

These orders also required the reclassification of the LEC-owned payphones from a regulated part of the rate base to deregulated, and detariffed customer premise equipment (CPE) through a structurally separate affiliate. In addition, a LEC must unbundle for resale as payphone UNEs those functions that the LEC is providing to its own payphones.

A Public Interest Payphone (PIP) as defined by the FCC is a payphone "which (1) fulfills a public policy objective in health, safety, or public welfare, (2) is not provided by a location provider with an existing contract for the provision of a payphone, and (3) would not otherwise exist as a result of the operation of the competitive marketplace." The FCC has determined that the states should develop the funding of the public interest payphone program.

UNIVERSAL SERVICE

In the federal Telecommunications Act of 1996 (FTA), the FCC was required to undertake a substantial project to reconfigure the federal Universal Service Fund. Problems perceived with the current USF include the following:

- The plan is based on embedded costs reflecting outdated telecommunications networks, rather than the forward-looking, economic costs associated with an efficient competitor. Since ILEC embedded costs were used to determine USF support, it would be unreasonable for non-ILEC local service providers to receive such support.
- The support plan is based on an average loop cost for a study area, which cost is not a good indicator of support for specific high-cost areas.
- While large carriers that serve both urban and high-cost areas could not receive USF support, their competitors could receive such support.
- Long-distance access charges, which are paid to local service providers by IXCs, are artificially high to implicitly support low local rates. This implicit subsidy leads to high toll charges for end users.
- Many states pay more into the fund than they receive from it. Others, like Texas, receive more from the fund than they put into it. This difference causes tension between urban and rural states, although it is a normal characteristic of any pooling mechanism.

In FTA § 254, Congress codified the long-standing commitment of state regulators and the Commission to ensuring the preservation and advancement of

universal service in rural, high-cost, and insular areas.[160] The FTA requires that sufficient and predictable universal service support mechanisms be maintained,[161] and states that federal support mechanisms should be explicit and sufficient to achieve the purposes of § 254 even as competitive markets develop.[162] As the FTA required, the FCC convened the Federal-State Joint Board on Universal Service,[163] and the Joint Board produced its first set of recommendations to the FCC in November 1996.[164] In light of those recommendations, on May 8, 1997, the FCC released the *Universal Service Order*, which, among other things, identified the services included within the definition of universal service and established a specific timetable for implementation of revised universal service support mechanisms.[165]

Consistent with the Joint Board's recommendations, the FCC determined that carriers should receive support for serving rural, insular and high-cost areas based on the forward-looking cost of providing the supported services, because forward-looking costs provide the best measure of sufficient support that sends the correct signals for efficient entry and investment.[166] The Joint Board recommended that the FCC continue to work with the Joint Board and the industry to refine the models that were on the record at that time for estimating forward-looking costs.[167] The FCC determined that non-rural carriers would begin to receive high-cost support based on forward-looking costs on July 1, 1999, but that the implementation of support based on forward-looking costs for rural carriers would be delayed pending further review by the FCC, the Joint Board, and a Joint Board-

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[160] 47 U.S.C. § 254. Section 254 also addresses universal service support for schools, libraries, rural health care providers, and low-income consumers. *See* 47 U.S.C. §§ 254 (a), (b)(1), (b)(3), and (h).

[161] 47 U.S.C. § 254(b)(5).

[162] 47 U.S.C. § 254(e). Congress placed section 254 in Part II of the title dealing with common carriers, which it entitled "Development of Competitive Markets." *See also* 47 U.S.C. §§ 251, 253.

[163] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Notice of Proposed Rulemaking and Order Establishing Joint Board, 11 FCC Rcd 18092 (rel. Mar. 8, 1996).

[164] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Recommended Decision, FCC 96J-3, 12 FCC Rcd 87 (1996) *(Recommended Decision).*

[165] *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report and Order, 12 FCC Rcd 8776 (1997) (*Universal Service Order*), as corrected by Federal-State Joint Board on Universal Service, CC Docket No. 96-45, Errata, FCC 97-157 (rel. June 4, 1997), *appeal pending in Texas Office of Public Utility Counsel v. FCC*, No. 97-60421 (5th Cir. 1997); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order on Reconsideration, 12 FCC Rcd 10095 (rel. July 10, 1997); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Third Report and Order (rel. Oct. 14, 1997), as corrected by *Federal-State Joint Board on Universal Service*, CC Docket Nos. 96-45 and 97-160, Erratum (rel. Oct. 15, 1997); *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, FCC 97-411, Third Order on Reconsideration (rel. Dec. 16, 1997); *Federal-State Joint Board on Universal Service, Access Charge Reform, Price Cap Performance Review for Local Exchange Carriers, Transport Rate Structure and Pricing, End User Common Line Charge*, CC Docket Nos. 96-45, 96-262, 94-1, 91-213, 95-72, FCC 97-420, Fourth Order on Reconsideration, 13 FCC Rcd 5318 (1997).

[166] *Universal Service Order*, 12 FCC Rcd at 8899-8900, ¶ 224-226; *Recommended Decision*, 12 FCC Rcd at 232, ¶ 276.

[167] *Recommended Decision*, 12 FCC Rcd at 229, ¶ 268.

appointed Rural Task Force, but at least until January 1, 2001.[168] On October 28, 1998, the FCC released an Order adopting a platform for a federal mechanism for determining non-rural carriers' forward-looking costs.[169]

The FCC also concluded in the *Universal Service Order* that the share of support provided by federal mechanisms initially should be set at 25 percent.[170] This determination generated several petitions for reconsideration and significant comment. On March 11, 1998, the state members of the Joint Board filed a request that certain issues related to the determination of high cost support, including issues regarding the share of federal high cost support, be referred back to the Joint Board.[171] In July 1998, the FCC referred to the Joint Board essentially the same issues of which the state members had requested referral.[172]

On November 23, 1998, the Joint Board issued the *Second Recommended Decision*, outlining an initial methodology for directing sufficient federal support to non-rural carriers to offset high intrastate costs in states with insufficient internal resources to ensure affordable and reasonably comparable rates. The Joint Board recommended a federal high-cost support mechanism for non-rural carriers that enables rates to remain affordable and reasonably comparable, even as competition develops, but that is no larger than necessary to satisfy that statutory mandate. The Joint Board expressed its belief that the transition to a competitive environment requires the balance of two competing goals: (1) supporting high-cost areas so that consumers there have affordable and reasonably comparable rates; and (2) maintaining a support system that does not, by its sheer size, over-burden consumers across the nation.

The Joint Board recommended that the FCC replace the 25/75 jurisdictional division of responsibility for high-cost universal service support, adopted in the *Universal Service Order*, with a new methodology for non-rural carriers. The Joint Board also made recommendations about the information that consumers should receive from carriers in connection with the recovery of universal service contributions. While the Joint Board recommended a shared federal-state responsibility for universal service support, they concluded that, consistent with the FTA, no state can or should be required by the FCC to establish an intrastate universal service fund.

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[168] *Universal Service Order*, 12 FCC Rcd at 8910, ¶. 254; 8917-18, ¶¶. 252-56. The *Universal Service Order* determined that non-rural carriers should begin to receive support based on forward-looking costs on January 1, 1999. This implementation date was extended to July 1, 1999, in conjunction with the referral of issues back to the Joint Board. *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, FCC 98-160, Order and Order on Reconsideration (rel. July 17, 1998) (*Referral Order*).

[169] *Federal-State Joint Board on Universal Service*, CC Docket Nos. 96-45, 97-160, FCC 98-279, Forward-Looking Mechanism for High-Cost Support for Non-Rural LECs (rel. Oct. 28, 1998) (*Platform Order*).

[170] *Universal Service Order*, 12 FCC Rcd at 8925, ¶ 269.

[171] Formal Request for Referral of Designated Items by the State Members of the § 254 Federal-State Joint Board on Universal Service, CC Docket No. 96-45 (filed Mar. 11, 1998).

[172] *In the Matter of Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Order, FCC 98-160 (July 13, 1998).

The FCC is expected to decide on the universal service issues in the spring of 1999, including the amount of universal service support to be provided to non-rural carriers for serving high-cost areas. The support system for rural carriers, by contrast, will not be altered until January 1, 2001, at the earliest, and not before the Joint Board has completed further deliberations on related issues in light of upcoming recommendations from the Rural Task Force.

INTERLATA ELCS PETITIONS IN TEXAS[173]

The FTA, with its passage in February 1996, removed interLATA calling restrictions from GTE; consequently, Expanded Local Calling Service (ELCS) routes involving GTE and the other non-restricted companies were approved by the Commission and implemented. However, new interLATA provisions were imposed upon SWBT. Section 271 of the FTA states that RBOCs may not provide interLATA calling services until a 14-point checklist of competitive services is met. At that time, there were 54 ELCS cases involving SWBT that were pending until either SWBT met the requirements set by the FTA or the FCC determined that it had the authority to grant a request for limited waiver.

In June 1996, SWBT filed a request for waiver in two new test cases.[174] The FCC addressed SWBT's request for waiver in combination with requests for similar waivers from other RBOCs and, on July 15, 1997, issued an order addressing the procedures for SWBT to request limited modifications of LATA boundaries for the provision of ELCS.[175] This order granted 23 of the 24 RBOC requests, ordered amendment of the remaining request, and provided guidelines for future interLATA waiver requests. The FCC also determined that its Common Carrier Bureau had the authority to act on requests to modify LATA boundaries. In addition, the order explained that the FCC had determined that none of the BOCs met the requirements of Section 271 of the FTA, but that state Commissions had established that some communities had an immediate need for local calling service that crosses a LATA boundary, and that requiring the BOCs to meet the requirements of Section 271 prior to offering the requested local calling service "would not further Congress' intent to guard against competitive abuses." The FCC also found that a modification of the LATA boundary for a "limited purpose" that would permit the BOC to provide only flat-rate, non-optional local calling between specific exchanges would best accomplish the desired goals. It was further determined that the need for the requested LATA waivers for ELCS service outweighed the risk of potential anti-competitive effects because the services requested were non-optional, flat-rate, and

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[173] Some background information on ELCS, along with EAS and EMS, is given in Chapter 6.

[174] *Petition of the Pawnee Exchange for Expanded Local Calling Service to the Karnes-Falls City and Kennedy Exchanges*, Project No. 13706 (Sept. 19, 1997), and *Petition for Expanded Local Calling Service from the Albany Exchange to the Exchange of Breckenridge*, Project No. 15129.

[175] *In the Matter of Petitions for Limited Modification of LATA Boundaries to Provide Expanded Local Calling Service (ELCS) at Various Locations,* CC Docket No. 96-159, FCC 97-244 (rel. July 15, 1997).

between specific exchanges. The order also contained guidelines to be followed by SWBT in the filing of future requests for LATA modifications.

In August 1997, SWBT filed 64 requests for limited LATA boundary modifications with the FCC, pursuant to the order issued July 15, 1997. In December 1997, the FCC granted the 64 requests for limited LATA boundary modifications involving SWBT in a Memorandum Opinion and Order.[176] The Commission has approved an additional 11 interLATA ELCS petitions involving SWBT, for which applications for limited LATA boundary modifications will be filed on a quarterly basis.

In addition, Commission staff met with representatives from SWBT and other affected LECs, such as GTE and Sprint, later in December 1997. Discussion at this meeting centered on how to implement these cases in a timely and equitable manner. Eventually, a three-month schedule for the filing of a proposed implementation schedule was established by the parties. The petitioning-exchange LECs filed the proposed implementation schedules over a three-month period beginning January 31, 1998.

SEPARATIONS PROCEEDING

Jurisdictional separations is the process of apportioning regulated costs between the intrastate and interstate jurisdictions. Carriers apportion the interstate regulated costs among their interexchange services and rate elements that form the cost basis for their interstate service tariffs. The remaining regulated costs are recovered from intrastate services. One of the primary purposes of this process is to prevent ILECs from recovering the same costs in both the interstate and intrastate jurisdictions.

Telecommunications regulation has changed greatly since the separation process was first found to be essential by the U.S. Supreme Court in 1930.[177] New state and federal statutes and the emergence of competition in new service markets have combined to cause regulators to reevaluate whether the current system of jurisdictional separations is still relevant and applicable. In October 1997, the FCC initiated a proceeding[178] to determine whether the separations rules should be reformed and whether the FCC continues to be required by statute or case law to prescribe separations rules. Any changes in the FCC's jurisdictional separations process would likely have a direct impact on the costs assigned to the state jurisdiction; therefore, separations changes are important to the PUCT as well as to the carriers and customers in Texas. In comments to the FCC, the PUCT agreed that a review of the current dual-jurisdictional nature of rate regulation may be in order in light of recent statutory and regulatory changes. To the extent that the

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[176] *In the Matter of Southwestern Bell Telephone Company Petitions for Limited Modification of LATA Boundaries to Provide Expanded Local Calling Service (ELCS) at Various Locations,* File No. NSD-LM-97-32 (rel. December 3, 1997).

[177] *Smith v. Illinois Bell Tel. Co.*, 282 U.S. 133, 148 (1930).

[178] *In the Matter of Jurisdictional Separations,* CC Docket No. 80-286, FCC 97-354 Reform and Referral to the Federal-State Joint Board (pending).

current dual-jurisdictional system remains, the PUCT supported the continuation of a jurisdictional separations process, although the Commission supported efforts to simplify the complex mechanisms that are currently used. The joint board on jurisdictional separations has not yet made its recommendation to the FCC, and therefore the FCC has not yet made a final determination in its proceeding on jurisdictional separations.

Court Rulings

Background: The FCC's Interconnection Order

The FCC's First Order and Report in Docket No. 96-98[179] provided guidance to interested parties and state utility Commissions with respect to the negotiation and arbitration of interconnection agreements. That order contained, among other things, default rates, a mandatory pricing methodology (total element long run incremental cost, or TELRIC), the FCC's interpretation of the "most favored nations" (MFN) clause[180] of the FTA, and guidelines for states to use when determining whether a competitor should have access to particular unbundled network elements (UNEs) of ILECs. Numerous petitioners appealed the FCC's order to the 8th Circuit Court. Petitioners included a number of state Commissions, ILECs, and CLECs.

Limited Effect of 8th Circuit's Decision

In October 1996, the 8th Circuit Court, in *Iowa Utilities Board,*[181] stayed a number of key provisions in the FCC's order, such as the FCC's pricing mandates and the FCC's interpretation of the MFN clause that would have allowed competitors to "pick and choose" which provisions they want to adopt from other interconnection agreements. In those areas where the FCC's order was stayed, state Commissions were required to provide their own interpretations of the FTA. Consequently, the 8th Circuit's final order invalidating a number of the FCC interconnection rules on jurisdictional grounds did not have a broad impact on the various arbitrated interconnection agreements. See the description of decisions made in SWBT's Mega-arbitration proceeding in Chapter 6 for an explanation of how the Commission's decisions in that proceeding were (or were not) affected by the ruling.

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[179] *Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96-98, First Report and Order (Aug. 8, 1996) [hereinafter the FCC's order or the Order].

[180] FTA § 252(i).

[181] *Iowa Utilities Board v. FCC*, 109 F.3d 418 (8th Cir. 1996). (The U.S. Supreme Court will hear oral arguments on the appeals from the *Iowa Utilities Board* case by the end of 1998. A decision is expected early in 1999).

Separating and Combining UNEs

In October 1997, the 8th Circuit Court issued an order on rehearing that addressed the combination of network elements.[182] In that order, the Court reiterated a prior July 1997 holding that an ILEC is not obligated to combine network elements for requesting carriers, and clarified that an ILEC is not prohibited from separating network elements that may already be combined. Because the Commission determined that SWBT waived its rights to "not combine" UNEs, SWBT must do the combining under its interconnection agreements with AT&T and MCI. On the other hand, since SWBT may separate UNEs, the 8th Circuit's order has the practical effect of increasing the non-recurring charges faced by CLECs when they win a customer from another LEC and serve that customer through UNEs since reconnection charges apply. Moreover, for other ILECs and for SWBT after the expiration of the current contracts, the 8th Circuit's order could limit the degree to which the use of UNEs is able to bring rapid, facilities-based competition to local markets.

Wichita Falls Decision

Separate from the arbitrations, SWBT filed in the federal district court in Wichita Falls, Texas, generally arguing that section 271 of the FTA is unconstitutional because it amounts to a bill of attainder. Specifically, SWBT and other RBOCs argued that the statute illegally discriminates against them. Although the RBOCs won at the trial level, the district court judge's decision was reversed by the court of appeals. A decision is expected by the U.S. Supreme Court in 1999.

[182] *Iowa Utilities Board v. FCC*, Nos. 96-3321, *et al.*, Order on Petitions for Rehearing (8th Cir., Oct. 14, 1997).

APPENDIX D
LITIGATION SUMMARIES

Significant FCC Decisions

BARRIERS TO ENTRY IN THE LOCAL TELECOMMUNICATIONS MARKET

In the Matter of Public Utility Commission of Texas et al., FCC 97-346 (Sept. 26, 1997)

In May 1996, the Commission filed a petition with the Federal Communications Commission (FCC) requesting the FCC to determine whether certain provisions of the Public Utility Regulatory Act (PURA) violate the federal Telecommunications Act of 1996 (FTA), including § 253. Section 253 directs the FCC, subject to certain limited exceptions, to preempt any state or local statute, regulation, or legal requirement that "prohibit[s] or [has] the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service." Petitions for declaratory ruling and/or preemption claiming that certain portions of PURA violate § 253 or are otherwise inconsistent with the FTA were subsequently filed by the Competition Policy Institute; Intelcom Group (U.S.A.), Inc.; ICG Access Services, Inc.; AT&T Corporation; MCI Telecommunications Corporation; MFS Communications Company, Inc.; Teleport Communications Group, Inc.; and the City of Abilene, Texas.

The principal PURA provisions challenged were as follows: the certificate of operating authority (COA) buildout requirements and associated resale restrictions; the service provider certificate of operating authority (SPCOA) six percent eligibility limitation; the SPCOA five percent discount for resold service; the prohibition on the direct or indirect sale by municipalities of certain telecommunications services; the use of usage-sensitive rates for the resale of local loops; the restriction on reductions in rates for intrastate switched access; intraLATA toll dialing parity limitations; and the prohibition on SPCOA holders obtaining discounts from incumbent local exchange carriers when purchasing for resale optional extended area service and expanded local calling service. Two Commission decisions reached in docketed proceedings were also challenged: the decision allowing SPCOA holders to provide service using their own facilities, and the decision restricting the resale of Centrex service.

In September 1997, the FCC concluded that the Commission for the most part has interpreted and applied the challenged provisions of PURA in a manner that does not

conflict with the FTA. In this regard, the FCC applauded the efforts by the Texas Commission to reconcile these state and federal statutes and indicated an interest in avoiding unnecessary conflicts between the two statutory schemes. In reaching its decision not to preempt most of the challenged statutory provisions, the FCC concurred in the Commission's argument that the state statute and the federal statute operate on "parallel tracks," offering competitors separate, alternative paths into the local telecommunications marketplace.

The FCC found that two provisions of PURA, however, could not be reconciled in a manner to avoid preemption. First, it preempted the buildout requirements for COA holders in PURA § 3.2531 [now §§ 54.102(b) and 54.104], which generally require COA holders to serve a specified portion of their service area using facilities that are not owned by the incumbent local exchange carrier. The FCC preempted the enforcement of the buildout requirements because they violate § 253 in two ways: (1) they restrict the means or facilities through which a party is allowed to provide service, and (2) they impose a financial burden that has the effect of prohibiting certain entities from providing telecommunications services. The FCC also preempted the buildout requirements because they unlawfully conflict with a COA holder's right to resell an incumbent local exchange carrier's retail services in violation of the FTA.

Second, the FCC preempted PURA § 3.2531(h) [now § 54.103(g)], which prohibits the granting of a COA for the provision of service in an exchange in which an incumbent local exchange carrier serves fewer than 31,000 lines. (This subsection expired under the terms statute in September 1998.) The FCC reasoned that this provision in the state statute is in direct conflict with § 253 of the FTA.

Finally, the FCC preempted the Commission's enforcement of a "continuous property" restriction applicable to SWBT's Centrex service when made available for resale. The Commission had approved such a restriction in a docketed proceeding in April 1994 and applied that decision in subsequent arbitration proceedings conducted pursuant to the FTA. The FCC preempted the enforcement of the restriction on the grounds that it violates § 253 of the FTA and constitutes an "unreasonable or discriminatory limitation" in violation of the federal statute.

Significant State Court Decisions

CERTIFICATION AND THE ROLE OF MUNICIPALITIES

City of Plano v. Public Utility Commission of Texas, Cause No. 03-96-00691-CV (Court of Appeals, Third District, Austin) (Aug. 14, 1997)

In November 1995, the Commission issued a service provider certificate of operating authority (SPCOA) to MFS Intelenet of Texas, Inc. (MFSI) in Docket No.

14650.[183] PURA § 3.2555(a) [now § 54.154(b)] required an applicant for an SPCOA to file a sworn statement with its application that represents it has applied for any necessary municipal consent, franchise, or permit required for the type of services and facilities for which it has applied. The Commission concluded that MFSI satisfied this requirement by stating that it planned to operate as a pure reseller of local exchange service and, therefore, believed no municipal consent was necessary. Noting that it had not determined whether MFSI needed any municipal consent, the Commission also concluded, as a matter of law, that § 3.2555 does not grant it the jurisdiction or authority to determine the necessity of a permit or franchise between a municipality and an SPCOA holder.

The City of Plano appealed the decision to state district court. It argued that MFSI's statement did not meet the requirements of PURA § 3.2555(a). The district court upheld the Commission. The City appealed to the court of appeals, which also upheld the Commission. In reaching its decision, the court of appeals did not address the question of whether a pure reseller, such as MFSI, must actually obtain municipal consent or a franchise in order to operate within a municipality's jurisdiction. Rather, the court adopted the Commission's position that such a question is an issue to be determined in another type of proceeding involving the SPCOA applicant/holder and the municipality, not by the Commission in the certification docket.

City of Plano v. Public Utility Commission of Texas, Cause No. 96-10977 (District Court, Travis County); *City of Irving v. Public Utility Commission of Texas,* Cause No. 96-05416 (District Court, Travis County) (November 1997)

The Cities of Plano and Irving challenged the Commission's issuance of SPCOAs to U.S. Long Distance, Inc.; WorldCom, Inc. d/b/a LDDS Worldcom; American Telco, Inc.; and TCG Dallas on the same grounds as in the City of Plano litigation. The state district court affirmed the Commission's decisions. The Cities did not appeal the district court's decision.

FRANCHISE TAX INCREASES FOR ELECTING COMPANIES

GTE Southwest, Inc. v. Public Utility Commission of Texas; Cause No. 03-97-00148-CV (Court of Appeals, Third District, Austin) (June 1998)

In Docket No. 15082,[184] the Commission refused to allow GTE Southwest Incorporated (GTE-SW) to pass through to its customers any increase in tax liability caused by House Bill 11. Enacted in 1991, this law increased state franchise tax liability for many corporations doing business in Texas. GTE-SW had filed a petition at the

[183] *Application of MFS Intelenet of Texas, Inc. for a Service Provider Certificate of Operating Authority,* Docket No. 14650 (Mar. 1, 1996).

[184] *Application for Approval of Calculations of House Bill 11 Tax Adjustment Factors for 1996, Pursuant to Subst. R. 23.21(D),* Docket No. 15082 (Jan. 15, 1997).

Commission seeking to increase its HB 11 tax adjustment factor following its election of Subtitle H incentive regulation [now Subchapter B in the Utilities Code]. In denying GTE-SW's request, the Commission found that such an increase would be inconsistent with GTE-SW's agreement to freeze rates under Subtitle H.

GTE-SW appealed the Commission's decision to state district court, which upheld the Commission. GTE-SW again appealed to the court of appeals, which affirmed the Commission's decision. In upholding the Commission's order, the court of appeals stated that §§ 3.352(a) and 3.353(b) [now 58.021 & 58.054] of PURA clearly require that any company electing to be subject to incentive regulation under these provisions commits itself to forego any increase in rates for basic network services for a period of four years. Given this commitment by GTE-SW, the court held that an increase in GTE-SW's franchise tax adjustment would be contrary to GTE-SW's election under these provisions.

Significant Federal Court Decisions

ARBITRATION OF INTERCONNECTION AGREEMENTS UNDER FEDERAL TELECOMMUNICATIONS ACT

Southwestern Bell Telephone Company vs. AT&T Communications of the Southwest, Inc., et al., No. A 98-CA-197-SS (United States District Court for the Western District, Austin Division) (November 9, 1998)[185]

SWBT, AT&T and MCI filed appeals challenging various provisions of the arbitration awards in the second round of the SWBT "mega-arbitration." The parties challenged the Commission's arbitrated decisions on issues as the terms and conditions for physical collocation, permanent prices for unbundled network elements, whether SWBT must offer combinations of unbundled network elements, and a large number of contractual issues not arbitrated during the first round in the SWBT "mega-arbitration."

Lauding the Commission's achievement in balancing the parties' polarized positions, the federal district court upheld the Commission's arbitration award on all issues of merit, dismissing the remaining issues as moot.[186] Most notably, the court ruled

[185] Consolidated from *Southwestern Bell Telephone Company v. AT&T Communications of the Southwest, Inc. et al. and the Public Utility Commission of Texas*, Civil Action No. A-98-CA-197; *AT&T Communications of the SW. Inc. v. Southwestern Bell Telephone Company and the Public Utility Commission of Texas*, Civil Action No. A-98-CA-196; *MCI Telecommunications Corp. and MCI Metro Access Transmission Services, Inc. v. Southwestern Bell Telephone Company and the Public Utility Commission of Texas*, Civil Action No. A-98-CA-199SS (United States District Court for the Western District, Austin Division).

[186] With the support of the Commission, the court corrected a Commission oversight regarding the duration of the MCI/SWBT interconnection agreement.

that the Commission's factual finding that SWBT voluntarily agreed to combine network elements at a price determined by the Commission was not arbitrary and capricious. Moreover, the court determined that the Commission set reasonable, cost-based rates for SWBT's provision of combined network elements.

***Southwestern Bell Telephone Company v. AT&T Communications of the Southwest, Inc.,* Civil Action No. A-97-CA-132-SS (consolidated with Civil Action Nos. A-97-CA-029-SS; A-97-CA-044; A-97-CA-126-SS), United States District Court for the Western District of Texas, Austin Division (August 1998)**

Southwestern Bell Telephone Company (SWBT) challenged in federal district court virtually all of the Commission's decisions in five arbitration proceedings. These consolidated proceedings conducted pursuant to the FTA involved several petitions for arbitration to establish interconnection agreements with SWBT. The petitions for arbitration were filed in late 1996 by AT&T Communications of the Southwest. Inc., MCI Telecommunications Corporation, MFS Communications Company, Teleport Communications and ASCI Communications Services Inc. In its appeal, SWBT challenged the pricing methodology, the unbundling of key network elements, and the collocation of equipment, among other things.

The court rejected SWBT's arguments. It upheld the Commission's 21.6% wholesale discount, approved the Commission's forward-looking Total Element Long-Run Incremental Cost (TELRIC) costing methodology, and held that the Commission's decisions were based on the appropriate application of state and federal laws. The court also ruled that most of SWBT's complaints on network element unbundling and provision of dark fiber were resolved by FCC rules and provisions of the FTA. In particular, the court upheld the portion of the award requiring that SWBT provide nondiscriminatory access to unbundled network elements, including the local loop, network interface devices, local switching, tandem switching, interoffice transport, signaling and call-related databases, operations support systems (OSS), operator services and directory assistance, and the cross-connect from SWBT's main distribution frame to the competitor's collocation space. In addition, the court upheld the Commission's decision requiring SWBT to provide dark fiber in the feeder segment of the loop and in the dedicated interoffice transport segment of the network as unbundled network elements under certain conditions.

The court also upheld the Commission's requirement that SWBT provide parity access to OSS. In addition, while acknowledging that SWBT would be the first to implement interim number portability (INP), the court ruled that it was proper to establish a mechanism in which all local service providers, including SWBT, pay their own costs of implementing INP. Referencing the Eighth Circuit's ruling in *Iowa Utilities Board v. FCC*, 120 F3d 753 (8th Cir. 1997), the court rejected SWBT's argument that allowing competitors to provide telecommunications services using 100% unbundled network elements (UNEs) at TELRIC pricing amounts to sham unbundling and de facto resale.

The court noted that the issue of whether SWBT must provide "combined UNEs" was not addressed in these arbitration proceedings, but will be addressed in a subsequent appeal.

***AT&T Communications of the Southwest, Inc. v. Southwestern Bell Telephone Company and the Commissioners of the Public Utility Commission of Texas,* Civil Action No. A-97-CA-029-SS (consolidated under Civil Action No. A-97-CA-132-SS), United States District Court for the Western District of Texas, Austin Division (August 1998)**

AT&T appealed the Commission's decision regarding intellectual property in the arbitration award addressing the SWBT/AT&T interconnection agreement. In its appeal, AT&T alleged that the Commission violated § 251(c)(3) of the FTA by failing to require SWBT (rather than AT&T) to obtain any necessary licenses or right to use agreements from SWBT's third-party vendors of intellectual property. AT&T contended that this duty to obtain license agreements is an extension of the ILEC's duty to provide competitors with nondiscriminatory access to UNEs. In its arbitration award, the Commission required SWBT to provide AT&T with a list of all known and necessary licenses or right-to-use agreements applicable to the subject network elements. In addition, the award required that SWBT use it best efforts to assist AT&T in obtaining such licenses or right-to-use agreements. However, the award placed the responsibility to negotiate all such necessary agreements upon AT&T. AT&T moved for referral of these issues to the FCC.

The court noted that AT&T is not seeking to expropriate the intellectual property of third parties with whom SWBT has licensing agreement, but rather, is seeking clarification of SWBT's obligations under the federal statute. Based on AT&T's request for referral to the FCC and because the issue is within the FCC's special competence, the court ordered the issue referred to the FCC under the doctrine of primary jurisdiction. The FCC has not yet ruled on this matter.

***Southwestern Bell Telephone Company v. Public Utility Commission of Texas;* Civil Action No. A-97-CA-108; *Southwestern Bell Telephone Company v. MCI Telecommunications Corp.*; Civil Action No. A-CA-171, United States District Court for the Western District of Texas, Austin Division (August 1998)**

In addition to filing appeals of the Commission's arbitration awards in federal district court, SWBT filed similar appeals in state district court. In the state action, SWBT asserted that the Commission committed various errors of state law in arbitrating and approving the interconnection agreements mandated by the FTA. The Commission had the state court case removed to federal district court and moved to dismiss the state law claims on alternative grounds: the Eleventh Amendment to the U.S. Constitution bars the federal court from considering them, or the state law provisions in question are entirely preempted by federal law.

The federal district court ruled that the state had waived any Eleventh Amendment immunity by electing to arbitrate the interconnection agreements pursuant to § 252 of the FTA. The court observed that the FTA permits, but does not require, state Commissions to impose state-law requirements when reviewing interconnection agreements. The court further noted that the Commission had decided to implement the FTA and PURA on separate "parallel tracks" to avoid federal preemption issues. The court found that the Commission's decision to base its arbitration awards exclusively on a construction of federal law was the safer course of action. In holding that SWBT's state law claims are completely preempted by the federal law, the court rejected SWBT's contention that the Commission was required to apply state law in arbitrating and approving the interconnection agreements.

COMPENSATION FOR CALLS TO INTERNET SERVICE PROVIDERS

***Southwestern Bell Telephone Company v. Public Utility Commission of Texas,* Civil Action No. MO- 98-CA-043, United States District Court for the Western District of Texas, Midland-Odessa Division (June 16, 1998)**

In October 1996 and November 1997, the Commission approved interconnection agreements between SWBT and Time Warner Communications of Austin, L.P.; Time Warner Communications of Houston, L.P.; and Fibrcom, Inc. (collectively Time Warner), pursuant to the FTA. A controversy subsequently arose between the parties to the agreements with respect to the compensation of calls connecting SWBT customers to Time Warner customers that are Internet service providers (ISPs). In Docket No. 18082,[187] Time Warner filed a complaint against SWBT alleging a breach in the terms of the interconnection agreements on this issue because SWBT refused to compensate Time Warner for these types of calls as local calls.

In the complaint proceeding, the Commission concluded that the interconnection agreements required SWBT to compensate Time Warner under the terms of the agreements' reciprocal compensation provisions, which address the compensation for the origination and termination of local calls. This decision was consistent with the decisions of other state regulatory Commissions on the same issue. SWBT appealed the Commission's decision to federal district court.

The court upheld the Commission's decision. It found that the Commission's rationale for treating the calls in question as local calls was reasonable. The court recognized that calls over the Internet consist of two components: the information service component and the telecommunications transmission component. The information service component—or the content—may consist of a significant amount of traffic outside the local exchange. The network component, however, is characterized as local

[187] *Complaint of Time Warner Communications of Austin, L.P., Time Warner Communications, L.P., and Fibrcom (Time Warner Communications' San Antonio Affiliate) Against Southwestern Bell Telelphone Company,* Docket No. 18082 (Feb. 27, 1998)

traffic when the connection between the person calling the ISP and the ISP occurs in the same local calling area. Because it is this network component that determines what regulatory body has jurisdiction over the traffic, the court concluded that the Commission has such jurisdiction when the call from a SWBT customer to an ISP occurs in the same local calling area. Finally, the court concluded that the Commission had substantial evidence to conclude that the reciprocal compensation provisions in the interconnection agreements addressing local traffic applied to calls from SWBT customers to ISPs when they are within the same local calling area.

CONSTITUTIONALITY OF PROVISIONS IN FEDERAL TELECOMMUNICATIONS ACT

SBC Communications, Inc. v. Federal Communications Commission, Cause No. 98-10140, United States Court of Appeals for the Fifth District (September 1998)

Section 271 of the FTA requires each Bell Operating Company (BOC) to obtain prior authorization from the FCC before it can provide in-region interLATA long-distance service, that is, interLATA long-distance service to customers in areas in which it was allowed to provide local service prior to the enactment of the FTA. The FCC can grant such authorization only after a number of complex criteria evidencing free and open competition in the particular local service market are established. Even then, however, the BOCs may provide interLATA long-distance service initially through a separate affiliate only. Also, under § 273 of the FTA, the BOCs may not manufacture or provide telecommunications equipment until they have met the requirements of § 271, and such equipment may be provided only through a separate affiliate. Finally, under §§ 274 and 275 of the FTA, the BOCs may not provide electronic publishing or alarm monitoring services until February 8, 2001, unless they do so through a separate affiliate or joint venture (and, in the case of alarm monitoring, only if they were engaged in the business prior to November 30, 1995).

In July 1997—approximately 17 months after the FTA became law—SBC Communications, Inc. (SBC) and its subsidiaries filed suit against the United States of America and the FCC, alleging that the above provisions are unconstitutional under the bill of attainder and the equal protection clauses of the federal Constitution. It also contended that § 274 unconstitutionally violated the free speech clause as well. The Commission did not intervene in this proceeding, but filed an amicus curiae brief in opposition to the relief sought by SBC.

In December 1997, the federal district court voided the challenged sections of the FTA, holding that they constituted an unconstitutional bill of attainder and were severable from the remainder of the FTA. It concluded that the statutory provisions punitively impose line-of-business restrictions on named corporations. The district court did not address the other grounds upon which SBC challenged the constitutionality of the statutory provisions in question.

On appeal, the court of appeals reversed the lower court, concluding that the challenged provisions are nonpunitive as a historical, functional, and motivational matter. Furthermore, the appellate court rejected other constitutional arguments made by SBC as alternative bases for affirming the district court's judgment. A decision is expected by the US Supreme Court in 1999.

Pending Litigation (No Decisions)

STATE COURT

City of Tulia, City of Venus, City of Emory, City of Point, City of East Tawakoni, and City of Maud v. Public Utility Commission of Texas, Cause No. 96-06857 (District Court, Travis County) (filed June 12, 1996)

Six cities challenge an order that dismissed a general rate proceeding inquiring into the reasonableness of the rates and services of Contel of Texas, Inc. (Contel),[188] an electing company under Subtitle H of PURA95 [now Chapter 58 of PURA]. The Cities allege that the Commission (1) misinterpreted PURA in dismissing the inquiry into the rates and services of Contel; (2) erred in limiting its authority to review the reasonableness of rates under Subtitle H; and (3) incorrectly determined that it lacked authority to eliminate extended local calling charges.

GTE Southwest, Inc. v. Public Utility Commission of Texas, Cause No. 96-09155 (District Court, Travis County) (filed August 2, 1996)

GTE-SW challenges an order that requires it to revise its tariff to include a reasonable and nondiscriminatory practice addressing the relocation of multiple demarcation points to a single point of demarcation on multi-unit premises. GTE-SW alleges that the Commission erred by (1) exceeding its statutory authority; (2) violating GTE-SW's constitutional rights to freedom of contract and procedural due process; (3) taking action that is preempted by federal law; (4) misinterpreting FCC rules and precedent; (4) concluding that GTE-SW violated its own tariff; (5) ruling that GTE-SW violated PURA; (6) violating the substantial evidence rule; (7) determining that GTE-SW had the burden of proof; (8) ignoring and violating the filed rate doctrine; and (9) failing to state that GTE-SW should be reasonably compensated for the purchase or lease of its network cable.

AT&T Communications of the Southwest, Inc. v. Public Utility Commission of Texas, Cause No. 96-09822, (District Court, Travis County) (filed August 19, 1996); *MCI Communications Corporation v. Public Utility Commission*

[188] Contel is now merged completely into GTE-SW, and no longer operates as "Contel."

***of Texas*, Cause No. 96-09848 (District Court, Travis County) (filed August 19, 1996)**

AT&T and MCI challenge an order that approved five joint petitions for extended area service (EAS). They allege that the Commission erred by (1) failing to apply the imputation standard in PURA; (2) concluding that alternatives to EAS available from local exchange carriers relieved the imputation requirement in PURA; (3) modifying findings of fact and conclusions of law sua sponte without allowing the parties to present evidence or arguments on those modifications; and (4) failing to establish new rates for the provision of basic network functions needed for interexchange carriers to provide competitive services to EAS.

***Southwestern Bell Telephone Co. v. Public Utility Commission of Texas,* Cause No. 97-10254 (District Court, Travis County) (filed September 5, 1997)**

SWBT challenges the rule (P.U.C. SUBST. R. 23.105) that governs the pricing of SWBT's network elements to competitors, arguing that the rule (1) exceeds the Commission's authority; (2) was adopted without meaningful notice and opportunity to comment; and (3) violates the Texas Constitution and federal law.

***GTE Communications Corp., d/b/a GTE Long-Distance, v. Public Utility Commission of Texas*, Cause No. 97-10253 (District Court, Travis County) and *GTE Southwest, Inc. v. Public Utility Commission of Texas*, Cause No. 97-10241 (District Court, Travis County) (both filed September 5, 1997)**

Two GTE companies filed suit against the Commission concerning a single order. GTE Long-Distance (GTE LD) challenges an order that requires affiliate wholesale pricing "attribution." The holding attributes to GTE Southwest (GTE-SW), the local service provider, a discount offered by GTE LD on intraLATA toll calls carried by GTE-SW. GTE Communications alleges that the Commission erred by (1) finding that GTE-SW and GTE LD had engaged in anti-competitive behavior; (2) requiring GTE LD to cease and desist from offering the discount; and (3) exceeding its statutory authority in requiring the wholesale pricing attribution in the event the discount is offered.

GTE-SW challenges the same order requiring affiliate wholesale pricing attribution on grounds similar to those alleged by GTE LD in its appeal of the same order. GTE-SW also alleges that the Commission erred by (1) failing to provide meaningful notice and hearing, as required by due process of law, and (2) failing to follow the requirements in the Texas Government Code for modifying and/or deleting an administrative law judge's proposed findings of fact and conclusions of law.

On December 16, 1998, Travis County District Court Judge Margaret Cooper reversed and remanded the Commission's decision for failing to fully explain the reasons for the ruling. As of press time, the Commission had not acted to either accept the remand or appeal the order.

Texas Association of Long-Distance Telephone Companies v. Public Utility Commission of Texas, Cause No. 97-10272 (District Court, Travis County) (filed September 8, 1997)

The Texas Association of Long-distance Telephone Companies (TEXALTEL) challenges an order that approved an SWBT tariff without requiring that the tariff include a "percent interstate usage" (PIU) audit committee provision.

Southwestern Bell Telephone Company v. Public Utility Commission of Texas, Cause No. 9713922, (District Court, Travis County) (filed December 17, 1997)

SWBT challenges an order dismissing its application to provide a point-to-point optional calling plan in its long-distance message telecommunications tariff. SWBT alleges that the Commission erred by (1) classifying the service as a basic network service, and (2) issuing an order after the expiration of the jurisdictional deadline. SWBT also seeks a declaratory judgment stating that the Commission's rule barring electing companies from exercising pricing flexibility for basic network services (P.U.C. SUBST. R. 23.104(e)) is invalid.

Office of Public Utility Counsel v. Public Utility Commission of Texas, Cause No. 9800201 (District Court, Travis County) (filed January 15, 1998)

The Office of Public Utility Counsel (OPC) challenges an order approving a SWBT service, Telecommunications Revenue Interactive Management System (TRIMS), which permits SWBT to place toll credit limits on residential customers under certain circumstances, without affecting customers' ability to make local calls, 911 emergency calls, or toll-free calls. OPC alleges the Commission erred by failing to reasonably support its decision with substantial evidence.

GTE Communications Corporation v. Public Utility Commission of Texas, Cause No. 9801148 (District Court, Travis County) (filed February 2, 1998)

GTE Communications challenges an order denying its application for a certificate of operating authority (COA) in territory currently served with local exchange service by GTE-SW. GTE Communications alleges that the Commission erred by (1) misinterpreting PURA and (2) exceeding its statutory authority under PURA because its decision constitutes a barrier to entry prohibited by the FTA.

GTE Communications Corporation v. Public Utility Commission of Texas, Cause No. 9801147 (District Court, Travis County) (filed February 2, 1998)

GTE Communications challenges an order denying approval of an interconnection agreement between itself and GTE-SW. GTE Communications alleges that the Commission erred in failing to adopt the agreement, which is identical to one previously approved between GTE-SW and MCI Communications Corporation, by (1) exceeding its authority over the approval and rejection of interconnection agreements under the FTA;

(2) failing to follow the FTA's requirement mandating the availability of existing and approved interconnection agreements to any other requesting telecommunications carrier; and (3) violating the prohibition against barriers to entry under the FTA.

***Southwestern Bell Telephone Company v. AT&T Communications of the Southwest, Inc. and the Public Utility Commission of Texas*, Cause No. 9814970 (District Court, Travis County) (filed May 12, 1998)**

SWBT challenges the arbitration awards in the second round of the SWBT "mega-arbitration" on the basis that it violates substantive provisions of PURA. In addition, SWBT contends the process used by the Commission in arbitrating these matters violated procedural provisions of Texas law. Furthermore, SWBT contends that the Commission's findings in these awards violate applicable constitutional and statutory provisions, are in excess of the agency's statutory authority, and were made as a result of unlawful procedures. The proceeding has been removed to federal district court.

***Southwestern Bell Telephone Company v. Public Utility Commission of Texas,* Cause No. 9805047 (District Court, Travis County) (filed May 13, 1998)**

SWBT challenges an order concluding that the reciprocal compensation provisions in an interconnection agreement between SWBT and Time Warner, which address compensation for the origination and termination of local calls, govern calls from SWBT customers to Time Warner customers that are Internet service providers (ISPs). The grounds upon which SWBT relies are the same as those rejected by the federal district court in *Southwestern Bell Telephone Company v. Public Utility Commission of Texas*, Civil Action No. MO-98-CA-043 (U.S. Dist. Ct. Tx.).

FEDERAL COURT

***GTE Southwest Inc. v. Public Utility Commission of Texas,* Civil Action No. M-97-078 (consolidated with M-97-115 and M-97-138) (United States District Court, Southern District, McAllen Division) (filed April 28, 1997)**

GTE-SW challenges arbitration awards issued pursuant to the FTA, in two consolidated proceedings involving interconnection agreements with AT&T, MCI, Sprint and ASCI. In the arbitration awards, the Commission established prices and terms under which GTE-SW must agree to sell its local telephone services and make available elements of its local telephone network and to otherwise interconnect its network with AT&T, MCI, ACSI, and Sprint. GTE-SW contends that the Commission's rulings violate its rights under the FTA.

GTE Southwest, Inc. v. Public Utility Commission of Texas, **Cause No. M-97-187 (US District Court, Southern District, McAllen Division) (filed July 30, 1997)**

GTE-SW challenges an arbitration award issued pursuant to the FTA, establishing certain terms of an interconnection agreement between Western Wireless and GTE-SW. In particular, GTE-SW challenges rates set by the Commission for interconnection and for transport and termination.

Southwestern Bell Telephone Company v. Golden Harbor of Texas, Inc. and the Public Utility Commission of Texas, **Cause No. 98-CA-475-JN (United States District Court, Western District, Austin Division) (filed July 24, 1998)**

SWBT challenges an arbitration award issued pursuant to the FTA, construing an interconnection agreement between SWBT and Golden Harbor. SWBT and Golden Harbor entered into a negotiated interconnection agreement that provides for reciprocal compensation for terminating local traffic originating on the other carrier's network. SWBT contends that in interpreting the negotiated agreement, the Commission failed to recognize that Internet traffic is interstate in nature and exceeded its jurisdiction in applying the reciprocal compensation rates to such traffic. These issues are similar to those adjudicated in *Southwestern Bell Telephone Company v. Public Utility Commission of Texas,* Civil Action No. MO-98-CA-043, U.S. Dist Ct. Tx.). In addition SWBT contends that the Commission committed an error by failing to conduct a hearing to determine the appropriate rate to apply to calls accessing the Internet. SWBT also claims that the Commission erred by failing to comply with the FTA requirements relating to an initial period of negotiations between parties.

APPENDIX E
ILECS

Incumbent Local Exchange Carriers

The ILECs listed below provide local service to Texas customers. They are arranged according to number of access lines (an approximation of their numbers of customers). All of the ILECs responded to the PUC request for data for this Scope of Competition Report (usually filed under seal). Sources of the public information charted below are the PUCT 1997 earnings monitoring reports.

Company	Access Lines	Revenues	Net Plant in Service
Southwestern Bell Telephone Company	9,343,711	$4,504,320,789	$6,502,756,902
GTE Southwest, Inc.	2,104,291	$972,662,675	$1,739,453,621
Central Telephone Co. of Texas	204,214	$90,094,343	$139,811,878
United Telephone Company of Texas	149,501	$75,952,074	$121,631,999
Lufkin-Conroe Telephone Exchange	97,925	$62,424,015	$97,939,229
Sugar Land Telephone Company	65,305	$34,570,285	$53,183,768
Fort Bend Telephone Company	31,507	$16,252,239	$29,397,962
Century Telephone of San Marcos, Inc.	28,913	$17,534,213	$25,228,073
Guadalupe Valley Telephone Cooperative	28,587	$16,288,802	$34,855,144
Eastex Telephone Cooperative	27,154	$15,110,628	$40,187,243
Texas ALLTEL	26,684	$10,672,168	$32,382,043
Kerrville Telephone Company, Inc.	21,262	$12,111,245	$26,803,076
Hill Country Telephone Cooperative	13,122	$6,306,854	$15,326,579
Etex Telephone Cooperative, Inc.	12,772	$6,909,617	$7,183,522
Peoples Telephone Cooperative, Inc.	11,145	$5,267,401	$12,150,599
Century Telephone of Lake Dallas, Inc.	8,468	$3,901,456	$10,002,764
Livingston Telephone Company	6,646	$3,416,058	$3,647,916
Central Texas Telephone Cooperative	6,555	$4,854,693	$23,038,862
Taylor Telephone Cooperative, Inc.	6,471	$3,224,460	$11,658,267
Brazoria Telephone Company	6,234	$4,497,532	$22,412,239
Valley Telephone Cooperative, Inc.	6,080	$6,920,578	$26,238,102
Colorado Valley Telephone Cooperative	5,945	$3,606,185	$23,702,199
West Plains Telecommunications, Inc.	5,381	$2,592,449	$3,517,167
Comanche County Telephone Company	5,379	$2,672,087	$3,686,339
Cap Rock Telephone Cooperative, Inc.	4,885	$3,363,940	$6,626,734
South Plains Telephone Cooperative	4,657	$2,860,143	$14,595,032
Big Bend Telephone Company	4,504	$5,780,760	$27,071,450
Century Telephone of Port Aransas, Inc.	4,148	$1,828,828	$3,031,325

Brazos Telecommunications, Inc.	4,031	$2,120,705	$1,930,459
Southwest Texas Telephone Company	3,783	$2,952,808	$8,299,180
Poka-Lambro Telephone Cooperative, Inc.	3,510	$3,139,352	$8,408,516
Muenster Telephone Corp. of Texas	3,337	$2,882,593	$6,290,830
Wes-Tex Telephone Cooperative, Inc.	3,224	$1,838,060	$2,503,395
Mid-Plains Rural Telephone Cooperative	3,035	$1,783,408	$4,692,631
Ganado Telephone Company	2,755	$1,553,259	$3,748,416
Santa Rosa Telephone Cooperative	2,223	$1,585,938	$3,159,791
Coleman County Telephone Cooperative	2,066	$1,312,330	$3,460,791
Industry Telephone Company	1,903	$1,457,036	$3,689,003
West Texas Rural Telephone Cooperative	1,891	$1,772,684	$3,385,348
Electra Telephone Company	1,808	$1,303,349	$3,315,637
Community Telephone Company, Inc.	1,702	$1,048,669	$2,345,015
ALENCO	1,515	$2,404,411	$8,244,767
Five Area Telephone Cooperative	1,447	$1,564,860	$3,175,358
Blossom Telephone Company	1,296	$573,323	$849,325
XIT Rural Telephone Cooperative	1,257	$1,232,453	$4,850,652
Lipan Telephone Company	1,227	$1,239,777	$1,492,517
Cameron Telephone Company	1,205	$705,741	$2,277,909
Brazos Telephone Cooperative, Inc.	1,163	$1,247,900	$2,568,770
La Ward Telephone Exchange, Inc.	1,086	$923,475	$2,406,833
Lake Livingston Telephone Company	1,043	$843,854	$1,591,628
Riviera Telephone Company, Inc.	1,001	$1,370,934	$2,063,656
Tatum Telephone Exchange	919	$873,052	$1,476,370
North Texas Telephone Company	876	$400,309	$813,602
ENMR Telephone Cooperative	838	$452,571	$3,074,862
Cumby Telephone Cooperative, Inc.	749	$669,766	$670,197
Dell Telephone Cooperative, Inc.	655	$583,487	$7,297,748
Southwest Arkansas Telephone Cooperative	518	$253,343	$406,172
Border to Border Communications	77	$294,477	$974,967
TOTALS			
Cooperatives	149,949	$92,149,453	$263,216,514
Investor-Owned Utilities	12,143,637	$5,844,230,989	$8,893,767,865
All ILECs	**12,293,586**	**$5,936,380,441**	**$9,156,984,379**

APPENDIX F
COAS AND SPCOAS

Certificated Competitors

Below is a list of entities who have been awarded, or are pending award, of COA and SPCOA certificates as of December 15, 1998. Certificate approval indicates only that the company has Commission permission to provide telecommunications services (*i.e.*, some may not yet be offering services and some may no longer be in business). Because the telecommunications market is increasingly dynamic, this appendix reflects only a static view of potential competitors. The Commission web site periodically posts an updated version of this list at <http://www.puc.state.tx.us>.

How to use this list:

Companies named include those that were recently certificated. Since the data period for this report ended December 31, 1997, many of these companies did not provide information because they were either not yet in operation or were not yet certificated.

Information listed in the "Supplied Data" column indicates the following:

- **yes**: Yes, the company supplied data for this report.
- **new**: Company is too new to have been part of data set.
- **no**: Certificate in force but company did not reply to data request.
- **no operations**: Company confirmed to not be in operations during the data period (1995, 1996 and 1997 calendar years).
- **Cross-ref**: Company reported under a different name (listed in parentheses).

Organization Name	Type	COA or SPCOA Number	Date of Issuance	Docket Number	Supplied Data
Access Network Services, Inc.	SPCOA	60067	12/10/96	16502	no operations
AccuTel of Texas, Inc.	SPCOA	60072	2/6/97	16706	no
ACI Corp.	SPCOA	60204	10/8/98	19629	new
ACSI Advanced Technologies, Inc. (See E.Spire)	COA	60030	5/9/90	15616	cross-ref
ACSI Local Switched Services, Inc. (See E.Spire)	SPCOA	60105	6/4/97	17316	cross-ref
Action Telcom Co.	SPCOA	60009	12/20/95	14875	no

Advanced Communicating Techniques	SPCOA	60120	6/27/97	17387	yes
Allegiance Telecom of Texas, Inc. (See Intetech, L.C.)	SPCOA	60143	11/20/97	17976	no operations
Alternative Telephone Connections, Inc.	SPCOA	60169	4/21/98	18897	new
Amarillo Cell Telco	SPCOA	60032	8/7/96	16005	no
America's Tele-Network Corp.	SPCOA	60021	4/24/96	15421	yes
American Communication Services of Amarillo, Inc. (See E.Spire)	COA	60029	6/9/96	15595	cross-ref
American Communication Services of Irving, Inc. (See E.Spire)	COA	60028	6/9/96	15593	cross-ref
American Communications Services of El Paso, Inc. (See E.Spire)	COA	60035	7/10/96	15596	cross-ref
American Communications Services of Ft. Worth, Inc. (See E.Spire)	COA	60034	7/10/96	15594	cross-ref
American Local Tele. LL.D., (d/b/a ALT Communications)	SPCOA	60171	5/6/98	18940	new
American Metrocomm/Texas, Inc.	SPCOA	60136	10/22/97	17761	no operations
American PhoneCom, Inc.	SPCOA	60053	10/11/96	17118	no
American Telco, Inc.	SPCOA	60004	10/25/95	14649	no
Americas Conex, L.L.C.	SPCOA	60056	10/28/96	16315	no operations
Ameritech Communications International, Inc.	SPCOA	60092	3/26/97	16965	no operations
AT&T Communications of the Southwest, Inc.	COA	50003	4/24/96	16658	yes
AustiCo Telecommunications, Inc.	SPCOA	60040	1/15/98	20076	yes
Austin Bestline Company (Bestline)	SPCOA	60033	7/10/96	15896	yes
Austin Teleco USA, Inc. (d/b/a Teleco U.S.A., Inc.)	SPCOA	60083	3/26/97	16858	yes
Basicphone, Inc.	SPCOA	60079	8/6/97	17542	yes
BellSouth BSE, Inc.	SPCOA	60172	5/6/98	18984	yes
Birch Teleco of Texas Ltd. L.L.P	COA	50023	12/14/98	20013	new
Business Telecom, Inc. (d/b/a BTI)	SPCOA	60117	6/27/97	17375	yes
Buy-Tel Communications, Inc.	SPCOA	60154	2/5/98	18446	no operations
C2C Fiber, Inc.	SPCOA	60193	8/12/98	19385	new
Cable & Wireless, Inc.	SPCOA	60015	1/25/96	15050	yes
Cable Plus Company, L.P. (d/b/a MultiTechnology Services, L.P.)	SPCOA	60157	2/25/98	18414	yes
Call For Less Long Distance, Inc.	SPCOA	60061	11/14/96	17307	no
Capital Telecommunications, Inc. [d/b/a CTI]	SPCOA	60020	4/24/96	15420	yes
Cap Rock Communications Corporation	SPCOA	60077	2/19/97	16784	yes
CellTeleCo, Inc. (aka Amarillo CelTelCo)	SPCOA	60032	8/7/96	16005	no
Cellufone of Texas, Inc.	SPCOA	60168	4/21/98	18860	new
Choctaw Communications, L.L.C. (See VarTec) (a/k/a Smoke Signal)	SPCOA	60052	10/14/96	16709	no
ClearSource, Inc.	SPCOA	60209	10/22/98	19790	new
Coastal Telecom Limited	SPCOA	60011	12/21/95	14876	no
Communications Pearl, LLC	SPCOA	60189	7/22/98	19429	new
CoServ, L.L.C.	SPCOA	60183	7/8/98	19206	new
CoServe	COA	50012	9/10/97	17262	no operations
Covad Communications Company	SPCOA	60192	8/12/98	19490	new
Credit Loans, Inc. (d/b/a Lone Star Communications)	SPCOA	60038	8/7/96	17435	cross-ref

CS Wireless Systems, Inc., (d/b/a The Beam)	SPCOA	60144	11/20/97	18007	no
CSW/ICG ChoiceCom, L.P.	SPCOA	60103	5/21/97	17090	yes
CTJ Investments, Inc.	SPCOA	60116	6/27/97	17372	no operations
Cumby Telephone Cooperative, Inc.	COA	50017	6/11/98	18795	yes
Cypress Telecommunications	SPCOA	60048	9/23/98	16180	no
Deloach's Home Entertainment Centers Inc. (d/b/a Rent City)	SPCOA	60076	4/21/98	18493	yes
Dial Tone USA, Inc.	SPCOA	60113	6/27/97	17347	no
Diamond Communications International, Inc.	SPCOA	60127	8/6/97	17541	no
Diamond Telco-Your Home Telephone Store	SPCOA	60094	4/23/97	17094	yes
Digital Broadcast Network Corp. (d/b/a Data Delivery Network)	SPCOA	60198	9/9/98	19520	new
Digital Network Services, Inc.	SPCOA	60190	7/22/98	18985	new
Digital Services Corp.	SPCOA	60088	3/26/97	16889	no
Direct Communications, Inc. (d/b/a Online Communications)	SPCOA	60110	6/4/97	17219	no
Discount Calling, Inc.	SPCOA	60185	7/8/98	19353	new
DMJ Telecommunications, Inc.	SPCOA	60054	10/14/96	16268	no
Dobson Wireless, Inc. (d/b/a Logix Communications Corp)	SPCOA	60155	2/25/98	18292	no operations
Eagle Comm., Inc. (d/b/a Texas Eagle Communications)	SPCOA	60165	4/1/98	18774	new
Easy Cellular, Inc.	SPCOA	60057	10/28/96	16318	no operations
Eclipse Communications Corp.	SPCOA	60162	4/1/98	18601	new
Ernest Communications, Inc.	SPCOA	60207	10/8/98	19776	new
E.Spire (formerly ASCI)	COA	60105	7/8/98	19258	yes
ETS Telephone	SPCOA	50001	12/8/98	19657	yes
EZ Talk Telecommunications	SPCOA	60049	9/23/96	16708	yes
Facilities Communications International, Ltd.	SPCOA	60115	6/27/97	17371	yes
Faithnet Telecommunications, Inc.	SPCOA	60142	11/20/97	17946	no operations
Fast Connections, Inc. (see Sterling International Funding, Inc.)	SPCOA	60045	9/11/96	16709	cross-ref
Fiber Wave Telecom, Inc.	SPCOA	60128	8/21/97	17599	no operations
FibrCom Incorporated (See Time Warner)	SPCOA	60138	11/6/97	19302	cross-ref
First Telecommunications Network	SPCOA	60096	5/6/97	17024	no operations
FirstLink Telecommunications, Inc.	SPCOA	60200	9/24/98	19601	new
FlashNet Telecom, Inc.	SPCOA	60199	9/9/98	19584	new
Fort Bend Long Distance Company	SPCOA	60179	6/11/98	19533	yes
Frontier Local Services, Inc.	SPCOA	60148	12/12/97	18066	yes
Frontier Telemanagement, Inc.	SPCOA	60149	12/12/97	18067	no
Future Communications	SPCOA	60163	4/1/98	18639	new
Go-Tel, Inc. (a/k/a Go-Comm.)	SPCOA	60137	11/5/97	19496	no
Golden Harbor of Texas, Inc.(formerly Lone Star Net., Inc.)	SPCOA	60037	8/7/96	17800	cross-ref
Great West Services, LTD.	SPCOA	60150	12/18/97	18097	no
Griffin Communication & Security Systems, Inc.	SPCOA	60090	4/2/97	16926	no
GST Texas Lightwave, Inc.	SPCOA	60036	8/7/96	17256	yes
GTE Communications Corporation	COA	50014	10/30/97	16495	yes
Hollywood Communications, Ltd.	SPCOA	60099	5/6/97	17167	no

Hotelecom Communications Corporation	SPCOA	60101	5/21/97	17218	no
ICG Telecom Group, Inc.	SPCOA	60043	9/24/96	16122	no operations
ICG Telecom Group, Inc. San Antonio	SPCOA	60042	9/24/96	16121	no operations
InfoCom Services	SPCOA	n/a	n/a	19831	new
Infolink Communications, Ltd.	SPCOA	60131	9/10/97	17656	no
Intellicell Operator Services, Inc.	SPCOA	60187	7/22/98	19169	new
Intellistar Communications, Inc. (d/b/a Intellistar Comm.)	SPCOA	60109	6/4/97	17253	no operations
Inter-Tel NetSolutions, Inc.	SPCOA	60066	12/2/96	16475	no operations
Intermedia Communications, Inc.	SPCOA	60082	3/5/97	16852	yes
Intetech, L.C.	SPCOA	60141	5/6/98	18976	new
ITC DeltaCom	SPCOA	60202	9/24/98	19660	new
IWL Communications, Inc. (d/b/a IWL Connect)(name change to IWL Holdings Corp. on 6/24/98, docket 19269)	SPCOA	60078	2/18/97	16813	cross-ref
IXC Communications Services Inc.	SPCOA	60140	11/20/97	17882	yes
Jato Communications Corp.	SPCOA	60203	9/24/98	19665	new
KeRo Communications	SPCOA	60098	5/6/97	19141	new
Kingsgate Telephone (See ETS Telephone Company, Inc.)(d/b/a Summerwood)	COA	50001	12/8/95	14651	cross-ref
Kingsgate Telephone (See ETS Telephone Co.) (d/b/a Greenleaf)	COA	50002	2/5/98	18197	cross-ref
Kingsgate Telephone, Inc.(See ETS Telephone Co.) (d/b/a Sienna)	COA	50009	3/26/97	16400	cross-ref
KMC Telcom	SPCOA	60039	8/21/96	16097	no
KMC Telecom II, Inc.	SPCOA	60194	8/12/98	19463	new
LCI International Telcom Corp. (See US Long Distance)	SPCOA	60010	12/21/95	14919	yes
LCT Long Distance, Inc.	SPCOA	60047	9/11/96	16205	no
Level 3 Communications, L.L.C.	SPCOA	60161	4/1/98	18598	new
Local Fone Service, Inc.	SPCOA	60055	10/14/96	16278	no
Local Phone Service, Inc. (d/b/a Phone Call Express)	SPCOA	60208	10/8/98	19663	new
Local Telecom Service, L.L.C.	SPCOA	60151	12/18/97	18098	no
Local Telephone Service Company, Inc.	SPCOA	60064	12/2/96	17753	yes
Lone Star Communications	SPCOA	60038	8/7/96	16045	no
Lone Star Telephone, Inc. (See Credit Loans)	SPCOA	60060	10/28/96	16306	yes
M-Tel Resources, Inc.	SPCOA	60080	3/5/97	16797	no
Matrix Telecom, Inc.	SPCOA	60108	6/4/97	17215	no
Max-Tel Communications, Inc.	SPCOA	60086	2/25/98	18103	new
MCImetro Access Transmission Services, Inc. (d/b/a MCI)	COA	50004	10/1/97	17706	yes
Metro Access Networks, Inc.	SPCOA	60062	11/13/96	16452	no
Metro Connection, Inc. (d/b/a TransAmerican & d/b/a/ American Telephone)	SPCOA	60059	10/28/96	16710	yes
Metro-Link Telcom, Inc.	SPCOA	60018	2/23/96	16711	no
Metrophone, Inc.	SPCOA	60119	6/27/97	17386	no
MFS Dallas (See WorldCom)	SPCOA	60005	11/21/95	14665	cross-ref
MFS Houston (See WorldCom)	SPCOA	60006	11/21/95	14666	cross-ref
MFS Intelenet of Texas, Inc.	SPCOA	60001	9/10/97	17737	cross-ref

MiComm Services, Inc.	SPCOA	60114	6/27/97	17348	no operations
MIDCOM Communications, Inc. (See WinStar)	SPCOA	60069	12/19/96	16538	cross-ref
Millennium Telcom, L.L.C.	COA	50019	8/12/98	19489	new
Momentum Telecom, Inc.	SPCOA	60156	2/25/98	18413	no operations
Morris Communications	SPCOA	60197	8/26/98	19549	new
MSN Communications, Inc.	SPCOA	60073	5/6/98	16720	no operations
MultiTecnology Services, L.P. (d/b/a Cable Plus, Telephone Plus)	SPCOA	60097	2/25/98	18437	cross-ref
Nations Bell, Inc.	SPCOA	60017	3/6/96	15280	yes
Nationwide Communication	SPCOA	60135	10/22/97	17682	no operations
Navigator Telecommunications, LLC	SPCOA	60188	7/22/98	19420	new
Network Operator Services, Inc.	SPCOA	60019	4/10/96	15350	yes
New Millennium Comm. Corp.	SPCOA	60181	6/11/98	19157	new
Nextlink Texas, Inc. (d/b/a Nextlink Texas)	SPCOA	60173	5/6/98	19028	new
NHS Communications Group, Inc. (d/b/a NHS Networks)	SPCOA	60102	5/21/97	17224	no
Nortex Telcom, L.L.C. (See also Muenster in ILEC List)	COA	50015	2/25/98	18135	yes
North Amer. Tele. Corp.	SPCOA	60186	7/8/98	18190	new
Northpoint Communications, Inc.	SPCOA	60164	4/1/98	18718	new
NOS Communications, Inc.	SPCOA	60022	4/24/96	15422	no operations
NOW Communications, Inc.	SPCOA	60167	4/21/98	18799	new
NTS Communications, Inc.	SPCOA	60044	9/11/96	16135	yes
Omni Prism Communications, Inc.	SPCOA	60091	3/26/97	16933	no
Omnicall, Inc.	SPCOA	60201	9/24/98	19643	new
One Source Telecommunications, Inc.	SPCOA	60178	6/11/98	18775	new
Optel (Texas) Telecom, Inc.	SPCOA	60041	9/24/96	16188	no
Pacific Gateway Exchange, Inc.	SPCOA	60085	3/26/97	16875	yes
Page-Master, Etc.	SPCOA	60134	10/22/97	17631	no
Paging Express, Inc. (d/b/a Express Telecom, Inc.)	SPCOA	60071	1/22/97	16673	no
Panhandle Telecommunications Systems, Inc. (d/b/a Eaglenet, Inc.)	COA	50016	5/6/98	18972	yes
Penthouse Suites, Inc.	SPCOA	60063	12/2/96	16371	no
Peoples Telecommunications, Inc.	COA	50022	10/8/98	19709	yes
Petroleum Communications, Inc. (d/b/a Petrocom)	SPCOA	60158	2/25/98	18466	no operations
PhoneSense, Inc.	SPCOA	60206	10/8/98	19728	new
Phonit, Inc.	SPCOA	60104	5/21/97	17263	no
Plexnet Communications Services, Inc.	SPCOA	60107	6/4/97	17187	yes
Plum Creek Telephone Co., (See ETS Telephone Company)	COA	50007	10/14/96	16237	yes
Poka Lambro Telephone Company, Inc. (See ETS Telephone Co.)	COA	50008	11/14/96	16392	yes
Posner Telecommunications Inc. (d/b/a PageTexas)	SPCOA	60065	11/26/96	16474	no
Preferred Carrier Services, Inc. (aka PCS)	SPCOA	60031	9/23/98	19641	yes
Premiere Network Services, Inc.	SPCOA	60089	4/2/97	16921	yes
Progressive Concepts, Inc.	SPCOA	60016	3/7/96	15210	no
Qtel, Inc.	SPCOA	60070	12/19/96	16599	no
Quest (See US Long Distance)	-	-	-	-	cross-ref

Quick-Tel Communications, Inc.	SPCOA	60170	5/6/98	18579	new
Quintelco, Inc.	SPCOA	60146	12/5/97	17953	no operations
Reach Direct, Inc.	SPCOA	60152	1/15/98	18350	no operations
Real Time Communications	SPCOA	60159	2/25/98	18567	no
Reitz Rentals, Inc. (d/b/a Texas Teleconnect)	SPCOA	60058	10/23/96	16344	yes
Resource Innovations Group, Inc. (d/b/a DFW Direct)	SPCOA	60111	6/27/97	17186	yes
Ruth Riza (d/b/a ComTel Services)	SPCOA	60093	4/10/97	16922	yes
Santa Rosa Telephone Cooperative, Inc.	COA	50018	8/12/98	19488	yes
Shell Offshore Services Company	SPCOA	60191	8/12/98	19470	new
SouthNet Telecomm Services, Inc.	SPCOA	60205	10/8/98	19708	new
Southside Communications, L.L.C.	SPCOA	60182	6/24/98	19256	new
Southwestern Bell Telephone Company	COA	50005	8/9/96	16030	yes
Sprint Communications Company L.P. (also Centel and United)	COA	50006	10/14/96	15990	yes
Stargate Communications, Ltd.	SPCOA	60130	9/10/97	17632	no operations
State Discount Telephone	SPCOA	60147	12/5/97	18049	no operations
Sterling International Funding, Inc. (d/b/a RECONNEX & Fast Connections)	SPCOA	60051	10/14/96	16256	yes
Sugar Land Telephone (see also Alltel in ILEC list)	COA	50011	8/11/97	17242	yes
Supra Telecomm. & Information Systems, Inc.	SPCOA	10/2/64	5/21/98	19103	new
Suretel, Inc.	SPCOA	60180	6/11/98	19131	new
Switched Services Comm., L.L.C. (See IXC Comm. Services, Inc.)	SPCOA	60140	11/20/97	17882	cross-ref
Taylor Communications Group, Inc.	SPCOA	60050	10/14/96	16225	yes
TCG Dallas (d/b/a Teleport Communications Group)	COA	50020	9/23/98	19630	yes
TCG Dallas (d/b/a Teleport Communications Group)	SPCOA	60014	6/4/97	17034	yes
TCI Telephony Services (d/b/a People Link)	SPCOA	60153	2/5/98	18309	no operations
Tech Telephone Co., Ltd.	SPCOA	60176	10/8/98	19681	new
Tel-Save, Inc. (d/b/a The Phone Company)	SPCOA	60118	6/27/97	17385	no
Tele-One Communications, Inc.	SPCOA	60126	8/6/97	17517	yes
Telecom Licensing, Inc.	SPCOA	60196	8/12/98	19309	new
Telenetwork, Inc.	SPCOA	60095	4/23/97	19801	yes
Teleport Communications Houston, Inc.	COA	50021	9/24/98	19631	new
Teleport Houston	SPCOA	60013	6/4/97	17035	no
Teligent, Inc.	SPCOA	60087	2/5/98	18469	no operations
Teltrust Communications Service, Inc.	SPCOA	60132	9/10/97	17673	no operations
Texas Comm South, Inc.	SPCOA	60012	1/25/96	15051	no
Texas Hometel, Inc.	SPCOA	60145	11/20/97	18010	no operations
Texas Networking, Inc.	SPCOA	60166	4/1/98	18808	new
The Telephone Reconnection	SPCOA	60139	11/20/97	17778	no operations
Time Warner Communications of Austin, L.P.	SPCOA	60124	4/1/96	15025	yes
Time Warner Communications of Houston, L.P.	SPCOA	60123	7/16/97	17315	yes
Time Warner Connect	SPCOA	60075	7/22/98	19302	yes
Time Warner Connect - San Antonio	SPCOA	60074	2/5/97	17026	yes

Tin Can Communications Company, L.L.C.	SPCOA	60122	7/17/97	17459	no
Trans National Telecommunications, Inc.	SPCOA	60184	7/9/98	19277	new
TransAmerican Telephone, Inc.(see MetroConnection, Inc.)	SPCOA	60174	5/6/98	17777	cross-ref
Transtar Communications, L.C.	SPCOA	60081	3/5/97	16824	no operations
Trinity Telephone (d/b/a ADN Enterprises, Inc.)	SPCOA	60129	5/6/98	18962	yes
TXNet Communications	SPCOA	60175	5/21/98	18720	new
United Technological Systems	SPCOA	n/a	n/a	19787	new
U.S. Communications, Inc.	SPCOA	60026	5/22/96	15554	no
U.S. Dial Tone, Inc. (formerly Tex. Dial Tone, Inc)	SPCOA	60106	10/1/97	17755	no
U.S. Long Distance (USLD, LCI, Quest)	SPCOA	60033	10/25/95	14647	yes
U.S. OnLine Communications, L.L.C.	SPCOA	60025	7/8/98	19342	yes
U.S. Telco, Inc.(bought by Sterling International)	SPCOA	60023	5/8/96	15500	cross-ref
U.S. Telephone Holding, Inc. (d/b/a Sage Telecom)	SPCOA	60160	7/22/98	19373	no
U.S. West Interprise America, Inc.	SPCOA	60121	7/16/97	17426	yes
USA eXchange, LLC (d/b/a Omniplex Communications Group)	SPCOA	60100	4/21/98	17168	yes
USN Southwest, Inc.	SPCOA	60024	4/12/96	15505	no operations
USN Communication Southwest, Inc. (this is the name change of USN Southwest, Inc.)	SPCOA	60024	7/9/98	19278	no operations
Utel	SPCOA	60125	8/6/97	17397	yes
Valu-Line of Longview (d/b/a Value Line Long Distance)	SPCOA	60008	2/25/98	18180	yes
Valu-Net, Inc.	SPCOA	60068	12/12/96	16543	no operations
W.T. Services, Inc.	COA	50013	2/21/97	16508	yes
Waller Creek Communications, Inc.	SPCOA	60112	6/27/97	17255	no
Westel, Inc.	SPCOA	60007	12/8/95	14884	no
Wholesale Network, Inc. (d/b/a Local Network, d/b/a Southwest Paging)	SPCOA	60084	3/26/97	16859	no operations
WinStar Wireless of Texas, Inc.	SPCOA	60027	4/26/96	15555	yes
World Access Communications Corp.	SPCOA	60046	9/24/96	16105	no operations
WorldCom Technologies, Inc. (bought MFS)	SPCOA	60133	9/15/97	17737	yes
Worldcom, Inc.	SPCOA	60002	10/25/95	17737	yes
XIT Telecommunications & Technology, Inc.	COA	50010	4/23/97	16955	yes
Z-Tel Communications, Inc.	SPCOA	60195	8/12/98	19508	new

APPENDIX G
ACRONYMS

ALJ	Administrative Law Judge
ADSL	Asymmetric Digital Subscriber Line
AT&T	AT&T Communications of the Southwest. Inc.
BOC	Bell Operating Company
BRI	Basic Rate Interface (ISDN)
CAP	Competitive Access Provider
CCL	Carrier Common Line
CCN	Certificate of Convenience and Necessity
CLEC	Competitive Local Exchange Carrier
COA	Certificate of Operating Authority
CPNI	Customer Proprietary Network Information
CPE	Customer Premises Equipment
CMRS	Commercial Mobile Radio Service
DCTU	Dominant Certificated Telecommunications Utility
E 911	Enhanced 911 Service
EAS	Extended Area Service
ELCS	Extended Local Calling Service
EMS	Extended Metropolitan Service
ETC	Exempt Telecommunications Carrier
ETP	Eligible Telecommunications Providers

FCC	Federal Communications Commission
FTA	Federal Telecommunications Act of 1996, Public L. No. 104-104, 110 Stat. 56 (1996) (to be codified at 47 U.S.C. §§ 151 *et seq*.)
GTE	General Telephone and Electronics
GTE-SW	GTE Southwest Incorporated
HDSL	High Speed Digital Subscriber Line
HFC	Hybrid Fiber-Coaxial Cable
HHI	Hirshman-Herfindahl Index
ILEC	Incumbent Local Exchange Carrier
INP	Interim Number Portability
IOU	Investor Owned Utilities
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
IXC	Interexchange Carrier
kbps	kilobits per second
LATA	Local Access and Transport Area
LEC	Local Exchange Carrier
LNP	Local Number Portability
LRIC	Long Run Incremental Cost
LS	Local Switching
LSP	Local Service Provider
mbps	megabits per second
MCI	MCI Telecommunications Corporation
MFJ	Modification of Final Judgment

MMDS	Multichannel, Multipoint Distribution Service
MOU	Minutes Of Use
MSA	Metropolitan Statistical Area
NANP	North American Numbering Plan
NTS	Non-Traffic Sensitive (Cost)
NXX	3-Digit Prefixes (central office codes)
OCP	Office of Customer Protection
OPC	Office of Public Utility Counsel
OSP	Operator Service Provider or Outside Plant
OSS	Operations Support System
PBX	Private Branch Exchange
PCS	Personal Communications Service
PIC	Primary Interexchange Carrier
PLTS	Prepaid Local Telephone Service
PRI	Primary Rate Interface (ISDN)
PSP	Payphone Service Provider
PUCT	Public Utility Commission of Texas
PURA	Public Utility Regulatory Act, TEX. UTIL. CODE ANN §§ 11.001-63.063 (Vernon 1998)
PURA95	Public Utility Regulatory Act of 1995, Texas Civil Statutes, Article 1446c-0 (Vernon Supp 1996)
RBOC	Regional Bell Operating Company
SLC	Subscriber Line Charge
SLEC	Small Local Exchange Carrier

SMA	Service Market Area
SOAH	State Office of Administrative Hearings
SPCOA	Service Provider Certificate of Operating Authority
Sprint	Sprint Communications Company, L.P.
SWBT	Southwestern Bell Telephone
TELRIC	Total Element Long Run Incremental Cost
THCUSP	Texas High Cost Universal Service Plan
TRS	Telecommunications Relay Service
TSLRIC	Total Service Long Run Incremental Cost
TTY	Text Telephones
UNE	Unbundled Network Elements
USF	Universal Service Fund
WAN	Wide Area Network

APPENDIX H
GLOSSARY

800 service - A service which allows subscribers to receive calls from specified areas with no charge to the person calling. Includes 888 services.

Access line - A unit of measurement representing a telecommunications circuit or, in the case of integrated services digital network, a telecommunications channel designed for a particular customer. One access line shall be counted for each circuit which is able to generate usage on the line side of the switched network or a private circuit line, regardless of the quantity or ownership of customer premises equipment connected to each circuit. In the case of multi-party lines, each party line shall be counted as a separate access line.

Affiliate - For the purposes of this project, an affiliate is any entity that, directly or indirectly, owns or controls, is owned or controlled by, or is under common ownership or control with a company that has or applies for a certificate of convenience and necessity, a certificate of operating authority, or a service provider certificate of operating authority.

Analog electronic switch - An electronic (as opposed to mechanical) switch that switches messages without turning the analog signals into digital signals.

Basic local exchange service - For the purposes of this project, a flat-rate or measured residential or business local exchange telephone service, including primary directory listings, tone dialing service, access to operator services, access to directory assistance services, access to 911 service provided by a local authority or dual party relay service, the ability to report service problems seven days a week, and Lifeline and Tel-Assistance services. Also, basic local telecommunications service.

Basic rate interface (BRI) - One of the access methods to ISDN, comprising two 64 Kbps B-channels and one 16 Kbps D-channel (2B+D).

Billing and collection service - A wholesale service sold to a telecommunications service provider that involves all or some of the following functions: 1) compiling the information needed for customer billing, 2) preparing the customer bill statement, 3) sending the bill, and/or 4) collecting the customer payments.

Cable television service - A broadband transmission service wherein a (generally) 75-ohm coaxial cable is used to carry multiple TV channels simultaneously.

Cable television service provider - A provider of cable television service, as defined above.

Call control option - Generally, a switch-based optional service or feature which allows users to monitor and control the use of their own phone lines. Caller ID is an example of a call control option.

Cellular mobile service - A mobile radio service based on a number of "cells," each containing a transceiver (transmitter/receiver). As a cellular radio or phone user travels within a cell, the call signals are sent and received by the transceiver in the cell. When the caller travels outside of the cell, the signals are sent and received by the transceiver in the next cell.

Cellular mobile service provider - A provider of cellular mobile service, as defined above.

Certificated Telecommunications Utility - A telecommunications utility that has been granted either a certificate of convenience and necessity, a certificate of operating authority, or a service provider certificate of operating authority.

Coaxial cable - A cable made of an insulated central conducting wire wrapped in another cylindrical conducting wire, and again wrapped in another insulating layer and an outside protective layer. Such cable has great carrying capacity and is often used to carry high-speed data.

Competitive access provider (CAP) - A company competing in an ILEC's service territory in the provision of access services, private line, and

other telecommunications services (enhanced services, etc.).

Competitive custom calling feature - A call management service available from a central office switching system. Such competitive features are generally restricted to speed dialing and three-way calling.

Competitive local exchange company (CLEC) - A CTU that competes with other CTUs in providing local exchange telephone service in a service territory wherein it is not an incumbent LEC.

Cooperative incumbent local exchange carrier (co-op ILEC) - A telephone cooperative ILEC organized under Chapter 162 or a predecessor statute to Chapter 162 and operating under that chapter.

Cramming - The illegal practice by a telecommunications provider of billing a customer for services the customer never asked for, used, or otherwise knew he or she was receiving.

Dark fiber service - A service offering unlit or unused fiber optics. In providing dark fiber service, a company does not provide signaling equipment on either end of the fiber cable.

Directory assistance service - This includes, but is not limited to, the functions associated with making the information available in directory listings available to retail customers.

Digital switch - An electronic switch that converts a signal from analog to digital (or receives a signal that has already been converted from analog to digital) before routing the signal.

Discretionary custom calling feature - A call management service available from a central office switching system including, but not limited to, call forwarding and call waiting. Such features generally do not include speed dialing or three-way calling, but do include most other vertical services.

Dominant carrier - A provider of any particular communication service which is provided in whole or in part over a telephone system who as to such service has sufficient market power in a telecommunications market as determined by the Commission to enable such provider to control prices in a manner adverse to the public interest for such service in such market. Any provider of local exchange telephone service within a certificated exchange area on September 1, 1995, as to such service and as to any other service for which a competitive alternative is not available in a particular geographic market. Any provider of local exchange telephone service within a certificated exchange area as to intraLATA long-distance message telecommunications service originated by dialing the access code 1+ so long as the use of that code for the origination of 1+ intraLATA calls within its certificated exchange area is exclusive to that provider. This term does not include an interexchange carrier with respect to interexchange services.

Dominant certificated telecommunications utility (DCTU) - Refers to any certificated telecommunications utility that is also a dominant carrier in the provision of a particular service.

DS0 - A digital service or function that has a speed of 64,000 bits per second. This is generally the speed at which voice-grade telephone calls are carried.

DS1 - A digital service or function that has a speed of 24 DS0s, or 1.544 mega-bits per second (Mbps). For the purposes of this project, DS1 is synonymous with T-1.

DS3 - A digital service or function that has a speed of 28 DS1s, or 44.736 Mbps.

Educational institution - For the purposes of this project, this term refers to an institution that is 1) an accredited primary or secondary school, 2) an institution of higher education as defined by Section 61.003, Education Code, 3) a private institution of higher education accredited by a recognized accrediting agency as defined by Section 61.003, Education Code, 4) the Texas Education Agency and its successors and assigns, 5) a regional education service center established and operated in accordance with Chapter 8, Education Code, 6) the Texas Higher Education Coordinating Board and its successors and assigns, 7) a public library or regional library system as defined by Section 441.122, Government Code, or 8) a library operated by an institution of higher education or a school district.

Electric telecommunications carrier (ETC) - A telecommunications provider that is an affiliate of an electric utility.

Electromechanical switch - A switch that uses analog electric signals and moving mechanical parts to route calls.

Enhanced service - Any telecommunications service that utilizes computer-based processing applications to provide the customer with value-added telephone services. Voice mail is an example of an enhanced service.

Enhanced services provider (ESP) - A provider of enhanced services, as defined above.

Equal access - The ability of a caller to complete an intraLATA toll call using his or her provider of choice by dialing 1 or 0 plus the area code and the seven digit telephone number within the local access and transport area.

Facilities-based carrier - For the purposes of this project, a facilities-based carrier is a telecommunications service provider which owns conduits, ducts, poles, wires, cables, switches, telecommunications circuit equipment, telecommunications signaling systems, and/or telecommunications transmission facilities that are used to provide any telecommunications service, as defined in this attachment.

Foreign exchange service - A service that allows a caller from outside an exchange to call the exchange as if the caller were making a local call.

Incumbent local exchange company (ILEC) - A local exchange company that had a CCN as of September 1, 1995.

Integrated services digital network (ISDN) - a digital network architecture that provides a wide variety of communications services, a standard set of user-network messages, and integrated access to the network. Access methods to the ISDN are the Basic Rate Interface (BRI) and the Primary Rate Interface (PRI).

Interconnection - The termination of local traffic (including basic telecommunications service) or integrated services digital network and/or EAS/ELCS traffic of a CTU using the local access lines of another CTU.

Interexchange carrier (IXC) - A telecommunications carrier that has the ability to provide both intraLATA and interLATA long-distance service.

InterLATA toll service - Long-distance service between local access and transport areas (LATAs).

Internet service - The provision, generally through telephone lines, of access to the Internet and the World Wide Web, as well as Internet utilities like email.

Internet services provider (ISP) - A provider of Internet services, as defined above.

IntraLATA toll service - Long-distance service between exchanges within a local access and transport area (LATA).

Investor-owned incumbent local exchange company - An ILEC that is not a cooperative ILEC.

Local access and transport area (LATA) - A geographic area established for the provision and administration of communications service. It encompasses one or more designated exchanges, which are grouped to serve common social, economic and other purposes. For purposes of these rules, market areas, as used and defined in the Modified Final Judgment and the GTE Final Judgment, are encompassed in the term local access and transport area.

Local calling scope - The area within which telecommunications service is furnished to customers under a specific schedule of exchange rates. A local calling area may include more than one exchange area.

Local exchange company (LEC) - For the purposes of this project only, a LEC is a telecommunications utility that has either a CCN, a COA, or a facilities-based Service provider COA to provide local exchange telephone service (including basic local exchange service) and/or switched access service in the state of Texas.

Loop - For the purposes of this project, the loop includes all of the equipment that constitutes and supports the electrical circuit between the telecommunication provider's switch port in the central office or collocation facility and the end user premises. This includes the cabling, drop wire, poles, conduits, and interface device on the customer premises. The switch port is not considered to be part of the loop.

Mandatory extended area service (EAS) - A telephone switching and trunking arrangement which provides for mandatory calling service by dominant certificated telecommunications utilities within a local access and transport area (LATA) and between two contiguous exchanges or between an exchange and a contiguous metropolitan exchange local calling area. EAS is

provided at rate increments in addition to local exchange rates, rather than at toll message charges.

Message telecommunications (or toll) service (MTS) - Intra- or interLATA long-distance service.

Non-voice transmission service - A data transmission service where no voice messages are carried.

Operator service - A service using live operator or automated operator functions to handle telephone service such as toll calling using collect, third-number billing, and calling card services. The term does not include a call for which the called party has arranged to be billed (800 service).

Operator services provider (OSP) - A provider of a operator services, as defined above.

Optical fiber - Glass fiber cable used to carry signals made up of lightwaves.

Optional EAS - A telephone switching and trunking arrangement which provides for optional calling service by dominant certificated telecommunications utilities within a local access and transport area (LATA) and between two contiguous exchanges or between an exchange and a contiguous metropolitan exchange local calling area. EAS is provided at rate increments in addition to local exchange rates, rather than at toll message charges.

Pay telephone access service (PTAS) - A service offered by a certificated telecommunications utility which provides a two-way or, optionally, a one-way originating-only business access line composed of the serving central office line equipment, all outside plant facilities needed to connect the serving central office with the customer premises, and the network interface. This service is sold to pay telephone service providers.

Pay telephone service (PTS) - A telecommunications service utilizing any coin, coinless, credit card reader, or cordless instrument that can be used by members of the general public, or business patrons, employees, and/or visitors of the premise's owner, provided that the end user pays for local or toll calls from such instrument on a per call basis. Pay per call telephone service provided to inmates of confinement facilities is PTS. For purposes of this project, coinless telephones provided in guest rooms by a hotel/motel are pay telephones. A telephone that is primarily used by business patrons, employees, and/or visitors of the premise's owner is not a pay telephone if all local calls and 1-800 and 1-888 type calls from such telephone are free to the end user.

Pay telephone services provider (PTSP) - A provider of pay telephone service, as defined above.

Phone directory access - The ability of a CLEC to get information, including, but not limited to, the names and numbers of its customers, printed in a non-discriminatory manner in the same phone directory as other LECs serving an area.

Potential competitor - An entity that is expected to begin competing for customers in any telecommunications market in a particular service area within six months.

Presubscribed line - A condition wherein a customer is able to chose a long-distance carrier and then make all long-distance calls through that carrier by simply dialing 1+ before dialing the area code and seven-digit telephone number of the party he or she wishes to call.

Primary rate interface (PRI) - one of the access methods to ISDN, the 1.544-Mbps PRI comprises either twenty-three 64 Kbps B-channels and one 64 Kbps D-channel (23B+D) or twenty-four 64 Kbps B-channels (24B) when the associated call signaling is provided by another PRI in the group.

Private branch exchange (PBX) - A private telephone switching system, generally located on a customer's premises, that is connected to a common group of lines from one or more central offices. These lines provide service to a number of individual phone stations.

Private line service - A service providing a transmission path that is dedicated to a customer and that is not connected to a switching facility of a telecommunications utility, except that a dedicated transmission path between switching facilities of interexchange carriers shall be considered a private line.

Private payphone service - For the purposes of this project, private payphone service is an individual line customer service equipped with a coin collecting or coinless public telephone instrument installed for use of the general public

in locations where the general public has access to these telephones. This service is provided by a non-ILEC.

Public payphone service - For the purposes of this project, public payphone service is an individual line customer service equipped with a coin collecting or coinless public telephone instrument installed for use of the general public in locations where the general public has access to these telephones. This service is provided by the ILEC.

Public switched network (PSN) - Any common carrier network that provides switching between public users.

Relay Texas - The Texas intrastate telecommunications relay service. This is a service using oral and print translations by either live or automated means for allowing communication between individuals who are hearing-impaired or speech-impaired who use specialized telecommunications devices and others who do not have such devices.

Retail service - A telecommunications service is considered a retail service if it is provided to residential or business end users and the use of the service is other than resale.

Slamming - The illegal act of switching a retail customer's long-distance and/or local telecommunications service provider without permission and/or knowledge of the customer or any of the customer's representatives.

Special access service - A dedicated line from a customer to a long-distance company provided by a local phone company. For the purpose of this project, special access service does not include retail private line services.

Station - A telephone instrument or other terminal device.

Switched access service - A service providing 1) a transmission path connecting customer designated premises to each other either directly or through a hub or hubs where bridging, multiplexing or network reconfiguration service functions are performed and 2) including all exchange access not requiring switching performed by the dominant carrier's end office switches.

Switching office - A central office, or a switching unit in a telecommunications system, which provides service to the general public, having the necessary equipment and operating arrangements for terminating and interconnecting customer lines and trunks or trunks only.

Tandem switch - A switch that connects one central office trunk to another. The tandem switch is an intermediate switch that "hands off" a call from one central office to another, thereby obviating a direct connection between all of the central offices in an exchange or area.

Tel-Assistance program - A program providing eligible consumers with a 65% reduction in the applicable tariff rate for qualifying services.

Telecommunications service - For the purposes of this project, any of the following or related services: local exchange service, vertical services, cellular mobile service (including PCS), central-office-based PBX-type sharing or resale arrangements, intra- and interLATA long-distance service, operator services, payphone services, enhanced services, and Internet service provision.

Telecommunications service provider - A provider of telecommunications service, as defined above, whether by resale or by use of owned or leased facilities.

Total service resale (TSR) - A company partaking in TSR will purchase service provision from a LEC at a negotiated and/or Commission-approved wholesale discount and will resell the service to retail customers.

Transport facility - The cabling and outside plant equipment necessary to provide transport functions.

Transport termination - The central-office or remote office circuit equipment necessary to provide transport functions.

Unbundled network element - A facility or piece of equipment used in the provision of a telecommunications service. Such facilities/ equipment include, but are not limited to, features, functions, and capabilities that are provided by means of such facilities/equipment, such as subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provision of a telecommunications service.

Universal service - Telecommunications support mechanisms designed to ensure the widespread provision of services that 1) are essential to

education, public health, or public safety; 2) have, through the operation of market choices by customers, been subscribed to by a substantial majority of residential customers; 3) are being deployed in public telecommunications networks by telecommunications carriers; and 4) are consistent with the public interest, convenience, and necessity. In Texas, universal service programs include Tel-Assistance, Lifeline, the High-Cost Assistance Fund, and Relay Texas.

Wholesale service - A telecommunications service is considered a wholesale service when it is provided to a telecommunications utility which then uses the service is to provide a retail service to residence or business end-user customers.

Wireless service - Cellular mobile telephone service.

Working line - A access line that has been "turned up," or is operational. A subscribing customer can use his or her working line at any time.

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