Table 20 – Changing Business Strategies for CLECs in the Texas Market

CLEC	Action Taken	Date Announced	Source
AT&T	Reduced presence in residential voice market, focusing on data services. Restructure/divestiture into four separate business.	10/25/00	att.com/press/item/ Seth Schiesel, "AT&T, In Pullback, Will Break Itself Into 4 Businesses," New York Times, 26, Oct. 2000. Floyd Norris, "AT&T Realigns Its Planets," *New York Times*, Oct. 26, 2000.
Sprint	Reduced presence in residential voice market, focusing on data services.	11/03/00 11/22/00	CNET News.com PUC Project No. 17475 filing: Non-Dominant Carrier Tariff revisions to Grandfather Optional Calling Plans and Extended Area Service - Sprint Local Unlimited and Global Pref.ed Extended
Worldcom	Reduced presence in residential voice market, focusing on data services.	11/01/00	2000 Test.newsbytes.com/news/00 "WorldCom to Reorganize, Focus on Internet, Data," *Dallas Morning News*, Oct. 27, 2000.
Verizon /VSSI	Amend to withdraw local service package. Reduced presence within residential voice market, focusing on data services. Withdrawal of bundled package offerings.	10/20/00 11/13/00	Vikas Bajaj, "Verizon to Close Division," *Dallas Morning News*, Oct. 20, 2000. *Application of Verizon Select Services, Inc., for an Amendment to its COA*, PUC Docket No. 23271.
Excel Communications	Intent to cease local exchange service within the Texas market.	11/20/00	Letter to Commission, Robin Johnson, Assistant General Counsel, Excel Communications.

Source: Public Utility Commission

Provided below are more details on the situations faced by the companies presented in Table 20.

AT&T

In October 2000, AT&T abandoned its ambitious but unprofitable business plan of the last three years in favor of splitting into three different companies: Wireless, Broadband (containing cable), and Business Services, which contains and will eventually spin-off Consumer Services. The Business Services division will own the AT&T name and network, while the other companies will lease the rights. AT&T's plan to deliver bundled local exchange, long distance, broadband internet, and cable television over coaxial cable lines is now defunct.[65]

AT&T is also spinning off Liberty Media, a cable programming company it acquired during its long buildup in preparation for the abandoned integrated cable services plan.[66] Some telecommunications analysts say that AT&T will eventually pull completely out of the local exchange market, which has produced lower revenues than

[65] Seth Schiesel, "For Local Phone Users, Choice Isn't An Option," *The New York Times*, at A1 (November 21, 2000).

[66] Geraldine Fabrikant, "AT&T Plans Spinoff to Cut Cable Holdings," *The New York Times* at C1 (November 16, 2000).

expected.[67] The company has also seen an 11% drop in its long distance earnings in 2000, down from $22 billion.[68] With a $62 billion debt and company stock down from a high of $61/share in 1999 to less than $20/share in November 2000, few financial analysts are predicting a quick recovery.[69]

AT&T plans to move its Consumer Services division into bundling voice and DSL, and recently appointed David Dorman, an executive with a history of taking over troubled companies, as its president. Dorman is expected to focus on maintaining quality in the Business and Consumer Services division.[70] Some analysts have alleged that bundling voice and data will not solve the company's problems, as it will not differentiate AT&T from the many other CLECs offering the same services.[71] However, in the era of deregulation, long distance does not hold the same place for AT&T as it has in the past. The BOCs are entering the market with a strong customer base. As described in Chapter Three, SWBT, in particular, has picked up over a million long distance customers in Texas since July, grabbing a 12% share of the long distance market while ceding very little of the local exchange market.[72]

Verizon

Like AT&T, Verizon is having difficulty in the competitive local exchange and long distance markets. Verizon fared better than some other major telecommunications companies, through better estimation of its profit expectations. However, local and long distance revenues are dropping for the company, which claims that data sales alone are keeping its profits aloft.[73]

Verizon's financial difficulties in the CLEC market have apparently led the company to attempt to pull out of the residential competitive local exchange market in Texas, where it services over 43,000 customers. Verizon's CLEC, VSSI, submitted an Application for Amendment to its COA in November 2000, stating its wish to "discontinue competitive local exchange services to consumers and small business customers in Southwestern Bell and former GTE service areas." The PUC is awaiting further information from Verizon, including any plans for transfer of current customers to similar plans on other local exchange carriers and a justification for retaining its COA.

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[67] Seth Schiesel, "For Local Phone Users, Choice Isn't An Option," *The New York Times*, at A1 (November 21, 2000).

[68] Deborah Solomon, "AT&T Plans Big Asset Sales to Cut Debt," *The Wall Street Journal*, at A3 (November 8, 2000).

[69] Peter Elstrom, "AT&T: Breaking Up Is Still Hard To Do," *Business Week*, at 173-174 (November 6, 2000).

[70] Deborah Solomon, "AT&T Names Telecom Veteran Dorman Head of Business, Consumer-Phone Units," *The Wall Street Journal*, at A3 (November 29, 2000).

[71] Elizabeth Starr Miller, "Consumers at the Core: AT&T to Keep Consumer Side Close to Home," *Telephony*, at 28 (October 30, 2000).

[72] Elizabeth Douglass, "Firms Giving Long-Distance Short Shrift," *The L.A. Times* (November 8, 2000), accessed via Internet, www.latimes.com.

[73] Shawn Young, "Verizon Reports Solid Results Amid Sales Growth," *The Wall Street Journal*, at B10 (October 31, 2000).

MCI WorldCom

Immediately following AT&T's split announcement, WorldCom revealed that it also will spin off its local exchange and long distance services, most of which it acquired when it merged with MCI Communications in 1998, into a separate tracking stock under the MCI name.[74] As with AT&T, some analysts contend that this is the beginning of a shift away from local service.[75] WorldCom's stock is down 75% from its 1999 peak, proportionally more than AT&T's loss.[76]

WorldCom CEO Bernard Ebbers had long presented the company as an upstart intent on taking AT&T's business, but some analysts contend that Ebbers structured his company so similarly to AT&T that he was caught in the same downdraft in long distance revenues.[77] To illustrate the cutthroat nature of the long distance environment, Ebbers described a situation in which, after MCI won a big contract for Kmart's communication business, AT&T CEO C. Michael Armstrong called Kmart and offered them service for $5 million less than WorldCom's bid, regardless of what it was. Ebbers then offered Kmart service for $2 million below AT&T's offer, which would have been, by his admission, less than profitable. AT&T lowered its bid again and won the contract.[78]

WorldCom's push towards data is evidenced in its recent acquisition of Intermedia, a leading data provider, only a few weeks after announcing the MCI spin-off. WorldCom also recently began providing high-speed internet access in Memphis through fixed wireless technology.

Sprint

Sprint profits have been steady lately, mostly due to packaging long distance with data.[79] Sprint's CLEC offers local exchange service in 21 markets throughout the nation and has announced plans to enter 80 more over the next year, mostly using fixed wireless technology.[80] Sprint is de-emphasizing traditional local exchange, however, except as part of a package.[81]

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[74] Seth Schiesel, "With WorldCom's Breakup Plan, Eerie Similarities to AT&T," *The New York Times*, at C1 (November 2, 2000).

[75] Elizabeth Douglass, "Firms Giving Long-Distance Short Shrift," *The L.A. Times* (November 8, 2000), accessed via Internet, www.latimes.com.

[76] "WorldCom's Bernie Ebbers Scrambles to Raise Cash," *The New York Times*, at C1 (November 11, 2000).

[77] Seth Schiesel, "With WorldCom's Breakup Plan, Eerie Similarities to AT&T," *The New York Times*, at C1 (November 2, 2000).

[78] David Henry and Michelle Kessler, "Competition Grows Fierce," *USA Today* (November 2, 2000), accessed via Internet, www.usatoday.com.

[79] Bruce Meyerson, "Sprint Will Not Spin Off Long-Distance," *Austin American-Statesman*, at G4 (November 4, 2000).

[80] Paul Davidson, "Competition Squeezes Out Traditional Firms," *USA Today* (November 3, 2000), accessed via Internet, www.usatoday.com.

[81] Bruce Meyerson, "Sprint Will Not Spin Off Long-Distance," *Austin American-Statesman*, at G4 (November 4, 2000).

This de-emphasis of local exchange has led the company's CLEC to cease offering residential local exchange service to new customers in Texas, as of November 27, 2000. Existing customers have been grandfathered in their service, but are not allowed to change any features or add lines at the risk of termination of service.

In October, Sprint announced plans to offer its ION (meaning "integrated on-demand") service to residential customers in Houston and Dallas. ION bundles up to four voice lines, 750 minutes of long distance, vertical telephone services, and high-speed internet access. It is unclear whether, in light of Sprint's CLEC's decision to quit offering residential local exchange service, the company will follow through with this announcement. Sprint claims that the service would cost between $120 and $150, and has been available to business customers in Dallas since June.

Excel Communications

Excel Communications is a CLEC focused mostly on long distance, wireless, and internet access, although the company has been offering voice in some areas of Texas. However, like Sprint and Verizon, Excel has just announced its intent to cease local exchange service in Texas, citing the difficulty of breaking into the CLEC market in Texas and concerns about the short-term profitability.

TXU / Fort Bend Communications and Reliant Communications

These two companies had some of the deepest pockets among CLECs, as well as electric industry parents with a strong local presence and name recognition in Dallas and Houston, two markets where CLECs had been building wireline infrastructure. These advantages were not sufficient to challenge SWBT in local service. Reliant Communications has announced that it is abandoning voice service to focus on data services. TXU / Fort Bend Communications has announced that it will limit its presence in the residential voice market to the more upscale and Suburban markets in Texas. By reducing its presence in residential voice markets, the company could focus on providing data services.

ILECs

In the past two years, ILECs have used the pricing flexibility and bundling of services that they gained in SB560 to try to retain customers. SWBT has raised prices on a variety of services that competitors do not provide.

SB 560 and Pricing Flexibility

SB 560 provided ILECs with pricing and packaging flexibility for a variety of nonbasic services to allow customers to buy a bundled product of services from one provider, also known as one-stop shopping. Through one-stop shopping, a customer can often obtain a lower price for a package of bundled services, can eliminate any aggravation associated with having multiple providers, and can consolidate multiple service charges onto one bill for billing ease. Because one-stop shopping has become

popular in recent years, ILECs and their competitors are aggressively bundling services together in various packages that appeal to customers, particularly in urban areas.[82]

ILECs, primarily SWBT and Verizon (GTE/Contel), exercised their pricing flexibility options in various ways, filing approximately 150 pricing flexibility tariffs since September 1999.[83] SWBT, in particular, offered dozens of promotions on vertical services (such as call return, Caller ID, call waiting, and speed calling) and toll services by waiving non-recurring installation charges, providing cash-back offers for customers who retain service for a minimum period, and through other incentives.

These ILECs packaged popular vertical services and toll services together in different ways that allow customers to obtain a bundle of services at a lower overall price. In September of 1999, for example, SWBT reduced prices for some toll packages, business call-management service packages, residential single-line packages, and government contracts for business lines in a range of approximately 5% to 30%. SWBT also exercised its ability to offer customer-specific pricing on many services, including long-distance services, certain high-speed digital private line services, and governmental services. By agreeing to obtain service for a fixed term, usually 1-5 years, business telephone customers benefit from lower rates offered through customer-specific contracts.[84]

Over the same period SWBT also lowered the prices of some individual services, to better compete with offerings from other providers, as shown in Table 21. For example, SWBT reduced the prices for (1) its Personalized Ring and Priority Call services by 13% to 33%; (2) its Plexar I and II offerings (central-office-based PBX-type services) by 1% to 14% in 1999, and various Plexar II ancillary features by 14% to 50% (involving decreases ranging from $.10 to $2.50) in 2000; and (3) its shorter-term digital private-line contracts (month-to-month and 1-3 years) by 6% to 22% on average. Of these, the Plexar and private line offerings are available to business customers only.

On the other hand, SWBT has significantly increased the prices for a number of nonbasic services, often services that are very popular and for which competitive alternatives are very limited. In September of 1999, SWBT raised prices on some of its

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[82] ILECs may offer their customers the following: local exchange telephone service, custom calling features and vertical services, hardware to support custom calling features and vertical services (such as the Caller ID unit that identifies a calling number), long distance service, internet service, voice messaging services and other enhanced services, cellular telephone service, high-speed private line service, digital subscriber line (DSL) service, and other services.

[83] From September 1999 through October 2000, if price increases and decreases, new services, and promotions are included in the mix, the number exceeds 175.

[84] PURA §58.003(a) prohibits some customer-specific contracts until 2003, specifically those applying to a narrow range of services offered by Chapter 58 companies, primarily for the basic local lines of business and residential customers. A Chapter 58 company can offer customer-specific pricing for most of its other services, including many vertical services and toll services. For example, SWBT's tariff currently permits SWBT to enter into customer-specific contracts with residential or business customers for any long-distance service it offers. Also, high-speed private lines are routinely offered on a customer-specific contract basis. Generally, business customers are more likely to find the long-term contracts attractive than are residential customers.

more popular business call-management services[85] in a range of approximately 6% to 42%. In November of 1999, SWBT increased the price of a business extra directory listing by 107%, from $1.45 to $3.00.[86] In June of 2000, SWBT increased its monthly rates for residential Caller ID services (caller ID name-or-number and caller ID name-and-number, both of which are very popular in Texas) in a range of 22% to 30%.[87] SWBT also raised the following rates: (1) for per-use three-way calling, from $.75 to $.95, with the $6.00 monthly cap eliminated; (2) for call return, from $.50 to $.95 per use, while eliminating the $4.00 monthly cap; and (3) for residential call blocker and residential auto redial, from $2.00 to $3.00 each per month. In late 2000, SWBT raised its analog private-line rates by an average of 15%. SWBT also recently proposed a large increase to its charge for *not* publishing a directory listing ("unlisted numbers"). Over the past two years, the price of individual vertical services tended to rise, making the package prices more attractive to customers.

Recently, the Commission established its threshold policy concerning packaging services for sale on a wholesale basis. Responding to a complaint filed by AT&T regarding SWBT's essential office package for business customers, the commission determined that an ILEC may not tie the sale of vertical services with the purchase of basic services on a wholesale basis. The Commission determined that such a pricing mechanism is presumptively an unreasonable restriction on resale that is prohibited by PURA and the FTA.[88]

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[85] Examples are three-way calling, anonymous call rejection, auto redial, call waiting, call waiting ID, and call forwarding. (The price for residential call forwarding, newly classified by SB 560 as a basic network service, has not been raised.)

[86] *Informational Filing of Southwestern Bell Telephone Company Pricing Flexibility Associated with Business Extra Listings, Pursuant to PURA § 58.15*, Tariff Control No. 21692 (November 19, 1999).

[87] *Informational Notice of SWBT for Pricing Flexibility Residence and Business Call Management (Vertical) Services; Pursuant to PURA § 58.063 and § 58.152*, Tariff Control No. 22719 (June 27, 2000).

[88] *Complaint of AT&T Communications of the Southwest, Inc. regarding Tariff Control Number 21311, Price Flexibility-Essential Office Packages*, Docket No. 21425, Final Order (December 19, 2000).

Table 21 – SWBT Price Changes Made Under SB 560†

Service	Description	Residential Prices			Business Prices	
		Old	New	Change	Old	New
Three Way Calling	Allows "on hold" & "add on" capability via switch hook	$2.10 for first, and $1.40 per additional of these services	$3.00 for first, and $2.00 per additional of these services	↑	↑	$2.50	$4.00
Call Forwarding	Permits transfer of incoming calls to another phone no.			↑	↑	$3.50	$6.00
Speed Calling 8	Permits speed dialing for up to eight programmed numbers				↓	$2.50	$1.50
Anonymous call rejection	Permits automatic rejection of anonymous incoming calls via Caller ID	$1.00	$1.00	=	↑	$1.00	$2.00
Auto Redial	Rings a called busy number when available	$2.00	$3.00	↑	↑	$3.50	$4.00
Call Waiting	Indicates an incoming call while on the line	$2.80	$2.80	=	↑	$3.25	$5.00
Call Waiting ID	Identifies name and/or number of incoming call while on line	$3.00	$3.00	=	↑	$3.00	$5.00
Caller ID Name or Caller ID Number	Shows Name or Number of Incoming Caller	$4.95	$6.50	↑	↑	$7.50	$8.00
Call Blocker	Blocks incoming calls from designated numbers	$2.00	$3.00	↑	↑	$3.00	$3.50
Speed 30	Permits speed dialing for up to 30 programmed numbers	NA	NA	↓	↓	$3.20	$2.00
Priority Call	Provides distinctive ring on calls from designated numbers	$2.50	$2.00	↓	↓	$3.00	$2.00
Personalized Ring I	Distinctive ring for an additional number on same access line	$4.00	$3.50	↓	↓	$6.00	$5.00
Call Return	Rings most recent calling number by dialing *69	$.50 each, $4.00 cap	$.95 each (no cap)	↑	↑	$.50 each $4.00 cap	$.95 each (no cap)
Three Way Calling, per use	Allows "on hold" and "add on" capabilities via switch hook	$.75	$.95	↑	↑	$.75	$.95
Call Trace, per Activation	Traces last incoming call, via activation before next call received	$8.00	$7.00	↓	↓	$8.00	$7.00
Directory Assistance – Direct Dialed	Provides directory assistance via calling 1-411; call allowances not affected	$.30 per use	$.75 per use on local calls	↑	↑	$.30 per use	$.75 per use on local calls
Directory Assistance Call Completion – Direct	Connects caller to number obtained when dialing directory assistance	$.30 per use	$.05 per use	↓	↓	$.30 per use	$.05 per use

† Old and New compares prices from August1999 through December 2000

Source: SWBT filings

PRICING AND PACKAGING COMPARISONS AMONG PROVIDERS

Basic Service Charges

For a residential customer desiring only basic local service with no additional services (such as call waiting, call forwarding, caller ID, etc.), the minimum rates offered by the leading companies are shown in Table 22 below. Except for SWBT, most telecommunications companies do not package special long distance rates for customers seeking minimum basic service.

All cost figures are subject to fees, taxes, and surcharges, and may vary slightly among areas. Long distance packages are extra unless noted otherwise.

Table 22 – Minimum Rates for Basic Local Residential Service

Company	SW Bell	Sprint (ILEC)	AT&T	MCI
Dial Tone	X	X	X	X
Other	Optional long distance at $0.09/minute	some additional services may be available at no charge		
Cost per Month	$12-$16*	$11-$16.75*	$15	$7.75-$10.50

*Includes Subscriber Line Charge, may include mandatory Extended Area Service and Expanded Local Calling Service
Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Residential Package Comparison

Some residential customers hope to save money on local service, vertical services, and long distance through packages, which telephone companies are happy to offer to win more customers in the residential market. Table 23 shows some of the service packages offered by major telephone companies. The SWBT plan integrates many vertical services with local exchange service and a long distance plan. Sprint offers two packages, one with a set long distance plan and one that allows access to any of its pre-established long distance plans. AT&T offers a fixed long distance plan with customer choice in the number and type of vertical services. The MCI Worldcom packages offer permutations on local service combined with customer choice in different long distance plans and optional vertical services.

All packages are subject to service limitations and may not be available in all areas. All cost figures are subject to fees, taxes, and surcharges, and may vary slightly among areas.

Table 23 – Comparison of Local and Long Distance Residential Service Packages

Company	SW Bell	Sprint	Sprint	AT&T			MCI	MCI
Package	Phone Solution	Connected Solution	Custom II Solution	Local One Rate Texas			One Company Advantage 200	One Company Advantage 7
Dial Tone	X	X	X	X			X	X
Long Distance Cost per Minute	$0.06	100 minutes included, $0.10 over 100 minutes	Choice of Sprint Long Distance Packages	$0.07			200 minutes included, $0.07 over 200 minutes	$0.07
Vertical Package (Features Below)	The Works	Essentials	Essentials	Choice of Feature Plans: 3	5	10	MCI Premium Packages available, but not mandatory	
• Anonymous Call Rejection	X	X	X				Choice of 5 or 10	
• Auto Redial	X	X	X			X	Choice of 5 or 10	
• Call Block	X							
• Call Forwarding	X	X	X	X*		X	Choice of 5 or 10	
• Call Forwarding – Busy							Choice of 5 or 10	
• Call Forwarding – Busy & No Answer							Choice of 5 or 10	
• Call Forwarding – No Answer							Choice of 5 or 10	
• Call Return	X	X	X			X	Choice of 5 or 10	
• Call Screening				X*	X	X	Choice of 5 or 10	
• Call Waiting	X	X	X	X*	X	X	Choice of 5 or 10	
• Call Waiting ID	X						Choice of 5 or 10	
• Call Waiting ID Plus							Choice of 5 or 10	
• Caller ID	X	X	X	X*	X	X	Choice of 5 or 10	
• Caller ID (no name)							Choice of 5 or 10	
• Distinctive Ring						X	Choice of 5 or 10	
• Non-listed Number				X*				
• Non-published Number				X*				
• Priority Call	X						Choice of 5 or 10	
• Priority Call Forwarding							Choice of 5 or 10	
• Selective Call Forwarding	X					X		
• Speed Dial 8	X					X	Choice of 5 or 10	
• Three Way Calling	X	X	X	X*	X	X	Choice of 5 or 10	
Voice Mail	X							
Inside Wire Maintenance Plan	X							
Other							Airline Miles or Blockbuster Certificates	
Cost per Month	$39.95 plus installation	$30	$25 plus long distance plan costs	3 Features: $22.95-$25.95 5 Features: $27.95 10 Features: $32.95			No Features: $29.99 5 Features: $40.94 10 Features: $45.94	No Features: $19.99 5 Features: $30.94 10 Features: $35.94

*Choice of Three

Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Small Business Package Costs Compared to Residential Costs

Given that some of the price drops in the above chart are found among services that business customers may be more likely to use than residential customers, it is also of interest to see how basic service packages for business customers compare to those for residential customers. SWBT appears to be the only major company offering business customers a better price on vertical service packages than the price they offer residential customers for the same services. Table 24 shows how SWBT's BASICS Business Plan offers a package of vertical services to business customers at a better price than it offers to residential customers, who could get the exact same package only by buying each of those services at their respective unbundled rates. SWBT does, however, offer a larger package of vertical services to residential customers at a slightly higher rate that is unavailable to business customers.[89]

Table 24 – A Business/Residential Basic Package Cost Comparison

Company	SW Bell	SW Bell	SW Bell
Package	Business BASICS Plan	Unbundled Residential Services Comparable to the BASICS Business Plan (not a package)	Residential WORKS Package
• Auto Redial	Choice of One	Choice of One	X
• Call Blocker	Choice of One	Choice of One	X
• Call Forwarding	X	X	X
• Call Return	Choice of One	Choice of One	X
• Call Waiting	X	X	X
• Call Waiting ID	X	X	
• Caller ID	X	X	X
• Priority Call			X
• Remote Access to Call Forwarding	X	X	
• Selective Call Forwarding	Choice of One	Choice of One	X
• Speed Calling-8			X
• Three-Way Calling	Choice of One	Choice of One	X
Cost Per Month	$16.95	$18.75-$20.75	$19.95

Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Internet Access Packages Comparison

Although all of the major telephone companies claim to be moving towards offering bundled voice and data, only SWBT and Sprint are currently offering such packages in Texas. Table 25 examines the differences in these packages. SWBT has organized a number of packages around integrated services, including combining dial tone and long distance with internet access, wireless service, and DIRECTV. None of the other major telephone companies has taken such steps in Texas, although Sprint has announced plans to offer its similar ION service in Dallas and Houston next year. At

[89] All packages are subject to service limitations and may not be available in all areas. All cost figures are above and beyond basic service rates (including dial tone), are subject to fees, taxes, and surcharges, and may vary slightly among areas.

present, Sprint has packaged several long distance plans with internet access, which can be combined with its local service Custom II Solutions plan in a way that is competitive with SWBT's internet access plans.[90]

Table 25 – Comparison of Internet Access Packages for Residential Customers

Company	SW Bell	SW Bell	Sprint	Sprint
Package	DSL Web Solution	Web Solution	7¢ Anytime and Earthlink	1000 Nights and Earthlink
Dial Tone	X	X	Available through Sprint Custom II Solution (not mandatory)	
Long Distance Cost per Minute	$0.06	$0.06	$0.07	1000 minutes included during 7pm – 7am, $0.10 for calls over 1000 minutes and at other times
Vertical Features	Same as SW Bell Phone Solution		Available through Sprint Custom II Solution (not mandatory)	
56k Unlimited Internet Access		X	X	X
DSL	X			
Email Addresses	5-10	11	6	1
Web Site Space	3-6 MB		6 MB	6 MB
Contract	1 year	No	no	no
Other		2nd Phone Line		
Cost per Month	$88.95 plus Installation	$65.95 plus Installation	$19.95 (with no local service) $44.95 (with Sprint Custom II Solution)	$30 (with no local service) $55 (with Sprint Custom II Solution)

Source: Public Utility Commission, Survey of company offerings as of November 28, 2000

Conclusion

Investors provided CLECs with a large amount of money in the form of equity, debt, and bank loans in the late 1990s to challenge well-heeled ILECs across the country. As a result, as seen in Chapter 3, CLECs gained market share in local telephony in the late 1990s in Texas.

In 1998 and 1999, a sizeable number of CLECs entered the Texas market, including a number of well-financed long-distance carriers and start-ups. Some of the investment was speculative, however, as 40 percent stated that they had no customers as of December 31, 1999.

In the seven months from March to October 2000, prices of CLECs' bonds and stocks fell sharply, crimping the funding for sizeable CLECs that had planned to compete in the Texas local voice market. At the same time, SWBT's stock rebounded from its low of calendar year 2000.

[90] All packages are subject to service limitations and may not be available in all areas. All cost figures are subject to fees, taxes, and surcharges, and may vary slightly among areas.

CHAPTER 5: ALTERNATIVE MARKET PROVIDERS

Through most of the 20th Century, the prevailing view of telephony was that wireline was the only means to provide voice telephone services. This monopoly provision of telephone service required that state and federal governments maintain continuing oversight of and intervention in the industry. As technological changes and market forces reinforced by regulation-based price distortions changed the cost and benefits of maintaining monopoly service in voice telephony, state and federal governments responded through legal and regulatory changes. The breakup of AT&T in the 1980s unbundled long-distance voice from local voice services. The federal Telecommunications Act of 1996 created the ground rules for entry of CLECs into local voice telephony, whose entry in turn culminated in SWBT's entry into the long distance market.

Technology is again reshaping the competitive landscape of telecommunications. New technologies such as cable, wireless, satellite, and voice over internet protocol (VoIP) likely will create new avenues and providers for customers to receive traditional local and long distance voice services, profoundly changing the market structure from the customers' point of view. Telecommunication providers will sell local and long-distance voice services as part of a bundled product, where pricing, terms and conditions of voice service will no longer be determined independently of other telecommunications services.

New market segments and technologies, such as wireless telephony, the Internet, and local and long-distance data services are diminishing the importance of long distance and local voice on wireline. J.P. Morgan Securities, in a recent analysis of the telecommunications industry, has estimated that both local and long distance wireline voice, which accounted for about 70 percent of 1999 telecommunication revenues in the United States, will account for only 39 percent of revenues in 2005.[91]

The rise of Internet Protocol as the backbone for wireline telecommunications has the potential to replace the dedicated switched circuit that has been the basis of telephony for the past century. J.P Morgan also projected that information transmitted through the Internet Protocol (IP) alone probably will comprise more than 90 percent of the wireline bit stream in 2005, compared with 13 percent in 1998.[92]

The purpose of this chapter is to discuss alternatives to wireline telephony, not with regard to their technological feasibility, but with respect to their potential to

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[91] J.P. Morgan Securities, Equity Research, *Telecom Services, A Fresh Look at the Industry*, at 4, Table 1 (Sept. 8, 2000).

[92] *Id* at 6.

seriously challenge wireline ILECs for market share. While CLECs and ILECs have deployed most of the alternatives discussed below, their availability at a price that would be competitive to the majority of Texans is limited to one exception: mobile telephony.

This report divides these technologies into three categories: current competitors, coming competitors, and potential future competitors. This report draws from the Commission's recent *Advanced Services Report* to discuss these technologies.[93]

Current Competitor

Currently, wireline voice has one competitor that provides local and long-distance voice at a price and quality that is becoming comparable to that of wireline service: mobile telephony.

MOBILE TELEPHONY

In the United States in the twelve months ending December 1999, mobile telephony subscribership increased 24 percent from 69.2 million to 86 million. Eighty-eight percent of the total U.S. population has three or more different operators offering mobile telephone service in the county where they reside. Moreover, 69 percent of the population live in areas with five or more mobile telephone operators offering service.[94]

According to the FCC, nearly one in every three Texans was a mobile telephone subscriber at year-end 1999. In particular, Texas had 0.29 subscribers *per capita*, the same rate as the United States as a whole, as shown in Table 26. Texas also had 0.44 subscribers per end-user wireline, which is comparable to the United States, with 0.42 subscribers per end-user wireline.[95]

The price of mobile telephone service reportedly decreased by 11.3 percent between the end of January 1999 and the end of January 2000. Some reports estimate that the prices fell as much as 20 percent between 1998 and 1999.[96] Further, one analyst claimed that roaming rates per minute have declined. The local average roaming rate per minute fell from $0.75 in the fourth quarter of 1997 to $0.37 in the first quarter of 1999.[97]

At present, concerns about the quality of service of wireless telephony have kept consumers from using wireless telephony as a complete substitute for local wireline service. Fast-growing demand has required companies to invest in large-scale, rapid expansion of their facilities in a short period of time, and the multiple wireless systems in the United States increase the complexity of providing telecommunication service relative to wireless services in Europe.

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[93] Public Utility Commission of Texas, *Report to the 77th Legislature on Advanced Services in Rural and High Cost Areas* (January 2001).

[94] *FCC Releases Fifth Annual Report on State of Wireless Industry*, CC Docket No. 00-289, Report (Rel. August 2000).

[95] Federal Communications Commission, *Local Telephone Competition at the New Millennium*, Tables 4 and 5 (August 2000).

[96] *Id.*

[97] *Id* at 20.

Table 26 – Mobile Telephone Subscribers Reported: Year-End 1999 ** [98]

State	Number of Carriers	Subscribers	Percent of Nation	Population ***	Subscribers per Capita
Alabama	10	1,080,410	1.4 %	4,369,862	0.25
Alaska	5	165,221	0.2	619,500	0.27
Arizona	9	1,125,321	1.4	4,778,332	0.24
Arkansas	5	719,919	0.9	2,551,373	0.28
California	11	8,544,941	10.7	33,145,121	0.26
Colorado	8	1,552,718	1.9	4,056,133	0.38
Connecticut	6	1,077,089	1.4	3,282,031	0.33
Delaware	5	270,848	0.3	753,538	0.36
District of Columbia	5	910,116	1.1	519,000	1.75
Florida	14	5,158,079	6.5	15,111,244	0.34
Georgia	13	2,538,983	3.2	7,788,240	0.33
Hawaii	8	288,425	0.4	1,185,497	0.24
Idaho	4	271,436	0.3	1,251,700	0.22
Illinois	10	3,922,482	4.9	12,128,370	0.32
Indiana	10	1,318,975	1.7	5,942,901	0.22
Iowa	9	774,773	1.0	2,869,413	0.27
Kansas	11	669,472	0.8	2,654,052	0.25
Kentucky	12	911,700	1.1	3,960,825	0.23
Louisiana	9	1,227,106	1.5	4,372,035	0.28
Maine	4	187,003	0.2	1,253,040	0.15
Maryland	7	1,473,494	1.8	5,171,634	0.28
Massachusetts	6	1,892,014	2.4	6,175,169	0.31
Michigan	13	3,512,813	4.4	9,863,775	0.36
Minnesota	13	1,550,411	1.9	4,775,508	0.32
Mississippi	6	673,355	0.8	2,768,619	0.24
Missouri	10	1,855,452	2.3	5,468,338	0.34
Montana	*	*	*	882,779	*
Nebraska	4	576,296	0.7	1,666,028	0.35
Nevada	7	750,335	0.9	1,809,253	0.41
New Hampshire	6	280,508	0.4	1,201,134	0.23
New Jersey	5	2,289,181	2.9	8,143,412	0.28
New Mexico	6	363,827	0.5	1,739,844	0.21
New York	7	4,833,816	6.1	18,196,601	0.27
North Carolina	11	2,536,068	3.2	7,650,789	0.33
North Dakota	*	*	*	633,666	*
Ohio	12	3,237,786	4.1	11,256,654	0.29
Oklahoma	9	826,637	1.0	3,358,044	0.25
Oregon	7	914,848	1.1	3,316,154	0.28
Pennsylvania	12	2,767,474	3.5	11,994,016	0.23
Puerto Rico	*	*	*	3,889,507	*
Rhode Island	6	279,304	0.4	990,819	0.28
South Carolina	7	1,137,232	1.4	3,885,736	0.29
South Dakota	*	*	*	733,133	*
Tennessee	9	1,529,054	1.9	5,483,535	0.28
Texas	20	5,792,453	7.3	20,044,141	0.29
U.S. Virgin Islands	*	*	*	120,917	*
Utah	8	643,824	0.8	2,129,836	0.30
Vermont	*	*	*	593,740	*
Virginia	12	1,860,262	2.3	6,872,912	0.27
Washington	8	1,873,475	2.4	5,756,361	0.33
West Virginia	7	241,265	0.3	1,806,928	0.13
Wisconsin	9	1,525,818	1.9	5,250,446	0.29
Wyoming	4	127,634	0.2	479,602	0.27
Nationwide	76	79,696,083	100.0	276,701,237	0.29

* Data withheld to maintain firm confidentiality.
** Carriers with under 10,000 subscribers in a state were not required to report.
*** Population as of July 1999.

[98] *Local Telephone Competition at the New Millennium*, Federal Communications Commission, Common Carrier Bureau, Industry Analysis Division (August 2000).

Coming Competitors

Three alternatives for voice telephony - cable television (broadband), voice over the Internet, and fixed wireless - are currently available in limited areas. While they do not at present pose a strong competitive challenge to wireline telephony based on dedicated switched circuits, they have the potential in the near future to be viable alternatives for telephone customers.

CABLE TELEVISION

Cable TV has been a part of American homes for decades. A number of CLECs, most prominently AT&T, have sought to commercialize the technology that could provide voice telephony over the same connection that provides cable TV. The technology involved uses the cable modem to split voice telephony from the cable signal, so that the customer would use a telephone rather than the television set to make telephone calls.[99]

Voice telephony over cable is part of a larger plan to provide broadband access that will bundle all telecommunication services into one package (voice, TV, and Internet). The customer would receive one monthly bill, also known as "one-stop shopping." Additional services that cable providers would like to sell to customers in the future include video conferencing and video on demand.

Cable is available in many areas of the United States. Cable infrastructure reaches 70% of American households, some 67 million subscribers. The physical presence of cable in an area alone does not ensure broadband or basic Internet cable modem access. Only 40% of homes with cable have been upgraded to allow broadband access.[100] By July of 2000, 2.27 million residential and small business users were accessing the Internet via cable modems.[101] Projections show that over 3.6 million cable modems will be in use by the end of 2000.[102] This is over a 100% rise this year, and projections indicate a steady though slowing increase over the next few years.

Competition in providing cable services will occur in cities and urban areas where high population density will allow many providers to survive for the next few years, until the next generation of services and technology redefines advanced services. The areas that have neither cable nor telephone access are low density rural areas. Most small cities and many rural communities have cable facilities in Texas. Yet these systems still

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[99] This technology is distinct from Voice over Internet Protocol discussed below.

[100] Cable Modem Market Stats & Projections. Cable Datacom News, March 3, 2000. http://www.cabledatacomenws.com/cmic/cmic16.html. *See also* Annual Assessment of the Status of Competition in Markets for the Delivery of Video Programming, Sixth Annual Report. CC Docket No. 99-230 (Jan. 14, 2000).

[101] "NCTA Reports Fast Growth in Cable Modem, Telephony Rollouts." *Telecommunications Report Daily* (July 26, 2000). http://www.tr.com.

[102] "NCTA Reports Fast Growth in Cable Modem, Telephony Rollouts." *Telecommunications Report Daily* (July 26, 2000). http://www.tr.com.

service only areas where population density is large enough to support building the initial infrastructure.

VOICE OVER INTERNET (VOIP)

Internet Protocol (IP) has revolutionized data communications worldwide. As the speed and reliability of the Internet improve, it is relatively easy to communicate using VOIP. Voice transmission has been digitized on telecommunications carrier networks in some cases since the 1960s, and encoding voice messages over the Internet is a natural progression. There are many varieties of VOIP in use today, from rudimentary connections between two computers to sophisticated corporate interconnections. Today's VOIP status should generally be viewed as an emerging application, used by a growing number of customers with varying degrees of satisfaction.

VOIP relies more on the packet-switched Internet rather than the circuit-switched telephone network, and "lost," retransmitted, or otherwise delayed packets are more disruptive to voice calls than they are to data transmission. As a result, customer satisfaction with VOIP calls varies. However, as technology progresses, VOIP is expected to account for increased traffic. According to an analyst with U.S. Bancorp, VOIP, which accounted for less than 1% of global telecom traffic in 1999, is expected to surge to 17% by 2003 and more than 30% by 2005.[103]

In Texas in the fall of 2000, SBC Communications, Inc., proposed to provide an IP phone system for the city government of Dallas. SBC Communications claimed that voice quality should not be an issue in the city's network because phone traffic will have a priority over data.[104]

FIXED WIRELESS

Fixed wireless is a system that provides high-speed services to customers by attaching to the customer's premises a radio transmitter/receiver (transceiver) that communicates with the provider's central antenna site. By doing so, the central antenna site acts as the gateway into the public switched telephone network or the Internet for the transceivers. Basically, the radio signals serve as a substitute for the copper wire or cable strand that connect customers to the network in traditional, wired technologies.

The market for fixed wireless services is expected to reach about $1 billion by the end of 2002, according to market researcher Gartner Group. Analysts expect the national fixed wireless market to grow significantly in the next three to five years, with projections estimated at 2.0 to 2.6 millions subscribers by 2003.[105]

In geographic areas with limited cable or telephone infrastructure, as in some rural areas of Texas and the rest of the United States, providers can deploy a fixed

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[103] Special Report – The Talking Internet, BusinessWeek Online, May 1, 2000, http://www.businessweek.com/2000/00_18/b3679024.htm.

[104] "SBC Proposes High-Tech Phone System for Dallas," *Dallas Morning News* (October 24,2000).

[105] Peter Jarich and Mendelson, James, *U.S. Wireless Broadband* at 243, 252, and 262; Strategies Group, *High-Speed Internet Report* at 131 (Nov. 8, 2000), http://www.strategisgroup.com/.

wireless network faster and cheaper than a xDSL or cable modem system. While infrastructure costs of wireless networks may be significantly less than those of wireline networks, wireless networks incur substantial costs acquiring spectrum.

In the year 2000 fixed wireless saw an improved competitive position as an alternative to local fixed wireline service in Texas when the Commission designated Western Wireless Corporation as an Eligible Telecommunications Carrier (ETC) and an Eligible Telecommunications Provider (ETP). The Commission action put the company one step closer to offering local service in certain rural areas of Texas.

Potential Future Competitors

The following technologies could have the potential to offer local and long distance service in the future, but currently are not ready for commercial application. If either or both applications become commercially viable in the future, Texas customers would have additional alternative means of delivery of telephone service that could increase the level of competition in voice telephony.

SATELLITE

Traditional satellite networks have been limited to specialized private VSAT (very small aperture terminal) networks, low bandwidth services and DTH (direct-to-home) video, but new broadband satellite systems are offering service comparable to current broadband terrestrial services. Satellite services can include any fixed multimedia service, from Internet access, local telephony, cable, video transmission, private business networks, telemedicine, teleeducation, and video conferencing.

Service to whole regions, reaching low subscriber-density areas without costly construction of terrestrial networks, gives satellite technology a promising future. Today, however, most current residential satellite offerings provide information in only one direction, downstream into the home of the user. The user needs a standard dial-up connection to send information upstream. Several satellite providers have announced plans to provide residential service with both downstream and upstream paths via satellite.

ELECTRICITY TRANSMISSION LINES FOR TELECOMMUNICATIONS

In the future, consumers may have access to voice telephony and the Internet using the electric grid. Two companies, Northern Telecom and Norweb Communications, have been developing the means to send vast amounts of data along power lines without distortion from electric current. In the future, every home in the country could have a second telephony wireline connection, increasing competition for telecommunication providers.

The system works by using either fiber-optic or radio links to transmit data from the Internet to local electricity sub-stations. The low-voltage part of the electricity network then becomes a local area network. A small box is installed next to the electricity meter in the home to send and receive data. The box itself is connected by ordinary cable

to personal computers, which will need to be fitted with a special card and software. The new technology eventually could enable the introduction of applications such as electronic commerce, telenetworking, web broadcast media, entertainment, and Internet telephony on a mass-market scale.

Conclusion

Mobile telephony is just the beginning of the technological transformation of the traditional voice telephony market. While Commission data suggest that CLECs have increased their market share in wireline service in Texas from a very low base, CLECs have not dislodged the predominance of ILECs in wireline telephony. Advances in telecommunications, however, offer the chance for a much more powerful form of competition in the future using methods of delivering local telephony without a large, well-financed incumbent to challenge directly for market share.

CHAPTER 6: TELECOMMUNICATIONS IN TEXAS – PAST, PRESENT, AND FUTURE

As in previous years, this Scope of Competition Report has focused on competition in wireline voice services. In most of the past reports, local competition could only be discussed in terms of niche providers, with long distance services being the main arena of competition. With the implementation of PURA 95 and the FTA finally underway, the 1999 Scope Report could finally document a CLEC presence in the local telecommunications market. In the last Scope of Competition Report, in 1999, the evidence could support only what can perhaps be called a "toe-hold" for competition.

Evidence available for this report clearly demonstrates that competitive providers have a visible market share, with dozens of CLECs entering the more lucrative local wireline voice markets in Texas by the end of 1999. Clearly, the potential exists for creating competition in local telephony in the urban areas of Texas, if not the state as a whole.

Though trends of the last several years suggest that Texas is poised for competition in local voice telephony, events in the year 2000 have created a dramatically different backdrop for competition in local voice telephony. The recent slump in the share prices of CLECs and the reorganizations of AT&T, Sprint, and Worldcom announced in the fall of 2000 suggest that CLECs may be heading for a period of consolidation

In the next five years, however, even more sweeping changes in technology and the newly found ability of the former monopolies and CLECs to offer "one stop shopping" for a wide range of telecommunications services will overshadow the fight for market share in wireline telephony. Future reports may focus on these trends far more than on the entry of CLECs into the local wireline service territories of Verizon, SWBT, and Valor.

Past: CLECs Flood into Texas

There exists in Texas a legal and regulatory framework that can facilitate competition to enter local telephony for customers of SWBT, Verizon, and Valor Telecommunications (the ILEC in some of Verizon's former service territories). The Commission opened the door to competition in wireline for SWBT through SWBT's Section 271 proceeding, arbitrations between SWBT and CLECs, and various rulemakings.

In 1998 and 1999, in response to these new opportunities for entry into local voice telephony, CLECs entered the Texas market as rapidly as anywhere else in the United States. A recent FCC study on competition for local voice service found that Texas ties New York for being the states with the largest number of operating CLECs. This result, on its face, supports the notion that the regulatory atmosphere in Texas is friendly for competition.

Such factors as population growth, economic growth, and population density also appear to be important considerations in the decisions of CLECs to invest in or resell voice telephony facilities in a given area of Texas. The Large Metropolitan areas and the Suburban counties, which combined comprise almost 60 percent of Texas' population, have heavy concentrations of CLECs. Data show that the Dallas and Houston metro areas have about twenty or more CLECs serving customers, while San Antonio and Austin have ten or more CLECs serving customers. Many rural areas that allow for customer choice have a choice of two, three, or more CLECs, in addition to an ILEC. Some of these competitors, however, may be aimed at customers with poor credit histories and are not vying for the average local customer's business.

Data for 1999 show while statewide CLECs are using equally all three means of entry that the FTA envisioned – construction of new lines, purchase of UNEs, and resale of telephone service - to gain entry into local telephony, the strategy varies dramatically by size of the market. CLECs built facilities in Dallas, Houston, San Antonio, and Austin to compete with ILECs, particularly for business customers. Outside the Large Metro areas, however, CLECs pursued customers by purchasing UNEs and reselling telephone services.

The market share of local access lines of CLEC in the Suburbs is about 12 percent and in Large Metropolitan areas about eight percent. The eight percent figure probably masks a wide range of market penetration rates that includes a lower penetration rate in El Paso and higher penetration rates in the Dallas and Houston, areas. The latter have large and growing residential and business populations, a high population density, and high *per capita* incomes. Seventy percent of CLECs' customers in the Large Metro areas and Suburbs are businesses.

CLECs in rural areas are showing little or no market share at this point, but that fact may reflect in part the legal and regulatory prohibitions to competition as well as poor economics of doing business in rural areas. (Counties with a population of 20,000 people or fewer have a CLEC penetration rate of less than 2 percent.) Seventy percent of their customers are residential. The entry of some telephone cooperatives into the market, particularly those in or near wealthier parts of West Texas, may indicate that some CLECs might be focusing on rural or small-town areas that allow customer choice. These CLECs may possess expertise that can make them very competitive without drawing competition from companies with deep pockets.

Having CLECs enter new markets is only the first stage of offering customer choice. CLECs must have the power to fight for market share for a sustained period before Texans harvest the fruits of competition. A key factor in developing competition in local telephony over time will be the capitalization of those CLECs.

The good news for the 1998-1999 period was that about a quarter of CLECs had market capitalizations of at least $1 billion, an order of magnitude comparable to the capitalizations of the two largest ILECs, Verizon and SWBT. Areas of Texas served by these well-capitalized CLECs were much better positioned to receive the benefits of competition in local telephony and the benefits of competition for bundled services ("one-stop shopping").

Though almost 100 CLECs responded to the Commission survey, two-thirds of the CLECs were private firms with capitalizations that were unknown or less than $100 million. These CLECs may have limited prospects that may lead to failures and mergers for many of them under the best of market conditions.

Affiliates of eight cooperatives have filed as CLECs, located near areas with high *per capita* incomes. Given that most of them have small capitalizations of $20 million or less, it will be a formidable task for them to become more than regional or niche players. Rural areas where ILECs face their primary competition from these CLECs face uncertain prospects for competition in local telephony in the long term.

Present: ILECs Adapt, CLECs Struggle

ILECs

The ILECs that must allow the greatest customer choice – SWBT and Verizon – responded to new market opportunities in 1998 and 1999. Indirect effects of deregulation and competition in local exchange service in Texas have led to a sale of rural exchanges in Texas in 1999-2000. Verizon and SWBT have contended with the heavy investment in facilities by CLECs in the metropolitan areas of Texas. With competition increasing in some parts of their service territories, these companies had incentives to rethink their holdings and strategic approach to selling telephony in Texas.

Southwestern Bell

SWBT's competitive position in Texas has strengthened considerably in the past year. SB 560 granted SWBT pricing flexibility in vertical services, an important means to lower prices where competition with CLECs exists, and raise prices where competition is limited. For example, in 2000 SWBT significantly increased the prices for a number of nonbasic services, often services that are very popular and for which competitive alternatives are limited.

SB 560 also granted SWBT the ability to competitively bundle its products. An important additional piece in SWBT's "one-stop" shopping strategy was SWBT's receiving a favorable recommendation from the Commission on its Section 271 application, leading to FCC approval for SWBT to offer long distance service in Texas in the second half of 2000. SWBT at present has very limited competition in providing bundled services in Texas.

Verizon

During the last two years Verizon implemented an additional strategy to cope with shareholder or market pressure, including reducing its presence in local voice markets in Texas as a CLEC. Verizon chose to sell some of its rural exchanges in various states to earn a better return on its assets in a changing telecommunications industry. Verizon's sale of a number of rural exchanges to Valor this year was part of this national trend.

A number of ILECs across the country have been seeking changes in the geographical boundaries of their operations to meet competitive challenges elsewhere. According to a recent U.S. General Accounting Office (GAO) survey of state public utility commissions, of the nearly 832,000 access lines that major ILECs have sold from January 1996 through April 2000, an estimated 68 percent were in rural areas.[106] The GAO analyzed 27 pending sales, totaling 901,000 access lines, and found that 872,000, or 97 percent, were in rural areas.

Telephone cooperatives and small private telephone companies in rural parts of Texas might do something similar to the Verizon sale and merge or purchase each other's service territories. These ILECs could then capture economies of scale and use their expertise in handling the multitude of services and would possess sufficient capitalization to invest in lines and equipment to upgrade a system in the targeted service territory. The quality and range of services, therefore, might improve in parts of rural Texas even without direct competition from CLECs, competition that is very unlikely until alternative technologies described in this report become widely available.

CLECs

In the second half of the 1990s, technological breakthroughs and deregulation in the telecommunications industry created new and highly uncertain investment opportunities for investors. By the late 1990s, investors in the telecommunications industry faced investments that had a high risk / high reward profile in an industry that was once considered the realm for retirees searching for a safe, fixed return on assets. Venture capitalists, private investors, and commercial banks flooded the telecommunications industry with investment capital.

As a result, in the late 1990s, the telecommunications industry saw a proliferation of small or poorly capitalized CLECs that were vulnerable to the level of risk investors (mutual fund managers, investment banks, and commercial banks) would tolerate over time. Large long-distance carriers such as AT&T and Worldcom made large-scale investments in new technologies to compete with SWBT for customers that wanted "one-stop" shopping in telecommunications services.

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[106] United States General Accounting Office, *Telecommunications: Issues Related to Local Telephone Service*, Report to the Ranking Minority Member, Committee on Commerce, Science, and Transportation, U.S. Senate, GAO/RCED-00-237 at 5 (August 2000).

The rush into the new world of telephony created a classic bubble in telecommunications stocks.[107] According to a NASDAQ index of telecommunications companies, share prices rose 300 percent from January 1998 to early March 2000. By early 2000 such an increase provided CLECs with large capitalizations, allowing them to challenge ILECs for market share in local exchange service in Texas.

As with other stock market bubbles, this one burst, forcing the industry to endure bankruptcies of some leading CLECs and massive restructuring of others. Increased competition by ILECs in long distance, and the perception by the market that long-distance service using dedicated switched circuits was yesterday's technology, took its toll on the three dominant long distance carriers. Some analysts believe that traditional long-distance business is going away and will be replaced by any-distance calls and data transmissions that also include voice.[108] With the entry or potential entry of ILECs into long-distance telephony, prices and revenues for long-distance providers have fallen, contributing to the fall in the market capitalization of large CLECs.

The fall in the market capitalizations of large CLECs that are long distance carriers has left them in a weaker position to provide competition in local exchanges in Texas. In October and November 2000, these long-distance carriers announced their intentions to reduce their emphasis on residential services in Texas as part of massive restructuring of their business lines.

The sharp fall in share and bond prices in 2000 for CLECs may presage consolidation in the telecommunications sector. A handful of CLECs that each had capitalizations of $1 billion or more in 1999 saw their share prices drop over 95 percent during 2000. Thirty-eight of the CLECs that responded to the data collection instrument stated that they had not started serving customers in Texas at the end of 1999 and may not have sufficient revenue to weather the decline in the financial support needed to challenge an ILEC.

By the end of 2000, SWBT's financial position had strengthened relative to the CLECs. SWBT's entry into the long distance market has weakened the ability of CLECs to challenge SWBT in local voice service. Without investor confidence and funding, in the near term CLECs might pose a weaker challenge to SWBT for local wireline voice telephony or in the "one-stop" shopping market than they did in 1998 and 1999. The Commission has noted that in 2000 SWBT raised its prices on a number of vertical services and was successful in rapidly gaining market share in the long distance market, even though it was offering interLATA long distance to only customers who had SWBT as an ILEC.

In the short term, the largest potential impact of CLECs' financial troubles will be to limit their ability to enter a local market by making long-term investments in plant and equipment. Physical investment in new plant and equipment is the most powerful means to develop competition in local wireline telephony, allowing CLECs to own an increasing

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[107] For a description of how stock market bubbles have inflated and burst over the past three centuries, see Charles Kindleberger, *Manias, Panics, and Crashes*, Wiley Investment Classics, Fourth Edition, 2000.

[108] For a detailed discussion of this point, *see* J.P. Morgan Securities, Equity Research, *Telecom Services*, "A Fresh Look at the Industry" (Sept. 8, 2000).

share of the local exchange infrastructure relative to the ILECs while expanding wireline capacity in a local market overall.

Future: Technology Spawns Competition

While short-term disruptions in the financing of CLECs may slow the advance of competition in wireline telephony, the long-term prospects for competition in telephony look promising. Disruptive new technologies, the rise of the Internet Protocol as an increasing backbone to telecommunications, and deregulation are massively restructuring the telecommunications industry. A result of all these changes is a massive increase in telecommunications services and products that will be available to customers, along with a decreasing emphasis on wireline voice telephony.

Projections that telecommunications industry analysts at J. P. Morgan Securities made in September 2000 can provide a sense of the magnitude of these changes that may occur in the next five years, as shown in Table 27. J.P. Morgan Securities projects that revenues in telecommunications services nationwide will grow from $246 billion in 1999 to $422 billion in 2005. Wireline voice (local and long distance) revenues are expected to decline slightly between 1999 through 2005. As a percentage of total revenues, however, local wireline voice will fall from 33 percent in 1999 to 21 percent in 2005, and long distance wireline voice will fall from 32 percent in 1999 to 16 percent in 2005. In contrast, data services' share of total telecommunications revenues will rise from 12 percent in 1999 to 21 percent in 2005, and the Internet's share of total telecommunications revenues will rise from 4 percent in 1999 to 16 percent in 2005.

Table 27 – Forecast of Revenues in the Telecommunications Industry

	1999		2005E	
Service	$ in Billions	Percent of Total	$ in Billions	Percent of Total
Local Voice	87.8	33.0	92.6	20.8
Long Distance Voice	84.0	31.6	71.1	16.0
Wireless	40.0	15.1	100.1	22.5
Internet	10.5	4.0	69.7	15.7
Data Services	31.4	11.8	90.8	20.5
Other iLEC	11.9	4.5	19.8	4.5
Total	265.5	100.0	444.1	100.0

Source: J. P. Morgan Securities, *Telecom Services Industry Analysis*, September 8, 2000.

One trend influencing the direction of the industry is the rise of the Internet Protocol for delivering voice and data to customers. While Voice over Internet Protocol is not currently a viable alternative for local telephony, the indirect effects of this revolution are profound on telecommunications providers. Industry giants such as AT&T and SWBT are reorganizing business lines and altering their emphasis towards data and Internet services. Many analysts who follow the telecommunications industry believe

that voice telephony likely will become more of a commodity business, no longer sold as a separate service.

Another trend that will affect competitive delivery of voice telephony will be the alternatives to wireline discussed in Chapter 4. Growth in satellite, cable, and wireless services to customers will change the market structure of local telephone service by providing several means to deliver local telephone service. The locations where alternative providers offer these services would affect the level of competition across different areas of Texas. The number of CLECs on wireline in a rural area may not be as important as the opportunity for area customers to have several portals. In areas that currently have numerous CLECs on wireline, the competition will be even fiercer but not fully captured in the data of regulated telecommunications providers.

Competition Outlook

The Commission has implemented the Texas Legislature's framework for deregulating local voice service in Texas. As a result, CLECs have entered the Texas market in the past two years and have provided competition in certain regions of Texas.

The market for business customers in the Large Metro areas of Texas appears to be competitive. Facilities-based competition has provided increased capacity for CLECs to compete with ILECs over the long term. Monopoly power exists, however, in residential and rural markets in Texas. Key CLECs that were expected to challenge SWBT are now limiting their push into residential voice markets in Texas.

The Commission recognizes that differences in personal income and population density among various regions of Texas also affect where CLECs decide to compete for residential customers. At the same time, however, cross-subsidies that have traditionally kept residential rates artificially low have contributed to the lack of competition for residential customers.

The Commission believes that long term re-regulation of residential and rural markets should not be necessary, as new technologies could dislodge the monopolistic position of ILECs in certain areas of Texas in coming years.