

# THE STATUS OF TELECOMMUNICATIONS COMPETITION IN UTAH



Fifth Annual Report to the Governor,  
Legislature, the Public Utilities and Technology  
Interim Committee, and Information Technology  
Commission

Public Service Commission  
State of Utah

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## Preface

The Utah Public Service Commission submits this fifth annual report on the state of local telecommunication competition to the Governor, the Legislature, the Public Utilities and Technology Interim Committee, and the Information Technology Commission in accordance with UCA §54-8b-2.5. The report, prepared with the assistance of the Division of Public Utilities (Division), outlines access line growth, broadband deployment, revenue generation, and other information on the current state of competition in the telecommunications industry. The current transition from service provision by regulated monopoly to competition is attributable to state and federal policies which implement the Utah Telecommunications Reform Act of 1995 and the federal Telecommunications Act of 1996, and our efforts to enforce the competitive provisions of both statutes. These efforts to further competition in Utah in 2002 are reviewed and we provide policy recommendations which we believe will help achieve this purpose.

# TABLE OF CONTENTS

1	INTRODUCTION .....	1
	Federal and Regional Impacts on the Competitive Marketplace .....	1
	Telecommunication in Utah.....	2
2	COMMISSION EFFORTS TO FURTHER COMPETITION IN UTAH.....	4
	Establish Rules Governing Reporting.....	4
	Review Applications and Approve New Competitors.....	4
	Protect Public Safety.....	4
	Arbitrate and Approve Interconnection Agreements.....	5
	Review and Evaluate Qwest’s Long Distance Petition.....	5
	Establish Unbundled Network Element Prices .....	6
	Administer the Extended Area Service Process.....	6
	Enforce Price Index Compliance .....	6
	Establish Terms and Conditions of Collocation .....	7
	Preserve and Advance Universal Service .....	7
	Enforce and Monitor Service Quality .....	8
	Promote Technology and Advanced Telecommunications Services.....	8
	Facilitate Relay Utah.....	9
	Number Conservation and Area Code Relief .....	10
3	COMPETITION IN UTAH’S LOCAL SERVICE MARKET.....	11
	Market Power.....	13
	Tables: Utah’s Local Service Market 2002 .....	15
	Other Forms of Competition.....	19
	Challenges to Competition.....	20
4	POLICY RECOMMENDATIONS .....	21

# THE STATUS OF TELECOMMUNICATION COMPETITION IN UTAH

## Introduction

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Provisions of the Utah Telecommunications Act of 1995 and the federal Telecommunications Act of 1996 are intended to open local markets to competition through the entry of new firms via either resale of an incumbent's (the existing regulated telecommunications provider) retail services acquired at wholesale, facilities-based competition, or the use of the incumbent's network elements, possibly in conjunction with facilities owned by the new entrant. February 8, 2002 marked the sixth anniversary of the 1996 Act, which also promotes increased competition in the long distance market through the mandates of Section 271. Both legislative enactments require the incumbent local exchange carriers ("ILECs" such as Qwest) to open their networks to competitive local exchange carriers ("CLECs"), to allow these competitors to interconnect fairly with their networks, and to offer services suitable for resale to them at wholesale prices.

The federal Telecommunications Act of 1996 assigned a number of specific responsibilities to state regulatory commissions. These are necessary both to open telecommunications markets to competition and to meet the longstanding public policy goal of universal service.

In 2000, the Commission implemented an alternative form of regulation for Qwest, Utah's principal regulated utility (a Regional Bell Operating Company or RBOC), termed an incentive (or price cap or price index) plan. Incentive regulation is intended to allow the company to adjust to a market moving toward competition. Incentive regulation encourages efficient operation by setting general limits on price changes the utility can make unilaterally. This reduces regulatory constraints on the company and allows emerging competition by forcing the company to adopt efficient and non-predatory practices. Companies under the former system of rate-of-return regulation may have less incentive to control costs or increase revenues since cost reductions and revenue increases benefit captive ratepayers through service price reductions or quality improvements. In other words, the price cap plan encourages Qwest to behave more like a firm in a market in which competition constrains cross-subsidies and anticompetitive conduct.

In this report we focus both on voice services and advanced broadband transport systems. The competitive framework that we have established for traditional voice services affects, and is affected by, broadband services and the challenges rolling out broadband presents.

### **Federal and Regional Impacts on the Competitive Marketplace**

Many significant events have occurred in Utah this year which affect the telecommunications industry. On March 5, 2002, the Utah Supreme Court affirmed our decision to deny Western Wireless Holding Company's application for rural eligible telecommunications carrier (ETC) status. This means Western must price its universal service offerings at or below the

rate the Commission sets to determine distributions from the state universal service fund. The Court confirmed our conclusion that an additional ETC in rural areas already served would increase burdens on the state universal service fund without the offsetting public benefits of either lower cost service or new service in areas currently unserved. ETC status has been granted only in the areas served by Qwest.

During the past year, the Federal Communications Commission (“FCC”) has reviewed and acted upon major issues affecting Utah carriers including access charge reform, unbundled network elements, and federal universal service funding policies. We actively monitor all telecommunications activity at the FCC, and when necessary to further the purposes of the 1996 Federal Act, work with that agency.

On May 13, 2002, the U.S. Supreme Court upheld FCC rules intended to foster local phone competition. The Court preserved the TELRIC (Total Element Long-Run Incremental Cost) pricing model which is used to set prices for the lease of incumbent local exchange carrier networks by competing carriers in Utah. This new method of pricing is key to transforming the industry along competitive lines, and, as may be expected, requires a great deal of work to implement properly. Significantly, the Court’s decision also gives deference to FCC rules requiring ILECs to combine unbundled network elements for new local phone competitors.

The broadband deregulation debate came to the forefront this year with House passage of the Tauzin-Dingell Bill, H.R. 1542, the Internet Freedom and Broadband Deployment Act of 2001. The Senate companion to this bill was introduced by Senators John Breaux and Don Nickles as the Broadband Regulatory Parity Act of 2002, S. 2430. The Breaux-Nickles proposal would preempt state commission authority over the rates, terms, and conditions of Internet service.

## **Telecommunications in Utah**

In early 2002, many visitors came to Utah for the 2002 Winter Olympic Games. To meet the telecommunications requirements of the Games, Qwest constructed more than 650 miles of fiber optic cable to connect Olympic venues to six Synchronous Optical Network rings that encircle Salt Lake City. Other Utah telecommunications companies provided advanced telecommunications to the living quarters of NBC staff and to the Olympic venues.

High-tech businesses are catalysts to the deployment of advanced telecommunications services here, and some high-tech firms have decided to locate in Utah because of easy access to them. The Annual Center for Digital Government and the Annual Progress and Freedom Foundation Survey ranked Utah one of the top ten digital states in the country this past year. In addition, Utah made the list of Internet-friendly states and has the best climate for e-commerce, according to the Progressive Policy Institute.

This year, state government implemented the “Smart Sites Initiatives,” allowing companies located anywhere in the world to electronically reach rural Utah locations for services such as software testing, technical call centers, database management, data entry, and web site

development. Initial Smart Sites are now in ten locations in rural Utah, allowing residents there to use the Internet to overcome the challenges of distance and isolation.

In 2002, 115 local service carriers are authorized to conduct business in the state. Seventeen competitive local service carriers are providing service,<sup>1</sup> 15 companies are operating as rural carriers, and Qwest is the incumbent Regional Bell Operating Company.

The transition to competition in Utah, as elsewhere, has been slow but steady. Though the basic purpose of federal and state legislation was to establish a new regulatory model to enable the transition to a competitive telecommunications industry, competition has not come to all areas of the state at the same time. The need to protect consumers remains. Most competition continues to be in the larger business and urban markets.

### **Indicators of Telecommunications Competition in Utah**

- 99 CLECs hold certificates and 17 of them currently provide service.
- Statewide, 16 ILECs, 388 toll resellers.
- 99 Interconnection Agreements; 207 collocations.
- Within Qwest's service area, Qwest's market share is 83.1%; the CLECs', 16.9%.
- Within Qwest's service area, Qwest controls 67.4% of business lines; CLECs', 32.6%.
- Within Qwest's service area, Qwest controls 92.1% of residential lines; CLECs', 7.9%.
- Qwest has petitioned the FCC to provide long distance service to its Utah customers; our final Section 271 Order was issued in July 2002 finding that Qwest met the requirements of the federal law.
- DSL will be available by the end of 2002 in all of Qwest's central offices as required by the 1999 Commission merger order. DSL will not be available to all Qwest customers, however, because of some technological limitations.
- The wireless market is growing: 25 licensed cellular and 40 PCS broadband companies offer service in Utah.

### **Commission Efforts To Further Competition in Utah**

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<sup>1</sup>This is up from 14 last year, though only ten are serving a significant number of customers. Those include AT&T Communications, AT&T Broadband, Brooks Fiber, ELI, Eschelon, Integra, McLeod, MCI, 1-800 Reconnex, and XO Communications.

The road from traditional monopoly to an open and competitive telecommunications market has been a difficult one. In the past year, a tidal wave of troubles has hit the telecommunication markets, including dramatic declines in market valuations, layoffs amounting to almost double that of other industries, and an unprecedented number of telecommunications bankruptcies. The number of competitive local exchange carriers in Utah increased from 97 last year to 99 in 2002. While there were new applicants, several existing carriers filed bankruptcy. Others never began doing business in Utah and asked for their certificates to be canceled which resulted in the net gain of two. Nevertheless, the Commission has actively pursued market-opening measures to promote competition.

### **Establish Rules Governing Reporting**

Effective May 16, 2002, we adopted new reporting requirement rules for utilities which require local exchange carriers to report a variety of statistics about their provision of local exchange service (Rule R746-400). We adopted this rule to simplify the reporting process, track more closely the progress of competition, and to be able to determine whether competition is developing.

### **Review Applications and Approve New Competitors**

Since passage of the 1995 State Act, we have been working to facilitate a competitive local service market in Utah. To date, we have granted 116 certificates to companies that desired to offer local service here. Twenty-five companies filed applications for certification as local exchange carriers in 2001, but only thirteen received certificates. Thus far in 2002, two companies have filed applications for certification and have been granted certificates.

One company, CeriStar, applied as a local exchange carrier for voice over the Internet service. This was a first for Utah, and the Division was very careful in reaching its recommendations that this would be in the public interest. Based on the Division's analysis, we granted the certificate early in 2002. To our knowledge, this is the first company in the country to be approved as a carrier with voice-over-the-Internet technology. CeriStar's unique business plan has it applying first in Utah, and then, if successful here, to other states. Applicants often apply in as many states as possible at the same time, expanding before they are really established.

### **Protect Public Safety**

Protecting Utah's telecommunications infrastructure is a high priority. We work with industry representatives and government officials to determine how to safeguard this critical infrastructure. We particularly monitor federal efforts in this regard.

During the year, the Division met with telecommunications companies to review emergency procedures. A disaster recovery process and a call list have been developed in coordination with Utah's Emergency Management Center. This was tested during the Olympics, where it proved successful. Work continues on an emergency recovery plan for utilities.

## **Arbitrate and Approve Interconnection Agreements**

Interconnection Agreements are negotiated or arbitrated contracts between two telecommunications carriers. We review and determine if the public interest standards are met for all interconnection agreements. We also, when necessary, conduct arbitration proceedings between companies if issues cannot be resolved through negotiation. Rates, terms and conditions for unbundled network elements, physical network interconnection, and operations support systems may be addressed in this way. We have approved 99 interconnection agreements thus far between Qwest and new entrants. These agreements are a necessary first step to local competition.

Many interconnection agreements were amended in the past year because of new developments and rulings by the courts and by the FCC. Reciprocal compensation has given way to “bill and keep” so that competitive local exchange carriers are receiving much less revenue from large ILECs. Other amendments included adding “UNE-P,”<sup>2</sup> or unbundled network element-platform, local number portability, enhanced extended loops, collocation cancellation and decommission, single points of presence, shared loops, local interconnection service trunking, unbundled dedicated interoffice transport, and CLEC-to-CLEC cross-connections.

## **Review and Evaluate Qwest’s Long Distance Petition**

In July 2002 we completed a two-and-a-half year review of the competitive market and public interest requirements Qwest must meet before it is permitted to provide interstate long distance service within its service territory. Under Section 271 of the federal Telecommunications Act of 1996, a Regional Bell Operating Company may offer long distance service only after showing that it has met the legal requirements written into the legislation requiring certain practices with regard to the treatment of its competitors.

Section 271 contains a fourteen-point checklist and public interest requirement that a Bell Company, such as Qwest, is required to meet before the FCC can grant 271 authority to offer interstate long distance service. As part of the review process, we, along with the Division, participated in the Regional Oversight Committee’s Operations Support Systems (OSS) test that was established by thirteen of the fourteen states served by Qwest. The process included a system-wide test of Qwest’s network and operating systems as well as development of guidelines to ensure that Qwest’s performance does not deteriorate once it receives interstate long-distance approval.

KPMG Consulting and Hewlett Packard Consulting, the consultants hired by the Regional Oversight Committee to conduct the test of Qwest’s network and operating systems, issued their joint final report on May 28. In addition to the thirteen-state OSS collaborative, we participated in

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<sup>2</sup>UNE-P is an end-to-end connection that includes the line, switch, and transport elements. There is an ongoing lobbying effort by some regional Bell companies to eliminate UNE-P. The Commission opposes that effort.

a nine-state collaborative to develop a post-entry performance plan to ensure that Qwest's network remains open to local competition once it is granted Section 271 approval.

Throughout the process, we have received and reviewed comments and filings by all interested parties, reviewed staff workshop reports, issued numerous orders and findings, and held several technical conferences for parties to review performance measures and present evidence on any disputed issues. We issued our Final Order on July 8, 2002. On July 12, Qwest made a joint filing of Utah's 271 application to the FCC with the Washington, Wyoming, and Montana state applications. This application was later withdrawn. On September 30, 2002 Qwest reapplied for 271 authority. The FCC is currently reviewing Qwest's second application and the Department of Justice has tentatively recommended that the FCC approve it. We expect the FCC decision to issue by the end of December.

### **Establish Unbundled Network Element Prices**

Unbundled Network Elements (UNEs) are pieces of Qwest's network which can be used by a competitor in conjunction with its own facilities to provide service. Incumbent local exchange carriers are required to make those particular elements available to other telecommunications carriers as a means of fostering competition in telecommunication markets. A new UNE docket was opened in April 2002 to readdress the costs of unbundled network elements. The Division is currently analyzing various cost proxy models to ensure proper pricing of these UNEs. We have scheduled hearings for the UNE docket in December 2002 and expect to issue an order on new prices for the loop and switching network elements soon afterwards. Additionally, we have issued final orders for collocation rates and subloop UNE's used by the competitors.

### **Administer the Extended Area Service Process**

Extended Area Service (EAS) allows communities to expand their local toll-free calling area. Customers pay an increased monthly local service rate to offset the reductions in their long distance local charges. We are exploring the problem of Utah communities unable to make the toll-free calls to meet their day-to-day calling needs. The Division has submitted draft rules for EAS which began a formal rulemaking proceeding. The rulemaking will culminate in December.

### **Enforce Price Index Compliance**

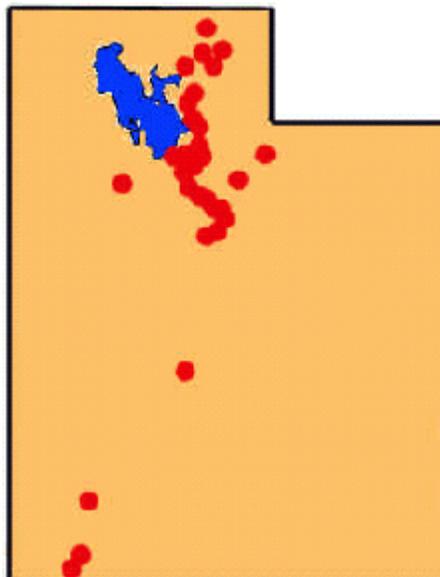
Pursuant to Utah Code Ann. 54-8b-2.4(5)(a), we have adopted price cap regulation as the means by which the prices of Qwest's tariffed services are adjusted. This form of regulation employs price indices which may be revised periodically to reflect the effects of inflation, productivity, and exogenous factors. Pursuant to Rule R746-352, on December 31, 2001 we issued an order retaining the prescribed method to calculate the productivity factor (called the X factor) used in the annual price index, and setting the value of the X factor at 4.955 percent for 2002 index calculations. This is the second adjustment to the price index since the method was adopted. The first price index adjustment, which occurred by order on June 15, 2001, reduced service revenues by \$3.85 million across the board. The 2002 price compliance filing cut \$2.37

million from Qwest's revenues, and reduced rates to consumers largely for EAS, direct inward dialing, and common carrier line access charges. Under Utah statute, Qwest applied for and received approval to flexibly price specific business services in fourteen of its wire centers in Salt Lake, Provo, and Orem. Qwest has two additional applications for pricing flexibility pending for business and residential services.

### **Establish Terms and Conditions of Collocation**

Collocation is the term used when an incumbent company provides space in its central offices for a competing company's telecommunications equipment. Collocation has been implemented in Utah since the passage of the 1995 State Act. That Act and the 1996 federal Act ordered ILECs such as Qwest to allow competitive providers to place equipment that would allow interconnection in order to give CLECs access to the ILEC's customer access lines. We issued our collocation order on December 3, 2001 in Docket No. 00-049-106. It establishes permanent collocation rates that supersede those in current interconnection agreements.

At the end of June 2002, 33 of Qwest's 59 central offices have physical, virtual, or DSL collocation present. Twenty-one central offices have three or more collocations. Those twenty-one wire centers serve approximately 71.8 percent of Qwest's access lines within the state. CLEC collocation continues to be mainly limited to the Wasatch Front and outlying population centers.



### **Preserve and Advance Universal Service**

The State Universal Service Fund (USF) currently provides \$7,513,003 in annual high cost assistance to rural telephone companies. In the past 12 months, the USF provided approximately \$850,000 in telephone assistance (Lifeline) for approximately 20,000 Utah customers. The telephone assistance plan is designed to help low income, disabled, and senior customers defray the monthly cost of telephone service.

Service providers or prospective customers may petition the Commission for funding to extend telephone service to areas not served when traditional methods of funding are not available. We granted six one-time distributions from the State USF in 2002 totaling \$373,363.

### **Enforce and Monitor Service Quality**

This Commission promotes service quality in Utah by carefully tracking the service quality and customer service practices of local exchange companies. As with all types of complaints

mentioned here, the Division investigates the circumstances and makes appropriate recommendations for action.

Billing complaints increased 61% from 2000 to 2001. Shut off complaints increased 52% during the same period. Complaints against Qwest for installation decreased by 27%. Likewise, repair complaints decreased by 56%.

During 2001, the company had four service failures in its 59 Utah wire centers. These four instances were factored into the price index calculations for the year. A wire-center service failure occurs when field-response intervals (such as repair out-of-service within 24 hours) or commitment standards are not met for four consecutive months. A statewide service failure occurs when held-order levels (installations delayed due to a lack of facilities) exceed 4 percent for four consecutive months. There were no statewide held-order level failures.

Qwest has substantially improved the quality of its wholesale service since its 1999 merger with US West as a result of steps taken toward Section 271 approval. As part of the 271 process, Qwest must provide competitors the same quality of service it provides to itself. Performance Indicator Definitions were developed as part of the evaluation process to test the performance of Qwest's operational support systems. Problems competitors encounter when interconnecting with the network of an incumbent company may retard the development of competition. While the number of such problems is not large, each incident places the affected competitor at a disadvantage.

As of June 30, 2002, the Division has received 39 complaints from customers of the 15 rural telecommunications providers, up from 21 last year. These complaints primarily involve billing and customer service problems.

### **Promote Technology and Advanced Telecommunications Services**

In addition to the copper wires carrying analog traffic into the home, broadband telecommunications lines can deliver both data and voice content. We, in concert with others, encourage the deployment of advanced telecommunications capabilities and can report that increasing numbers of Utahns now use the Internet, broadband services, and computer technologies for a wide range of activities including online commerce, e-government services, telecommuting, and accessing information. For example, earlier this year the Northern Ute Indian tribe had cable companies install hundreds of miles of high-speed optical cable through the 4.5 million acre Uintah and Ouray Reservations 150 miles east of Salt Lake City. As do others, the tribe expects broadband to enhance economic opportunities and the quality of life.

More than one million of Qwest's Utah access lines are served by central offices having DSL services (although many of these lines do not qualify for DSL due to technical limitations). The Company expects to deploy DSL in 23 more central offices by the end of the year. Although technological limitations do not permit all of these customers to use DSL today, this is nonetheless a significant advance in broadband availability. By the end of 2002, the company will have invested almost \$15 million in DSL deployment throughout the state, as we required when we

approved the merger of Qwest and US West. Every Qwest central office will be equipped with DSL by the end of 2002. We believe that Utah will be the first state in the nation to achieve this level of broadband access. Most rural ILECs have the ability to deliver broadband services on request.

### **Facilitate Relay Utah**

The Commission, in cooperation with Utah's telephone service providers, implemented an abbreviated dialing system to reach Relay Utah. Relay Utah is a telecommunications relay service we provide in partnership with Sprint to deaf, hard-of-hearing, and speech-impaired telephone customers. To the extent possible, the service is functionally equivalent to that experienced by users having normal hearing. Relay Utah employs operators (known as communications assistants) to relay or translate communications between hearing customers using traditional telephones and deaf or speech-impaired customers using keyboard devices. Relay Utah is a service required by the Americans with Disabilities Act and currently processes approximately 546,000 calls annually.

With the implementation of 7-1-1 dialing to reach Relay Utah, the service witnessed an increase in calls made by telephone users to communicate with people who use text telephones (TTY's). Relay Utah users automatically connect to a Relay Utah communications assistant. Toll-free numbers are another way to access the service.

Utah Video Relay Service (UTVRS) is a new feature added to Relay Utah July 1, 2002. A person who uses American Sign Language (ASL) can access the relay service either through use of a Video Interpreter, a personal computer, a web camera, or on the Internet at [www.utvrs.com](http://www.utvrs.com). This is the most functionally equivalent form of communication to a telephone call for a person who depends upon ASL as their native language.

Another new method of using the relay service is by accessing the relay service online at [www.sprintrelayonline.com](http://www.sprintrelayonline.com). By connecting to this site, a person can use a computer to make a relay call rather than using a TTY. Long distance calls are free, and the calls are secure and confidential.

We are currently in the process of implementing an additional outreach campaign in order to raise awareness of Relay Utah and all of its services. An advertising, marketing, and public relations firm will be producing Public Service Announcements, brochures, print and radio advertisements in order to inform the general public about Relay Utah services, and about the equipment distribution program.

### **Number Conservation and Area Code Relief**

In September 1999, the North American Numbering Plan Administration declared the 801 area code in jeopardy of running out of numbers. Through special petition to the FCC, we requested and were granted the right to extend the use of this area code by implementing number

conservation, that is, by requiring carriers to file for 1,000-, instead of 10,000-number blocks. In this way, fewer unused numbers are tied up awaiting later distribution to customers. Utah was one of the first states to implement this program, known as number pooling. We recalled unused blocks from previous distributions, or in some instances carriers voluntarily returned them, and in this way were able to extend the useful life of the 801 area code. Because of this success, the implementation date of the new 385 area code for Utah, Weber, Davis, and Morgan counties has been extended to at least March 2005.

## Competition in Utah's Local Service Market

The competitive landscape of the telecom industry in 2002 is vastly different from years past. In the wake of the recent bankruptcies and financial accounting scandals involving WorldCom, Global Crossing, Qwest, and others, financial difficulties are occurring throughout the telecommunications industry. The issue of corporate accountability now impedes competition.

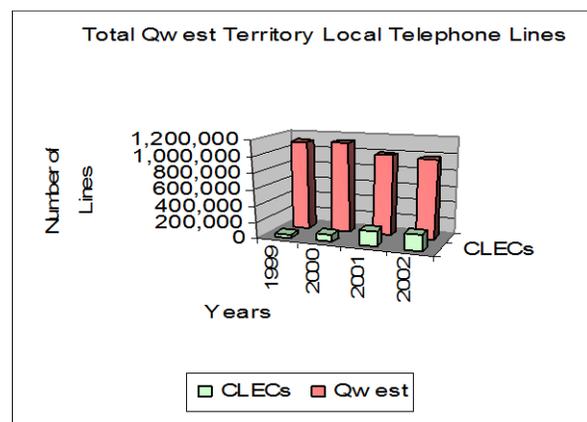
Assessing whether a market is competitive is not simple. It depends on such factors as the boundaries of a given market and the breadth of the definition of goods or services provided. Economists define a competitive market as one in which a substantial number of buyers and sellers trade a particular good or service independently. Thus, no single buyer or seller is powerful enough to independently influence market prices or quantities exchanged. Competition thrives where entry and exit to the market are free, and where buyers and sellers understand the goods and services being traded. Competitiveness in markets is always a matter of degree.

In this report, we ask how much of the market each company holds, measured by its revenues, number of lines, and customers. Concerns over carriers' service quality can reduce the market to a single dominant company if customers are afraid to try an "unestablished newcomer" for services considered essential. It is not just the number of carriers in each telecommunications market that defines competition, but also market shares and perceived quality of service.

Telecommunications is a broad field extending beyond traditional modes of residential voice and business service to newer modes of advanced services such as wireless phones pagers, personal digital assistants, email, Internet telephone, and interactive television. It may be broadcast using a segment of the radio spectrum or transmitted via satellite. Although the Public Service Commission does not regulate all segments of the telecommunications industry, we briefly report on some advanced services and new technologies.

The traditional telecommunications markets are the wireline markets that consist of local exchange, Intra-LATA toll, and Inter-state long distance services provided by ILECs, CLECs, and IXC ("interexchange carriers") to residential and business customers. Competitive local exchange carriers are wireline carriers authorized under state and federal laws to compete with incumbent companies to provide local exchange service.

Residential competition in the local market is currently very limited. Data indicates that Qwest, holds a dominant position even though it reported a slight net decline in the total number of residential telephone lines served during 2002.

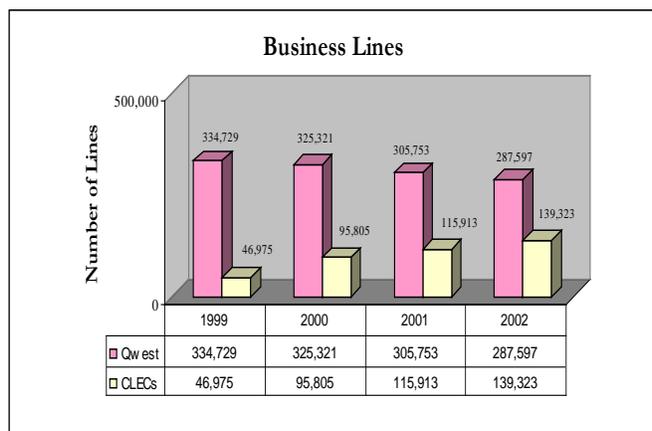


However not all of this decrease is due to competitors. Some residential customers have opted to drop second telephones because of the slowing economy. Others have canceled service because they have signed up for high-speed Internet connections and no longer need a second phone line for their computer modems.

The number of residential lines served by CLECs increased by 31 percent over last year's number, however, as a percentage of the total market CLECs still serve only about 8 percent of the residential lines. With competitive providers present in 20 of Utah's 29 counties, the responses to this year's data requests show the emergence of specialty markets in the residential sector as well as the business sector.

In percentage terms, CLECs serve 33 percent of business access lines in Qwest's service territory. Some CLECs are providing bundled residential service, either including local service, a fixed or unlimited amount of monthly long distance service in addition to Internet access, or combining local and long distance phone service with cable television and Internet service.

AT&T has been the strongest contender in the residential market, but has restructured its AT&T Broadband segment, splitting from the parent company. In addition, in July of this year, we approved the merger of AT&T Broadband-Utah and Comcast Corp., shifting control of the company to Comcast – a major cable company. The FCC approved that transaction November 13, 2002. Recently MCI has entered the local residential market as well and appears to be very successful in attracting new customers. MCI introduced a plan for residential customers in which a single rate is paid to obtain local service, unlimited toll service, and other features. Both AT&T and MCI serve only limited geographic areas. The large majority of Qwest's residential customers have no competitive choice.



Qwest Communications International Inc., the nation's fourth-largest phone company, is struggling under \$26 billion in debt. Much of this debt was acquired on the non-local service side of the Qwest company. Qwest is now attempting to pay it down. Qwest's accounting practices are, under investigation by the Securities and Exchange Commission. The U.S.

Attorney's Office and Congress are also investigating Qwest.

Previous editions of this report have tracked the emergence of data local exchange carriers (DLECs) that provide data services. These companies specialize in high-speed services, including

the various forms of DSL service and other specialized products marketed primarily to businesses. They operate in large metropolitan areas and provide service, usually wholesale DSL service to Internet Service Providers, through UNEs in conjunction with their own facilities. Since the last edition of this report, a number of these DLECs have reported difficulties in accessing capital markets. Some have filed for reorganization under Chapter 11, and others have disappeared. As of June 2002, there are only two data local exchange carriers providing service in Utah.

The fifteen member companies of the Utah Rural Telecom Association (or rural ILECs) offer high-quality service to their rural Utah customers. Unlike Qwest, ILECs are either rate-of-return regulated telecommunications carriers, or cooperatives. These companies are frequently family-operated businesses or relatively small cooperatives, they are primarily community-based operations. In April 2001, five rural companies completed major expansions by acquiring twelve exchanges formerly owned by Qwest, gaining approximately 34,622 access lines. Since then, the companies have been upgrading networks and initiating new services.

The long distance market in Utah is exhibiting mixed signals. According to FCC data, long distance minutes of use in the state grew slowly between 1996 and 2002 while total long distance revenues declined. In addition, certain carriers reported a decline in residential long distance subscribership during that period. It is unclear whether this indicates changes in the degree of competition in this market. On one hand, several long distance carriers claim they are experiencing a downturn due to wireless, email, and Internet substitution. On the other hand, the changes may be attributable to shifting customer bases between long distance carriers and may not indicate market decline. There are currently 388 toll resellers serving Utah.

Intense price wars have lowered long-distance service rates. Wireless service plans lure customers with flat rate service. Long distance pricing is pressured by a glut of capacity, and this market will further be affected should Qwest receive FCC approval to begin offering long-distance service here.

## **Market Power**

Courts and federal agencies acknowledge the existence of market power when a firm has the ability and incentive to raise or maintain prices above competitive levels or to achieve other anticompetitive effects. Two economic measures used to evaluate market power are the Herfindahl-Hirschman Index (“HHI”) and the Effective Firm Index. Both can be used to judge the level of competition in the industry.

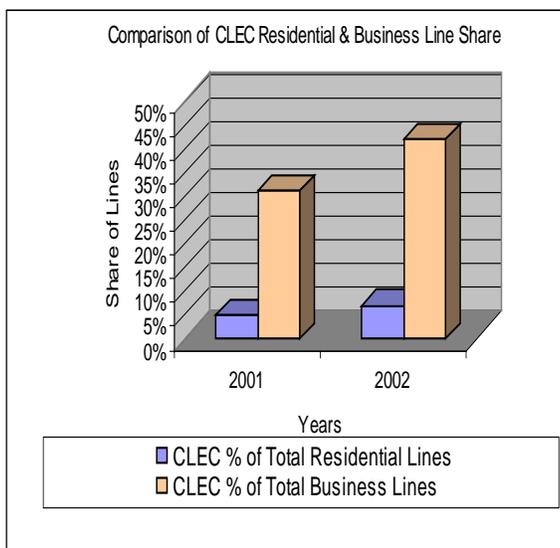
HHI measures market concentration by squaring the market share of each firm competing in the market and summing the results. The HHI increases as the number of firms in the market decreases and as the disparity in size between those firms increases. An index value of .50 is the necessary threshold value for the market to begin to be considered somewhat competitive. The table below reflects the HHI values for the past three years in Qwest’s Utah service territory. A troubling sign this year is a flattening of the index’s downward trend for business services. At the very time that Qwest has been granted pricing flexibility along much of the Wasatch Front for

business services, and has applied for further expansion, effective competition appears to be slowing.

<b>Herfindahl-Hirschman Index for Qwest's Utah Operations</b>			
Year	Total Market	Residential Market	Business Market
2000	.844	.985	.614
2001	.716	.888	.480
<b>2002</b>	<b>.695</b>	<b>.853</b>	<b>.472</b>

The Effective Firm Index is another objective economic measurement that reveals the degree of competition in a market by estimating the number of effective firms within the industry. The Effective Firm Index for Qwest's Utah service territory remains basically unchanged at 1.44, compared to the previous year's 1.40. The index, which is the inverse of the HHI, will usually not exceed 2 unless

the dominant firm's market share declines to approximately 65 percent. The Effective Firm Index in the business market was 2.12, slightly larger than last year's 2.08. In the residential market, the Effective Firm index increased from 1.13 to 1.17. The results show that the total market has changed only slightly in the past year. The 17 CLECs active in Utah jointly have the impact of a little less than one half of an effective competitor in the overall market.



Competition does exist in some portions of the Utah telecommunications markets, but it is neither equally distributed throughout the state nor equally present in the residential and business service markets. Generally urban areas are more competitive than rural areas and some parts of the state have little or no competition. The following tables illustrate the situation. Data shows that service offerings in Utah vary widely in target markets, method of service provision, and geographic availability.

**Table 3.1. Utah's Local Service Market 2002**

County	Companies Providing Service		Competitors Present	
	Incumbent Wireless Providers	Competitive Providers	Business	Residential
Beaver	Qwest, South Central Utah	Reconex	No	Yes
Box Elder	Beehive, Frontier/Citizens, Qwest	AT&T Communications (Business only), Eschelon, McLeodUSA, Reconex, Tel West	Yes	Yes
Cache	Bear Lake, Qwest	American Fiber Network, AT&T Communications (Business only), Eschelon, Integra, McLeodUSA, Reconex, Tel West, Z-Tel	Yes	Yes
Carbon	Carbon/Emery, Central Utah	AT&T Communications	Yes	No
Daggett	Union		No	No
Davis	Qwest	American Fiber Network, AT&T Broadband, AT&T Communications, Comm South, Eschelon, First Digital, Integra, MCI Metro, McLeodUSA, Reconex, SBC, TCG, Tel West, XO Utah, Z-Tel	Yes	Yes
Duchesne	UBET, UBTA		No	No
Emery	Emery	AT&T Communications	Yes	No
Garfield	Beehive, South Central Utah		No	No
Grand	Frontier/Citizens		No	No
Iron	Beehive, Qwest, South Central Utah	Comm South, Eschelon, McLeodUSA, Reconex, Tel West	Yes	Yes
Juab	Beehive, Qwest, Skyline	Eschelon, McLeodUSA, Reconex, Tel West	Yes	Yes
Kane	Beehive, Qwest, South Central Utah		No	No
Millard	Beehive, Frontier/Citizens		No	No

	Companies Providing Service		Competitors Present	
Morgan	Qwest	AT&T Communications (Business only), McLeodUSA, Reconex	Yes	Yes
Piute	South Central Utah		No	No
Rich	All West Comm., Bear Lake		No	No
Salt Lake	Qwest	American Fiber Network, AT&T Broadband, AT&T Communications, Comm South, DSLnet, ELI, Eschelon, First Digital, Integra, Level 3, MCI Metro, McLeodUSA, Reconex, SBC, TCG, Tel West, XO Utah, Z-Tel	Yes	Yes
San Juan	Frontier/Citizens, Farmers, Navajo		No	No
Sanpete	Central Utah, Manti, Gunnison, Skyline	AT&T Communications	Yes	No
Sevier	Qwest, South Central Utah	Eschelon, Integra, McLeodUSA, Reconex, Tel West	Yes	Yes
Summit	All West Comm., Qwest, Union	American Fiber Network, AT&T Communications (Business only), Eschelon, Integra, McLeodUSA, Reconex, TCG, XO Utah	Yes	Yes
Tooele	Beehive, Qwest, Skyline,	AT&T Communications (Business only), Eschelon, McLeodUSA, Reconex, Tel West, XO Utah	Yes	Yes
Uintah	UBET, UBTA	AT&T Communications	Yes	No
Utah	Central Utah, Qwest, Skyline	American Fiber Network, AT&T Broadband, AT&T Communications, Comm South, Eschelon, Integra, McLeodUSA, Reconex, SwitchPoint, Tel West, XO Utah, Z-Tel	Yes	Yes
Wasatch	Central Utah, Qwest	AT&T, Eschelon, McLeodUSA, Reconex	Yes	Yes
Washington	Beehive, Qwest, South Central Utah	American Fiber Network, AT&T Communications (Business only), Comm South, Eschelon, McLeodUSA, Reconex, Tel West	Yes	Yes
Wayne	Beehive, Hanksville, South Central Utah	Eschelon	Yes	No
Weber	Qwest	American Fiber Network, AT&T, Eschelon, Integra, MCI Metro, McLeodUSA, Reconex, SBC, TCG, Tel West, XO Utah, Z-Tel	Yes	Yes

**Table 3.2. Summary Data for 2002**

<b>Data</b>	<b>Qwest</b>	<b>CLECs</b>	<b>Other ILECs</b>
Number of Local Access Lines Served (as of June 30, 2002)	974,247	198,478	95,057
Residential	686,650	59,276	67,813
Business	287,597	139,202	27,187
Other	0	0	57

**Table 3.3. Growth Data Summary**

<b>Data</b>	<b>Qwest 2001</b>	<b>Qwest 2002</b>	<b>% Growth</b>	<b>Other ILECs 2001</b>	<b>Other ILECs 2002</b>	<b>% Growth</b>
Number of Local Access Lines Served (as of June 30, 2002)	1,027,897	974,247	(5.22%)	95,633	95,000	(0.66%)
Residential	722,144	686,650	(4.92%)	70,136	67,813	(3.3%)
Business	305,753	287,597	(5.94%)	25,497	27,187	6.63%

**Table 3.4. CLEC Growth Data**

<b>Data</b>	<b>1999 %Growth</b>		<b>2000 %Growth</b>		<b>2001 %Growth</b>		<b>2002 %Growth</b>	
Number of Local Access Lines Served	47,859	166%	101,899	113%	161,218	58%	198,478	23%
Residential	826	313%	6,094	638%	45,305	643%	59,276	31%
Business	46,975	164%	95,805	104%	115,913 <sup>3</sup>	21%	139,202	20%

<sup>3</sup>Last year's Report contained an error in the CLEC business line count. Private line and point-to-point lines were included in the business line count. This year's Report corrects that error. The previously reported line count was 145,302.

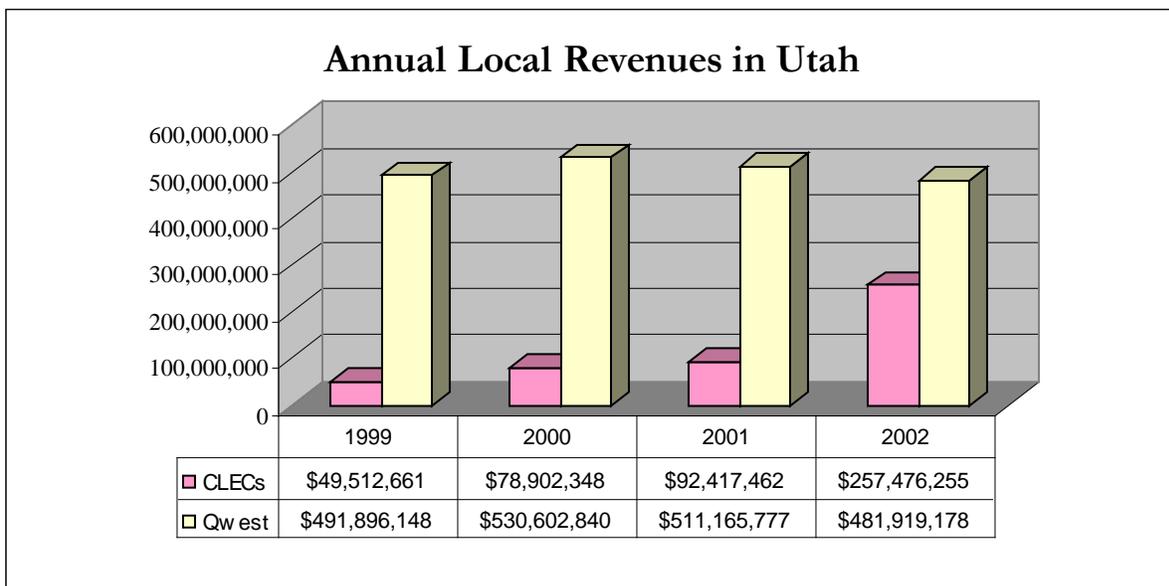
**Table 3.5. 2002 Fiscal Year Telecommunications Operating Revenue**

(Estimated based on YTD figures as of June 30, 2002)

Category of Revenue	Qwest	CLECs	Other ILECs
Residential Local Exchange	116,276,094	13,535,531	13,351,142
Business Local Exchange	116,965,068	27,509,202	5,340,154
Vertical Services	117,994,486	6,847,621	4,312,733
Private Line and Special Access-inter- and intrastate	18,224,576	47,508,874	10,304,856
Network Interexchange			
Switched Access	18,026,196	15,893,794	48,063,098
Toll (Intra- and Inter-LATA)	18,455,808	128,975,667	590,302
Data Local Exchange	218	14,910,114	1,082
Other	75,976,732	2,295,452	7,503,385
<b>Total</b>	<b>\$481,919,178</b>	<b>\$257,476,255*</b>	<b>\$90,895,070</b>

(The revenues in Table 3.5 are reported to the Division by each company and may not include all earnings or Commission adjustments. In addition, Qwest's announced restatement of its earnings may change the numbers currently reported.)

\*In previous reports, interstate revenues were excluded. Intrastate revenues are estimated to be \$96.2 million.



## **Other Forms of Competition**

Currently, five major types of residential broadband service are available--cable modem, Digital Subscriber Line (DSL), satellite, Integrated Services Digital Network (ISDN), and wireless broadband (also known as fixed wireless). Each has advantages and disadvantages in performance, speed and availability.

**Cable.** Cable television companies' high-speed Internet service is a viable competitive alternative to ILEC DSL service. Nationally, at the end of 2001, cable modem subscribers (7.4 million) outnumbered DSL subscribers (3.3 million) by more than 2 to 1. At the present time, only 8 percent of U.S. households have cable modems or DSL, but this is expected to rise. In Utah, cable modem broadband service has limited availability though some expect the pending AT&T/Comcast merger to increase cable's market share.

**DSL.** DSL competition is limited, and a number of DSL providers have gone out of business this past year. DSL deployment is relatively expensive, and competitors are dependent on incumbent local exchange carriers for network linkages in order to provide competitive alternatives to the incumbent's DSL service. Nevertheless, DSL growth has exceeded growth in cable for the past two years.

**Satellite.** Satellite broadband competition is growing, in part, as the result of 1999 federal regulations that prevent zoning boards and landlords from restricting dish antennas. Satellite broadband has grown quickly in rural areas not served by cable, but does not appear to be an effective competitor where cable and or DSL are already available.

**Fixed Wireless.** An Orem company has been working on Discus Broadband, a high-speed, always-on service. Based on placement of low-cost, fixed broadband wireless radios to create Discus Broadband using a "dynamic airwave network" (DAN), this service may be available by year's end. Another company provides a high-speed Internet service in Utah county which allows consumers to be mobile while staying connected to the Internet.

**Wireless.** Wireless service competes for both interstate and intrastate voice services, and wireless data may gain broader acceptance, becoming a substitute for landline service, if spectrum frequencies are broadened. Such service has yet to significantly impact traditional local phone service, however. Nationwide, about 3 percent of households have terminated traditional landline phone service and are relying entirely on cell phones. Moreover, many persons now send email messages rather place telephone calls. The lack of number portability, high fees for breaking contracts, and different technology standards may be preventing still greater wireless usage. Verizon, VoiceStream, Sprint PCS, and AT&T are among the largest wireless carriers in Utah. We are unable to quantify the effect of wireless service on local exchange service.

**Municipal Telecommunications.** Earlier this year UTOPIA ("Utah Telecommunication Open Infrastructure Agency") was formed. UTOPIA is a group of a dozen cities, mostly along the Wasatch Front, that are attempting to build fiber optic broadband telecommunication networks to provide data, voice, and video transfer technology to their residents and businesses. This venture

is a serious concern to service providers the Commission regulates. Eagle Mountain currently serves business, government, and residential customers but has expressed interest in exiting the business and is actively seeking alternatives to operating its own telecommunications network. Murray owns a \$2 million fiber optic system, which currently serves its own internal city government and school district, but is considering expansion. Provo and American Fork are contemplating the purchase of either existing networks or building their own systems.

## **Challenges to Competition**

While competition can promote lower prices, innovation, and improved service quality, it can also present challenges and hazards to customers. The wave of bankruptcies during the past year suggests why.

The economic downturn has had a particularly adverse effect on competitive DSL providers and on competitive local exchange carriers. Capital markets have had a definite negative effect on competition as telecommunications stocks have lost about \$2 trillion of value in the last two years. Bankruptcies of CLECs and DSL competitors began in 2000 and accelerated in 2001 and 2002. On July 21, 2002, WorldCom, the nation's second largest long distance company, filed for bankruptcy protection. This is the largest bankruptcy filing in United States history. The Securities and Exchange Commission has charged WorldCom with fraud, and the Department of Justice is conducting a criminal investigation of its business practices. WorldCom's bankruptcy filing has created a cascade of problems for local and long distance phone carriers, and equipment suppliers. Some companies have emerged from Chapter 11 protection and remain in business. Covad, McLeodUSA, and Teligent are examples. LCG has been acquired by Qwest. XO Communications also filed for bankruptcy protection this year, but pledges to reorganize without cutting its workforce or closing facilities. Will the CLECs that have emerged from bankruptcy, now largely free of crushing debt, be competitive? Such firms will not survive unless their operations produce positive cash flows.

Nevertheless, 17 competitive companies are currently providing local exchange service in Utah, compared to 14 last year. While capital expenditures have dropped considerably, local service carriers are expected to invest more than \$139 million in 2002, after spending \$641 million in 2001. The difficulty facing competitive carriers is the continued softness in the economy during a time in which investors are pressing management for profitable operations.

## Policy Recommendations

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To promote competition, we tender certain policy recommendations. We are guided in this by three principles.

- *Remove roadblocks.* Because customer demands often cannot be anticipated, and can quickly change, government's role should be to facilitate the deployment of new technologies by removing unnecessary roadblocks. Then carriers can decide what to deploy and consumers can decide what to buy.

- *Let market forces work.* Though the market might not develop simultaneously in rural and urban areas, there is little to be gained by artificially stimulating the availability of services such as broadband where consumers have shown no interest in subscribing to them.

- *Impose deterrent penalties.* Enforcement must be part of an effective regulatory framework. Regulations must have teeth in order to prevent anticompetitive and discriminatory conduct by market participants.

Based on the fact that the marketplace is not fully competitive and working from the three principles above, we make the following recommendations:

- *Do not support the effort to eliminate UNE-P as a market entry option.* Some of the regional Bell companies are trying to persuade Congress and the FCC to eliminate the unbundled network element platform as an option for CLECs to enter markets. They argue that the ultimate objective of the 1996 Federal Act is facilities-based competition and that no other strategy is viable. There is no stated preference in the Act for facilities-based competition and eliminating UNE-P would snuff out the competition that has finally begun to develop in the Utah residential market.

- *Do not support the Tauzin-Dingell or Breaux-Nickles bills, or other legislation that does not provide appropriate incentives.* The legislation in its current form would reduce incentives for incumbents to meet obligations to open the local phone markets and would give them the chance to enter long-distance data markets without the safeguards built into the 1996 federal Act. Premature deregulation of incumbent facilities would undermine competition for voice and data services because the transmission facilities used to provide broadband services are inseparable from those used to provide voice services.

The 1996 Act calls for deregulation after a competitive market structure is in place. Customers benefit when providers are allowed to compete. There are dangers if proposed legislation frees ILECs from any unbundling obligations under section 251 of the 1996 Act. Instead we believe the FCC should use its authority to enforce current policies and orders so as to promote both intermodal and intramodal competition. Do not remove regulation prematurely.

- *Enact state laws and policies that mirror federal laws.* Each year brings new opportunities for regulatory arbitrage or changing conditions that result in increased customer

complaints. The Commission does not have authority to oversee wireless telecommunications carriers, and consumers are not aware how to resolve disputes with them. We should have the authority to fairly regulate all telecommunications carriers to the extent necessary. Federal law prohibits state regulation of wireless rates but allows states to regulate service quality, terms and conditions of wireless service. Utah regulators do not have that authority because wireless carriers are excluded from the statutory definition of telephone corporation. The legislature should amend that law.