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The State of the Telecommunications Industry in Utah
Third Annual Report to the Governor, Legislature, the Public Utilities and Technology
Interim Committee, and Information Technology Commission
by
The Public Service Commission of Utah
November 30, 2000

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Annual Report to the Governor, Legislature, the Public Utility and Technology Interim

Committee, and the Information Technology Commission

The State of Telecommunications Competition in Utah

Introduction

Pursuant to UCA § 54-8b-2.5, our third annual report, covering the period October 1999 to October 2000, examines factors that enhance or inhibit telecommunications competition in Utah, and reviews progress to date toward an open competitive market. Commission efforts to further competition throughout the past year are presented.

US West's (now Qwest) competitors have made healthy gains in the Utah marketplace. Together they serve 113 percent more customer access lines than they did last year and their combined in-state revenues have increased by \$29 million. At the same time, Qwest's customer line count increased by 64,000, more than the competitors' combined access line increase. Nevertheless, Qwest's share of the Utah market still decreased by 3.5 percent this year compared to last year.

Despite the promising competitive growth and increased competitive market share in the Utah telecommunications marketplace, it is far too early to conclude that the market is vital and competitive. Qwest continues to be a dominant firm, serving 88 percent of the overall lines in the state and 92 percent within their service territory. Qwest is the price

leader in the market and, so far, few of their customers have seen price reductions though their earnings in Utah have been substantial.

The first section of this report is an overview of 1995 State Act and 1996 Federal Act implementation during the period. The second reviews our efforts to further competition in Utah. The third section evaluates the status of telecommunications competition, and the fourth assesses its prospects. We present two recommendations in the fifth section.

Section 1

The 1995 State and 1996 Federal Acts

The intent of the 1995 State and 1996 Federal Acts is to develop a competitive telecommunications industry so that ultimately prices are kept in check, and other desirable characteristics of telecommunications service are promoted by competition rather than by rate-of-return regulation.

To that end, the 1995 State Act freezes the prices of Qwest's services until the first of 2001, following which the Qwest's tariffed intrastate services will be subject to an indexed price-cap regime the Commission is charged to develop. Price-cap regulation is intended to mimic the prices, efficiency, and innovation that are expected of a competitive market. It should provide an incumbent local exchange carrier greater flexibility to act in an evolving competitive market than would the rate-of-return form of regulation it replaces. Rate-of-return regulation ended with the price freeze in 1997. Price-cap regulation should be in place at the beginning of 2001. Accordingly, a rulemaking proceeding to develop the price-cap regulation rules which will implement UCA § 54-8b-2.4 is underway.

In the interests of a transition to a competitive telecommunications market, UCA § 54-8b-2.3 allows incumbent telephone corporations with more than 30,000 access lines to petition for pricing flexibility in geographic areas of the state where a competitor also provides service. Pricing flexibility means that an incumbent local exchange carrier can alter the prices of its services without regulatory approval, once the Commission has granted it the authority to do so.

Under the law, Qwest, the only incumbent telephone company that has more than 30,000 access lines in the state, is allowed to flexibly price services in specific geographic areas when they show that competitors are offering the same or substitutable services in those areas. There is no requirement that competitors have a minimum market share or that competition be effective. This means Qwest may be granted pricing flexibility even though the market is insufficiently developed to constrain their behavior. Utah law contemplates this situation by authorizing the Commission to impose price caps or to revoke pricing flexibility if Qwest's pricing flexibility actions are not in the public interest. The Commission recently granted Qwest pricing flexibility for several business services in ten of their Wasatch Front central offices. The Commission did not impose a price cap on those services but chose instead to monitor the market and Qwest's pricing.

The price index the Commission is developing will apply only to services for which Qwest has not been granted pricing flexibility. Following legislation passed in the 2000 general legislative session, a price index cannot be used to reduce the price of a service if that price does not recover the total service long-run incremental cost of providing the service. The Commission must determine which service prices cover these costs, but as it stands, the indices may not apply to residential and non-urban business services. If that is true, few customers will benefit from reductions in the cost of providing service these indices are designed to reflect in prices.

We are now reviewing an expected Qwest application to the Federal Communications Commission (FCC) to enter the interLATA long-distance market (a Local Access and Transport Area is a geographic area within which a local telephone company may offer telecommunications services) under Section 271 of the Federal Act. In that effort we are collaborating with 12 other states in testing the ease with which competitors can obtain service from Qwest. We are collaborating with six other states to review the other required points on the federal checklist to address the entire application. Although the FCC will make the ultimate decision, the recommendations we make will influence the FCC's determinations about whether Qwest can enter the interstate long-distance market.

As these statutes mandate, we continue the work of developing cost-proxy models which estimate the incremental costs

of the local loop, unbundled network elements, and local basic service -- the latter for purposes of the Universal Service Program. Prices for all these must now be based on incremental, rather than on average embedded costs as has been traditional under rate-of-return regulation.

Events at the federal level have affected telecommunications competition in Utah. On May 31, 2000, the FCC adopted the CALLS (Coalition for Affordable Local and Long Distance Services) proposal to overhaul the interstate access charge system. Long-distance providers, like AT&T, pay incumbent local exchange carriers a charge, known as an access charge, to complete a long-distance telephone call on the local network. At the federal level, the new plan restructures access charges during the coming five years, and begins reducing revenues received from access charges by approximately \$3.2 billion nationwide effective July 1, 2000. It also reduces special access fees by about \$170 million, effective the same date. A \$650 million federal fund, based on federal Universal Service Fund fees assessed to telephone subscribers, is established to support universal service.

On November 11, 1999, the FCC began allowing competitive carriers to obtain access to the high-frequency portion of local loops, the utility plant owned by incumbent local exchange carriers which connects businesses and households to central offices where switching equipment is located. With this authority, competitors can provide high-speed digital data over the same telephone lines used to provide voice service, without interrupting voice service, putting them on a more equal footing with incumbent local exchange carriers like Qwest, for broadband services. It is a step toward statewide broadband service deployment. Qwest, then US West, entered a regional interim line sharing agreement with nine competitive carriers on April 24, 2000.

Section 2

Commission Efforts to Further Competition in Utah

The 1995 State and 1996 Federal Acts are circumspect and deliberate in the steps they mandate as a transition from regulated monopoly markets to competition. This transition raises important economic and social concerns.

Telecommunications is a network-based business. As much as 50 percent of the investment required to provide service consists of the plant and equipment that connects household and business customers to the incumbent local exchange carrier's central offices. This plant and equipment would be very difficult and expensive for competitors to duplicate, and it will remain so until other ways to provide the same or substitutable service are technologically and economically feasible. Under these Acts, competitors not only may use their own facilities, but may lease portions of the incumbent's network (unbundled network elements, or UNEs) or resell its retail services, to enter the local service telecommunications market.

The transition to competition is difficult because the market is dominated by an incumbent local service provider that formerly was a state-regulated monopoly. The state and federal laws that allowed competitive entry give the Commission a significant role in determining how, in the public interest, incumbents and competitors should jointly use separately owned facilities and networks to serve customers efficiently and reliably. With this much at stake, however, the large corporations involved have not hesitated to litigate to advance and protect their own interests.

Since 1934, universal service - service for every household and business that desires it at affordable rates regardless of location -- has been a telecommunications objective. It is a public policy objective of both the 1995 and 1996 Acts. State commissions are again assigned a central role to encourage universal service during the transition to competition. Competition threatens average-cost based prices and policies that in the regulated monopoly era helped to achieve the goal of universal service. A subsidy or some other mechanism is still required to ensure that local basic service prices do not discourage or prevent households and businesses from subscribing for service in high-cost areas. The means, however, cannot affect the business opportunities of incumbent providers and competitors differently. In today's terminology, it must be "competitively neutral." Universal service retains its value in part because, as in 1934, the greater the number of subscribers, the greater is the value of telecommunication service for each subscriber.

Pursuant to the requirements of the 1995 State and 1996 Federal Acts, our efforts to help develop a competitive local service market in our state fall in several categories.

Competitive Entry

UCA § 54-8b-2.1(2) requires the Commission to approve, or certify, applicants to provide local exchange service if each has sufficient financial, technical and managerial resources, and we determine a certificate is in the public interest. Rules and procedures for competitive entry are in place, and can be viewed on the Internet. To date, 130 companies have applied for certificates and 89 have been granted. Three of those certified have withdrawn from the state. Twenty-two applications are pending because the applicants have not filed sufficient information showing adequate financial, technical, and managerial resources required by law. Eleven applications have been withdrawn. Eight applications have been denied because the applicants failed to supply required information or the applicant did not meet certification requirements. No applicant has sought to serve rural Utah in areas outside the Qwest service territory in the near term. Applicants there would face additional requirements for competitive entry under both Utah and federal law.

Arbitrate and Approve Interconnection Agreements

An interconnection agreement between an incumbent local exchange carrier and a new local phone company describes the terms and conditions under which their operations are joined so that their customers can call one another. These agreements, hammered out in great technical detail in the first years, with the Commission actively arbitrating the differences between incumbents and competitors, have become fairly straightforward and all now bear similarities. The 1996 Federal Act allows a company to adopt all or parts of existing interconnection agreements as their own. Ninety-three interconnection agreements have been filed with the Commission and 66 have been approved. Sixteen have been denied, 10 are pending, one has been resubmitted, and one has been canceled, leaving 65 active agreements.

Reciprocal compensation, the process whereby telecommunications providers compensate each other for the use of one network owned by another, is a major interconnection agreement issue. Internet calls, which generate significant one-way traffic across networks, have been a source of contention between Qwest and competitive local exchange carriers. During 1999, the Commission ruled that Qwest must pay reciprocal compensation for Internet traffic, based on terms of specific interconnection agreements between Qwest and competitors. These orders are currently on appeal before the United States District Court for the District of Utah. The Commission recently initiated another case to take up the issue of reciprocal compensation for Internet calls in a general proceeding rather than dealing with the issue on a case by case basis.

Line sharing, recently made possible by the FCC, could lead to modification of existing interconnection agreements. Line sharing, which allows competitive carriers to obtain access to the high-frequency portion of the local loop owned by the incumbent, has been designated a network element.

Establish Unbundled Network Element Costs and Prices

We are required to adopt cost-proxy models to produce incremental-cost estimates as the basis for unbundled network element (UNE) prices. UNEs are elements or functions of an incumbent provider's network which can be leased by a competitor, and used, in conjunction with its own facilities, to provide service. We have charged the Division of Public Utilities to investigate cost-proxy models. Among candidate models, the FCC's Hybrid Cost Proxy Model (HCPM) may have the greatest potential. Much time has been invested in reviewing candidate models; they are complex and in a continual state of development. The process, moreover, is controversial. Each model has supporters who are often at odds over technical modeling issues. Substantial progress, however, has occurred this year.

Determine Wholesale Discounts For Retail Services

The 1996 Federal Act, and FCC rules implementing that Act, require state commissions to establish wholesale prices for the retail services of incumbents like Qwest. These services can then be purchased at wholesale by competitors for resale to end users. Wholesale prices are derived by removing retail costs, such as marketing, sales, billing, collections, and other general support expenses from retail prices. The amount removed is referred to as a discount. We approved wholesale discount prices in December 1996, and have since updated them in October 1997, February 1998, and February 2000.

Establish Terms and Conditions of Collocation

Pursuant to the 1996 Federal Act, the FCC's March 31, 1999 collocation order allows competitors to place switches in an incumbent's central offices. Thirty-one Qwest central offices now accommodate competitor facilities in 176 sites. Of these, competitors providing high-speed data services, such as Digital Subscriber Line (DSL), have 51 collocation sites. Collocation is mainly limited to the Wasatch Front. The cost of collocation, the amount competitors should pay to place facilities in Qwest central offices, is currently under study in a joint effort by the Division, Qwest and competitors. We expect the study to be complete in the first part of 2001. Until then, collocation charges are based on negotiated amounts in interconnection agreements and are considered interim. That means that competitors will receive a refund if the rate they are paying currently is too high or be surcharged if the price is too low.

Support Broadband Deployment in Utah

Telecommunications companies are developing and deploying advanced technologies to meet the increasing demand for high-speed, high-capacity connectivity. High-speed, switched, broadband telecommunications enables users to originate and receive high-quality voice, data, graphics, and video. Advanced services such as Digital Subscriber Line, which can carry voice and data simultaneously and in two directions, are offered by competitive providers in both Qwest's and six rural incumbent carriers' territories. As a condition of the recent merger between US West and Qwest, the Commission required Qwest to invest \$15 million to make DSL available in their central offices throughout their service area. That will be an important benefit of the merger. AT&T of the Mountain States, Teligent Services, and others, have begun or expect to begin rolling out alternative forms of broadband-capable services, using cable and fixed wireless technologies.

DSL services are being deployed in rural Utah by six of 14 rural incumbent telephone companies. Because of the expense involved, many rural companies are opting to build broadband-capable facilities only when they are convinced demand in their sparsely populated service areas warrants doing so.

Institute the New Universal Service Fund Required by State Law

The Universal Service Fund (USF) formerly in place here in Utah (UCA § 54-8b-12) has been replaced by the UCA § 54-8b-15 Fund, and is now governed by a new set of implementing rules. We are required to estimate the costs of providing local basic telephone service in order to set the amount of Universal Service Fund support for telephone companies serving in high-cost areas of the state. We have established a mechanism to support on a monthly basis high cost service provided by rural telephone companies and have a procedure by which all service providers can qualify for one-time distributions from the fund. The Commission, however, has not yet adopted a cost model appropriate for companies like Qwest that serve both low cost and high cost areas, but we indicated that we will likely select the FCC's Hybrid Cost-Proxy Model. Once that is done and the rules the Commission recently issued for comment are final, all providers will be able to qualify for USF support in rural, high cost service areas. Statutes require the Commission to ensure that prices for basic local telephone service in rural areas remain affordable and reasonably comparable to prices for the service in urban Utah. USF support must be competitively neutral.

Enforce Carrier-to-Carrier Service Rules, Adopt End-User Service Quality Rules, and Report on Quality of Service Incumbent Telecommunications Corporations Provide to End Users

Pursuant to UCA § 54-8b-3.3 (6)(c), which became effective May 1, 2000, the Commission is required to report annually to the legislature concerning incumbent telecommunications corporations' "quality of service to end users of tariffed public telecommunications services." We issued and made effective retail service quality rules at the end of September 2000 as required by law. We refined those rules in October and re-published them for additional comment. These rules are important because Qwest's monthly average service quality complaints have been increasing. Carrier-to-Carrier Service Quality Rules have been in place since June 1, 1999, though they are on appeal to the Utah Supreme Court.

Fourteen rural incumbent telecommunications providers serve areas of Utah outside Qwest's territory. By May 31, 2000, the Division had received but 19 complaints during the year for the 14 companies combined. Rural telephone customers complained about billing problems, deposits, and terminations due to delinquent bill payments.

Review Qwest's Petition to Enter the InterLATA Long Distance Market

Section 271 of the 1996 Federal Act presents fourteen requirements that Regional Bell Operating Companies like Qwest must meet before gaining approval from the FCC to provide in-region (that is, in their multi-state service territory) long-distance telephone service. The FCC must consult with the Utah Commission and the U. S. Department of Justice in determining whether Qwest meets the 14 requirements in Utah. The requirements are designed to open local telecommunications markets to competition through resale, availability of unbundled network elements, and facility-based competition.

As noted above, Utah is actively involved in a thirteen-state test of Qwest's Operational Support Systems, a key aspect of 271 compliance. Performance measures have been developed to test Qwest's ability to provide non-discriminatory access to these systems. Testing is being conducted, and will conclude when Qwest successfully meets test criteria perhaps by the end of spring 2001. In addition, the Division and the Commission are participating in workshops jointly conducted by Utah, Idaho, Montana, New Mexico, North Dakota, Wyoming, and Iowa to consider whether Qwest is complying with all of the other Section 271 requirements. These workshops will provide a record which will be the basis for our recommendation to the FCC, once Qwest files an application with that agency pursuant to Section 271 for authority to provide in-region long-distance service.

Workshops are improving communication among parties so that disputed positions may more quickly be resolved. Performance measures, needed to give regulators and competitors assurance that Qwest is providing non-discriminatory access to key business systems, have been jointly developed and refined. Obstacles to competition are being eliminated across a multi-state region.

The Commission and the Division are also part of a multi-state effort to develop a performance assurance plan for Qwest to follow after they have received Section 271 authority. The FCC wants such a mechanism as part of Section 271 approval to assure that markets, once open to competition, do not deteriorate after Qwest receives Section 271 authority.

Other Representative Dockets

1. Pricing Flexibility. UCA § 54-8b-2.3 requires Qwest to provide evidence that a competitor is providing a telecommunications service in a defined geographic area before Qwest can be granted pricing flexibility for that service in that area. Qwest must prove that they have allowed the competitor to interconnect with their network. Qwest must show that they are in substantial compliance with the rules and orders of the Commission issued pursuant to UCA § 54-8b-2.2.

Qwest, the Division and interveners have stipulated that pricing flexibility should be granted in 10 wire centers for identified business services. The Stipulation, presented August 1, 2000, includes areas in Salt Lake, Provo, and Orem, where competitors have sufficient presence. We approved the Stipulation at hearing. If Qwest raises the prices of these services in those areas, we may, pursuant to law, find it in the public interest to cap prices.

Qwest recently petitioned the Commission for pricing flexibility in four additional central office switches. The Commission will act on that request in the near future.

2. US West/Qwest Merger. On August 19, 1999, Qwest Communications Corporation, LCI International Telecom Corp., and US West Communications, Inc. filed a Joint Application seeking an order by the Commission approving the proposed merger of their parent corporations, Qwest Communications International, Inc. and US West, Inc. A number of parties, including the Division, were concerned the merger could negatively affect competition and telecommunication service in the state. Hearings were held March 8 to March 13, 2000. At hearing, the Division and US West reached a stipulation containing conditions intended to mitigate potential negative effects of the merger on competitors and customers. We adopted the Stipulation. Our June 9, 2000 Order approving the merger imposes additional conditions to ensure that the merger promotes competition and provides net benefits to customers. The merger was consummated on July 1, 2000.

3. Petition of Western Wireless For Eligible Telecommunications Carrier (ETC) Status. Under federal guidelines, Western Wireless, a firm primarily in the mobile radio business, petitioned the Commission to obtain ETC status. ETC

designation would enable Western Wireless to receive federal and state universal service subsidies if it provides basic exchange service. In an Order dated July 21, 2000, we determined that Western Wireless satisfied all criteria for federal ETC designation in exchanges served by Qwest that are in Western Wireless' signal coverage area. The Commission, however, did not grant ETC status to Western Wireless in areas currently being served by rural incumbent carriers because of the impacts that may have on the State's Universal Service Fund. Western Wireless appealed that decision to the Utah State Supreme Court where it is currently pending.

4. Area Code "Exhaust." On September 21, 1999, the North American Numbering Plan Administration (NANPA) declared the 801 area code in jeopardy because it is expected to reach its limiting capacity level by June 30, 2001. On April 26, 2000, the Commission adopted an area code relief plan splitting the 801 calling area. Under the plan, Salt Lake County will retain the 801 area code, while the areas south and north will have the new area code, 385. Also, the FCC on July 20, 2000, gave the Commission conditional authority to allow thousand-block number pooling and rationing procedures for six months following implementation of the area code split. Prior to this, telecommunications companies were issued telephone numbers in blocks of 10,000 by NANPA. Because of inefficiencies inherent in this system, more than half of these numbers went unused. Moreover, the FCC granted the Commission authority to implement central office code (NXX) sharing. This code is the second three digits of a ten-digit (NPA-NXX-XXXX) telephone number, in which "NPA" refers to numbering plan area (area code). By these number conservation efforts, the Commission is able to encourage efficient telephone number assignment. The measures are intended to prolong the life of the new and existing area codes. With the start of these number conservation efforts the Commission was able to postpone the area code split at least until September 2002. Through these efforts, we believe we will be able to move that date yet further into the future.

5. Sale of US West Rural Exchanges. On December 22, 1999, US West and six Utah independent rural telephone companies petitioned the Commission to permit US West to sell several of their central offices to the independent companies. A stipulation, in which US West agreed to invest \$15 million in their remaining territory to render their equipment capable of providing Digital Subscriber Line service, was reached between US West, the independent companies, and the Division on July 6, 2000. On condition of the added investment, the Commission was able to accept the Stipulation and approved the sales. The Commission made the \$15 million investment a condition of the Qwest - US West merger as well.

6. Price-Cap Regulation. By law, regulation of Qwest is scheduled to undergo a significant change as it moves, beginning 2001, from a price freeze to price-cap indices. Rules are required to implement pertinent statutes. The new rules have been published for written comment and the Commission held the hearing required by statute to take oral comment on November 7, 2000. The price index rule will be in effect the first of 2001.

Section 3

Current State of Telecommunications Competition

Local Service Market Competition

The number of certificated competitors has increased from 34 in the previous year to 89 in this reporting period. Only one new competitor, CommSouth, in addition to six reported last year (AT&T, ELI, NextLink now XO, MCI WorldComm, Tel-Link, and One-800 Reconex), has actually begun to provide local exchange service. Several new entrants provide data service (e.g., high-speed Internet access).

Market penetration by competitors is increasing, but primarily in the business sector and primarily in the greater Salt Lake area, and in Davis, Weber and Utah Counties. AT&T has entered the residential market on the Wasatch Front over their cable network. XO offers local residential service in a package.

The tables below show an overall increase of 64,050 in the number of access lines Qwest serves, even though competitive local exchange carriers serve 54,040 more this year than last. The tables also show the areas of market presence, estimated numbers of access lines, and revenue information for incumbent telephone corporations and competitors. Table 1 shows Reconex as a competitive provider. This firm targets Qwest's high-credit risk customers and resells Qwest's services to them. Competitors serve customers only in the Qwest service territory.

Table 1. Local Telecommunication Companies, Including Resellers, in Utah

County	Companies Providing Service		Competitors Serve	
	Incumbent Local Exchange Carriers	Competitive Local Exchange Carriers	Business	Residential
Beaver	South Central Utah, Qwest	Reconex	No	Yes
Box Elder	Albion, Beehive, Citizens, Qwest	Reconex	No	Yes
Cache	Bear Lake, Qwest	Reconex, AT&T	Yes	Yes
Carbon	Central Utah, Qwest	Reconex	No	Yes
Daggett	Union Tel.		No	No
Davis	Qwest	AT&T, Nextlink, Now (formerly Tel-Link), Reconex	Yes	Yes
Duchesne	Uintah Basin, Qwest	Reconex	No	Yes
Emery	Emery		No	No
Garfield	Beehive, Citizens, South Central Utah		No	No
Grand	Citizens, Emery		No	No
Iron	Beehive, South Central Utah, Qwest	Reconex	No	Yes
Juab	Beehive, Citizens, Skyline, Qwest		No	No
Kane	Beehive, Citizens, South Central Utah, Qwest		No	No
Millard	Beehive, Citizens, Qwest		No	No
Morgan	Qwest	Reconex	No	Yes
Piute	South Central Utah		No	No
Rich	All West, Bear Lake, Qwest		No	No
Salt Lake	Qwest	AT&T, ELI, Brooks Fiber, CommSouth, Nextlink, Now (formerly Tel-Link), Reconex	Yes	Yes
San Juan	CenturyTel, Citizens, Farmers, Navajo		No	No
Sanpete	Central Utah, Gunnison, Manti, Skyline, Qwest	Reconex	No	Yes
Sevier	South Central Utah, Qwest	Reconex	No	Yes
Summit	All West, Union Tel., Qwest	Reconex, AT&T	Yes	Yes
Tooele	Beehive, Qwest	Now (formerly Tel-Link), Reconex	No	Yes
Uintah	Uintah Basin, Qwest	Reconex	No	Yes
Utah	Central Utah, Skyline Qwest	AT&T, ELI, Nextlink, Reconex	Yes	Yes
Wasatch	All West, Central Utah, Uintah Basin, Qwest	Reconex	No	No
Washington	Beehive, South Central Utah, Qwest	Reconex, AT&T	No	Yes
Wayne	Beehive, South Central Utah, Qwest		No	No
Weber	Qwest	AT&T, ELI, Nextlink, Reconex	Yes	Yes

Table 2. Qwest

	1998	1999	2000
Number of Local Access Lines Served (As of August 1)	1,072,051	1,108,650	1,172,700
Residential	717,202	763,238	775,694
Business	344,128	334,729	389,794
Other	10,721	10,683	7,212
Annual Utah Revenue (2000 estimate based on figures as of Sept 1, 2000)	\$481,673,444	\$497,995,287	\$527,823,979
Excess Above 11.5 Percent Authorized Return on Equity	6.08%	5.10%	7.21%
Excess Collected from Customers (Estimated 2000: Annualized based on first, second, and third quarters 2000)	\$40,256,592	\$33,357,155	\$39,675,598
Excess Revenue Per Line	\$37.55	\$30.09	\$33.83

Table 3. Other Incumbent Local Exchange Carriers

	1998	1999	2000
Number of Local Access Lines Served (as of August 1)	52,478	57,225	61,320
Residential	37,220	41,249	43,773
Business	13,119	15,032	15,972
Other	2,139	944	1,575
Utah 2000 Gross Operating Revenue (Estimated based on YTD figures as of May 1, 2000)	\$54,889,447	\$59,772,618	\$61,873,151
Utah Basic Local Service Revenue (Estimated based on YTD figures as of May 1, 2000)	\$9,522,682	\$11,603,87	\$13,943,140

Table 4. Competitive Local Exchange Carriers In Qwest Service Territory

	1998	1999	2000
Number of Local Access Lines Served (as of August 1)	18,000	47,859	101,899
Residential	0-200	826	6,094
Business	17,800-18,000	46,975	95,805
Other	0	58	0
Utah Fiscal Year Revenue (2000 estimate based on May 1, 2000, year-to-date)	\$29,696,038	\$49,512,661	\$78,902,348

Table 5. Competitive Local Exchange Carriers' Intrastate Revenue (Estimated)

Category of Revenue	1997/1998	1998/1999	1999/2000
Residential Local Exchange	\$0	\$688,458	\$569,120
Business Local Exchange	\$3,686,570	\$14,805,728	\$20,585,646
Vertical Services	\$258,565	\$216,156	\$284,373
Private Line and Special Access - Local and Interexchange	\$4,164,714	\$5,487,784	\$12,078,993
Network Interexchange			
Switched Access	\$760,345	\$1,697,310	\$8,749,539
Toll	\$20,385,435	\$25,643,442	\$29,003,847
Other	\$440,409	\$973,758	\$7,630,830
Total	\$29,696,038	\$49,512,661	\$78,902,348

The number of access lines served by competitors in Qwest's Utah service territory has reached 101,899, an increase of 113 percent over last year. Nevertheless, Qwest's line growth still increased by 5.8 percent. Competitors serve nearly 25 percent of all business lines in Qwest's territory. Yet less than one percent of the residential lines in the Qwest service territory are served by competitors. Despite the growing number of certified local competitors, and the 14 incumbent local exchange carriers serving rural Utah areas outside the Qwest territory, Qwest controls 88 percent of all Utah access lines and 92 percent in their territory. Competitors serve 7.6 percent of Utah access lines and 8 percent in Qwest's territory.

Qwest continues to post exceptional returns. We estimate their return on equity for 2000 at 18.71 percent. We further estimate that these earnings are \$39.7 million higher than they would have been had rate-of-return regulation continued. The relevance of Qwest's earnings performance is to show that, in spite of competition that has begun in Utah, Qwest continues to dominate the markets in which they serve.

Market Concentration

Economic theory requires that a perfectly competitive market have the active presence of many firms. Consequently, the number of such firms may indicate the degree of market competitiveness. In previous reports, we have presented two objective economic measures, the Herfindahl and the Effective Firm Indices, to give an idea of the competitiveness of Utah's local exchange service market.

The Herfindahl Index measures market concentration as the sum of squared market shares (expressed as a percentage) of all of the firms in this market. The Index has a value of one when a single firm serves the entire market (monopoly), and approaches zero as full and effective competition is reached. A minimum value of 0.500 is necessary before a market has reasonably competitive characteristics. In Qwest's service territory, based on data current through August 1, 2000 the Index value is 0.844, down slightly from last year's 0.919. Considering residential services alone, the Herfindahl Index is 0.985, slightly lower than last year's 0.998. For local business service, the Index has decreased to 0.657 from last year's 0.775. In 1998, the Herfindahl Index for local business service was 0.904.

The Effective Firm Index, the inverse of the Herfindahl Index, reveals the presence or lack of competition in a market by estimating the number of "effective" firms in an industry. In Qwest's service territory, the Index stands at 1.185, meaning less than one-fifth of an effective competitor is present, a slight improvement from last year's 1.087. The Effective Firm Index for the local business sector is 1.522, up from 1.290 a year ago. The Index for the residential sector stands at 1.018.

It is evident that competition is growing in business local exchange services, but is in its infancy in the residential local exchange services market. The Public Service Commission is taking the steps mandated by law to alter the institution of regulation. Nevertheless, Qwest continues to dominate Utah's local exchange service markets. Qwest continues to earn substantial returns and has yet to lower prices.

Transition to Competition - A Brief Comparison

When the 1995 State and 1996 Federal Acts became law, competition was expected to follow quickly. That expectation has proven to be wrong, not only in Utah, where competitors serve 8 percent of the state's local exchange access lines, but in other states served by Qwest and across the nation as well. In Nebraska, competitive local exchange carriers served only 2.1 percent of that state's local exchange access lines by the end of 1998; by early 1999, competitors were serving 6 percent of Oregon's local exchange access lines. In New York, where the dominant local exchange carrier is authorized to provide interLATA long-distance services (i.e., has Section 271 authority), competitors served 5 percent of the state's local exchange access lines by the end of 1999. Nationally, competitive local exchange carriers accounted for 5 percent of local lines at the close of 1999, up 2.2 percent from the previous year. (See Pearce, Alan. "The Bell Isn't Tolling for CLECs," America's Network, July 1, 2000.) Though the 8 percent market share competitors hold in Utah is small, it exceeds the national average.

Section 4

Competition in Utah - The Near Future

The 1996 Federal Act facilitates competition by requiring an incumbent to permit competitors to interconnect with its network via the facilities a new competitor may own, or by leasing key facilities from the incumbent telephone company or buying the incumbent's retail services at wholesale and reselling them. In addition, line sharing, newly mandated by the FCC, gives competitive carriers access to the high-frequency spectrum portion of the incumbent's local loop plant by which means they can provide DSL-type broadband services, in competition with the incumbent, to small business and residential customers. Historically, these services were provided only by the incumbent carrier.

Even though we await line sharing rules from the FCC, a number of competitors have already signed procurement contracts with Qwest for DSL-ready local loops. Voice-over-DSL service is also a prospect for the future. Although DSL originally was hailed as the ideal delivery mechanism for high-speed Internet connectivity, today's applications extend beyond simple data transmission. Local dial tone and long distance, in addition to "always on" Internet connectivity and other features can be delivered over DSL.

Cable and other alternative technologies to traditional wireline local exchange service will soon compete for the local exchange customers' business in our state. AT&T is rolling out cable telephone service to residential customers along the Wasatch Front. Wireless telecommunication continues to expand throughout Utah. Ownership of cellular telephones and digital personal communications systems (PCS) is not limited to the Wasatch Front. While wireless subscribership is widespread, it usually is a supplement to, and not a substitute for, traditional wireline service. Internet Protocol telephony (VoIP) may permit voice service over the Internet. VoIP calls are switched from telephones to the Internet and from the Internet to telephones. If this unregulated form of telephony is successful and spreads widely, it may come to compete effectively with traditional wireline service. CLECs and DLECs (Data Local Exchange Carriers are companies that deliver high-speed access to the Internet rather than voice) now have 176 collocation sites in 31 US West central offices. Only seven, however, are providing service. Some DLECs indicate they may begin to offer broadband-related services such as DSL as early as the end of the year.

Section 5

Policy Recommendations

We recommend that once price indices are in place for non-competitive services, UCA 54-8b-2.4 (5)(c) be scrutinized to ensure that customers who were to benefit from the indices under provisions of the 1995 State Act not be treated inequitably. Section 2.4(5)(c) was part of H.B. 338 in the 2000 General Session of the Legislature. It was intended to promote competition but the real impact on customers will not be clear until new costs of services are established and the price indices are applied to those services.

We strongly recommend that no further legislative action be taken that would affect competition in the telecommunications industry. Although progress has been slower than originally expected, the 1995 State Act and the 1996 Federal Act are working. Competition for business local exchange service has taken hold on the Wasatch Front and has begun there for residential service. We believe that over time, once numerous issues under existing law are settled, competitors will enter the rural markets as well. Amendments to the law invite new disputes and litigation between telecommunications service providers.