# A TIME SERIES AND CROSS-SECTIONAL CLASSIFICATION OF STATE REGULATORY POLICY ADOPTED FOR LOCAL EXCHANGE CARRIERS

Divestiture to Present (1984-1998)

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#### **FOREWORD**

As the public policy experiment with alternative forms of economic regulation for local exchange carriers in the telecommunications industry continues, systematically documenting this transition provides valuable information for state public utility commissions and other analysts. This NRRI publication fills a void in documenting the post-divestiture industry transformation observed today. This basic information creates an easily accessible resource that can be used to make observations about trends in state regulatory policy, identify case study possibilities, and serve as a comprehensive resource to create empirical tests comparing alternative forms of regulation.

Raymond Lawton, Ph.D. Director, NRRI Columbus, Ohio December 1998

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#### I. Introduction

Since the breakup of AT&T, the telecommunications industry has been progressing from a structure of regulated monopoly to managed competition. During this period, state public utility commissions have chosen to use quite different and sometimes novel approaches in an effort to manage the transition. There is little doubt that state regulation of the telecommunications industry of today, taken as a whole, looks much different than in 1984. But how did we get here from there?

This report documents one aspect of the regulatory transition by providing a detailed summary of the policies state public utility commissions have chosen to use for local exchange carriers (LECs) operating in their jurisdictions. This information is unique on several fronts. First, the time period under study, divestiture to 1998, provides the most complete, publicly available documentation of this important post-divestiture industry transition. Second, this report identifies the form of regulation used for most LECs, both large and small, in all fifty states plus the District of Columbia, regardless of the presence of a Regional Bell Operating Company (RBOC). Previous studies tend to focus only on states served by an RBOC. This is particularly important since the form of regulation chosen is often firm-specific rather than state-specific.

For the past two and a half years, the highest priority of state commissions has been implementation of the Telecommunications Act of 1996. As pieces of the Act fall into place and many state plans for alternative regulation come up for renewal, state policy makers will be well served by having thorough documentation of the forms of alternative regulation that have been used. This report provides such a resource. Additionally, the variation in state regulatory policy for the telecommunications industry creates an interesting natural experiment for public policy analysts and economists to study. This report should prove to be a useful tool for analysts and researchers interested in estimating the impacts of alternative regulation on selected measures of

industry performance or in identifying the underlying factors that influence state public utility commissions' decisions to adopt particular regulatory plans. The next section briefly discusses the approach employed in compiling this report.

#### II. Research Method

A three-stage process was used to obtain the telecommunications regulatory policy information.

#### **Stage 1: Identify and Define Regulatory Policy**

Before classifying each state's regulatory policy, the possible regulatory options a state could use were examined and a uniform classification scheme was developed. To accomplish this, we relied upon previous work in telecommunications incentive regulation to structure and define the set of possible regulatory regimes a state could choose.<sup>1</sup> We decided upon a classification scheme consisting of nine forms of regulation, including traditional ratebase rate-of-return (RBROR) regulation. These categories and their accompanying definitions are included in a later section.

# Stage 2: Use a Combination of Existing Sources to Create a Preliminary Summary

Armed with a uniform classification scheme and working definitions of each regulatory category, we used a combination of existing documents to preliminarily identify the types of regulation for each year and LEC. The sources weighed most heavily are the ones most often cited in the academic literature on incentive regulation as sources of state regulatory policy. Most notably, we used several issues of the *State Telephone Regulation Report* (1989-1998), BellSouth's *Regulatory Reform: A Nationwide Summary* (1987-1995), and various National Regulatory Research Institute

<sup>&</sup>lt;sup>1</sup> For example, see Timothy J. Tardiff and William E. Taylor, *Telephone Company Performance Under Alternative Forms of Regulation in the U.S.* (Cambridge, MA: National Economic Research Associates, September 7, 1993), unpublished mimeo and David E. M. Sappington and Dennis Weisman, *Designing Incentive Regulation for the Telecommunications Industry* (Cambridge, MA: The MIT Press, 1996).

surveys. By comparing several sources and constructing our data over a period of fifteen years, we were able to compile a reliable chronology of each state's regulatory transition since divestiture.

# Stage 3: Survey the State Public Utility Commissions for an Additional Perspective

In order to ensure accuracy and enhance our documentation of this regulatory transition, we sent to each state public utility commission the information we had collected for their respective state. Each commission was asked to review their records and suggest any changes or additions to the information collected.<sup>2</sup> Of the fifty-one commissions contacted, forty-five responded with comments, corrections, and additions to our information. This additional step of validating and incorporating appropriate additions greatly improves the reliability and detail of the information and strengthens the overall quality of this work.

What follows is the product of this three-stage process. Where sufficient firm-specific information is available for a particular state, we include a full tabular chronology of that state's regulatory constraint for the firm. Each tabular chronology includes a year, primary regulation, and details section. The primary regulation section includes an entry corresponding to one of the nine categories of regulatory constraint discussed in the next section, with limited exceptions for unique hybrid plans. We identify a regulatory plan as being in place in a particular state based on the plan's implementation date, not necessarily the date the state commission adopted the plan. Where the implementation date is available, we include that date. Otherwise, we simply report the implementation year. The details section provides additional information about the specific plan. The additional information often includes the approval and implementation dates, specific plan details (e.g., the range of shared earnings), and an expiration date. By providing sufficient detail, we believe state

<sup>&</sup>lt;sup>2</sup> This process of contacting the individual state commissions consisted of an initial paper survey that was faxed to the telecommunications division of each commission and subsequent telephone and email follow-up for non-respondents.

commissions and other researchers can better understand and make their own classification decisions for each specific plan. Finally, in instances where sufficient firm-specific information is not available, we include available information in footnotes to the most appropriate table. This approach provides the greatest amount of information without unnecessary duplication and complexity.

# III. Forms of Regulatory Constraint Used in the Telecommunications Industry

Many forms of economic regulation are used in the telecommunications industry at the state level. Below are some of the main regulatory regimes observed over the period under consideration and a brief description of each type of plan. This is largely based on previous research about incentive regulation programs used in the telecommunications industry.<sup>3</sup> We begin with the baseline case of traditional RBROR and then consider regulatory plans that incrementally provide greater flexibility to the telephone company.

#### 1. Ratebase Rate-of-Return

Under this traditional form of regulation, the LEC's operating costs are determined and prices for its services are set to generate revenues that cover these costs plus a fair return on used and useful investments. LECs have little incentive to reduce operating costs and improve operations as they receive no incremental profits beyond the commission-established return. Further, additional distortions, such as a capital input bias, are likely.<sup>4</sup> This form of regulation is also referred to as cost-plus regulation and was the standard form of regulation before states began experimenting with incentive regulation plans.

<sup>&</sup>lt;sup>3</sup> For example, see Tardiff and Taylor, *Telephone Company Performance* and Sappington and Weisman, *Designing Incentive Regulation*.

<sup>&</sup>lt;sup>4</sup> For example, see Harvey Averch and Leland Johnson, "Behavior of the Firm Under Regulatory Constraint," *American Economic Review* (1962): 1052-1069.

#### 2. Banded Rate-of-Return

Under this form of incentive regulation, regulators establish a range (or band) of authorized earnings in which prices are initially set to generate earnings that fall within the authorized range. When only a narrow band of earnings is permitted, a LEC's incentives do not differ significantly from those created by traditional RBROR. However, the need to undertake rate hearings diminishes. When a broad band of earnings is permitted, stronger incentives are created to reduce operating costs and improve operations in other dimensions.

#### 3. Rate Case Moratoria

Rate case moratoria are agreements to suspend investigations of the LEC's earnings and the associated revision of prices that serve to return earnings to their target level. This form of incentive regulation is often used at the beginning of a switch to incentive regulation, in conjunction with other regulatory reforms, and for only a short pre-specified time period (usually two to five years). This form of regulation provides the LEC with an incentive to lower operating costs since it benefits from higher earnings until prices are revised to return earnings to their target level. The certainty involved with rate case moratoria is thought to encourage the LEC to undertake short-run, cost-reducing activities. However, it will not necessarily promote long-run investments because the LEC does not receive the full benefits in terms of incremental profits from its long-term investments. For this reason, rate case moratoria are often accompanied by infrastructure commitments and service quality obligations.

### 4. Rate-of-Return Incentive (Earnings-Sharing)

Under an earnings-sharing plan, the LEC is afforded greater earnings flexibility on the condition that earnings in a prespecified range are shared with consumers. Since the sharing is based on earnings, cost savings are not translated dollar-for-dollar into increased earnings. Many argue this dulls the LEC's incentive to reduce production costs vis-a-vis plans that allow full retention of incremental earnings.

Typically, these plans are set up with different sharing regions based on a prespecified and negotiated rate-of-return (ROR). These sharing regions can differ substantially from plan to plan.

Some of the more common plans include:

- a. **Banded rate-of-return regulation coupled with a region of higher potential earnings**: In this type of plan, the LEC keeps 100 percent of the
  earnings up to X percent, followed by a band between X percent and Y
  percent where earnings are split between the LEC and consumers, and
  finally earnings over Y percent are returned to consumers in full. In a
  plan of this sort, there exists a maximum level of earnings available to the
  LEC.
  - Sometimes this plan will be implemented with one important exception. For any earnings over Y percent, the LEC is allowed to keep a small fraction (usually one-fourth or less) of those earnings. This provides an additional level of incentives since the LEC is able to benefit from earnings above Y percent.
  - Additionally, how the earnings are allocated differs from plan to plan. For example, it could be the case that all the earnings between X percent and Y percent are given to consumers and earnings between Y percent and Z percent are given to the LEC, followed by a region of shared earnings. This guarantees that consumers are rewarded first while awarding the LEC for exceptional performance.
  - Finally, in some cases, a portion of the shared earnings is set aside for infrastructure or service quality investments in addition to splitting the earnings between the LEC and consumers.
- b. **LEC earnings conditioned on infrastructure or service quality performance standards**: In this form of plan, a performance standard must be achieved before the incentive structure is transformed from that existing under banded ROR.

#### 5. Revenue-Sharing

A plan of this variety is structured similarly to that described above, with the difference that incremental revenues rather than earnings are shared. Revenue-sharing plans avoid the problem associated with earning-sharing plans and to a larger extent traditional RBROR plans by providing a LEC with dollar-for-dollar increases in final earnings resulting from production cost reductions. Consequently, revenue-sharing plans create enhanced incentives for cost reduction relative to earnings-sharing plans. However, since revenue sharing is similar to a tax on incremental revenues, full incentives to increase revenues do not exist.

#### 6. Indexed Price Cap

The central idea behind a price cap plan is to control the price a regulated LEC charges rather than its earnings. Maximum price levels are established and the LEC retains any incremental earnings above costs. This in turn encourages cost minimizing behavior and results in greater productive efficiency. The price level is indexed by an inflation rate adjustment mechanism.<sup>5</sup>

In theory, price cap plans require the regulated LEC's average real prices to fall annually by a specified percentage productivity offset commonly referred to as an X-factor. This productivity offset represents the percentage reduction in prices that the LEC is deemed technologically capable of implementing without jeopardizing its financial integrity. Under the simplest version of price cap regulation, the regulated LEC is given substantial freedom to set rates for individual services. Often services are grouped into baskets. The LEC can raise its rates for some services (or a basket of services), provided it lowers its rates on other services (or baskets of services) sufficiently to ensure that real overall average rates decline by the required amount.

<sup>&</sup>lt;sup>5</sup> Common forms include the Gross Domestic Product Price Index (GDP-PI), the Gross National Product Price Index (GNP-PI), and the Consumer Price Index (CPI). Of these, the most frequently used index is the GDP-PI.

The standard formula takes the following form:

$$PCI = GDP-PI - X + / - Z$$

Where.

PCI = Price Cap Index

GDP-PI = Gross Domestic Product Price Index

X = Productivity Offset

Z = Exogenous Factor Adjustments

In its purest form, no sharing of realized earnings occurs in a price cap plan. However, some states using a price cap plan do require earnings sharing between consumers and the LEC. This, of course, dampens incentives for cost reduction activity as the LEC no longer receives the full earnings reward arising from reducing costs.

#### 7. Social Contracts and Rate Freezes

Although all forms of regulatory reform could be considered a social contract, the term has come to mean a negotiated regulatory plan in which special treatment for some services (for example, price freeze for basic exchange services or a given level of investment) is exchanged for flexible regulation (or perhaps deregulation) of competitive services. This form of regulatory reform achieves short-term regulatory goals directly, rather than through monitoring of price or profits.

Rate freezes are agreements not to raise (or lower) the price of a regulated service for a specified period of time. This form of incentive regulation institutionalizes what has come to be known as "regulatory lag," which provides an incentive to reduce costs since over that time period the LEC keeps all cost savings. A rate case moratorium is usually included in this kind of an agreement between the state and the LEC.

#### 8. Pricing Flexibility for Competitive Services

Some states classify services by the amount of competition the LEC faces for each service. Typically, the categories are (a) basic, (b) discretionary, (c) potentially competitive, and (d) competitive or unregulated. By classifying services in this manner, the LEC is afforded pricing flexibility on competitive services. For example, the LEC may still need regulatory approval to change rates for services in group (a) or (b), may be allowed to change rates in group (c) with 30 days notice, and be free to do as it wishes for services in group (d). Often this form of regulation is used in conjunction with a form of RBROR on monopoly services. Considerable pricing flexibility is given to those services deemed competitive, whereas very little pricing flexibility is given to traditional monopoly services. In addition, rate freezes are often implemented on basic local service rates when pricing flexibility is allowed. Common names for this type of regulatory regime include "stepped regulation," "detariffing," "service-specific price flexibility," and "service-specific deregulation."

#### 9. Deregulation

The regulatory regime furthest from RBROR, both in terms of flexibility and incentives, is full deregulation. A plan of this sort provides the LEC with strong incentives to reduce production costs as it is the sole residual claimant to any incremental profits. Further, the LEC has the opportunity and incentive to respond to changing demand and competition conditions. Theoretically, a plan of this nature most closely resembles that of a competitive marketplace. To date, the closest any state has come to full deregulation is the plan used in Nebraska. In this plan, all services other than basic local exchange are fully deregulated and earnings are not regulated.

# IV. A Final Thought on Hybrid Plans

The fact that LECs produce many products is a complicating factor in classifying the primary form of regulation that applies to LECs operating within a state. Indeed, states often use several forms of regulation in combination to constrain the operations of monopoly LECs. For example, it is common to find states employing a price-cap plan that also has an earnings-sharing component to the regulatory constraint or allowing some competitive services to be deregulated while implementing a ROR incentive plan for noncompetitive services. These are usually referred to as hybrid plans. In our documentation of the regulatory plans used by the states, an effort is made to point out all the various forms of regulation a particular LEC faces. That being said, however, caution should be used in classifying, as well as, interpreting the impacts of these hybrid plans.

# Alabama

TABLE 1a: REGULATION OF MAJOR LEC: SOUTH CENTRAL BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	Banded ROR (1986-1990)	If LEC earns a ROR outside 11.65%-12.3% band, a rate change formula is triggered. This regulation applies to all LEC services.
1987	Banded ROR (1986-1990)	No change in regulatory regime.
1988	Banded ROR (1986-1990)	No change in regulatory regime.
1989	Banded ROR with Earnings-Sharing (1989-1991)	Earnings above 12.3% are split on a sliding scale up to 50-50 depending on service quality and cost efficiency.
1990	Banded ROR with Earnings-Sharing (1989-1991)	No change in regulatory regime.
1991	Banded ROR with Earnings-Sharing (1989-1993)	No change in regulatory regime. Plan was given three-year extension through December 1993. Earnings reviewed quarterly.
1992	Banded ROR with Earnings-Sharing (1989-1993)	No change in regulatory regime.
1993	Banded ROR with Earnings-Sharing (1989-1993)	No change in regulatory regime.
1994	Banded ROR with Earnings-Sharing (1989-1994)	No change in regulatory regime. Plan extended through 1994 while PSC considers continuation or replacement plan.
1995	Banded ROR with Earnings-Sharing (1989-1995)	No change in regulatory regime. Plan extended into 1995.
	Price Caps (September 1995-2000)	Price caps adopted for large LECs in September 1995. Basic exchange and access services cannot exceed September 1995 levels until 2000. After September 1996, rates for nonbasic services can rise up to 10 percent a year, in aggregate, but rate design may be reviewed by the PSC. Earnings are <i>not</i> regulated. BellSouth must cut rates on certain services by \$63.2 million before 2000.
1996	Price Caps (1995-2000)	No change in regulatory regime.
1997	Price Caps (1995-2000)	No change in regulatory regime.
1998	Price Caps (1995-2000)	No change in regulatory regime.

## Alabama, cont.

TABLE 1b: REGULATION OF OTHER LEC: GTE SOUTH

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR Price Caps (September 1995-2000)	Price caps adopted for large LECs in September 1995. Basic exchange and access services cannot exceed September 1995 levels until 2000. After September 1996, rates for nonbasic services can rise up to 10 percent a year, in aggregate, but rate design may be reviewed by the Public Service Commission. Earnings are <i>not</i> regulated. GTE must cut basic exchange rates by \$8.5 million annually until 2000.
1996	Price Caps (1995-2000)	No change in regulatory regime.
1997	Price Caps (1995-2000)	No change in regulatory regime.
1998	Price Caps (1995-2000)	No change in regulatory regime.

Note: In 1996, LECs under 50,000 lines were offered the option of moving from traditional regulation to a price cap plan. The plan capped basic rates at 1996 levels until 2000, except for rate changes mandated as part of a four-year rate rebalancing program to bring access charges down to interstate levels and basic rates up to the statewide level of \$16.30 per month. Earnings are not regulated. All 34 small LECs elected to participate in the price cap plan in 1996, 1997, and 1998.

## Alaska

#### TABLE 2a: REGULATION OF MAJOR LECs: LARGE LECs

(over \$325,000 in Annual Revenues)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	No known activity.
1985	RBROR	No known activity.
1986	RBROR	No known activity.
1987	RBROR	No known activity.
1988	RBROR	No known activity.
1989	RBROR	No known activity.
1990	RBROR	No known activity.
1991	RBROR	No known activity.
1992	RBROR with Streamlining (1992)	Streamlining allows rate increases of 6% and any rate decreases to be decided in 45 days. Any rate increase over 6% requires a full rate case. No sunset date set.
1993	RBROR with Streamlining (1992)	No change in regulatory regime.
1994	RBROR with Streamlining (1992)	No change in regulatory regime.
1995	RBROR with Streamlining (1992)	No change in regulatory regime.
1996	RBROR with Streamlining (1992)	No change in regulatory regime.
1997	RBROR with Streamlining (1992)	No change in regulatory regime.
1998	RBROR with Streamlining (1992)	No change in regulatory regime except Anchorage Telephone Utility regulations effective June 2, 1998, to allow downward rate flexibility upon 30-day notice to the commission. Rate increases by dominant carriers subject to rate case proceedings.

# Alaska, cont.

#### TABLE 2b: REGULATION OF OTHER LECs: SMALL LECs

(under \$325,000 in Annual Revenue)

YEAR	PRIMARY REGULATION	DETAILS
1984	Hybrid: Pricing Freedom (1984)	Small LECs can opt out of rate regulation if they have support from the majority of their ratepayers. No expiration date set. LECs under \$50,000 in revenue deregulated.
1985	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1986	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1987	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1988	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1989	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1990	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1991	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1992	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1993	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1994	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1995	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1996	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1997	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.
1998	Hybrid: Pricing Freedom (1984)	No change in regulatory regime.

# Arizona

## TABLE 3a: REGULATION OF MAJOR LEC: MOUNTAIN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Regulators can end price regulation of discretionary and competitive services. No sunset date.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1996	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1985)	No change in regulatory regime. To date, Centron, toll, private lines, and switched digital services are flexibly priced.
1998	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.

# Arizona, cont.

## TABLE 3b: REGULATION OF OTHER LECs

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Regulators can end price regulation of discretionary and competitive services. No sunset date.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1996	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1985)	No change in regulatory regime. To date, Centron, toll, private lines and switched digital services are flexibly priced.
1998	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.

## **Arkansas**

## TABLE 4a: REGULATION OF MAJOR LEC: SOUTHWESTERN BELL (SWB)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility	Pricing flexibility applies to billing and collection.
1988	Rate Freeze with Pricing Flexibility	Freeze applies to basic local exchange for both residential and business customers. Two-year rate freeze expires Dec. 31, 1989.
1989	Rate Freeze with Pricing Flexibility	No change in regulatory regime.
1990	RBROR with Pricing Flexibility	Reversion back to RBROR for LEC once rate freeze expired. Centrex detariffing for big users under consideration.
1991	RBROR with Pricing Flexibility	No change in regulatory regime.
1992	RBROR with Pricing Flexibility	No change in regulatory regime.
1993	RBROR with Pricing Flexibility	No change in regulatory regime.
1994	RBROR with Pricing Flexibility	No change in regulatory regime.
1995	RBROR with Pricing Flexibility	No change in regulatory regime. Flexibility applies to competitively bid services.
1996	RBROR with Pricing Flexibility	No change in regulatory regime.
1997	Indexed Price Caps (1997)	A price cap system that allows large LECs to self-select into plan instituted. Basic exchange and switched access under caps and indexed to three quarters of GDP-PI. Nonbasic service rates deregulated. Basic rates deregulated in any competitive local exchange. Earnings <i>not</i> regulated. No expiration date.
1998	Indexed Price Caps (1997)	No change in regulatory regime.

# Arkansas, cont.

# TABLE 4b: REGULATION OF OTHER LECs: ALLTEL, SMALL LECs (under 50,000 lines)

\ <b>-</b>	(under 50,000	,
YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	
1996	RBROR	
1997	Indexed Price Caps (1997)	A 1997 law allows large LECs to self-select price cap regulation. Basic exchange and switched access under caps indexed to three quarters of GDP-PI. Nonbasic services deregulated. Basic rates are deregulated in any competitive local exchange. Earnings not regulated. No expiration date set.  Small LECs can self-select price cap system that allows them to raise basic service rates annually by the lesser of 15% or \$2 per line
		per month. Nonbasic rates deregulated. Earnings not regulated. No expiration date set. To date, 10 of 24 eligible small LECs have selected price cap regulation.
1998	Indexed Price Caps (1997)	No change in regulatory regime. However, 22 of the 24 eligible small LECs have selected price cap regulation.

# California

## TABLE 5a: REGULATION OF MAJOR LEC: PACIFIC BELL (PACIFIC TELESIS)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility (1988)	Downward pricing flexibility on competitive services including T-1 and T-3 private lines, Centrex, and Custom Calling. Referred to as "banded pricing." First part of three-phase regulatory reform.
1989	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1990	Indexed Price Cap with Earnings- Sharing (1990)	Monopoly service capped at index of GNP-PI minus 4.5%. 50-50 earnings sharing between 13% and 16.5%. Pricing flexibility allowed for competitive services. No expiration date.
1991	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime.
1992	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime.
1993	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime.
1994	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime. Index set at GNP-PI minus 5%.
1995	Indexed Price Cap with Earnings- Sharing (1990)	December 1995, Public Utilities Commission (PUC) froze LECs' rates through 1998.
1996	Rate Freeze with Earnings-Sharing (1996)	Rate freeze replaces indexed price caps.
1997	Rate Freeze with Earnings-Sharing (1996)	No change in regulatory regime.
1998	Rate Freeze with Earnings-Sharing (1996)	Indexed price cap plan due to resume in 1999. To date, Pac Bell has not shared any earnings with customers.

# California, cont.

#### TABLE 5b: REGULATION OF OTHER LEC: GTE CALIFORNIA

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility (1988)	Downward pricing flexibility on competitive services including T-1 and T-3 private lines, Centrex, and Custom Calling. Referred to as "banded pricing." First part of three-phase regulatory reform.
1989	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1990	Indexed Price Cap with Earnings- Sharing (1990)	Monopoly service capped at index of GNP-PI minus 4.5%. 50-50 earnings sharing between 13% and 16.5%. Pricing flexibility allowed for competitive services. No expiration date.
1991	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime.
1992	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime.
1993	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime.
1994	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime. Index set at GNP-PI minus 5%.
1995	Indexed Price Cap with Earnings- Sharing (1990)	No change in regulatory regime. Index set at GNP-PI minus 4.8%. December 1995, PUC froze LECs' rates through 1998.
1996	Rate Freeze with Earnings-Sharing (1996)	Rate freeze replaces indexed price caps.
1997	Rate Freeze with Earnings-Sharing (1996)	No change in regulatory regime.
1998	Rate Freeze with Earnings-Sharing (1996)	Indexed price cap plan due to resume in 1999.

# California, cont.

### TABLE 5c: REGULATION OF OTHER LECs: CITIZENS, ROSEVILLE TELEPHONE

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	Indexed Price Caps with Earnings- Sharing (1995)	Earnings between 11.25% and 14.75% split 50-50 with ratepayers. Index set at GDP-PI minus 4% for monopoly services. Pricing flexibility allowed for competitive services. No expiration date.
1996	Indexed Price Caps with Earnings- Sharing (1995)	No change in regulatory regime.
1997	Indexed Price Caps with Earnings- Sharing (1995)	No change in regulatory regime.
1998	Indexed Price Caps with Earnings- Sharing (1995)	No change in regulatory regime.

Note: All other small LECs operate under RBROR.

### Colorado

### TABLE 6a: REGULATION OF MAJOR LEC: MOUNTAIN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (1987)	Services are classified as fully regulated, flexibly priced, or deregulated. Termed Stepped Regulation. No expiration date.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1993	ROR Incentive with Pricing Flexibility (1993-June 1998)	Sharing on earnings determined by sliding scale (no sharing under 13.5%, 35-65 firm-customers if between 13.5%-14.5%, 50-50 if between 14.5%-15.5%, 65-35 if between 15.5%-16.5%, company retains all earnings above 16.5%). Pricing flexibility allowed on semi and fully competitive services.
1994	ROR Incentive with Pricing Flexibility (1993-June 1998)	No change in regulatory regime.
1995	ROR Incentive with Pricing Flexibility (1993-June 1998)	No change in regulatory regime.
1996	ROR Incentive with Pricing Flexibility (1993- June 1996)	No change in regulatory regime.
1997	ROR Incentive with Pricing Flexibility (1993-1997)	No change in regulatory regime; plan extended to end of 1997.
1998	RBROR (1998)	Reversion back to RBROR once incentive plan expired in 1997. Public Utilities Commission is considering new price regulation plan that includes a five-year rate freeze and no earnings sharing.

# Colorado, cont.

# TABLE 6b: REGULATION OF OTHER LECs: PTI COMMUNICATIONS, LARGE LECs (over 50,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (1987)	Services are classified as fully regulated, flexibly priced, or deregulated. Termed Stepped Regulation. No sunset date.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1987)	No change in regulatory regime. Under 1995 law, LEC can seek price cap regulation.
1996	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1998	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.

# Colorado, cont.

### TABLE 6c: REGULATION OF OTHER LECs: SMALL LECs

(under 50,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (1987)	Services are classified as fully regulated, flexibly priced, or deregulated. Termed Stepped Regulation. No sunset date.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1993	RBROR with Streamlining (1993)	Under 1993 law, small LECs may petition to be deregulated under streamlined earnings-based process that eliminates most cost-support and cost-allocation requirements.
1994	RBROR with Streamlining (1993)	No change in regulatory regime.
1995	RBROR with Streamlining (1995)	Under a 1995 law, small LECs may petition for light regulation under streamlined earnings-based or price-based methodologies. So far, eligible LECs have not petitioned for streamlining.
1996	RBROR with Streamlining (1995)	No change in regulatory regime.
1997	RBROR with Streamlining (1995)	No change in regulatory regime.
1998	RBROR with Streamlining (1995)	No change in regulatory regime.

### Connecticut

TABLE 7a: REGULATION OF MAJOR LEC: SOUTHERN NEW ENGLAND TELEPHONE

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	ROR Incentive with Pricing Flexibility (1987-1989)	Earnings shared on a sliding scale. Company keeps earnings between 13%-13.5%, splits 50-50 earnings between 13.5%-14.3% and refunds all earnings above 14.3%.
1988	ROR Incentive with Pricing Flexibility (1987-1989)	No change in regulatory regime.
1989	ROR Incentive with Pricing Flexibility (1987-1989)	No change in regulatory regime.
	RBROR	Reversion back to RBROR at beginning of 1989 when ROR incentive plan expired.
1990	RBROR	No change in regulatory regime.
1991	ROR Incentive (1991)	50-50 sharing on earnings between 12.75% and 15.75% contingent on meeting service quality standards. No expiration date set.
1992	ROR Incentive (1991)	No change in regulatory regime.
1993	ROR Incentive (1991)	No change in regulatory regime, LEC has filed rate case to bring earnings up to 12.5%.
	RBROR	Earnings sharing plan discontinued on July 7, 1993.
1994	RBROR	1994 law passed to allow Department of Public Utility Control to approve most forms of alternative regulation and local competition.
1995	RBROR	No change in regulatory regime.
1996	Indexed Price Caps (1996)	Basic rates frozen until 1998, then capped. Other noncompetitive services capped at beginning of plan. Index set at GDP-PI minus 5%. Competitive services not capped. Earnings not regulated. Service quality standards set. No expiration date.
1997	Indexed Price Caps (1996)	No change in regulatory regime.
1998	Indexed Price Caps (1996)	No change in regulatory regime.

Note: New York Telephone operations in Connecticut under RBROR.

### **Delaware**

### TABLE 8a: REGULATION OF MAJOR LEC: DIAMOND STATE TELEPHONE (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	Banded ROR with Rate Freeze (1988-1990)	Company asked for banded ROR between 12%-15% return on equity, however, plan approved was as follows no action taken by commission if return on equity between 13%-14%. However, plan lapses if return on equity falls below 12%.
1989	Banded ROR with Rate Freeze (1988-1990)	No change in regulatory regime.
1990	Banded ROR with Rate Freeze (1988-1990)	No change in regulatory regime.
1991	RBROR	Rate freeze and banding expired.
1992	RBROR	
1993	RBROR	
1994	RBROR Indexed Price Caps (March 1994-1998)	Indexed Price Caps adopted March 24, 1994. Basic services capped, competitive services flexibly priced. Index set at GNP-PI minus 3%. Earnings <i>not</i> regulated. LEC must spend \$250 million on network by 1998.
1995	Indexed Price Caps (1994-1998)	No change in regulatory regime.
1996	Indexed Price Caps (1994-1998)	No change in regulatory regime.
1997	Indexed Price Caps (1994-1998)	No change in regulatory regime.
1998	Indexed Price Caps (1994-2001)	No change in regulatory regime; plan extended until March 2001.

# **District of Columbia**

### TABLE 9a: REGULATION OF MAJOR LEC: C&P TELEPHONE (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	ROR Incentive with Rate Freeze (1993-1996)	50-50 sharing on earnings over 13.5%. Residential rates frozen. Price flexibility allowed for certain competitive services.
1994	ROR Incentive with Rate Freeze (1993-1996)	No change in regulatory regime.
1995	ROR Incentive with Rate Freeze (1993-1996)	No change in regulatory regime.
1996	ROR Incentive with Rate Freeze (1993-1996)	No change in regulatory regime, proposal made to move to price-cap regulation by end of 1996.
1997	Indexed Price Caps (1996)	Price caps adopted, but basic exchange and access rates frozen until 2000 (except for series of mandated rate cuts totaling \$25.8 million). Other basic services under caps indexed to GDP-PI minus 3%. Discretionary service rates can rise 15 percent a year. Competitive services and earnings <i>not</i> regulated. No expiration date. PUC mandates a \$4 million contribution to educational infrastructure fund.
1998	Indexed Price Caps (1996)	No change in regulatory regime.

# Florida

### TABLE 10a: REGULATION OF MAJOR LEC: SOUTHERN BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	ROR Incentive with Rate Freeze (1988-1990)	Earnings between 14%-16% split 40-60 (firm-customers) with ratepayers. All earnings over 16% refunded to consumers. Basic residential rates capped. All LEC services affected.
1989	ROR Incentive with Rate Freeze (1988-1990)	No change in regulatory regime.
1990	ROR Incentive with Rate Freeze (1988-1990)	No change in regulatory regime.
1991	ROR Incentive with Rate Freeze (1988-1992)	No change in regulatory regime; plan extended through 1992.
1992	ROR Incentive with Rate Freeze (1988-1992)	No change in regulatory regime.
1993	ROR Incentive with Rate Freeze (1988-1993)	No change in regulatory regime, plan extended through 1993 until Public Service Commission decides next step.
1994	ROR Incentive with Rate Freeze (1994-1997)	Earnings between 12% and 14% shared 60-40 with ratepayers. Sharing points to be adjusted annually. LEC must make \$300 million in rate cuts by 1996 and must establish a service guarantee plan.
1995	Indexed Price Cap with Earnings- Sharing (1995-2001)	Basic rates frozen through 2001, then go under caps indexed to GDP-PI minus 1%. Nonbasic services can increase 6% annually in noncompetitive markets and 20% annually in competitive markets. Access rates capped until Jan. 1, 1999. For 1995-1997, Southern Bell must share earnings over 12% with ratepayers. After 1997, earnings not regulated. No expiration date.
1996	Indexed Price Cap with Earnings- Sharing (1995-2001)	No change in regulatory regime.

# Florida, cont.

### TABLE 10a: REGULATION OF MAJOR LEC: SOUTHERN BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1997	Indexed Price Cap with Earnings- Sharing (1995-2001)	No change in regulatory regime.
1998	Indexed Price Cap (1995-2001)	Earnings sharing component of plan expired. Extended caps on access rates; capped at Jan. 1, 1999 levels until Jan. 1, 2001.

# Florida, cont.

TABLE 10b: REGULATION OF OTHER LECs: GTE FLORIDA, SPRINT/UNITED, SPRINT/CENTEL

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	Indexed Price Cap (1995-2000)	Basic rates frozen through 2000. Index is set at GDP-PI minus 1%. Nonbasic services can increase 6% per year in noncompetitive markets and 20% per year in competitive markets. Access capped until Jan. 1, 1999. Earnings <i>not</i> regulated. No expiration date set. In 2001, LECs can petition for full rate deregulation.
1996	Indexed Price Cap (1995-2000)	No change in regulatory regime.
1997	Indexed Price Cap (1995-2000)	No change in regulatory regime.
1998	Indexed Price Cap (1995-2000)	No change in regulatory regime. Extended caps on access rates; capped at Jan. 1, 1999 levels until Jan. 1, 2001. GTE and Sprint ordered to reduce intrastate access rates by 5% effective July 1, 1998, and by an additional 10% effective Oct. 1, 1998.

Note: Small LECs (under 15,000 lines) beginning in 1995 had the option to self-select into a price cap plan similar to the one GTE, Sprint/United and Sprint/Centel operate under. To date, at least four have done so.

# Georgia

TABLE 11a: REGULATION OF MAJOR LEC: SOUTHERN BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	A 1988 law allows Public Service Commission to relax regulation of competitive services. Action not taken.
1989	RBROR	
1990	RBROR	
1991	ROR Incentive (January 1991-1993)	Earnings between 14% and 16% split 50-50 with ratepayers. Split contingent upon meeting service and productivity standards.
1992	ROR Incentive (1991-1993)	No change in regulatory regime.
1993	ROR Incentive (1991-1993)	No change in regulatory regime.
1994	ROR Incentive (1991-June 1994)	Plan revised and extended through June 1994. Earnings between 11.5% and 13.5% split 50-50 with ratepayers unless LEC does not meet service and productivity standards.
1995	ROR Incentive (1991-1995)	Plan extended into 1995.
	Indexed Price Caps (1995-2000)	Basic rates frozen through 2000. The index is set at GDP-PI minus 3%. Switched access capped at interstate rate. Rates on all other services deregulated. Earnings <i>not</i> regulated. LEC must invest more that \$2 billion in network by 2000. No expiration date set.
1996	Indexed Price Caps (1995-2000)	No change in regulatory regime.
1997	Indexed Price Caps (1995-2000)	No change in regulatory regime.
1998	Indexed Price Caps (1995-2000)	No change in regulatory regime.

Note: Alltel, another large LEC serving Georgia, elected to go under the price cap plan Southern Bell faces.

# Hawaii

### TABLE 12a: REGULATION OF MAJOR LEC: GTE HAWAIIAN TELEPHONE

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	A 1995 state law (Act 225) requires the Public Utilities Commission to maintain cost-based regulation of GTE until effective local competition is in place.
1996	RBROR	
1997	RBROR	
1998	RBROR	

Idaho

TABLE 13a: REGULATION OF MAJOR LEC: MOUNTAIN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR and Revenue Sharing with Pricing Flexibility (July 1988)	All services other than basic local service have been removed from Public Utilities Commission regulation.
1989	RBROR and Revenue Sharing with Pricing Flexibility (1988)	A revenue sharing plan approved April 1, 1989, went into effect Jan. 1, 1989, until 1995.
1990	RBROR and Revenue Sharing with Pricing Flexibility (1988)	No change in regulatory regime.
1991	RBROR and Revenue Sharing with Pricing Flexibility (1988)	No change in regulatory regime.
1992	RBROR and Revenue Sharing with Pricing Flexibility (1988)	No change in regulatory regime.
1993	RBROR and Revenue Sharing with Pricing Flexibility (1988)	No change in regulatory regime.
1994	RBROR and Revenue Sharing with Pricing Flexibility (1988)	No change in regulatory regime.
1995	RBROR and Revenue Sharing with Pricing Flexibility (1988)	Revenue sharing plan expired at end of 1995.
1996	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1988)	No change in regulatory regime. A 1997 law allows U S West to seek price cap regulation when residential and business competition emerges at the local exchange.
1998	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.

Note: U S West has two companies in Idaho, north (30,000 customers) and south (600,000 customers). This table reflects regulatory information for U S West operations in Southern Idaho. U S West operations in Northern Idaho have always been and still remain RBROR.

# Illinois

### TABLE 14a: REGULATION OF MAJOR LEC: ILLINOIS BELL (AMERITECH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Pricing flexibility allowed if service found to be competitive. Services include Centrex, T-1, billing and collection, 900 service. No expiration.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	ROR Incentive with Pricing Flexibility (1989-1991)	In addition to 1985 pricing flexibility plan, Illinois Bell required to split earnings. Earnings between 12.76%-14% split 60-40 (firm-customers); 14%-15% split 30-70; and above 15% goes to customers.
1990	ROR Incentive with Pricing Flexibility (1989-1991)	
	RBROR with Pricing Flexibility (1985)	Court struck down earnings sharing plan Oct. 5, 1990.
1991	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1995	Indexed Price Caps (1995-1999)	Under this plan, a rate freeze is applied to basic residential rates. Other noncompetitive services are under indexed price caps. The index is set at GDP-PI minus 4.3%. Competitive services remain flexibly priced. Earnings not regulated. Service quality and infrastructure standards set.

# Illinois, cont.

### TABLE 14a: REGULATION OF MAJOR LEC: ILLINOIS BELL (AMERITECH)

YEAR	PRIMARY REGULATION	DETAILS
1996	Indexed Price Caps (1995-1999)	No change in regulatory regime.
1997	Indexed Price Caps (1995-1999)	No change in regulatory regime.
1998	Indexed Price Caps (1995-1999)	No change in regulatory regime.

# Indiana

# TABLE 15a: REGULATION OF MAJOR LEC: INDIANA BELL (AMERITECH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	Price Caps (1994-1997)	Price cap applies to local and toll rates, other services are flexibly priced. Earnings <i>not</i> regulated. No indexing. Adopted June 30, 1994. Infrastructure commitment required.
1995	Price Caps (1994-1997)	No change in regulatory regime.
1996	Price Caps (1994-1997)	No change in regulatory regime.
1997	Price Caps (1994-1997)	No change in regulatory regime.
1998	Price Caps (1994-1997)	Price cap plan technically expired at end of 1997, but has received de facto extension because of Ameritech litigation over interim rate freeze program. Commission ordered rate freeze until decision is reached on new price regulation plan.

# Indiana, cont.

### TABLE 15b: REGULATION OF OTHER LECs: SMALL LECs

(under 30,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR with Pricing Flexibility (1991-1993)	This plan applies to New Paris Telephone company. It is a test to see whether deregulation of small LECs (under 6,000 lines) benefits the public. All other small LECs remain under RBROR.
1992	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime.
1996	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime, however, all small LECs (under 30,000 lines) are eligible for plan. New Paris Telephone company is only LEC to select plan. All other small LECs are under RBROR regulation. Rural cooperatives are deregulated at their option.
1997	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime.
1998	RBROR with Pricing Flexibility (1991-1993)	No change in regulatory regime.

TABLE 16a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

Iowa

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR with Pricing Flexibility (1983)	Fourteen fully competitive services have been removed from regulation since 1983. No expiration date set.
1985	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1986	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1983)	No change in regulatory regime. U S West has option to move to price cap regulation of noncompetitive services.
1996	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1983)	No change in regulatory regime.
1998	RBROR with Pricing Flexibility (1983)	No change in regulatory regime. U S West filed a price cap regulation plan for Board review on July 1, 1998. The Board has 90 days to review the plan. If approved, U S West will no longer be under ROR regulation in Iowa.

# lowa, cont.

# TABLE 16b: REGULATION OF OTHER LECs: GTE, FRONTIER COMMUNICATIONS (over 15,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	Indexed Price Caps (1995)	Price cap plan adopted with index set at GDP-PI minus 2.6%. Nonbasic services can rise 6% per year. Earnings <i>not</i> regulated. LECs had to cut rates, unbundle loops, and create infrastructure plan in order to get price cap plan. No expiration date set for GTE, Frontier plan expires in 1999 but may be renewed.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	No change in regulatory regime.

# lowa, cont.

### TABLE 16c: REGULATION OF OTHER LECs: SMALL LECs

(under 15,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	Deregulation (1983)	Small LEC's rates deregulated in 1983. However, these LECs are subject to service regulation.
1985	Deregulation (1983)	No change in regulatory regime.
1986	Deregulation (1983)	No change in regulatory regime.
1987	Deregulation (1983)	No change in regulatory regime.
1988	Deregulation (1983)	No change in regulatory regime.
1989	Deregulation (1983)	No change in regulatory regime.
1990	Deregulation (1983)	No change in regulatory regime.
1991	Deregulation (1983)	No change in regulatory regime.
1992	Deregulation (1983)	No change in regulatory regime.
1993	Deregulation (1983)	No change in regulatory regime.
1994	Deregulation (1983)	No change in regulatory regime.
1995	Deregulation (1983)	No change in regulatory regime.
1996	Deregulation (1983)	No change in regulatory regime.
1997	Deregulation (1983)	No change in regulatory regime.
1998	Deregulation (1983)	No change in regulatory regime.

# Kansas TABLE 17a: REGULATION OF MAJOR LEC: SOUTHWESTERN BELL (SWB)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Pricing flexibility applies to competitive services such as Centrex.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	Rate Freeze (Jan. 1990-1995)	Rates for basic local exchange and other basic services frozen through 1995. Earnings not reviewed during freeze. Rates for T-1 service, billing and collection, and other discretionary nonbasic services can change upon 14 days notice. Company must invest \$110 million in network improvements.
1991	Rate Freeze (1990-1995)	No change in regulatory regime.
1992	Rate Freeze (1990-1995)	No change in regulatory regime.
1993	Rate Freeze (1990-1995)	No change in regulatory regime.
1994	Rate Freeze (1990-March 1997)	No change in regulatory regime. A 1994 law extends this rate freeze plan through March 1997. Now, LECs must invest \$128 million in network before 1997. During the extension, SWB cannot move any jobs out of the state.
1995	Rate Freeze (1990-March 1997)	No change in regulatory regime.
1996	Rate Freeze (1990-March 1997)	No change in regulatory regime.
1997	Rate Freeze (1990-March 1997) Interim Rate Freeze	Rate freeze plan expired on March 1, 1997. LEC placed on interim rate freeze until Corporation Commission decides new regulatory regime.
1998	Interim Rate Freeze	No change in regulatory regime.

# Kentucky

### TABLE 18a: REGULATION OF MAJOR LEC: SOUTH CENTRAL BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	ROR Incentive (October 1988-1990)	Earnings shared on a sliding scale. Earnings between 12.07%-13.57% split 50-50; earnings above 13.57% split 25-75 (firm-customers); if earnings fall below 11.52%, rates can increase.
1989	ROR Incentive (1988-1990)	No change in regulatory regime.
1990	ROR Incentive (1988-1990)	No change in regulatory regime.
1991	ROR Incentive (1991-1994)	Original incentive plan extended through June 1994. Now, earnings between 11.61%-13.11% split 50-50; earnings above 13.11% split 25-75; and if earnings fall below 10.99%, rates can increase.
1992	ROR Incentive (1991-1994)	No change in regulatory regime.
1993	ROR Incentive (1991-1994)	No change in regulatory regime.
1994	Banded ROR (1990-June 1994)	
	RBROR	Reversion to RBROR after incentive regulation plan expired.
1995	Indexed Price Caps (1995)	Under this price cap plan (implemented in the third and fourth quarter of 1995), residential rates are frozen (pending universal service reform), access is capped at interstate levels, and all other noncompetitive services are indexed at GDP-PI minus 4%. Competitive services are not regulated. Earnings are <i>not</i> regulated. No expiration date set, but PSC will review plan in 1998.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	No change in regulatory regime.

# Louisiana

# TABLE 19a: REGULATION OF MAJOR LEC: SOUTH CENTRAL BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	Banded ROR with Earnings-Sharing (1992-1995)	ROR outside neutral band of 10%-11.7% on assets triggers rate changes. (Earnings reviewed semi-annually.) Earnings between 11.7%-12.7% split 50-50; earnings over 12.7% returned to customers; and if earnings below 10%, a rate increase is allowed. Service quality and infrastructure mandates included. Plan expires at beginning of 1995.
1993	Banded ROR with Earnings-Sharing (1992-1995)	No change in regulatory regime.
1994	Banded ROR with Earnings-Sharing (1992-1995)	No change in regulatory regime.
1995	Banded ROR with Earnings-Sharing (1992-1995)	No change in regulatory regime.
1996	Banded ROR with Earnings-Sharing (1992-1995)  Price Caps (1996)	No change in regulatory regime.  Prices for basic services capped at March 1996 levels until 2001, except for \$70 million in rate cuts that must be completed by the end of 1998. Access charges capped through 1998. No indexing. No expiration date set. Company must meet service quality targets and accommodate local competition.
1997	Price Caps (1996)	No change in regulatory regime.
1998	Price Caps (1996)	No change in regulatory regime.

Maine

TABLE 20a: REGULATION OF MAJOR LEC: NEW ENGLAND TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR with Pricing Flexibility (1990-1992)	Pricing flexibility applies to new and competitive services.
1991	RBROR with Pricing Flexibility (1990-1992)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1990-1992)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1990-1993)	Plan technically expired at end of 1992.
1994	RBROR with Pricing Flexibility (1990-1994)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1990-1995)	
	Indexed Price Caps (May 1995-1999)	Price cap plan adopted mid-1995 for all services. Index set at GDP-PI minus 4.5%. Earnings <i>not</i> regulated. Company mandated to cut rates by \$10.4 million in 1995. Service quality goals set.
1996	Indexed Price Caps (1995-1999)	No change in regulatory regime.
1997	Indexed Price Caps (1995-1999)	No change in regulatory regime.
1998	Indexed Price Caps (1995-1999)	No change in regulatory regime.

# Maryland

# TABLE 21a: REGULATION OF MAJOR LEC: C&P TELEPHONE (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR and Rate Freeze with Pricing Flexibility (1988-1990)	Pricing flexibility applies to services deemed competitive. These include Centrex, WATS, 800 service, billing & collection, custom calling, and audiotex. C&P Telephone voluntarily froze rates for basic local service and business message rate service (a total of 14 services) for two years (through June 1990).
1989	RBROR and Rate Freeze with Pricing Flexibility (1988-1990)	No change in regulatory regime.
1990	ROR Incentive and Rate Freeze with Pricing Flexibility (1988-1992)	Plan extended for two years, however now includes sharing on "other than competitive" services. Earnings between 13.6%-15.6% split 50-50. Rate freeze continues through mid-1992.
1991	ROR Incentive and Rate Freeze with Pricing Flexibility (1988-1992)	No change in regulatory regime.
1992	ROR Incentive and Rate Freeze with Pricing Flexibility (1988-1992)	No change in regulatory regime. Rate freeze expired mid-1992.
1993	ROR Incentive with Pricing Flexibility (1993-1996)	Earnings sharing 50-50 between 12.7%-14.7% return on equity. Basic rates remain frozen, except for exogenous factors and competitive services still flexibly priced.
1994	ROR Incentive with Pricing Flexibility (1993-1996)	No change in regulatory regime.
1995	ROR Incentive with Pricing Flexibility (1993-1996)	No change in regulatory regime.

# Maryland, cont.

### TABLE 21a: REGULATION OF MAJOR LEC: C&P TELEPHONE (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1996	Indexed Price Caps (1996)	Indexed price cap plan with basic exchange rates frozen and access charges cut \$32 million, then frozen through 2000, after which basic and access services come under caps. Other noncompetitive services are under caps indexed at GDP-PI minus three-year average of CPI plus/minus exogenous changes. Competitive services not rate regulated, however rates must still satisfy just and reasonable status. Earnings not regulated. No expiration date set.
1997	Indexed Price Caps (1996)	No change in regulatory regime.
1998	Indexed Price Caps (1996)	No change in regulatory regime.

# Massachusetts

### TABLE 22a: REGULATION OF MAJOR LEC: NEW ENGLAND TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Pricing Flexibility (1986)	Pricing flexibility applies to competitive services. These include Centrex, custom calling, and any competitive new services. No expiration date set.
1987	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1995	Indexed Price Caps (September 1995-2001)	This is an indexed price cap plan with basic residential rates frozen until 2001. All other services are under caps indexed at GDP-PI minus 4.1%. Service quality standards included and if not satisfied productivity offset increased. Earnings <i>not</i> regulated.
1996	Indexed Price Caps (1995-2001)	No change in regulatory regime.
1997	Indexed Price Caps (1995-2001)	No change in regulatory regime.
1998	Indexed Price Caps (1995-2001)	No change in regulatory regime.

# Michigan

# TABLE 23a: REGULATION OF MAJOR LEC: MICHIGAN BELL (AMERITECH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Pricing Flexibility (1986)	Pricing flexibility applies to competitive services. These include Centrex and billing services provided to big users under contract.
1987	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1990	ROR Incentive (April 1990-1994)	Earnings between 13.25%-14.25% split 25-25-50 between company, ratepayers and network investment; from 14.25%-17.25% sharing is 50-25-25; and above 17.25% is 25-75-0. If earnings are below 12.25% rates can increase.
1991	ROR Incentive (1990-1994)	No change in regulatory regime.
1992	Hybrid: Service Oriented Regulation (1992-1995)	A 1991 law replaced ROR incentive with a regulation focusing on services rather than providers. This plan combines elements of price caps, streamlining, flexible pricing, and full deregulation. Rates frozen on basic exchange through December 1993.
1993	Hybrid: Service Oriented Regulation (1992-1995)	No change in regulatory regime. However, rate freeze on basic exchange expired.
1994	Hybrid: Service Oriented Regulation (1992-1995)	No change in regulatory regime.
1995	Hybrid: Service Oriented Regulation (1992-1995)	No change in regulatory regime. However, current plan expired at end of 1995.
	Indexed Price Caps (1995)	Noncompetitive services under cap with index of Detroit area CPI minus 1%. Competitive services not rate regulated and all rate cuts are deregulated. Earnings <i>not</i> regulated. No expiration date set.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	No change in regulatory regime.

# Michigan, cont.

### TABLE 23b: REGULATION OF OTHER LEC: GTE NORTH

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Pricing Flexibility (1986)	Pricing flexibility applies to competitive services. These include Centrex and billing services provided to big users under contract.
1987	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1990	ROR Incentive (1990-1994)	Earnings above 14% split 50-50 between company and ratepayers. Ratepayers refunded annually. Service quality goals must be met. Banded toll rates allowed by Public Service Commission.
1991	ROR Incentive (1990-1994)	No change in regulatory regime.
1992	Hybrid: Service Oriented Regulation (1992-1995)	A 1991 law replaced ROR incentive with a regulation focusing on services rather than providers. This plan combines elements of price caps, streamlining, flexible pricing, and full deregulation. Rates frozen on basic exchange through December 1993.
1993	Hybrid: Service Oriented Regulation (1992-1995)	No change in regulatory regime. However, rate freeze on basic exchange expired.
1994	Hybrid: Service Oriented Regulation (1992-1995)	No change in regulatory regime.
1995	Hybrid: Service Oriented Regulation (1992-1995)	No change in regulatory regime. However, current plan expired at end of 1995.
	Indexed Price Caps (1995)	Noncompetitive services under cap with index of Detroit area CPI minus 1%. Competitive services not rate regulated and all rate cuts are deregulated. Earnings <i>not</i> regulated. No expiration date set.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	No change in regulatory regime.

### Minnesota

### TABLE 24a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (June 1987)	LEC services classified as deregulated competitive, rate-banded semi-competitive and fully regulated. Plan is called "stepped regulation." No expiration date set.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	ROR Incentive with Pricing Flexibility (Jan. 1990-1994)	Earnings between 13.5%-18.5% split 50-50 with ratepayers. Profits from fully deregulated services are not factored into sharing. Infrastructure and service quality requirements required.
1991	ROR Incentive with Pricing Flexibility (1990-1994)	No change in regulatory regime.
1992	ROR Incentive with Pricing Flexibility (1990-1994)	No change in regulatory regime.
1993	ROR Incentive with Pricing Flexibility (1990-1994)	No change in regulatory regime.
1994	ROR Incentive with Pricing Flexibility (1990-1994)	No change in regulatory regime.
1995	ROR Incentive with Pricing Flexibility (1990-August 1995)	Plan extended through August 1995.
	RBROR	Reversion to traditional regulation when incentive regulation expired. Under 1995 law, LEC can select price cap regulation, but has not done so.
1996	RBROR	No change in regulatory regime.
1997	RBROR	No change in regulatory regime.
1998	RBROR	No change in regulatory regime.

# Minnesota, cont.

# TABLE 24b: REGULATION OF OTHER LECs: SPRINT/UNITED, FRONTIER (over 50,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	
1996	Price Caps (1996)	Basic rates frozen through 1999. Nonbasic rates can rise on 20 days notice. Competitive service rates not regulated. Earnings not regulated. No expiration date set. Infrastructure requirements set.
1997	Price Caps (1996)	No change in regulatory regime.
1998	Price Caps (1996)	No change in regulatory regime.

# Minnesota, cont.

### TABLE 24c: REGULATION OF OTHER LECs: SMALL LECs

(under 50,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Streamlining (1987)	Small LECs must file tariffs, but are exempt from most rate case requirements imposed on large LECs.
1988	RBROR with Streamlining (1987)	No change in regulatory regime.
1989	RBROR with Streamlining (1987)	No change in regulatory regime.
1990	RBROR with Streamlining (1987)	No change in regulatory regime.
1991	RBROR with Streamlining (1987)	No change in regulatory regime.
1992	RBROR with Streamlining (1987)	No change in regulatory regime.
1993	RBROR with Streamlining (1987)	No change in regulatory regime.
1994	RBROR with Streamlining (1987)	No change in regulatory regime.
1995	Price Caps (1995)	A 1995 law allows small LECs to self-select price cap regulation. Basic rates frozen through 1997. Nonbasic services flexibly priced and competitive services deregulated. Earnings not regulated. To date, 55 of 88 eligible LECs have selected plan.
1996	Price Caps (1995)	No change in regulatory regime.
1997	Price Caps (1995)	No change in regulatory regime.
1998	Price Caps (1995)	No change in regulatory regime. At last count, 65 of 88 eligible LECs have selected plan.

# Mississippi

# TABLE 25a: REGULATION OF MAJOR LEC: SOUTH CENTRAL BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	Banded ROR with Earnings-Sharing (1990-1993)	ROR outside band of 10.74%-11.74% triggers rate change formula. Earnings above 11.74% split 50-50; rates allowed to increase if below 10.74%. Earnings reviewed semi-annually.
1991	Banded ROR with Earnings-Sharing (1990-1993)	No change in regulatory regime.
1992	Banded ROR with Earnings-Sharing (1990-1993)	No change in regulatory regime.
1993	Banded ROR with Earnings-Sharing (1990-1993)	No change in regulatory regime.
1994	Banded ROR with Earnings-Sharing (1990-1993)	No change in regulatory regime. Plan extended through June 1995.
1995	Banded ROR with Earnings-Sharing (1990-June 1995)	No change in regulatory regime.
1996	Rate Freeze (1996-2001)	This is termed a price cap plan; however, basic service rates are frozen through duration of plan, except for \$7.6 million in rate cuts during 2000 and 2001. Access capped at interstate rates. All other rates can increase up to 20% per year. Earnings not regulated. Service quality goals set.
1997	Rate Freeze (1996-2001)	No change in regulatory regime.
1998	Rate Freeze (1996-2001)	No change in regulatory regime.

# Missouri

# TABLE 26a: REGULATION OF MAJOR LEC: SOUTHWESTERN BELL (SWB)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (September 1987)	Price deregulation applies to Centrex and all end-user services of rural telephone cooperatives.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	ROR Incentive (January 1990-1993)	Earnings between 14.1%-14.5% split 40-60 (firm-customers), earnings above 14.5% split 50-50. SWB still allowed pricing flexibility on Centrex contracts with large users under 1987 rule.
1991	ROR Incentive (1990-1993)	No change in regulatory regime. Earnings between 14.5%-17.25% split 50-50.
1992	ROR Incentive (1990-1993)	No change in regulatory regime.
1993	ROR Incentive (1990-1993)	No change in regulatory regime, plan extended to end of 1993.
1994	RBROR	Reversion to traditional regulation once incentive regulation plan expired.
	Rate Freeze (September 1994-1998)	Basic service rates frozen through 1998. No earnings review while freeze in effect. Rate banding is permitted for semi-competitive services, rate deregulation for competitive services. Infrastructure investment required.
1995	Rate Freeze (1994-1998)	No change in regulatory regime.
1996	Rate Freeze (1994-1998)	No change in regulatory regime.

# Missouri, cont.

# TABLE 26a: REGULATION OF MAJOR LEC: SOUTHWESTERN BELL (SWB)

YEAR	PRIMARY REGULATION	DETAILS
1997	Rate Freeze (1994-1998)	Plan dropped mid-1997 due to local competition.
	Indexed Price Caps (mid-1997)	Basic service rates frozen through 1999, then go under indexed (to be determined) price caps. Access capped at 150% of interstate rates. Nonbasic service rates frozen through December 1998, then can rise up to 8% per year. Earnings <i>not</i> regulated, no expiration date.
1998	Indexed Price Caps (1997)	No change in regulatory regime.

# Montana

TABLE 27a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Price deregulation applies to fully competitive services such as private lines, special access, billing and collection, wiring, and mobile phone. No expiration date set.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1996	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1985)	No change in regulatory regime. A 1997 pricing flexibility trial has allowed U S West to match competitors in markets with emerging local competition.
1998	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.

Note: Price deregulation has applied to small LECs (under 5,000 lines) since March 1987.

Nebraska

TABLE 28a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	Deregulation of LECs passed in 1986 effective Jan. 1, 1987.
1987	Deregulation (January 1987)	All services except basic local exchange removed from regulation. Intrastate toll deaveraging prohibited.
1988	Deregulation (1987)	No change in regulatory regime.
1989	Deregulation (1987)	No change in regulatory regime.
1990	Deregulation (1987)	No change in regulatory regime.
1991	Deregulation (1987)	No change in regulatory regime.
1992	Deregulation (1987)	No change in regulatory regime.
1993	Deregulation (1987)	No change in regulatory regime.
1994	Deregulation (1987)	No change in regulatory regime.
1995	Deregulation (1987)	No change in regulatory regime.
1996	Deregulation (1987)	No change in regulatory regime.
1997	Deregulation (1987)	No change in regulatory regime.
1998	Deregulation (1987)	No change in regulatory regime.

Note: Above plan applies to all LECs in Nebraska.

# Nevada TABLE 29a: REGULATION OF MAJOR LEC: BELL OF NEVADA (PACIFIC TELESIS)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Services deemed competitive can be detariffed or removed from regulation. Services include touch tone, custom calling features, Centrex, and digital data services. No expiration date set.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1985)  ROR Incentive with Pricing Flexibility (July 1991-1996)	No change in regulatory regime.  Earnings shared on a sliding scale. Earnings between 13%-15% split 50-50; earnings between 15%-18% split 40-60 (firm-customers); and earnings greater than 18% split 25-75. Pricing flexibility permitted on competitive and discretionary services. Service quality standards required.
1992	ROR Incentive with Pricing Flexibility (1991-1996)	No change in regulatory regime.
1993	ROR Incentive with Pricing Flexibility (1992-1996)	No change in regulatory regime.
1994	ROR Incentive with Pricing Flexibility (1992-1996)	No change in regulatory regime.
1995	ROR Incentive with Pricing Flexibility (1992-1996)	No change in regulatory regime.
1996	ROR Incentive with Pricing Flexibility (1992-1996)	No change in regulatory regime.

# Nevada, cont.

# TABLE 29a: REGULATION OF MAJOR LEC: BELL OF NEVADA (PACIFIC TELESIS)

YEAR	PRIMARY REGULATION	DETAILS
1997	Price Caps (1997-1999)	Basic services under nonindexed caps. Rate cuts permitted, but no increases above cap levels. Nonbasic services can increase 5% per year up to a cumulative total of 20%. Competitive services flexibly priced, earnings not regulated. BOC must reduce revenue by net \$13.2 million and return \$11.5 million in excess earnings to consumers. Also, infrastructure improvements must be made.
1998	Price Caps (1997-1999)	No change in regulatory regime.

# Nevada, cont.

#### TABLE 29b: REGULATION OF OTHER LEC: SPRINT/CENTEL

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Services deemed competitive can be detariffed or removed from regulation. No expiration date set.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1996	Price Caps (1996-2000)	Basic services under nonindexed caps. Rate cuts permitted, but no increases above cap levels. Nonbasic services can increase 5% per year up to a cumulative total of 20%. Competitive services flexibly priced. Earnings <i>not</i> regulated.
1997	Price Caps (1996-2000)	No change in regulatory regime.
1998	Price Caps (1996-2000)	No change in regulatory regime.

# **New Hampshire**

TABLE 30a: REGULATION OF MAJOR LEC: NEW ENGLAND TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	
1996	RBROR	
1997	RBROR	
1998	RBROR	In mid-1996 general guidelines for alternative regulation adopted, however no LEC has filed for it to date.

Note: All LECs in New Hampshire have never deviated from traditional regulation.

# **New Jersey**

### TABLE 31a: REGULATION OF MAJOR LEC: NEW JERSEY BELL (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	Rate Freeze with Incentive (July 1987-1993)	Rate freeze applies to residential customers. 12.9% return on equity permitted. Profits on competitive services are not factored in to return on equity calculation. Rate increases allowed due to tax hikes or other government actions.
1988	Rate Freeze with Incentive (1987-1993)	No change in regulatory regime.
1989	Rate Freeze with Incentive (1987-1993)	No change in regulatory regime.
1990	Rate Freeze with Incentive (1987-1993)	No change in regulatory regime.
1991	Rate Freeze with Incentive (1987-1993)	No change in regulatory regime.
1992	Rate Freeze with Incentive (1987-1993)	No change in regulatory regime.
1993	Rate Freeze with Incentive (1987-1993)	Detrocative to Jan 4 4002. Fermings over
	Rate Freeze with Earnings-Sharing (1993-1999)	Retroactive to Jan. 1, 1993. Earnings over 13.7% split 50-50 with ratepayers. Some competitive services deregulated. Infrastructure investment required.
1994	Rate Freeze with Earnings-Sharing (1993-1999)	No change in regulatory regime.
1995	Indexed Price Caps with Earnings- Sharing (1993-1999)	Basic rates now under indexed caps, index set at GNP-PI minus 2%. Residential rates remain frozen through 1999.
1996	Indexed Price Caps with Earnings- Sharing (1993-1999)	No change in regulatory regime.
1997	Indexed Price Caps with Earnings- Sharing (1993-1999)	No change in regulatory regime.
1998	Indexed Price Caps with Earnings- Sharing (1993-1999)	No change in regulatory regime.

### **New Mexico**

### TABLE 32a: REGULATION OF MAJOR LEC: MOUNTAIN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Pricing flexibility applies to effectively competitive services such as Centron.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	ROR Incentive with Pricing Flexibility (February 1990-1992)	Ratepayers are returned 55% of earnings above 13.75% return on equity. Basic service rates capped and nonbasic services regulated via rate banding.
1991	ROR Incentive with Pricing Flexibility (1990-1992)	No change in regulatory regime.
1992	ROR Incentive with Pricing Flexibility (1990-1992)	No change in regulatory regime.
1993	RBROR	Reversion to traditional regulation when incentive regulation plan expired Feb. 28, 1993.
1994	RBROR	No change in regulatory regime.
1995	RBROR	No change in regulatory regime.
1996	RBROR	No change in regulatory regime.
1997	RBROR	No change in regulatory regime.
1998	RBROR with Toll Pricing Flexibility	LEC remains under RBROR. However, it is allowed toll flexibility to match toll competitors. Rates can move in band that is 20% above to 50% below the tariffed index rate.

# **New Mexico, cont.**

#### TABLE 32b: REGULATION OF OTHER LEC: GTE/CONTEL

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Pricing flexibility applies to effectively competitive services.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	ROR Incentive with Pricing Flexibility (1991-1993)	Ratepayers get a sliding scale of earnings above 14.59% return on equity. Basic rates capped and other services regulated by ratebanding.
1992	ROR Incentive with Pricing Flexibility (1991-1993)	No change in regulatory regime.
1993	RBROR	Reversion to traditional regulation when incentive regulation plan expired Feb. 28, 1993. GTE and Contel merger in 1993.
1994	RBROR	No change in regulatory regime.
1995	RBROR	No change in regulatory regime.
1996	RBROR	No change in regulatory regime.
1997	RBROR	No change in regulatory regime.
1998	RBROR	No change in regulatory regime.

### **New York**

### TABLE 33a: REGULATION OF MAJOR LEC: NEW YORK TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	ROR Incentive with Rate Freeze (1987)	Earnings above 14% split 50-50 with ratepayers. Basic rates frozen. Plan expired Dec. 31, 1990.
1988	ROR Incentive with Rate Freeze (1987)	No change in regulatory regime.
1989	ROR Incentive with Rate Freeze (1987)	No change in regulatory regime.
1990	ROR Incentive with Rate Freeze (1987)	No change in regulatory regime.
1991	RBROR	Reversion back to traditional regulation after incentive regulation plan expired Dec. 31, 1990.
1992	RBROR	No change in regulatory regime.
1993	Performance based ROR Incentive (1993)	LEC keeps earnings between 11.7%-12.7% return on equity if service quality goals are met. This is a one-year test plan.
1994	ROR Incentive (1994)	Earnings over 12% split 50-50 with ratepayers subject to rewards and penalties for meeting service quality standards. Company must cut rates \$170 million and spend \$156 million on service quality improvements during 1994. Plan is temporary until Public Service Commission decides on permanent plan.
1995	ROR Incentive (1994-1995)	No change in regulatory regime, plan extended into 1995.
	Indexed Price Caps (July 1995-1999)	Plan retroactive to Jan. 1, 1995. Basic toll and access rates frozen for duration, nonbasic services are under indexed price caps. Index set at GDP-PI minus 4%. Competitive services priced to market. Earnings <i>not</i> regulated. Plan calls for \$375 million in rate cuts by 1999. Service quality standards set.

# New York, cont.

# TABLE 33a: REGULATION OF MAJOR LEC: NEW YORK TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1996	Indexed Price Caps (1995-1999)	No change in regulatory regime.
1997	Indexed Price Caps (1995-1999)	No change in regulatory regime.
1998	Indexed Price Caps (1995-1999)	No change in regulatory regime.

# New York, cont.

TABLE 33b: REGULATION OF OTHER LEC: ROCHESTER TELEPHONE/FRONTIER

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	ROR Incentive with Rate Freeze (1987)	Earnings above 13.8% split 50-50 with ratepayers. Basic rates frozen. Plan expires Dec. 31, 1990.
1988	ROR Incentive with Rate Freeze (1987)	No change in regulatory regime.
1989	ROR Incentive with Rate Freeze (1987)	No change in regulatory regime.
1990	Indexed Price Caps with Earnings- Sharing (1990-1992)	Price cap adjustments are based on forecasted rates of inflation. Index set at GNP-PI minus 3.25%. Excess earnings shared with ratepayers. Plan expires December 1992.
1991	Indexed Price Caps with Earnings- Sharing (1990-1992)	No change in regulatory regime.
1992	Indexed Price Caps with Earnings- Sharing (1990-1992)	No change in regulatory regime.
1993	RBROR	Reversion back to traditional regulation after expiration of incentive regulation plan.
1994	RBROR	No change in regulatory regime.
1995	Price Caps (January 1995-2001)	Basic wholesale and retail services capped until 2001. No indexing. Competitive services handled by separate and minimally regulated affiliate.
1996	Price Caps (1995-2001)	No change in regulatory regime.
1997	Price Caps (1995-2001)	No change in regulatory regime.
1998	Price Caps (1995-2001)	No change in regulatory regime.

Note: Taconic Telephone Company went under nonindexed price cap regulation in 1996.

# **North Carolina**

### TABLE 34a: REGULATION OF MAJOR LEC: SOUTHERN BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	A May 16, 1989, law permits adoption of incentive regulation if LEC petitions for it.
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	
1996	Indexed Price Caps (1996)	Basic residential rates frozen until 1999. Basic service category rates under cap indexed to GDP-PI minus 2%. Other services indexed at GDP-PI minus 3%. Plan also caps for individual service elements. Earnings <i>not</i> regulated. BellSouth must complete \$60 million in rate cuts by 1999. Commission will review in advance of five years from effective date of plan. No expiration date set.
1997	Indexed Price Caps (1996)	No change in regulatory regime.
1998	Indexed Price Caps (1996)	No change in regulatory regime.

# North Carolina, cont.

### TABLE 34b: REGULATION OF OTHER LECs: SPRINT, CAROLINA, GTE, CONCORD, ALLTEL

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	A 1989 law permits adoption of incentive regulation if LEC petitions for it.
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	
1996	Indexed Price Caps (1996) [Sprint, Carolina Telephone (1997)]	Basic residential rates frozen until 1999. All other local and access services under cap indexed to GDP-PI minus 2%. Plans also have caps for individual service elements. Earnings not regulated. No expiration date set. Commission will review in advance of five years from date of order. Carolina Telephone must complete \$30 million rate cut by 1999.
1997	Indexed Price Caps (1996) [GTE, Concord Telephone (1997)]	No change in regulatory regime. GTE and Concord Telephone are not required to make any rate cuts.
1998	Indexed Price Caps (1996) [AllTel (1998)]	No change in regulatory regime.

#### **North Dakota**

#### TABLE 35a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (1987)	Pricing flexibility applies to competitive services such as mobile phone and billing & collection.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime. A 1989 law separated all LEC services into 2 categories: essential and nonessential. Essential services are regulated via an indexed price cap plan and nonessential services are removed from regulation. Plan effective Jan. 1, 1990. No expiration date.
1990	Indexed Price Caps with Pricing Flexibility (1989)	1989 plan implemented.
1991	Indexed Price Caps with Pricing Flexibility (1989)	No change in regulatory regime.
1992	Indexed Price Caps with Pricing Flexibility (1989)	No change in regulatory regime.
1993	Indexed Price Caps with Pricing Flexibility (1989)	No change in regulatory regime.
1994	Indexed Price Caps with Pricing Flexibility (1993)	Switched basic exchange and switched carrier access remain under indexed (GNP-PI with an offset) price caps. All other LEC services are removed from rate regulation. Earnings not regulated. No expiration date.
1995	Indexed Price Caps with Pricing Flexibility (1993)	No change in regulatory regime.
1996	Indexed Price Caps with Pricing Flexibility (1993)	No change in regulatory regime.
1997	Indexed Price Caps with Pricing Flexibility (1993)	No change in regulatory regime.
1998	Indexed Price Caps with Pricing Flexibility (1993)	No change in regulatory regime.

Note: Since 1993, all rates of LECs other than U S West deregulated by state law. Upon reorganization, SRT Communications in 1996 went under same price cap plan as U S West.

TABLE 36a: REGULATION OF MAJOR LEC: OHIO BELL (AMERITECH)

Ohio

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Banded Toll Rates (1986)	Pricing within a specified band is allowed for toll rates only.
1987	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1988	RBROR with Banded Toll Rates (1986)	No change in regulatory regime. A 1988 law allows Public Utilities Commission to use alternative regulation for large LECs.
1989	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1990	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1991	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1992	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1993	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1994	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1995	Indexed Price Caps (January 1995- 2000)	Basic services frozen until 2000 except for mandated cuts totaling \$92.3 million by 2000. All other services under indexed caps set at GDP-PI minus 3%. LEC must offer certain advanced network functions by 2000.
1996	Indexed Price Caps (1996-2000)	A 1995 plan voided by state courts on a statutory difficulty. 1996 state legislation gave Public Utilities Commission (PUC) unrestricted power to set alternative regulation plans. Under this plan, basic residential rates are frozen through 2000 except for mandated \$34.7 million rate cuts by 2000 and a \$21 million access charge cut. All other services remain under caps indexed at GDP-PI minus 3%. Earnings not regulated. Company must meet service quality, competition, and infrastructure requirements.
1997	Indexed Price Caps (1996-2000)	No change in regulatory regime.
1998	Indexed Price Caps (1996-2000)	No change in regulatory regime.

# Ohio, cont.

#### TABLE 36b: REGULATION OF OTHER LEC: CINCINNATI BELL

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Banded Toll Rates (1986)	Pricing within a specified band is allowed for toll rates only.
1987	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1988	RBROR with Banded Toll Rates (1986)	No change in regulatory regime. A 1988 law allows PUC to use alternative regulation for large LECs.
1989	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1990	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1991	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1992	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1993	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1994	Rate Freeze (1994-1997)	Local rates frozen unless local earnings exceed ceiling. Other adjustments produced an \$11.9 million rate hike before rate freeze was in place. LEC must adhere to timetable for deploying advanced network functions.
1995	Rate Freeze (1994-1997)	No change in regulatory regime.
1996	Rate Freeze (1994-1997)	No change in regulatory regime.
1997	Rate Freeze (1994-1997)	No change in regulatory regime.
1998	Rate Freeze (1994-1997)	Plan extended into 1998 while PUC decides future regulatory regime.

# Ohio, cont.

#### TABLE 36c: REGULATION OF OTHER LEC: WESTERN RESERVE TELEPHONE

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Banded Toll Rates (1986)	Pricing within a specified band is allowed for toll rates only.
1987	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1988	RBROR with Banded Toll Rates (1986)	No change in regulatory regime. 1988 law allows PUC to use alternative regulation of large LECs.
1989	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1990	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1991	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1992	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1993	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1994	Rate Freeze (1994-April 1997)	Basic service rates frozen. Earnings not reviewed during freeze. Company must implement intraLATA equal access and make network upgrades.
1995	Rate Freeze (1994-1997)	No change in regulatory regime.
1996	Rate Freeze (1994-1997)	No change in regulatory regime.
1997	Rate Freeze (1994-1997)	No change in regulatory regime.
1998	RBROR	Reversion to traditional regulation once incentive regulation plan expired.

# Ohio, cont.

### TABLE 36d: REGULATION OF OTHER LECs: SMALL LECs

(Under 15,000 lines)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Banded Toll Rates (1986)	Pricing within a specified band is allowed for toll rates only.
1987	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1988	RBROR with Banded Toll Rates (1986)	No change in regulatory regime. A 1988 law allows PUC to use alternative regulation for large LECs.
1989	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1990	RBROR with Banded Toll Rates (1986)	No change in regulatory regime.
1991	RBROR with Streamlined Regulation (1991)	Rate cuts and small increases decided within 60 days. Large increases allowed up to five months to decide. Earnings remain regulated. LECs can petition for alternative regulation. No expiration date set.
1992	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.
1993	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.
1994	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.
1995	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.
1996	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.
1997	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.
1998	RBROR with Streamlined Regulation (1991)	No change in regulatory regime.

#### Oklahoma

TABLE 37a: REGULATION OF MAJOR LEC: SOUTHWESTERN BELL (SWB)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (1987)	Pricing flexibility applies to competitive services such as billing and collection. No expiration date set.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1996	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1998	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.

Note: GTE is subject to the same regulation as Southwestern Bell. Small LECs (under 15,000 lines) have had pricing freedom since 1986.

Oregon

TABLE 38a: REGULATION OF MAJOR LEC: PACIFIC NORTHWEST BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Pricing Flexibility (1986)	Pricing flexibility applies to competitive services such as billing and collection.
1987	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1992	Price Caps with Revenue Sharing (January 1992-1996)	LEC services are classified as essential and nonessential. Essential service rates are frozen. Nonessential rates are under nonindexed price caps. BOC and ratepayers share 50-50 revenues per line that exceed benchmark.
1993	Price Caps with Revenue Sharing (1992-1996)	No change in regulatory regime.
1994	Price Caps with Revenue Sharing (1992-1996)	No change in regulatory regime.
1995	Price Caps with Revenue Sharing (1992-1996)	No change in regulatory regime.
1996	Price Caps with Revenue Sharing (1992-1996)	
	RBROR	In April, 1996, Public Utility Commission terminated alternative regulation plan due to LEC's poor service quality record. A reversion to traditional regulation followed.
1997	RBROR	No change in regulatory regime.
1998	RBROR	No change in regulatory regime.

Note: Small LECs (under 15,000 lines) have had rates and earnings deregulated since 1987.

# Pennsylvania

TABLE 39a: REGULATION OF MAJOR LEC: BELL OF PENNSYLVANIA (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR with Pricing Flexibility (1986)	Pricing flexibility applied on a case-by-case basis to competitively bid contracts and competitive services. No expiration date.
1987	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.
1994	Indexed Price Caps (July 1994-1999)	Basic exchange rates frozen through 1999, but decrease in rates required if annual GDP-PI falls below 2.9%. Other services under indexed price caps. Index set at GDP-PI minus 2.93%. Earnings <i>not</i> regulated. Service quality and infrastructure requirements.
1995	Indexed Price Caps (1994-1999)	No change in regulatory regime.
1996	Indexed Price Caps (1994-1999)	No change in regulatory regime.
1997	Indexed Price Caps (1994-1999)	No change in regulatory regime.
1998	Indexed Price Caps (1994-1999)	No change in regulatory regime.

Note: Small LECs (under 50,000 lines) have had pricing flexibility since 1986. In addition, Commonwealth Telephone opted for price caps in 1996. Under this plan, basic services are under caps indexed at GDP-PI minus 2% and earnings are not regulated. No expiration date is set.

### **Rhode Island**

#### TABLE 40a: REGULATION OF MAJOR LEC: NEW ENGLAND TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	ROR Incentive (1989-1991)	Earnings between 13.25%-16.25% are split 50-50 with consumers. Earnings above 16.25% are returned to consumers. Rate increases not allowed until April 1991. Infrastructure requirement.
1990	ROR Incentive (1989-1991)	No change in regulatory regime.
1991	ROR Incentive (1989-1991)	No change in regulatory regime.
1992	RBROR  Indexed Price Cap with Earnings- Sharing (June 1992-1995)	Reversion back to traditional regulation once incentive plan expired at end of 1991.  Plan approved June 19, 1992 and retroactive to Jan. 1, 1992. Price caps apply to basic services (FCC style). Index set at CPI minus 3%. Earnings between 12.25%-15.75% split 50-50 with ratepayers.
1993	Indexed Price Cap with Earnings- Sharing (1992-1995)	No change in regulatory regime.
1994	Indexed Price Cap with Earnings- Sharing (1992-1995)	No change in regulatory regime.
1995	Indexed Price Cap with Earnings- Sharing (1992-1995)	No change in regulatory regime.

# Rhode Island, cont.

# TABLE 40a: REGULATION OF MAJOR LEC: NEW ENGLAND TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1996	Indexed Price Cap (1992-1995)	Plan extended into 1996.
	Indexed Price Caps (1996)	Basic services under caps indexed to lesser of CPI or 4%. Other noncompetitive services under caps indexed to lesser of 5% or twice CPI. Competitive services not rate regulated. Earnings <i>not</i> regulated. LEC must subsidize Intrastate toll calls and Internet access for schools and libraries.
1997	Indexed Price Caps (1996)	No change in regulatory regime.
1998	Indexed Price Caps (1996)	No change in regulatory regime.

# **South Carolina**

### TABLE 41a: REGULATION OF MAJOR LEC: SOUTHERN BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility (1988)	Pricing flexibility applies to competitive services such as custom calling and touchtone charges. These services are under price caps.
1989	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1992	ROR Incentive (January 1992-1994)	Earnings between 14%-16.5% on equity split 50-50 with ratepayers. Some competitive services remain flexibly priced. Service quality requirement.
1993	ROR Incentive (1992-1994)	
	RBROR	Supreme Court struck down incentive regulation in August 1993. Reversion back to traditional regulation.
1994	RBROR	No change in regulatory regime.
1995	RBROR	No change in regulatory regime.
1996	Indexed Price Caps (1996)	Under this price cap plan, basic rates are frozen through 2000, access charges frozen through 1998. After freeze, basic and access services indexed at GDP-PI minus 2.1%. Competitive and discretionary services can rise 20% per year, but Public Service Commission can refuse to allow a specific rate increase. Earnings <i>not</i> regulated. No expiration date set.
1997	Indexed Price Caps (1996)	No change in regulatory regime.
1998	Indexed Price Caps (1996)	No change in regulatory regime.

# South Carolina, cont.

#### TABLE 41b: REGULATION OF OTHER LEC: GTE SOUTH

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility (1988)	Pricing flexibility applies to competitive services such as custom calling and touchtone charges. These services are under price caps.
1989	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1992	ROR Incentive (1992-1994)	Earnings between 13.5%-16% on equity split 50-50 with ratepayers.
1993	ROR Incentive (1992-1994)	
	RBROR	Supreme Court struck down incentive regulation in August 1993. Reversion back to traditional regulation.
1994	RBROR	No change in regulatory regime.
1995	RBROR	No change in regulatory regime.
1996	RBROR	No change in regulatory regime.
1997	RBROR	No change in regulatory regime.
1998	RBROR	No change in regulatory regime.

# South Carolina, cont.

#### TABLE 41c: REGULATION OF OTHER LEC: UNITED TELEPHONE

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility (1988)	Pricing flexibility applies to competitive services such as custom calling and touchtone charges. These services are under price caps.
1989	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1993	ROR Incentive (1993-1995)	
	RBROR	Supreme Court struck down incentive regulation in August 1993. Reversion back to traditional regulation.
1994	RBROR	No change in regulatory regime.
1995	RBROR	No change in regulatory regime.
1996	RBROR	No change in regulatory regime.
1997	Incentive Regulation	In September 1997, United began operating under an incentive regulation plan which was passed by legislature in May 1997.
1998	Incentive Regulation	No change in regulatory regime.

# **South Dakota**

# TABLE 42a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility (July 1988)	A 1988 law classifies all LEC services as fully regulated, flexibly priced or deregulated. Pricing flexibility applies to emerging competitive services. New services are classified as fully regulated until proven competitive. No expiration date set.
1989	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1988)	No change in regulatory regime.
1996	Price Caps (1996)	Basic exchange rates under nonindexed price cap. Rate transition system will bring rates to cap levels by 1999 as long as LEC meets service quality standards. Rates for all other services other than switched access are deregulated. Switched access rates are frozen unless LEC can cost-justify change under RBROR principles. Earnings on services other than access <i>not</i> regulated. No expiration date.
1997	Price Caps (1996)	No change in regulatory regime.

#### South Dakota cont.

TABLE 42a: REGULATION OF MAJOR LEC: NORTHWESTERN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1998	Price Caps (1996)	The 1998 South Dakota legislature made comprehensive changes to the telecommunications regulatory statutes, South Dakota Codified Law 49-31. The changes affect virtually all aspects of the Public Utility Commission's (PUC) authority, diminishing some roles while expanding others. U S West local exchange service is no longer rate regulated by the PUC. The new law caps U S West local service rates at the Jan. 1, 1998 level. U S West may reduce its prices but cannot subsequently increase prices unless it receives legislative approval. Local exchange service includes switched voice, video, and data service.

Note: Small LECs (under 50,000 lines) and all telephone cooperatives have been under rate deregulation since 1987. Retail services other than switched access are not rate regulated.

#### **Tennessee**

#### TABLE 43a: REGULATION OF MAJOR LEC: SOUTH CENTRAL BELL (BELLSOUTH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	ROR Incentive (January 1990-1992)	Excess earnings split with ratepayers based on a service quality score. Pricing flexibility applied to competitive services. LEC must commit to Public Service Commission (PSC) technology deployment timetable.
1991	ROR Incentive (1990-1992)	No change in regulatory regime.
1992	ROR Incentive (1990-1992)	No change in regulatory regime.
1993	ROR Incentive (1993-1995)	Old incentive regulation plan expired at end of 1992. Under new plan earnings above 11.85% split 50-50 with ratepayers. Basic flat residential and business rates are capped. Plan does not alter LECs technology deployment timetable.
1994	ROR Incentive (1993-1995)	No change in regulatory regime.
1995	ROR Incentive (1993-1995)	No change in regulatory regime.
1996	***Indexed Price Caps (1996)	Under this price cap plan, basic rates are frozen through 1999, then come under indexed price caps. All other services are under caps indexed at lesser of one-half GDP-PI or GDP-PI minus 2%. Earnings not regulated. No expiration date set. South Central Bell must make \$56 million in rate cuts in 1996 as prerequisite to price cap plan.  Implementation of this plan suspended in March 1996 by act of Tennessee appeals
1007	***Indoved Price Cone (1996)	court pending resolution of BellSouth's challenge to 1996 rate cuts.
1997	***Indexed Price Caps (1996)	No change in regulatory regime.
1998	***Indexed Price Caps (1996)	No change in regulatory regime.

<sup>\*\*\*</sup> Due to BellSouth's appeal, the company has never technically operated under the price cap plan.

# Tennessee, cont.

#### TABLE 43b: REGULATION OF OTHER LECs: LARGE LECs

(GTE South/Citizens\*, Sprint/United)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	ROR Incentive (1991-1993)	Earnings over 11.45% split with ratepayers based on a service quality score. LEC must commit to PSC technology deployment timetable. Plan mandatory for BellSouth and United only.
1992	ROR Incentive (1991-1993)	No change in regulatory regime.
1993	ROR Incentive (1991-1993)	No change in regulatory regime.
1994	ROR Incentive (1991-March 1994)	No change in regulatory regime. Plan extended into 1994.
1995	ROR Incentive (1991-1995)	No change in regulatory regime. Plan extended through 1995.
1996	Price Caps (1996)	Under this price cap plan, basic rates are frozen through 1999, then come under indexed price caps. All other services are under caps indexed at lesser of one-half GDP-PI or GDP-PI minus 2%. Earnings not regulated. No expiration date set. No rate cuts required.
1997	Price Caps (1996)	No change in regulatory regime.
1998	Price Caps (1996)	No change in regulatory regime.

 $<sup>^{\</sup>star}$  Citizens entered Tennessee by acquiring the GTE properties and, therefore, these two companies were never operating simultaneously in Tennessee.

Texas

TABLE 44a: REGULATION OF MAJOR LEC: SOUTHWESTERN BELL (SWB)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR with Pricing Flexibility (June 1987)	Pricing flexibility applies to competitive services such as Centrex.
1988	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1987)	No change in regulatory regime.
1990	Rate Freeze with ROR Incentive (November 1990-1994)	Basic service rates frozen. Earnings between 12.06%-14.5% return on assets split 50-50 with ratepayers. LEC required to invest in network improvements. A 1987 law allows LEC to petition for pricing flexibility on competitive services.
1991	Rate Freeze with ROR Incentive (1990-1994)	No change in regulatory regime.
1992	Rate Freeze with ROR Incentive (1990-1994)	No change in regulatory regime.
1993	Rate Freeze with ROR Incentive (1990-1994)	No change in regulatory regime.
1994	Rate Freeze with ROR Incentive (1990-1994)	No change in regulatory regime.
1995	Rate Freeze with ROR Incentive (1990-1995)	Plan extended to September 1995.
	Indexed Price Caps (November 1995)	Under this price cap plan, basic rates frozen until 1999, then come under indexed caps. Index set at CPI minus PUC-set productivity factor. Discretionary services can increase up to 10% per year. Competitive services can be priced at any point above cost. Earnings <i>not</i> regulated. No expiration date set. LEC must install digital upgrades and provide discount service to schools, libraries, and hospitals. Service quality standard.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	No change in regulatory regime.

# Texas, cont.

#### TABLE 44b: REGULATION OF OTHER LECs: LARGE LECs

(GTE, Sprint/Centel, Spring/United)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	Indexed Price Caps (1995)	Under this price cap plan, basic rates frozen until 1999, then come under indexed caps. Index set at CPI minus PUC-set productivity factor. Discretionary services can increase up to 10% per year. Competitive services can be priced at any point above cost. Earnings <i>not</i> regulated. No expiration date set. LEC must install digital upgrades by 2000 and provide discount broadband service to schools, libraries, and hospitals. Not as stringent as SWB requirements.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	No change in regulatory regime.

**Utah**TABLE 45a: REGULATION OF MAJOR LEC: MOUNTAIN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR with Pricing Flexibility (1985)	Price flexibility applies to competitive services.
1986	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1987	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1988	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1989	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1994	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1995	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1996	RBROR with Pricing Flexibility (1985)	No change in regulatory regime.
1997	RBROR with Pricing Flexibility (1985)	
	Price Caps (1997)	Adopted May 1997. All services under nonindexed price caps. Rate increases prohibited until May 2000 except for increases pursuant to January 1998 rate rebalancing. After May 2000, all services come under caps indexed to inflation. Earnings <i>not</i> regulated.
1998	Price Caps (1997)	No change in regulatory regime.

Note: Small LECs (under 30,000 lines) have been under streamlined regulation since 1987.

# Vermont

### TABLE 46a: REGULATION OF MAJOR LEC: NEW ENGLAND TELEPHONE (NYNEX)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	Hybrid: Social Contract with Rate Freeze (February 1988)	Plan referred to as a "Negotiated Social Contract." It includes a rate freeze on local rates, price caps on toll, WATS, and Centrex services, and deregulation of rates for digital data and new services. No earnings regulation during contract. Infrastructure investment requirement. Contract expires Dec. 31, 1992.
1989	Hybrid: Social Contract with Rate Freeze (1988)	No change in regulatory regime.
1990	Hybrid: Social Contract with Rate Freeze (1988)	No change in regulatory regime.
1991	Hybrid: Social Contract with Rate Freeze (1988)	No change in regulatory regime.
1992	Hybrid: Social Contract with Rate Freeze (1988)	No change in regulatory regime.
1993	Hybrid: Social Contract with Rate Freeze (1988)	No change in regulatory regime. Plan extended through December 1993.
1994	RBROR	Reversion to traditional regulation after incentive regulation plan expired at end of 1993.
1995	RBROR	No change in regulatory regime.
1996	RBROR	No change in regulatory regime.
1997	RBROR	No change in regulatory regime.
1998	RBROR	No change in regulatory regime.

# Virginia

# TABLE 47a: REGULATION OF MAJOR LEC: C&P TELEPHONE (BELL ATLANTIC)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR with Pricing Flexibility and Streamlined Review (January 1989- 1992)	Pricing flexibility applies to 11 competitive services. Rates for 9 semi-competitive services can change on 30 days notice.
1990	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime. Plan extended into mid-1993
1994	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime. Plan extended into mid-1994 on interim basis.
1995	Indexed Price Cap (January 1995)	Under this price cap plan, basic rates are frozen through 2001, then capped. Other noncompetitive services capped with index set at one-half of GDP-PI. Earnings <i>not</i> regulated. Competitive services are priced flexibly. No expiration date set.
1996	Indexed Price Cap (1995)	No change in regulatory regime.
1997	Indexed Price Cap (1995)	No change in regulatory regime.
1998	Indexed Price Cap (1995)	No change in regulatory regime.

# Virginia, cont.

#### TABLE 47b: REGULATION OF OTHER LEC: GTE

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	Pricing flexibility applies to 11 competitive services. Rates for 9 semi-competitive services can change on 30 days notice.
1990	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime. Plan extended into mid-1993
1994	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime. Plan extended into mid-1994 on interim basis.
1995	Indexed RBROR (1995)	Noncompetitive services under RBROR regulation with return adjusted annually based on national long-term treasury bond rates. Sharp fluctuations result in rate changes. Competitive service rates deregulated. No expiration date set.
1996	Indexed ROR (1995)	No change in regulatory regime.
1997	Indexed ROR (1995)	No change in regulatory regime.
1998	Indexed ROR (1995)	No change in regulatory regime.

# Virginia, cont.

TABLE 47c: REGULATION OF OTHER LECs: SPRINT, UNITED, CENTEL, CONTEL

YEAR	PRIMARY REGULATION DETAILS	
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR with Pricing Flexibility and Streamlined Review (1988)	Pricing flexibility applies to 11 competitive services. Rates for 9 semi-competitive services can change on 30 days notice.
1989	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1990	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1991	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1992	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime.
1993	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime. Plan extended into mid-1993
1994	RBROR with Pricing Flexibility and Streamlined Review (1989-1992)	No change in regulatory regime. Plan extended into mid-1994 on interim basis.
1995	Indexed Price Caps (1995)	Under this price cap plan, basic rates are frozen through 1998, then capped. Other noncompetitive services capped with index set at one-half of GDP-PI. Earnings <i>not</i> regulated. Competitive services are priced flexibly. No expiration date set.
1996	Indexed Price Caps (1995)	No change in regulatory regime.
1997	Indexed Price Caps (1995)	No change in regulatory regime.
1998	Indexed Price Caps (1995)	Noncompetitive services come under indexed cap in 1998.

Note: Small LECs (revenues under \$10 million) have had streamlined regulation since 1986.

# Washington

### TABLE 48a: REGULATION OF MAJOR LEC: PACIFIC NORTHWEST BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS	
1984	RBROR		
1985	RBROR		
1986	RBROR with Pricing Flexibility (1986)	Pricing flexibility applies to competitive services such as Centrex, speed calling and intercom service.	
1987	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.	
1988	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.	
1989	RBROR with Pricing Flexibility (1986)	No change in regulatory regime.	
1990	Price Caps with Earnings-Sharing (January 1990-1994)	Price changes for monopoly-services can be downward only as long as earnings stay above 9.25%. Earnings shared on a sliding scale. Earnings between 11%-11.625% split 40-60, earnings between 11.625%-12.25% split 50-50, and earnings above 12.25% split 60-40.	
1991	Price Caps with Earnings-Sharing (1990-1994)	No change in regulatory regime.	
1992	Price Caps with Earnings-Sharing (1990-1994)	No change in regulatory regime.	
1993	Price Caps with Earnings-Sharing (1990-1994)	No change in regulatory regime.	
1994	Price Caps with Earnings-Sharing (1990-1994)	No change in regulatory regime.	
1995	RBROR	Reversion to traditional regulation once incentive regulation plan expired at end of 1994. LEC can petition to flexibly price competitive services.	
1996	RBROR	No change in regulatory regime.	
1997	RBROR	No change in regulatory regime.	
1998	RBROR	No change in regulatory regime.	

Note: All other LECs, including GTE Northwest, have been allowed flexible pricing on competitive services since 1986.

# **West Virginia**

### TABLE 49a: REGULATION OF MAJOR LEC: C&P TELEPHONE (BELL ATLANTIC)

YEAR	PRIMARY REGULATION DETAILS		
1984	RBROR		
1985	RBROR		
1986	RBROR		
1987	RBROR		
1988	Rate Freeze with Pricing Flexibility (1988-1990)	Local rates frozen through 1990. Pricing of competitive services can change on 14 days notice. Infrastructure investment requirement.	
1989	Rate Freeze with Pricing Flexibility (1988-1990)	No change in regulatory regime.	
1990	Rate Freeze with Pricing Flexibility (1988-1990)	No change in regulatory regime.	
1991	Rate Freeze with Pricing Flexibility (1988-1991)	Plan extended to September 1991.	
1992	Rate Freeze with Pricing Flexibility (1992-1994)	New plan replaces old flexible regulation plan with purpose of encouraging cuts in carrier access and business toll rates. Local rates remain frozen, flexible pricing allowed on "workably competitive" services.	
1993	Rate Freeze with Pricing Flexibility (1992-1994)	No change in regulatory regime.	
1994	Rate Freeze with Service-Specific Pricing Flexibility (1992-1994)	No change in regulatory regime.	
1995	Price Cap and Rate Freeze with Pricing Flexibility (1995-1998)	This plan replaces previous regulation. Basic rates remain frozen, access capped, competitive rates deregulated. No rate cases during plan. LEC can opt out of plan if Public Service Commission (PSC) implements IntraLATA toll presubscription or local competition.	
1996	Price Cap and Rate Freeze with Pricing Flexibility (1995-1998)	No change in regulatory regime.	
1997	Price Cap and Rate Freeze with Pricing Flexibility (1995-1998)	No change in regulatory regime.	
1998	Price Cap and Rate Freeze with Pricing Flexibility (1995-2001)	Plan extended to January 2001 on condition that there be \$6 million annual revenue cut, \$225 million invested in network, and \$5 million invested in a school technology grant program.	

# West Virginia, cont.

#### TABLE 49b: REGULATION OF OTHER LEC: CITIZENS TELECOM

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	Price Cap and Rate Freeze with Pricing Flexibility (1994-1997)	Basic rates frozen, access capped, competitive rates deregulated. LEC can opt out of plan if PSC implements IntraLATA toll presubscription or local competition.
1995	Price Cap and Rate Freeze with Pricing Flexibility (1994-1997)	No change in regulatory regime.
1996	Price Cap and Rate Freeze with Pricing Flexibility (1994-1997)	No change in regulatory regime.
1997	Price Cap and Rate Freeze with Pricing Flexibility (1994-2000)	No change in regulatory regime. Plan was due to expire at end of 1997 but was extended to 2000.
1998	Price Cap and Rate Freeze with Pricing Flexibility (1994-2000)	No change in regulatory regime.

# Wisconsin

# TABLE 50a: REGULATION OF MAJOR LEC: WISCONSIN BELL (AMERITECH)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	ROR Incentive with Rate Freeze (April 1987-1989)	Earnings between 14%-15.5% return on equity split 50-50 with ratepayers. Earnings above 15.5% refunded to ratepayers. Rate freeze from August 1987 to March 1989.
1988	ROR Incentive with Rate Freeze (1987-1989)	No change in regulatory regime.
1989	ROR Incentive with Rate Freeze (1987-1989)	No change in regulatory regime.
1990	RBROR	Reversion back to traditional regulation once incentive regulation plan expired in August 1989.
	Hybrid: Productivity Incentive (October 1990-1992)	Mandatory rate cuts provide productivity incentive to LEC. Mandatory measured service is used to gauge improvement.
1991	Hybrid: Productivity Incentive (1990-1992)	No change in regulatory regime.
1992	Hybrid: Productivity Incentive (1990-1992)	No change in regulatory regime.
1993	Hybrid: Productivity Incentive (1990-1993)	Plan extended through 1993.
1994	Hybrid: Productivity Incentive (1990-1994)  Indexed Price Caps (September 1994-1999)	Plan extended into 1994.  Under this plan, basic exchange rates decreased 10% initially, and are then frozen to September 1997. Other noncompetitive services are capped with index set at GDP-PI minus 3% productivity factor less up to 2% penalty for inadequate service or infrastructure deployment plus up to 2% incentive for infrastructure deployment. Access service rates adjusted as specified in statutes. Competitive or nonessential services are priced flexibly. Earnings not regulated.
1995	Indexed Price Caps (1994-1999)	No change in regulatory regime.

# Wisconsin, cont.

#### TABLE 50a: REGULATION OF MAJOR LEC: WISCONSIN BELL (AMERITECH)

YEAR	PRIMARY REGULATION	DETAILS
1996	Indexed Price Caps (1994-1999)	No change in regulatory regime. Basic message telecommunications services removed from price regulation.
1997	Indexed Price Caps (1994-1999)	No change in regulatory regime. Basic exchange rates under caps after Sept. 1997.
1998	Indexed Price Caps (1994-1999)	No change in regulatory regime.

Note: In 1995, GTE North came under a similar price cap plan as Wisconsin Bell. The main differences being a productivity offset of 2% rather than 3% and basic exchange rates frozen to January 1998. In addition, Small LECs (under 7,500 lines) in Wisconsin have had pricing flexibility since 1986.

# Wyoming

### TABLE 51a: REGULATION OF MAJOR LEC: MOUNTAIN BELL (U S WEST)

YEAR	PRIMARY REGULATION	DETAILS
1984	RBROR	
1985	RBROR	
1986	RBROR	
1987	RBROR	
1988	RBROR	
1989	RBROR	
1990	RBROR	
1991	RBROR	
1992	RBROR	
1993	RBROR	
1994	RBROR	
1995	RBROR	
1996	Price Caps (1996)	Under this price cap plan, basic residential rates frozen except for increases specified in plan as part of a rate transition system intended to cover revenue requirements and bring basic residential service rates to cost by 1998. Other basic services under nonindexed caps that allow price movements between cap and cost floor. Nonbasic and competitive services can be priced at any point above cost floor. Earnings <i>not</i> regulated.
1997	Price Caps (1996)	No change in regulatory regime.
1998	Price Caps (1996)	No change in regulatory regime.

#### REFERENCES

- BellSouth Services Regulatory Matters. *Regulatory Reform: A Nationwide Summary*. Edited by Andrea Helms. Volumes 1-12, 1987-1992. Atlanta, GA: BellSouth.
- BellSouth Telecommunications Regulatory Policy and Planning. *Regulatory Reform: A Nationwide Summary*. Edited by Beth Harber and Larry Greer. Volumes 13 and 14, 1993. Atlanta, GA: BellSouth.
- BellSouth Telecommunications State Regulatory. *Regulatory Reform: A Nationwide Summary.* Volumes 15-17, 1994-1995. Atlanta, GA: BellSouth.
- Davis, Vivian Witkind, Nancy Zearfoss and Catherine E. Reed. *Aspects of Telecommunications Reform: Results of a Survey of State Regulatory Commissions.* Columbus, OH: The National Regulatory Research Institute, February 1995.
- Davis, Vivian Witkind. Breaking Away from Franchises and Rate Cases: A Perspective on the Evolution of State Telecommunications Policy. Columbus, OH: The National Regulatory Research Institute, February 1995.
- Kirchhoff, Herb. "Earnings Regulation for Big Incumbent Telcos Just About Extinct in Eastern U.S." State Telephone Regulation Report 16, no. 7 (April 3, 1998): 1-4.
- \_\_\_\_\_. "Price Caps Still Struggle in Western States, But '98 may see Some Changes." State Telephone Regulation Report 16, no. 8 (April 17, 1998): 1-6.
- \_\_\_\_\_. "Price Cap Regulation has Become the Norm in Eastern States." *State Telephone Regulation Report* 15, no. 6 (March 20, 1997): 1-10.
- \_\_\_\_\_. "Price Caps Struggle in Western States, But '97 may see Major Changes." State Telephone Regulation Report 15, no. 7 (April 3, 1997): 1-12.
- \_\_\_\_\_. "Two-Thirds of Eastern States Have Switched to Price Caps." State Telephone Regulation Report 14, no. 2 (January 25, 1996): 1, 10-14.
- \_\_\_\_\_\_. "Price Caps Still Struggling for Acceptance in Western States." *State Telephone Regulation Report* 14, no. 3 (February 8, 1996): 1, 8-13.

- Kirchhoff, Herb. "RHCs in East Convince 8 States to Embrace Price Cap Regulation." State Telephone Regulation Report 13, no. 3 (February 9, 1995): 1, 5-12. . "Western States May See Major Swing to Price Caps this Year." State Telephone Regulation Report 13, no. 4 (February 23, 1995): 1, 6-11. . "Telcos in East Examine Price-Caps to Tackle Competition." State Telephone Regulation Report 12, no. 4 (February 10, 1994): 1-7. \_. "Alternate Regulation Seeks Foothold in Rocky West." State Telephone Regulation Report 12, no. 5 (February 24, 1994): 1-7. . "Traditional Telco Regulation Becoming a Rarity in the East." State Telephone Regulation Report 11, no. 2 (January 28, 1993): 1-8. . "Alternate Regulation in West May Resume Advance this Year." State Telephone Regulation Report 11, no. 3 (February 11, 1993): 1-9. . "Eastern States See Storm of Regulatory Reform Activity." State Telephone Regulation Report 10, no. 2 (January 30, 1992): 1-9. . "Reform Advances in West as Two-Thirds of States Take Action." State Telephone Regulation Report 10, no. 3 (February 13, 1992): 1-8. . "15 Eastern States Implement Major Telephone Reforms." State Telephone Regulation Report 9, no. 3 (February 7, 1991): 1-8. \_. "Reform of Telco Regulation on 1990 Agendas in 12 Eastern States." State Telephone Regulation Report 8, no. 6 (March 22, 1990): 1-11. \_. "Western States are a Hotbed of Action on Telco Reforms." State Telephone Regulation Report 8, no. 7 (April 5, 1990): 1-11. \_. "Most States Have Moved to Reform Regulation of Telcos." State Telephone Regulation Report 7, no. 1 (January 12, 1989): 1-7. National Association of Regulatory Utility Commissioners. Utility Regulatory Policy in the United States and Canada, 1991-1996 Compilations. Washington, DC:
- NARUC. Table 148.
- The National Regulatory Research Institute. Update to the Maine and Missouri Reports on Alternative Regulation Plans in Telecommunications. Edited by Vivian Witkind Davis and Nancy N. Zearfoss. Columbus, OH: The National Regulatory Research Institute, June 1993.

- Sappington, David E. M. and Dennis Weisman. *Designing Incentive Regulation for the Telecommunications Industry*. Cambridge, MA: The MIT Press, 1996.
- Schmitz, Susan M., Russell W. Trippensee, and M. Dianne Drainer. *Report on Alternative Regulation Plans by State*. Jefferson City, MO: Missouri Office of the Public Counsel, September 1989.
- Shifman, Joel and Darby Arseneault. Report on Telecommunication Alternative Regulation Plans by State. Augusta, ME: Maine Public Utilities Commission, February 1992.
- Tardiff, Timothy J. and William E. Taylor. *Telephone Company Performance Under Alternative Forms of Regulation in the U. S.* Cambridge, MA: National Economic Research Associates, 1993. Unpublished Mimeo.