The History, Financial Commitments and Outcomes of Fiber Optic Broadband Deployment in America: 1990-2004


Filed as Part of: GN Docket Nos. 09-47, 09-51, 09-137, DA 09-2458

Presented by

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Filed: December 4th, 2009
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Introduction

The Columbia Institute for Tele-Information (CITI) based at the Columbia Business School has been tasked to supply to the FCC with a report that, among other topics, includes “an analysis of the public statements of companies as to their future plans to deploy and upgrade broadband networks as well as an historical evaluation of the relationship between previous such announcements and actual deployment.” The FCC adds: “By focusing on data analysis -- of investment plans and deployment figures of upgraded broadband infrastructure, especially in this century -- CITI looks forward to helping the FCC to change the past culture and develop a National Broadband Plan grounded in facts.” CITI’s historical evaluation only goes back to 2004-05. Since we believe that the FCC would benefit from a historical analysis that goes further back, we have prepared this report to cover the period 1990-2004.

This document, using primary sources, covers the years 1990-2004 and outlines data to create an accurate model of phone company broadband historical ‘announcements and deployments’, specifically AT&T, Verizon and Qwest, tied to the investments that were previously and are currently being made via customer-funding through pre-existing deregulation, as well as the outcome of the deployment plans.

The plans to bring fiber-based broadband services to America were of two types:

- Federal proposals, known as “video dialtone”, which became “open video access” in the Telecom Act of 1996.
- State alternative regulation plans, (some times called “incentive regulation” or “price cap regulation”), which were sometimes tied to state legislation.

Note: Today there are three companies that were formed from 12 companies, most of which were the product of various merger.  

- AT&T: Southwestern Bell (SBC), Ameritech, BellSouth, Pacific Telesis, SNET, AT&T.
- Verizon: Bell Atlantic, NYNEX, GTE, MCI, Alltel
- Qwest: formerly US West

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2 Including annual reports, FCC reports and telco filings, state commission and legislation laws, decisions, new paper articles, and expert testimony, including state advocates’ offices.
3 NOTE: The names of the companies have all changed because of mergers and the renaming of the local phone companies to have the holding company name; i.e., New Jersey Bell became Bell Atlantic, then Verizon. For a list of states and companies, see: http://www.teletruth.org//History/history.html
1.0 Pre-2004 Fiber Optic-based Broadband Announcements.

There were both state and national announcements pertaining to the building out and upgrading of the networks, replacing the existing copper wiring with fiber optic wires and equipment that could deliver high speed broadband. Each Bell company made announcements, as well as groups that were established by these companies, such as Tele-TV and Americast.4


“We’re building a video network that will extend to six million customers within six years.”

NYNEX, 1993 Annual Report6

“We're prepared to install between 1.5 and 2 million fiber optic lines through 1996 to begin building our portion of the Information Superhighway.”

US West, 1993 Annual Report 7

"In 1993 the company announced its intentions to build a broadband, interactive telecommunications network…. US West anticipates converting 100,000 access lines to this technology by the end of 1994, and 500,000 access lines annually beginning in 1995."

The independent GTE (now owned by Verizon) stated they would have 7 million homes by 2004 in 66 key markets.8

“In 1991, GTE Telephone Operations became the first telephone company in the United States to offer interactive video services…. Expanding on this success, the company in 1994 announced plans to build

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4 TeleTV consisted of Bell Atlantic, NYNEX, and Pacific Telesis. Americast consisted of SBC, BellSouth, GTE, Ameritech, SNET and Disney.
7 Ibid.
New Networks Institute

video networks in 66 key markets in the next 10 years. When completed, the new network will pass 7 million homes and will provide broadcast, cable and interactive television programming.”

1.1 Bell Broadband and Capital Expenditure Announcements

Some of the companies outlined their plans as well as the capital expenditures.

Bell Atlantic 1993 Annual Report\(^9\) stated it would spend $11 billion in 5 years and have 8.75 million homes completed by 2000.

"First, we announced our intention to lead the country in the deployment of the information highway.... We will spend $11 billion over the next five years to rapidly build full-service networks capable of providing these services within the Bell Atlantic region..... We expect Bell Atlantic's enhanced network will be ready to serve 8.75 million homes by the end of the year 2000. By the end of 1998, we plan to wire the top 20 markets.... These investments will help establish Bell Atlantic as a world leader...."

In 1996, Bell Atlantic stated it would have “digital video broadcast capabilities” serving most of 12 million homes and small businesses.\(^10\)

"The company plans to add digital video broadcast capabilities to this 'fiber-to-the-curb', switched broadband network by the third quarter of 1997... Bell Atlantic plans to begin its network upgrade in Philadelphia and southeastern Pennsylvania later this year.... Ultimately, Bell Atlantic expects to serve most of the 12 million homes and small businesses across the mid-Atlantic region with switched broadband networks.”

According to Pacific Telesis’s 1993 Annual Report\(^11\), the company would spend $16 billion on the networks and reach 5 million homes.\(^12\)

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\(^9\) Bell Atlantic 1993 Annual Report
\(^11\) Pacific Telesis 1993 Annual Report
\(^12\) Pac Bell quoted as 6 million homes and 5.5 million in other announcements.
"In November 1993, Pacific Bell announced a capital investment plan totaling $16 billion over the next seven years to upgrade core network infrastructure and to begin building California's 'Communications superhighway'. This will be an integrated telecommunications, information and entertainment network providing advanced voice, data and video services. Using a combination of fiber optics and coaxial cable, Pacific Bell expects to provide broadband services to more than 1.5 million homes by the end of 1996, 5 million homes by the end of the decade."

According to the SNET 1996 Annual Report\textsuperscript{13}, which represented most of Connecticut (now part of AT&T), the company would spend $4.5 billion and finish the state in 2007.

“I-SNET(sm) is... a statewide telephony and information superhighway. Since 1994, the wireline business has been replacing its existing network of twisted copper wire with low maintenance fiber-optic and coaxial cable. The buildout of I-SNET, a $4.5 billion investment, is expected to be completed by 2007.”

1.2 Phone Company Groups: Tele-TV and Americast.

NYNEX, Bell Atlantic and Pacific Bell created Tele-TV in 1994.\textsuperscript{14} Ameritech, Southwestern Bell (SBC), GTE, SNET, BellSouth and Disney created “Americast”\textsuperscript{15}. Americast announced it would reach 68 million homes in 32 states, thus covering all of the companies’ lines.\textsuperscript{16} The companies, combined, also announced the “purchase of $1 billion worth of high-tech boxes, referred to as ‘digital set-top’ boxes.”\textsuperscript{17} While some of the Bell companies, such as Southwestern or BellSouth, did not announce full deployment plans, their organizations included the companies’ lines in their deployment announcements.

\textsuperscript{13} SNET 1996 Annual Report
\textsuperscript{14} Bell Atlantic 1996 Annual Report
\textsuperscript{15} “Re: Request for Comments on Deployment of Broadband Networks and Advanced Telecommunications Services,” Docket No. 011109273-1273-01, RIN 0660-XX13, The Walt Disney company letter to National Telecommunications and Information Administration, December 19, 2001
\textsuperscript{16} “GTE to Join Disney, Ameritech, BellSouth and SBC in Home Entertainment Partnership. Increases Venture Reach to 68 Million Access Lines, 32 States,” Press release, July 7, 1996.
\textsuperscript{17} “SBC set to expand in video market,” San Antonio Business Journal, August 30, 1996, print edition
1.2 Summary of the Announcements on a Timeline.

This exhibit gives the Regional Bell (including GTE and SNET) deployment schedule based on their annual report announcements.\textsuperscript{18}

\textbf{Announced RBOC, GTE, SNET Upgraded Residential Subscribers, 1994-2000}\textsuperscript{19}

<table>
<thead>
<tr>
<th>Company</th>
<th>Total by 2000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ameritech</td>
<td>6,000,000</td>
</tr>
<tr>
<td>Bell Atlantic</td>
<td>12,000,000</td>
</tr>
<tr>
<td>BellSouth</td>
<td>5,600,000</td>
</tr>
<tr>
<td>NYNEX</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Pacific Telesis</td>
<td>5,500,000</td>
</tr>
<tr>
<td>SouthWestern</td>
<td>5,600,000</td>
</tr>
<tr>
<td>US West</td>
<td>2,600,000</td>
</tr>
<tr>
<td>GTE</td>
<td>2,800,000</td>
</tr>
<tr>
<td>SNET</td>
<td>1,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>46,100,000</td>
</tr>
</tbody>
</table>

\textit{Sources: AT&T, Verizon and Qwest Annual Reports and Announcements.}

1.3 Filed FCC Applications for “Video Dialtone” Services

The Bell companies’ annual report announcements dovetailed with applications the companies filed to offer video-dialtone services. This next exhibit gives the 35 video dialtone applications at the FCC by the year of the application, phone company, location and number of households, and the status of the project, whether it was to be a permanent build out or a trial.

\textsuperscript{18} These announcements increased and/or decreased over time by each company and state.

\textsuperscript{19} NOTE: The numbers for BellSouth and Southwestern Bell are averages of other Bell companies (and GTE). While neither company officially released their roll-out plans in their annual reports, other sources (quoted herein) give clear indication that they had robust plans. GTE divided 7 million by 10 years. SNET households are through 2007.
## Video Dialtone Applications by the Phone Companies

<table>
<thead>
<tr>
<th>Date</th>
<th>Telephone Company</th>
<th>Location</th>
<th>Homes</th>
<th>Type of Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/21/92</td>
<td>Bell Atlantic-VA</td>
<td>Arlington, VA</td>
<td>2,000</td>
<td>technical/market</td>
</tr>
<tr>
<td>10/30/92</td>
<td>NYNEX</td>
<td>New York, NY</td>
<td>2,500</td>
<td>technical</td>
</tr>
<tr>
<td>11/16/92</td>
<td>New Jersey Bell</td>
<td>Florham Park, NJ</td>
<td>11,700</td>
<td>permanent</td>
</tr>
<tr>
<td>12/15/92</td>
<td>New Jersey Bell</td>
<td>Dover Township, NJ</td>
<td>38,000</td>
<td>permanent</td>
</tr>
<tr>
<td>04/27/93</td>
<td>SNET</td>
<td>West Hartford, CT</td>
<td>1,600</td>
<td>technical/market</td>
</tr>
<tr>
<td>06/18/93</td>
<td>Rochester Telephone</td>
<td>Rochester, NY</td>
<td>350</td>
<td>technical/market</td>
</tr>
<tr>
<td>06/22/93</td>
<td>US West</td>
<td>Omaha, NE</td>
<td>60,000</td>
<td>technical/market</td>
</tr>
<tr>
<td>12/15/93</td>
<td>SNET</td>
<td>Hartford &amp;Stamford, CN</td>
<td>150,000</td>
<td>technical/market</td>
</tr>
<tr>
<td>12/16/93</td>
<td>Bell Atlantic</td>
<td>MD &amp; VA</td>
<td>300,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/93</td>
<td>Pacific Bell</td>
<td>Orange Co., CA</td>
<td>210,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/93</td>
<td>Pacific Bell</td>
<td>So. San Francisco Bay, CA</td>
<td>490,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/93</td>
<td>Pacific Bell</td>
<td>Los Angeles, CA</td>
<td>360,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/93</td>
<td>Pacific Bell</td>
<td>San Diego, CA</td>
<td>250,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/10/94</td>
<td>US West</td>
<td>Denver, CO</td>
<td>330,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/24/94</td>
<td>US West</td>
<td>Portland, OR</td>
<td>132,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/24/94</td>
<td>US West</td>
<td>Minneapolis/ St. Paul, MN</td>
<td>292,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/31/94</td>
<td>Ameritech</td>
<td>Detroit, MI</td>
<td>232,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/31/94</td>
<td>Ameritech</td>
<td>Columbus &amp;Cleveland, OH</td>
<td>262,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/31/94</td>
<td>Ameritech</td>
<td>Indianapolis, IN</td>
<td>115,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/31/94</td>
<td>Ameritech</td>
<td>Chicago, IL</td>
<td>501,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/31/94</td>
<td>Ameritech</td>
<td>Milwaukee, WI</td>
<td>146,000</td>
<td>permanent</td>
</tr>
<tr>
<td>03/16/94</td>
<td>US West</td>
<td>Boise, ID</td>
<td>90,000</td>
<td>permanent</td>
</tr>
<tr>
<td>03/16/94</td>
<td>US West</td>
<td>Salt Lake City, UT</td>
<td>160,000</td>
<td>permanent</td>
</tr>
<tr>
<td>04/13/94</td>
<td>Puerto Rico Tel. Co.</td>
<td>Puerto Rico</td>
<td>250</td>
<td>technical</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE - Contel of Va.</td>
<td>Manassas, VA</td>
<td>109,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE Florida Inc.</td>
<td>Pinella and Pasco Co., FL</td>
<td>476,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE California Inc.</td>
<td>Ventura Co., CA</td>
<td>122,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE Hawaiian Tel.</td>
<td>Honolulu, HA</td>
<td>334,000</td>
<td>permanent</td>
</tr>
<tr>
<td>06/16/94</td>
<td>Bell Atlantic</td>
<td>Wash. DC LATA</td>
<td>1,200,000</td>
<td>permanent</td>
</tr>
<tr>
<td>06/16/94</td>
<td>Bell Atlantic</td>
<td>Baltimore, MD; Northern NJ; DE; Philadelphia, ; Pittsburgh, PA; S.E. VA</td>
<td>2,000,000</td>
<td>permanent</td>
</tr>
<tr>
<td>06/27/94</td>
<td>BellSouth</td>
<td>Chamblee &amp;DeKalb s, GA</td>
<td>12,000</td>
<td>technical/market</td>
</tr>
<tr>
<td>07/08/94</td>
<td>NYNEX</td>
<td>RI</td>
<td>63,000</td>
<td>permanent</td>
</tr>
<tr>
<td>07/08/94</td>
<td>NYNEX</td>
<td>MA</td>
<td>334,000</td>
<td>permanent</td>
</tr>
<tr>
<td>09/09/94</td>
<td>Carolina Tel. &amp; Tel.</td>
<td>Wake Forest, NC</td>
<td>1,000</td>
<td>technical/market</td>
</tr>
<tr>
<td>4/28/95</td>
<td>SNET</td>
<td>CT</td>
<td>1,000,000</td>
<td>permanent</td>
</tr>
</tbody>
</table>

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1.4 Announced Financial Commitments

The following chart summarizes the “announced” households and the financial ‘commitments’ that the companies stated they would be spending on the projects or were part of a state commitment, as discussed herein.

By the end of 2000, the companies stated they would spend $53.4 billion on 36.1 million homes.21

**AT&T, Verizon, Qwest Announcements of Households and Financial Commitments 1990-2000**

<table>
<thead>
<tr>
<th>Company</th>
<th>Money (billions)</th>
<th>Announced Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pacific Telesis</td>
<td>$16.0</td>
<td>5,500,000</td>
</tr>
<tr>
<td>Ameritech (3 states)</td>
<td>$7.5</td>
<td>6,000,000</td>
</tr>
<tr>
<td>SNET</td>
<td>$4.5</td>
<td>1,000,000</td>
</tr>
<tr>
<td>SBC, Texas (Pronto)</td>
<td>$1.5</td>
<td></td>
</tr>
<tr>
<td>BellSouth (Louisiana)</td>
<td>$1.0</td>
<td></td>
</tr>
<tr>
<td>SBC Total</td>
<td>$36.1</td>
<td>12,500,000</td>
</tr>
<tr>
<td>Verizon</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bell Atlantic</td>
<td>$11.0</td>
<td>12,000,000</td>
</tr>
<tr>
<td>NYNEX (in MA)</td>
<td>$.5</td>
<td>2,000,000</td>
</tr>
<tr>
<td>New York</td>
<td>$1.0</td>
<td></td>
</tr>
<tr>
<td>GTE</td>
<td>$4.1</td>
<td>7,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>$16.6</td>
<td>21,000,000</td>
</tr>
<tr>
<td>Qwest</td>
<td>$.75</td>
<td>2,600,000</td>
</tr>
<tr>
<td>Total</td>
<td>$53.45</td>
<td>36,100,000</td>
</tr>
</tbody>
</table>

21 We note that in this exhibit we only included ‘announced’ deployments, as compared to previous exhibits where we estimated the total for BellSouth and Southwestern.
1.5 State Alternative Regulation Financial Incentives and Commitments

In virtually every state, Verizon, AT&T and Qwest applied for and received major financial incentives through changes in state laws, sometimes referred to as “alternative regulations”, “incentive regulations”, “price cap regulation” or “AFOR”, “Alternative Form of regulation”.

While the video dialtone plans were submitted to the FCC as a federal (interstate) plan, state plans dovetailed and/or were part of the commitments made on the state level to receive financial incentives and secure deregulation.

Though each state had a different regulatory series of requirements and incentives, an example of alternative regulations is Indiana Bell’s changes in state law. Originally regulated through ‘rate-of-return’, which examined profits, in this case, the company profits were no longer examined and the company received “market based pricing” for “competitive” services using “pure price regulation” --- meaning that the price of a competitive service can be changed to what the market allows and that the state commission can not examine or restrict profits. In this state, the commission would no longer be allowed to examine “depreciation rates”, and the company would invest $120 million to wire schools, hospitals, and government centers.

Ameritech 1995 Annual Report

“"In 1994, the Indiana Utility Regulatory Commission (IURC) approved Ameritech's Opportunity Indiana plan. Under the plan, market based pricing and flexibility by means of pure price regulation has been instituted for competitive services, including Centrex, dedicated communications services, 800 service, WATS, operator services and business intraLATA toll service... IURC oversight of depreciation was suspended for the term of the plan... Ameritech will invest up to $120 million in infrastructure over six years to extend advanced communications links to interested schools, hospitals and major government centers.”

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22 Ameritech 1995 Annual Report
1.6 Fiber Optic Services for Schools, Libraries, hospitals, Government agencies, etc.

Ohio, like many other states, such as Texas and Wisconsin all made commitments to rewire schools, libraries, government agencies, and hospitals with fiber optic upgrades.

“21. INFRASTRUCTURE COMMITMENTS The Company's infrastructure commitment in this Plan shall consist of the commitment to deploy, within five years of the effective date of the Plan and within the Company's existing service territory, broadband two-way fully interactive high quality distance learning capabilities to all state chartered high schools including vocational, technical schools, colleges and universities; deploy broadband facilities to all hospitals, libraries, county jails and state, county and federal court buildings.”

1.7 Overall Deployment Plans: Speed, Services, Ubiquitous, Common Carriage

The video dialtone applications were quite similar. NYNEX would supply a service that would be fiber-coax based and have between 400 to 800 channels.

“NYNEX proposes to deploy hybrid fiber optic and coaxial (HFC) broadband networks that will provide advanced voice, data, and video services, including interactive video entertainment, multimedia education and health care services. NYNEX’s proposed video dialtone systems make available three types of service arrangements: analog broadcast, digital broadcast, and digital interactive service. The allocation plan provides for the offering of 21 analog channels, all but one of which will be used for over-the-air broadcast programming services, and, depending on compression rates, between 400 an 800 digital channels.”

On average, the companies’ video dialtone applications averaged 534 channels.

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23 Ohio alternative regulation plan, September 20, 1994
24 Order and Authorization, FCC 95-50, Released March 6, 1995
25 Source: New Networks Institute
1.8  The Speed of Broadband in 1993 was 45Mbps in Both Directions.

The standard speed for broadband in 1993 was 45 Mbps. It was also “symmetric” speeds, meaning fast in both directions. And it is part of state laws, including New Jersey and Texas. The speed was based on the fact that high definition television without compression required that speed in 1993.26

"Broadband Digital Service — Switching Capabilities matched with transportation capabilities supporting data rates up to 45,000,000 bits per second (45 Mbps) and higher, which enables services, for example, that will allow residential and business customers to receive high definition video and to send and receive interactive (i.e., two way) video signals."

1.9  Ubiquitous Fiber Optic Deployments

Like phone service, that is ubiquitous and required to go to every home, office and school and library, most state plans called for the entire state to be included and the deployments would be done to all economic strata.

Pennsylvania law states that rural, urban and suburban households should be treated equally when it comes to fiber optic deployments.27 This quote also demonstrates that some state laws, created in the 1990’s, still have requirements to be fulfilled.

“Verizon PA has committed to making 20% of its access lines in each of rural, suburban, and urban rate centers broadband capable within five days from the customer request date by end of year 1998; 50% by 2004; and 100% by 2015.”

1.10 Broadband Funding: Upgrades of the Public Switched Telephone Networks (PSTN)

The monies collected through incentive regulations were to be used to upgrade the Public Switched Telephone Networks (PSTN) the utility network, replacing the copper wiring with fiber optic wiring and new technology.

New Jersey state law:28

"NJ BELL'S PLAN FOR AN ALTERNATIVE FORM OF REGULATION. NJ Bell's plan declares that its approval by the Board would provide the foundation for NJ Bell's acceleration of an information age network in New Jersey and referred to by NJ Bell as 'Opportunity New Jersey'. Opportunity New Jersey would accelerate the deployment of key network technologies to make available advanced intelligent network, narrowband digital, wideband digital, and broadband digital service capabilities in the public switched network, and thereby accelerate the transformation of NJ Bell's public switched network, which today transports voiceband services (voice, facsimile and low speed data), to a public switched network, which transports video and high speed data services in addition to voiceband services."

1.11 Increases of Local Rates to Fund Broadband Continues Today.

New York Department of Public Affairs, in June 2009, agreed to Verizon local phone rate increases to fund fiber optics services.29

“We are always concerned about the impacts on ratepayers of any rate increase, especially in times of economic stress,” said Commission Chairman Garry Brown. “Nevertheless, there are certain increases in Verizon’s costs that have to be recognized. This is especially important given the magnitude of the company's capital investment program, including its massive deployment of fiber optics in New York. We encourage Verizon to make appropriate investments in New York, and these minor rate increases will allow those investments to continue.”

28 In the Matter of the Application of New Jersey Bell Telephone Company for Approval of Its Plan for an Alternative Regulation,” Decision Docket Number T092030358, April 14, 1993
29 http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/Web/B849A020314983A3852575D900530827/$File/pr09054.pdf
2.0 Outcome of Deployments

2.1 Fiber Optic-Based Broadband Compared to Annual Report DSL Data

Based on the total fiber-optic based lines, (as projected from annual reports and other phone company sources), there should have been approximately 46 million households upgraded with fiber optic upgraded lines by 2000. Based on annual reports, there were no fiber optic residential services. Instead, the companies reported their ADSL service. At the end of 2000, Verizon, AT&T and Qwest combined had 1.8 million ADSL lines.

### Fiber Optic-Based Broadband Compared to Annual Report DSL Data

(*As of the year 2000*)

<table>
<thead>
<tr>
<th>Company</th>
<th>Fiber</th>
<th>DSL-Annual Report</th>
<th>% any broadband Vs statements.</th>
</tr>
</thead>
<tbody>
<tr>
<td>AT&amp;T (SBC)</td>
<td>767,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ameritech</td>
<td>6,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BellSouth</td>
<td>5,600,000</td>
<td>215,000</td>
<td>4.1%</td>
</tr>
<tr>
<td>Pacific Bell</td>
<td>5,500,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SNET</td>
<td>1,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwestern</td>
<td>5,600,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>23,700,000</td>
<td>982,000</td>
<td></td>
</tr>
<tr>
<td>Verizon</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bell Atlantic</td>
<td>12,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NYNEX</td>
<td>5,000,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>GTE</td>
<td>2,800,000</td>
<td>540,000</td>
<td>2.7%</td>
</tr>
<tr>
<td>Qwest</td>
<td>2,600,000</td>
<td>255,000</td>
<td>9.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>46,100,000</td>
<td>1,777,000</td>
<td>3.9%</td>
</tr>
</tbody>
</table>

---

30 The Bell numbers for fiber optic upgrades were based on households in some cases, but DSL is expressed in lines.
31 ADSL is based on the existing copper plant, is ‘asymmetric’, (fast in only one direction) and can not handle high definition (high quality) video, the standard definition of “advanced Services”, used in Section 706 of the Telecom Act’. The FCC definition has been 200 Kbps in one direction as broadband.
32 Sources: Bell Annual Reports, Verizon, AT&T and Qwest 10K for 2000, New Networks Institute projection of Southwestern and BellSouth broadband fiber deployment is an average of the other Bell companies and GTE.
In terms of deployment accounting (*including ADSL), AT&T had deployed 4.1% of the announced services, Verizon had a 2.7% deployment as compared to announcements and Qwest had 9.8% as compared to announcements for all broadband.

2.3 Fiber Optic-Based Broadband Announcements Compared to FCC Data.

According to the FCC, the total fiber lines as of June 2000 were 40,627 lines, and 1.7 million lines could handle 200Kbps in one direction, for which 1.1 million DSL lines were capable of handling two directions over 200Kbps. (Defined by the FCC as “Advanced Services”). There were no 45 Mbps speed services available to residential customers in 2000.\(^{33}\)

Note: At least 319,000 of the ADSL lines listed by the FCC were handled by one competitor, Covad. The total number of competitors is not listed.

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\(^{33}\) FCC “Inquiry Concerning the Deployment of Advanced Telecommunications Capability to All Americans in a Reasonable and Timely Fashion, and Possible Steps to Accelerate Such Deployment Pursuant to Section 706 of the Telecommunications Act of 1996” GN Docket No. 07-45, FIFTH REPORT Adopted: March 19, 2008 Released: June 12, 2008”. 

16
FCC Report Data on DSL and Fiber Deployment\textsuperscript{34} (Based on June, 2000)

<table>
<thead>
<tr>
<th>Telco</th>
<th>FCC DSL</th>
<th>FCC Fiber</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCC Data</td>
<td>46,100,000</td>
<td>1,750,804</td>
</tr>
<tr>
<td>% vs statement</td>
<td>3.798%</td>
<td>0.088%</td>
</tr>
</tbody>
</table>

Comparing the AT&T, Verizon and Qwest announcements pertaining to fiber with actual deployments, while the telcos announced roughly 46 million lines, the total US fiber optic market (which could include business services) was only 41,000 lines – less than 1% of the actual announcements.

2.3 Video Dialtone “Permanent” Deployments Compared to Annual Report Broadband Data for 2000.

The video dialtone filings presented by the phone companies projected 8.6 million homes rewired, which were part of the larger announcements made by the companies.

\textsuperscript{34} Data for 2000 was based on the FCC “Statistics of Common Carriers” published June 2001.
Bell Company Video Dialtone Lines Compared to the Annual Report DSL Data.

<table>
<thead>
<tr>
<th></th>
<th>Lines</th>
<th>ADSL</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verizon</td>
<td>4,353,700</td>
<td>540,000</td>
<td>12.4%</td>
</tr>
<tr>
<td>SBC</td>
<td>3,566,000</td>
<td>982,000</td>
<td>27.5%</td>
</tr>
<tr>
<td>Qwest</td>
<td>712,000</td>
<td>255,000</td>
<td>35.8%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>8,631,700</strong></td>
<td><strong>1,777,000</strong></td>
<td><strong>20.6%</strong></td>
</tr>
</tbody>
</table>

Video Dialtone vs DSL Deployment, 2000

2.4 Cable Replacements, Then Closures.

According to the FCC’s third video competition report, by 1996, there were only two companies who had deployed an ‘operational’ video dialtone (VDT) service. US West, BellSouth, Ameritech, Sprint, SNET, Pacific Bell, SBC and GTE all converted their plans from offering video dialtone to offering cable service over upgraded plant.

- “Bell Atlantic is the only LEC to build and begin operating a VDT system before passage of the 1996 Act, (Dover, New Jersey) and Bell Atlantic and MFS (a CLEC) remain the only LECs with operational OVS (Open video systems) in the nation.” (‘Video Dialtone Became “Open video systems” in the 1996 Telecom Act)
New Networks Institute

- “U S West has elected to pursue cable franchises for its former Omaha, Nebraska, VDT trial.”

- “Sprint has applied for cable franchises in Wake Forest and Wake County, North Carolina, and has notified the Commission that it will pursue this option for its VDT trials.”

- Ameritech, instead of deploying the video dialtone services, “acquired 27 cable franchises in Illinois, Michigan, Ohio, and Wisconsin, to serve communities with a total population of more than 1.2 million. By 2000, the company had 100 franchises.”

- “BellSouth has obtained a cable franchise in Chamblee, Georgia, for the area served by its former VDT trial and has filed an election to utilize the cable regulatory option.”

Letter from Robert H. Jackson, U S West's Executive Director - Federal Regulatory, to Meredith J. Jones, Chief, Cable Services Bureau, Apr. 16, 1996.


FCC 3rd Video Competition Report: These franchises are located in: Glendale Heights, Glen Ellyn, Naperville, and Vernon Hills, Illinois; Clinton Township, Fraser, Garden City, Lincoln Park, Northville, Northville Township, Plymouth, Plymouth Township, Southgate, Sterling Heights, Troy, Wayne and Canton Township, Michigan; Berea, Columbus, Hilliard, North Olmsted, Perry Township, Riverlea, Upper Arlington, Clinton Township and Worthington, Ohio; and Greendale, Wisconsin. Ameritech Comments at 3; Telephone conversation between Commission staff and George Callard, Ameritech New Media Counsel, Dec. 3, 1996. See also Comm. Daily, Sept. 19 and Oct. 2, 1996.


FCC 3rd Video Competition Report: The seven areas are: Chamblee, Georgia, formerly a VDT trial; Gwinnett County, Georgia; Daniel Island, South Carolina; St. John’s Community/World Golf Village, near Jacksonville, Florida; Brentwood and Franklin, Tennessee; and Vestavia Hills, Alabama, a suburb of Birmingham. BellSouth, News from the BellSouth Video Front, http://www.bellsouth.com/investor/bellnews/jun96/art1.html (1996); CableFAX Daily, Oct. 3, 1996, at 1. BellSouth is also, according to CableFAX, pursuing a franchise for Nashville, Tennessee. See also Comm. Daily, Dec. 5, 1996.
“GTE has received five cable franchises, which will pass over 400,000 homes.”

“PacBell has obtained cable franchises for San Jose and the surrounding Santa Clara County in California.”

“SNET has received a state-wide cable franchise in Connecticut, where previously it had applied to provide VDT service.”

“SBC received authorization to perform an 18-month cable trial in Richardson, Texas, a suburb of Dallas.”

2.5 Bell Cable Outcomes

By 2000, most of the cable franchises were closed. SBC closed down whatever fiber optic or cable deployments were underway after each merger --- Ameritech, Pacific Bell, and SNET.

- **Ameritech**: SBC purchased Ameritech and sold the cable franchises and plant to WOW, 2001.
- **Pacific Bell**: SBC purchased Pacific Bell and closed its video operations in 1997.

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43 FCC 3rd Video Competition Report: These franchises include: Clearwater, Florida (where it previously was approved to provide permanent, commercial VDT service); St. Petersburg, Florida; Camarillo, Thousand Oaks, and Ventura County, California. GTE reports that it is already signing up subscribers for the Clearwater, Florida system and plans to pass 95,000 homes in this area. GTE Launches Its First Cable Franchise in Florida, Multichannel News, July 1, 1996, at 2. See also Local and State Actions, Warren’s Cable Regulation Monitor, Aug. 26, 1996; Notebook, Television Digest, Sept. 2, 1996, GTE plans to pass 122,000 homes in Thousand Oaks, California. Ameritech Gets 2 More System Approvals, CableFAX, Feb. 8, 1996.

44 FCC 3rd Video Competition Report: Pacific Bell Video Services launched its commercial video service initially to 7500 homes in the San Jose area in September, with plans to expand its video reach to 25,000 homes within one year and to a total of 175,000 homes by 2000. Pacific Telesis Corp., Pacific Bell Video Service Launches Commercial Cable TV Service in San Jose (press release), Aug. 30, 1996; Pacific Telesis Corp., San Jose First California City to Get Cable TV Franchise From Pacific Bell Video Services (press release), June 25, 1996.

45 Local and State Actions, Warren’s Cable Regulation Monitor, Aug. 19, 1996.


47 SBC Comments at 3-4.

48 WOW, what a deal,” Telephony, June 4, 2001
• SNET: SBC purchased SNET and closed down the cable service in 2000.  
• US West: Closed Omaha trial down in 1996. 
• Bell Atlantic: Closed Dover Township in 1997.

2.6 Financial Outcomes: Announcements Compared to Actual Expenditures:

Pacific Bell:
• Pacific Bell announced it would be spending $16 billion over the period of 5 years for fiber optic upgrades to 5.5 million homes.  
• Outcome: In 1997 SBC took a $145 million expense because the company “curtailed certain other video-related activities including discontinuing its broadband network video trials in Richardson, Texas, and San Jose, California.” An additional charge of $533 million was charged for the closure of Texas and California, as well as a payment to the vendors of the California buildout.  
• Estimated total expense in California: $250 million. Ratio of announcements and expenditures: 1.6%  
• Benefits from state Incentive regulations: Estimated $1 billion in extra profits.  
• Pacific Bell also took a $3.4 billion tax deduction for accelerated depreciation in 1995.

Bell Atlantic (and NYNEX)
• Bell Atlantic announced $11 billion dollars in expenditures for 8.75 million homes.  
• Outcome: In 1997 the company to $243 million in video-related charges, which included wireline but also CAI Wireless and the closing of Tele-TV. In 1998, the company took an additional $23 million charge.

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49 SBC 1997 Annual Report  
50 SBC 2000 Annual Report  
51 US West 1996 Annual Report  
52 Ibid. “Pacific and Southwestern Video Curtailment/Purchase Commitments - SBC also announced in 1997 that it was scaling back its limited direct investment in video services in the areas also served by Pacific Bell Telephone Company (PacBell) and Southwestern Bell Telephone Company (SWBell). As a result of this curtailment, SBC halted construction on the Advanced Communications Network (ACN) in California. As part of an agreement with the ACN vendor, SBC paid the liabilities of the ACN trust that owned and financed ACN construction, incurred costs to shut down all construction previously conducted under the trust and received certain consideration from the vendor. In the second quarter of 1997, SBC recognized net expense of $553 million ($346 million net of tax) associated with these activities.”  
53 Ibid. “Pacific and Southwestern Video Curtailment/Purchase Commitments -”  
54 Bloomberg Business News and Associate Press, December 21, 1995  
55 Deduction was part of “FAS71”, Pacific Telesis 1995 Annual Report  
56 Bell Atlantic 1998 Annual Report: “In 1997, we recognized total pre-tax charges of $243 million related to certain video investments and operations. We determined that we would no longer pursue a multichannel, multipoint, distribution system (MMDS) as part of our video strategy. As a result, we
New Networks Institute

- Estimated total expense in California: $200 million. Ratio of announcements and expenditures: 1.8%
- Benefits: Bell Atlantic (and NYNEX) took a $5.1 billion tax deduction for accelerated depreciation.\(^58\) State by state alternative regulations (deregulation) had been implemented for fiber optic upgrades.

**US West**
- US West said it will spend at least $750 million to upgrade 750,000 homes by 1995 and businesses in the four cities, on top of the Omaha Nebraska project.\(^59\)
- In 1996, the company took a tax deduction for the Omaha video trial of an undisclosed amount.\(^60\)
- Estimated total expenditures: $40 million. Ratio of announcements to expenditures: 5.3%
- Benefit: In 1993, the company took a $3.1 billion dollar tax deduction for accelerated depreciation.\(^61\)

recognized liabilities for purchase commitments associated with the MMDS technology and costs associated with closing the operations of our Tele-TV partnership because this operation no longer supports our video strategy. We also wrote-down our remaining investment in CAI Wireless.”

\(^{57}\) Ibid.
\(^{59}\) “US West accelerates its dial tone plans”, Multichannel News, January 17, 1994
\(^{60}\) [http://www.encyclopedia.com/doc/1G1-15142768.html](http://www.encyclopedia.com/doc/1G1-15142768.html)
\(^{61}\) US West 1996 Annual Report “Also contributing to the increase was a reserve adjustment associated with billing and collection activities performed for interexchange carriers and a charge related to the discontinuance of the Omaha broadband video service trial. Reduced access expense (a portion of which relates to the 1996 implementation of the MTCPs in Iowa and Nebraska) and a reduction in allocated costs from US WEST partially offset these increases. Allocated costs from US WEST were $88 and $116 in 1996 and 1995, respectively.
\(^{61}\) Ibid.
3.0 Verizon

Verizon is comprised of Bell Atlantic, NYNEX, GTE, and (MCI and Alltel). Each company had their own broadband plans, as well as state plans and video dialtone applications.

Video Dialtone: Verizon’s territories filed applications requesting 4,987,700\(^2\) permanent homes would be rewired with fiber optics and coax.

### Video Dialtone Filings by Verizon, 1992-1995

<table>
<thead>
<tr>
<th>Date</th>
<th>Phone Company</th>
<th>Location</th>
<th>Homes</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/21/92</td>
<td>Bell Atlantic-VA</td>
<td>Arlington, VA</td>
<td>2,000</td>
<td>technical</td>
</tr>
<tr>
<td>11/16/92</td>
<td>New Jersey Bell</td>
<td>Florham Park, NJ</td>
<td>11,700</td>
<td>permanent</td>
</tr>
<tr>
<td>12/15/92</td>
<td>New Jersey Bell</td>
<td>Dover Township, NJ</td>
<td>38,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/16/93</td>
<td>Bell Atlantic</td>
<td>MD &amp; VA</td>
<td>300,000</td>
<td>permanent</td>
</tr>
<tr>
<td>06/16/94</td>
<td>Bell Atlantic</td>
<td>Wash. DC LATA</td>
<td>1,200,000</td>
<td>permanent</td>
</tr>
<tr>
<td>06/16/94</td>
<td>Bell Atlantic</td>
<td>Balt., MD; Northern NJ; DE; Phila., Pitts. PA; S.E. VA</td>
<td>2,000,000</td>
<td>permanent</td>
</tr>
<tr>
<td>10/30/92</td>
<td>NYNEX</td>
<td>New York, NY</td>
<td>2,500</td>
<td>technical</td>
</tr>
<tr>
<td>07/08/94</td>
<td>NYNEX</td>
<td>RI</td>
<td>63,000</td>
<td>permanent</td>
</tr>
<tr>
<td>07/08/94</td>
<td>NYNEX</td>
<td>MA</td>
<td>334,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE - Contel of Va.</td>
<td>Manassas, VA</td>
<td>109,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE Florida Inc.</td>
<td>Pinella, Pasco Co., FL</td>
<td>476,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE California Inc.</td>
<td>Ventura Co., CA</td>
<td>122,000</td>
<td>permanent</td>
</tr>
<tr>
<td>05/23/94</td>
<td>GTE Hawaiian Tel.</td>
<td>Honolulu, HA</td>
<td>334,000</td>
<td>permanent</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>4,987,700</td>
<td></td>
</tr>
</tbody>
</table>

Based on annual report announcements, Verizon was to spend at least $16.6 billion and have 21 million lines completed, most by 2000.

### Verizon Summary of Fiber Optic Deployments, By 2000

<table>
<thead>
<tr>
<th></th>
<th>Money (billions)</th>
<th>Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bell Atlantic</td>
<td>$11.0</td>
<td>12,000,000</td>
</tr>
<tr>
<td>NYNEX (in MA)</td>
<td>$.5</td>
<td>2,000,000</td>
</tr>
<tr>
<td>New York</td>
<td>$1.0</td>
<td></td>
</tr>
<tr>
<td>GTE</td>
<td>$4.1</td>
<td>7,000,000</td>
</tr>
<tr>
<td>Total</td>
<td>$16.6</td>
<td>21,000,000</td>
</tr>
</tbody>
</table>

Outcome: Except for “tests” and “trials”, Verizon never deployed any serious amount of residential fiber optic services as stated in the video dialtone filings or state filings as of 2000. By the end of 2000, Verizon had 540,000 ADSL lines.

State Commitments: Verizon was the incumbent in 13 states and 28 GTE territories, though over time some of these properties, such as Maine, New Hampshire and Vermont, or GTE Hawaii, were sold off.

3.1 Bell Atlantic

- New Jersey Bell - New Jersey
- Bell of Pennsylvania - Pennsylvania
- Chesapeake and Potomac - West Virginia, Delaware, Virginia, Maryland District of Columbia

Bell Atlantic 1993 Annual Report stated it would spend $11 billion and have 8.75 million homes completed by 2000. The company also stated that the end of 1998, “we plan to wire the top 20 markets”. In 1996, the company stated it would have digital video broadcast capabilities and serve “12 million homes and small businesses.” These deployments were for a “fiber-to-the-curb”, switched broadband network by the third quarter of 1997, and broadband Internet access, data communications and interactive multimedia capabilities in late 1997 or early 1998.” In Wired Magazine, February 1995, Bell Atlantic claimed they would have 50% of the cable business by 2000.

Video Dialtone: Bell Atlantic filed FCC video dialtone applications to offer 3,549,700 permanent upgraded lines in Dover Township, New Jersey, other areas of New Jersey, Baltimore, Maryland; parts of Virginia, Washington, DC (1.2 million lines); Delaware, and Philadelphia and Pittsburgh Pennsylvania.

Broadband Outcome: By the year 2000, virtually none of the deployments for high speed broadband capable of high quality video in both directions existed. Verizon,
including the GTE territories, had 540,000 ADSL lines which used the existing copper plant.\textsuperscript{70}

The company also took a $2.2 billion dollar tax write off\textsuperscript{71} through accelerated depreciation based on the plans to upgrade and replace the copper plant with fiber optics.

State Commitments: Bell Atlantic filed and received alternative regulations, replacing the original ‘rate-of-return’ regulation in all of its states; the money to be used for fiber-optic-based broadband deployments.

### 3.2 New Jersey

In 1993, the New Jersey Board of Public Utilities agreed to give New Jersey Bell alternative regulation,\textsuperscript{72} to “accelerate the deployment of key network technologies to make available advanced intelligent network, narrowband digital, wideband digital, and broadband digital service capabilities in the public switched network, and thereby accelerate the transformation of NJ Bell’s public switched network...” By 2010, 100% of the state should be able to receive services capable of 45Mbps in both directions.\textsuperscript{73} Bell Atlantic was to spend an additional $1.5 billion from 1993-1999. The company also took a $1 billion dollar tax deduction through accelerated depreciation of the plant.\textsuperscript{74}

Outcome: According to the New Jersey' Division of the Ratepayer Advocate, March 21, 1997:\textsuperscript{75} “Bell Atlantic-New Jersey (BA-NJ) has over-earned, underspent and inequitably deployed advanced telecommunications technology to business customers, while largely neglecting schools and libraries, low-income and residential ratepayers and consumers in Urban Enterprise Zones as well as urban and rural areas.” The Ratepayer found that the company had increased dividends by $954 million and only spent $79 million dollars above ‘business as usual’.\textsuperscript{76}
Access New Jersey. To address some of the ratepayers' concerns, Verizon agreed to an additional $80 million commitment for “placing emerging information technologies into learning environments in New Jersey starting in 1998. Verizon committed an additional $55 million” in June 2002 for Communications Technology over the next five years.”

Outcome: “The New Jersey State Library (NJSL) has maintained the Hub program for about eight years (as of 2006) with 340 libraries participating. The Hub consists of 14 separate networks geographically dispersed throughout the state offering frame relay 76kbs to T1 connections and e-mail. The networks were created more for political rather than technical reasons. Use of the hub services is free to local libraries but they must pay for the local loop connection between library and the nearest hub network. There are only two principal providers in New Jersey: Sprint and Verizon.” There was no wiring of schools with fiber optics, and until 2002, the discounts did not include DSL.

### 3.3 Pennsylvania

In 1993, the Pennsylvania state legislature made changes to the state code, known as Chapter 30 and in 1994, Bell of Pennsylvania received alternative regulations (though there were later modifications). In exchange for financial incentives, Bell Atlantic, PA, made commitments to have 20% of its access lines in each of rural, suburban, and urban rate centers broadband capable within five days from the customer request date by end of year 1998; 50% by 2004; and 100% by 2015. According to Bell Atlantic filings, the commitments were for two-way digital video transmission at 45 Mbps.

Outcome: In March, 2002, the Pennsylvania Public Utility Commission rejected Verizon Pennsylvania's compliance with the state alternative regulation plan, stating that the Bell company had not satisfied its legal obligations to supply broadband services at 45 Mbps.

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77 http://www.accessnewjersey.net/anj/index.asp
78 Ibid.
79 “Public Libraries and the Internet 2006: Study Results and Findings, Information Use Management and Policy Institute”, College of Information, Florida State University, September 2006
80 http://www.state.nj.us/rpa/ver-trn.htm Remarks Of Blossom A. Peretz, Esq., Director, Division Of The Ratepayer Advocate, Before The Board Of Public Utilities, Public Hearing On The Verizon Alternate Plan Of Regulation, Trenton, NJ, September 25, 2000 5:00 p.m.
81 66 Pa.C.S. §3003(b)(6).
In 2003, the state Consumer Advocate found that Verizon profits from the changes in state law, as compared to the normal (12% on equity), yielded “approximately $1.7 billion in cumulative excess profits since 1994”.

Economics & Technology, who had tracked this states’ alternative regulation since 1998 found that “Verizon Pennsylvania has realized financial gains in excess of $4 billion as a direct result of Chapter 30 alternative regulation. Pennsylvania, however, is far from realizing a next generation broadband network.”

Verizon challenged the state’s 45Mbps standard, claiming that the original state legislation only held the company accountable for 1.5Mbps, even though it could not pass the statutory requirement of capable of high-quality video in both directions.

3.4 Maryland

In 1995, the Maryland General Assembly enacted legislation which permitted the state Public Service Commission (PSC) to “regulate the Company by a method other than rate base rate of return regulation”. In November, 1996, the PSC approved a price cap plan; “rates for competitive services may be increased without regulatory limits. Regulation of profits is eliminated.”

The original filings call for “ISDN, 100% by 1995; and “Fiber to the home, 100% by 2010”.

Video Dialtone: in June 1994, Bell Atlantic filed an application for two million homes, which included Baltimore, Maryland.

Outcome: Bell Atlantic’s video dialtone plans were cancelled in 1996.

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85 Bringing Broadband Services To Pennsylvania, Cable Is Winning The Race To Market; Bell Atlantic Has Had To Respond, Economics & Technology, 1999.
86 Commonwealth of PA Senate Communication and High Technology Committee, Hearing on Chapter 20 and the Telecommunications Industry of PA Direct, Lee Selwyn, Economic & Technology, on behalf of AT&T, September 10th, 2002.
3.5 Delaware

In 1993, the Delaware Telecommunications Technology Investment Act of 1993 was passed and Verizon received alternative regulations in 1994. The Act provides that “the prices of ‘competitive services’ (e.g., directory advertising and message toll service) will not be subject to tariff or regulation”; and “the company will develop a technology deployment plan with a commitment to invest a minimum of $250 million in Delaware’s telecommunications network during the first five years of the plan.”

Video Dialtone: in June 1994, Bell Atlantic filed an application for 2 million homes, which included Delaware.

3.6 District of Columbia

In 1993, Bell Atlantic, Washington, DC received alternative regulation, which was updated in 1996. The 1996 regulation --- “eliminates price limits on competitive service rates”; and “establishes a trust fund to finance advanced telecommunications services in the District's public schools, libraries, and community centers; and eliminates the regulation of profits.” The company also received a $75 million tax deduction for accelerated depreciation.

Video Dialtone: In 1994, Bell Atlantic filed to have 1.2 million households upgraded in the Washington, DC LATA (Local Access Transport Area) the equivalent of an area code.

Outcome: The video dialtone services were never deployed.

3.7 West Virginia

“In December 1991, the PSC approved an ‘Incentive Regulation Plan’. The Incentive Regulation Plan continued the major provisions of the prior plan, including pricing flexibility for competitive services and a freeze on rates for basic local exchange service. It also committed the Company to invest $450 million from 1991 through 1995 in West Virginia’s telecommunications infrastructure. “In December 1994, the PSC issued an order extending the Incentive Regulation Plan for three years, with certain modifications. Basic rates remain frozen through January 15, 1998 and Touch-Tone charges will be eliminated over a three year period. The Company is committed to invest at least $375 million in its network over the five year period from 1995 through

89 Bell Atlantic – Delaware, 1996 annual report
90 Bell Atlantic< Washington, DC 1996 annual report
91 Bell Atlantic, West Virginia, 1995
In February 1998, the PSC issued an order extending the Incentive Regulation Plan until December 31, 2000. The Incentive Regulation Plan includes pricing flexibility for competitive services. We are committed to invest at least $225 million in our network over the three-year period from 1998 through 2000.

3.8 Virginia

“Effective in 1995, the Virginia State Corporation Commission VSCC approved an optional regulatory plan that regulates our noncompetitive services on a price cap basis and does not regulate competitive services. The plan includes a moratorium on rate increases for basic local telephone service until 2001 and eliminates regulation of profits.”

Video Dialtone: Various parts of Virginia were slated to be upgraded to video dialtone services.

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92 Ibid.
93 Bell Atlantic West Virginia, 1998, Annual Report
94 Bell Atlantic, Virginia, 1995 Annual Report
4.0 NYNEX

- New York Telephone  New York
- New England Telephone  Massachusetts, Rhode Island, New Hampshire, Maine, Vermont

In 1993, NYNEX announced it would have “1.5 and 2 million fiber optic lines through 1996 to begin building our portion of the Information Superhighway.” NYNEX also applied 397,000 upgraded lines in Rhode Island and Massachusetts and had plans to upgrade New York State. NYNEX planned to have coverage of the “majority of its customers by the year 2010”. In 1996, NYNEX announced plans for large-scale deployment of switched fiber networks in the Boston and New York areas to provide video to up to five million subscribers.

Video Dialtone: NYNEX proposed to deploy “hybrid fiber optic and coaxial (HFC) broadband networks that will provide advanced voice, data, and video services, including interactive video entertainment, multimedia education, and health care services”.

Outcome: “In February 1996, New England Telephone advised the FCC that it relinquished authorization to construct advanced video dialtone network facilities in portions of Massachusetts and Rhode Island.” In 1995, NYNEX took a one-time $2.9 billion tax deduction for accelerated depreciation for the broadband plans.

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95 NYNEX 1993 Annual Report
97 “New England Telephone and Telegraph Company for Authority pursuant to Section 214 of the Communications Act of 1934, as amended, and Section 63.01 of the Commission’s Rules, to construct, operate, and maintain facilities to provide video dialtone service to communities in Rhode Island and Massachusetts,” FCC, W-P-C-6982, W-P-C-6983, Order and Authorization, Released: March 6, 1995
99 NYNEX’s 1996 Annual Report
100 NYNEX 1995 Annual Report
4.1 Massachusetts

In 1995, New England Telephone was granted alternative regulations to build out their proposed fiber-based broadband services to the 334,000 customers that were tied directly to the video dialtone plans.\(^1\) The original filed NYNEX, Massachusetts plan also included “Fiber optic facilities to all colleges and Universities by 1998, all psychiatric, chronic and critical care hospitals by 1999” and “will immediately begin deploying a broadband network within the Commonwealth by introducing fiber-based broadband technologies to 330,000 resident and business access lines.”\(^2\)

Outcome: “In February 1996, NYNEX withdrew its video dialtone application.”\(^3\) We note that the law was changed in Massachusetts to build these networks in September 1995.

Based on an analysis submitted to the state Department of Telecommunications & Energy, in 1999, the networks were never constructed. The company received and $800 million write off for accelerated depreciation, and had doubled their dividends to shareholders.\(^4\)

4.2 New York

In 1992, New York Telephone filed a report with the New York State Public Service Commission titled “Vision of the Future”\(^5\), stating that at least 15%-30% of the New York state plant would be upgraded with fiber optics by 2000. Based on the 1993 annual report, the state should have had 1.1-1.5 million lines wired by 1996.\(^6\) In 1995, NYNEX received alternative regulation, committing to spending $1 billion on network upgrades and received a $2.3 billion tax deduction through accelerated depreciation.\(^7\)

Outcome: Fiber optic lines were never installed, except for ‘tests’ and trials.

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\(^1\) [http://www.newnetworks.com/massfiberfailurepage2.htm](http://www.newnetworks.com/massfiberfailurepage2.htm)

\(^2\) Filed on 7/14/94, DPU94-50, Testimony by John Killian, Vice president Massachusetts.

\(^3\) NYNEX’s 1996 Annual Report


\(^6\) NYNEX 1993 annual report outlined that the company would have 1.5-2 million lines by 1996. MA and RI had 400,000 and the other parts of NYNEX, including New Hampshire, Vermont and Maine never had any stated commitments New York state would have the remainder of the lines.

\(^7\) NYNEX Annual Report 1995.
5.0 GTE

Prior to the merger with Bell Atlantic to form Verizon, GTE had properties in 28 states. Some of the largest cities served were Los Angeles, California; Tampa, Florida; Honolulu, Hawaii; Lexington, Kentucky; Fort Wayne, Indiana; and the metropolitan area of Dallas, Texas.

In 1994, GTE stated it would be updating 7 million homes by 2004 in 66 key markets with broadcast, cable and interactive television programming. GTE also stated it would be investing $250 million to build out its broadband video networks in four locations during 1995: Ventura County, California; St. Petersburg and Clearwater, Florida; Honolulu, Hawaii; and northern Virginia in 1995.109

Video Dialtone; GTE submitted applications stating it would have permanent “hybrid fiber optic and coaxial-cable video networks in Ventura County, Calif.; St. Petersburg and Clearwater, Florida; Honolulu, Hawaii; and northern Virginia”, totalling 1,041,000 households.110

Outcome: GTE built out some cable networks. In 1999, GTE “decided to scale back the deployment of the hybrid fiber coax (HFC) video network”. GTE had been granted nine video franchises in the Pinellas County, Florida market and five video franchises in the Ventura County, California market. In 2002 Verizon sold off the GTE properties that it had in Florida to Adelphia and Time Warner.111

State Laws: GTE received alternative regulations in 9 states by 1996, including California, Florida and Texas, the states containing GTE’s largest operations.112 These alternative regulation plans were piggy-backed off of alternative regulation plans for the incumbent Bell companies.

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109 Ibid.
111 “Time Warner bids Americast goodbye a bit early,” St. Petersburg Times, April 22, 2002
112 GTE 1996 Annual Report
6.0 AT&T

AT&T (formerly SBC Communications) is comprised of Ameritech, BellSouth, Pacific Telesis, SNTE, Southwestern Bell, and the legacy-AT&T. AT&T is currently the incumbent provider in 22 states. By 2000, the combined companies had made statements that they would be spending at least $29.5 billion and have at least 12.5 million homes completed\textsuperscript{113} \textsuperscript{114}.

**SBC Fiber Optic Broadband Spending and Households, 1990-2000**

<table>
<thead>
<tr>
<th>SBC</th>
<th>Money (billions)</th>
<th>Households</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pacific Telesis</td>
<td>$16.0</td>
<td>5,500,000</td>
</tr>
<tr>
<td>Ameritech</td>
<td>$7.5</td>
<td>6,000,000</td>
</tr>
<tr>
<td>SNTE</td>
<td>$4.5</td>
<td>1,000,000</td>
</tr>
<tr>
<td>SBC, Texas</td>
<td>$1.5</td>
<td></td>
</tr>
<tr>
<td>(Pronto)</td>
<td>$6.0</td>
<td></td>
</tr>
<tr>
<td>BellSouth</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBC Total</td>
<td>$29.5</td>
<td>12,500,000</td>
</tr>
</tbody>
</table>

Outcome: After each merger, SBC closed down (or sold off) whatever residential services had been constructed under video dialtone, cable or state plans.

Video Dialtone: Ameritech, Pacific Telesis (Pacific Bell) and SNTE applied for permanent video dialtone deployments, accounting for 3.4 million lines. Southwestern Bell and BellSouth had broadband deployments besides video dialtone.

\textsuperscript{113} This does not include “pronto” nor BellSouth or expenditures in Southwestern Bell states except for Texas

\textsuperscript{114} If BellSouth and SBC did not make formal announcements on the total homes passed. If the average of the other Bells was used, the total would be approximately 24 million homes.
State Commitments: AT&T is the incumbent phone company for 22 states. As of 2000, BellSouth was still an independent Bell company. However, all companies had received alternative regulations in multiple states for broadband deployments and had made various financial and broadband commitments.

7.0 Ameritech

- Illinois Bell  
  Illinois
- Indiana Bell  
  Indiana
- Ohio Bell  
  Ohio
- Michigan Bell  
  Michigan
- Wisconsin Bell  
  Wisconsin

The Ameritech 1993 Investor Fact Book stated the company would be building a video network to “extend to six million customers in within six years”. In 1994, the company told the press it would spend “$4.4 billion to take video conferencing and other video services to the home, for a total expenditure of $29 billion in the next 15 years.” In toto, the five year commitments for broadband, which included wiring schools, libraries and hospitals in some states, came to $7.45 billion.

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115 Ameritech Investor Fact Book, March 1994
117 Based on aggregate of state commitments.
Video Dialtone: Ameritech filed video dialtone applications in January 1994 for 1,256,000 million households to be upgraded, including 232,000 for Detroit Michigan, 501,000 for Chicago, IL and 146,000 for Milwaukee, Wisconsin. The services would be “advanced fiber optic facilities” to “businesses and institutions in geographically and economically diverse sections of its service area”, to “provide 310 multicast (240 digital and 70 analog) channels and 80 switched digital channels”.¹¹⁸

Outcome: Deployment of fiber-based cable services. By April 1999, Ameritech had signed 100 cable franchise agreements and had 200,000 customers under the Americast brand.¹¹⁹ “Ameritech had built systems in and now competes for cable television viewers in 84 cities and towns in the Detroit, Chicago, Cleveland and Columbus Ohio, areas.”¹²⁰

In 2001, SBC sold off Ameritech’s properties having 300,000 customers, for approximately $1000 a subscriber to WideOpenWest.¹²¹

### Ameritech Investment Commitments, 1992-1998¹²²

<table>
<thead>
<tr>
<th>State</th>
<th>Amount</th>
<th>Commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illinois</td>
<td>$3.0 billion</td>
<td>Investment commitment over 5 years</td>
</tr>
<tr>
<td>Ohio</td>
<td>$1.6 billion</td>
<td>Investment commitment over 5 years</td>
</tr>
<tr>
<td>Michigan</td>
<td>$2.0 billion</td>
<td>Investment commitment, 1992-1995</td>
</tr>
</tbody>
</table>
| Indiana    | $150 million | • $120 million in “Digital Broadband Facilities” to connect schools, hospitals, and government over the next 6 years  
|            |           | • $30 million for the next six years for educational hardware, software and training |
| Wisconsin  | $700 million¹²³ | • Upgrade 700 schools, libraries, hospitals with fiber optics.               |
| Total      | $7.45 billion |                                                                              |

¹¹⁸ “Ameritech Operating Companies for Authority Pursuant to Section 214 ... Illinois, Indiana, Michigan, Ohio, and Wisconsin,” FCC, Order And Authorization, W-P-C-6926, W-P-C-6927, W-P-C-6928, W-P-C-6929, W-P-C-6930, Adopted: December 23, 1994 Released: January 4, 1995
¹¹⁹ “Ameritech Signs 100th Cable Television Franchise Reaches Competitive Milestone in Less than Four Years,” Ameritech Release, Apr 13, 1999
¹²⁰ Ibid.
¹²¹ “WOW, what a deal,” Telephony, June 4, 2001
¹²² The Ameritech Investor Fact Book, 1993
¹²³ Wisconsin Bell 1996 Annual Report
New Networks Institute

7.1 Illinois

In 1994, the state commission approved “Advantage Illinois”, an alternative regulation plan. The company committed to spending $3 billion for infrastructure upgrades.\(^{124}\)

Video Dialtone: 501,000 lines were to be installed in Chicago, Illinois. The company rolled out cable services, in Glendale Heights, Glen Ellyn, Naperville, and Vernon Hills, Illinois.\(^{125}\) These cable franchises were sold to WOW in 2001.\(^{126}\)

7.2 Indiana

In 1994, the Indiana Utility Regulatory Commission approved the Company’s “Opportunity Indiana” plan. “The Company will invest up to $120 million in infrastructure over six years to extend advanced (to provide digital switching and transport facilities including, where appropriate, fiber optic facilities)\(^{127}\) communications links to interested schools, hospitals and major government centers and will contribute another $30 million to the Corporation for Educational Communications, an unaffiliated, not-for-profit organization, which will provide grants to public and private schools in the Company’s service area for equipment, software and training so the schools can take advantage of advanced network applications. Indiana is already a national leader in the use of distance learning to enhance education.”\(^{128}\)

Outcome: According to court documents, “The Commission also found that Ameritech had not made the full amount of infrastructure investments required under Opportunity Indiana. Ameritech had presented evidence to the Commission that it had been unable to generate sufficient interest for the required investments among the schools, hospitals and government centers it served. The Commission ruled that if Ameritech was unable to generate sufficient interest to absorb the full amount of the infrastructure investment obligations in Opportunity Indiana, Ameritech should ‘propose some other means for its shareholders to provide infrastructure improvements consistent with [the terms of Opportunity Indiana]’.”\(^{129}\)

\(^{125}\) From FCC 3rd video Competition report: CS Docket No. 96-133
\(^{126}\) WOW, what a deal,” Telephony, June 4, 2001
\(^{127}\) Section 10 of the 1994 Opportunity Indiana,
http://www.indiana.gov/judiciary/opinions/previous/archive/10149901.msm.html
\(^{128}\) Indiana Bell 1995 Annual Report.
Outcome: In 2001, the state granted a new Opportunity2000 plan, which allowed the companies to deploy ADSL.  

**7.3 Ohio**

In 1994, the state of Ohio granted alternative regulation, known as “Advantage Ohio”. According to the infrastructure commitments, “within five years from the date of the plan, would provide broadband, two-way, fully interactive, high quality distance learning capabilities to all state chartered high schools including vocational, technical schools, colleges and universities; deploy broadband facilities to all hospitals, libraries, county jails and state, county and federal court buildings...”

Video Dialtone: Ameritech filed for 262,000 lines in Cleveland and Columbus, Ohio. Ameritech rolled out cable services in Berea, Columbus, Hilliard, North Olmsted, Perry Township, Riverlea, Upper Arlington, Clinton Township and Worthington.  

Outcome: Cable networks were sold to WOW in 2001.

**7.4 Wisconsin**

In June 1994, the Wisconsin legislature passed a new telecommunications bill which granted the company alternative regulation. “Under terms of the bill, the Company committed to spend at least $700 million on new equipment and technology over five years extending fiber optics to hundreds of secondary schools, technical colleges, universities, hospitals and federated libraries in the region.”

Outcome: Capital Times of Wisconsin found that because of a loophole with the definition of “to the doorstep”, many of the locations were never upgraded.

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131 Ohio alternative regulation plan, September 20, 1994

132 From FCC 3rd video Competition report: CS Docket No. 96-133

133 WOW, what a deal,” Telephony, June 4, 2001

134 Wisconsin Bell 1995 Annual Report

135 “Smoke And Mirrors? As Cable Deregulation Picks Up Steam In The Legislature, Critics Warn That AT&T Has A History Here Of Spinning Optic Fables”, The Capital Times — Wednesday, October 31, 2007 [http://74.125.113.132/search?q=cache:zJs6iOL7sgJ:madison.com/tct/archives/index.php%3FarchAction%3Darch_read%26a_from%3Dsearch%26a_file%3D%252Ftct%252F2007%252F10%252F10%252F31%252F07103102](http://74.125.113.132/search?q=cache:zJs6iOL7sgJ:madison.com/tct/archives/index.php%3FarchAction%3Darch_read%26a_from%3Dsearch%26a_file%3D%252Ftct%252F2007%252F10%252F10%252F31%252F07103102)
Video Dialtone: In 1994, Ameritech filed for a permanent build out of 146,000 households in Milwaukee, Wisconsin. Ameritech offered cable service in Greendale, Wisconsin until the sale to WOW in 2001.  

7.5 Michigan

In 1992, Michigan Bell received alternative regulation under the Michigan Telecommunications Act of 1991 (MTA). It provided for “no cap on earnings or depreciation.” The company made an investment commitment of $2 billion dollars to be spent from 1992-1995. “In January 1994, Ameritech announced a program to launch a digital video network upgrade that is expected, by the end of the decade, to make available interactive information and entertainment services, as well as traditional cable TV services.” “The Company anticipates that its capital expenditures for the program will be funded without an increase in its recent historical level of capital expenditures.”

In 1994, the Michigan Public Service Commission Audit report on the progress of the MTA found that "The deregulation of non-basic service coupled with the pricing freedom gained for toll and access service has permitted Michigan Bell to prosper financially.... The act has not increased the number of new services. New services under the Act could have been introduced under previous statutes and the Act has eliminated any regulatory review process to prior introduction."

Video Dialtone: Ameritech filed for 232,000 households in Detroit, Michigan to be upgraded. Ameritech rolled out cable networks in Clinton Township, Fraser, Garden City, Lincoln Park, Northville, Northville Township, Plymouth, Plymouth Township, Southgate, Sterling Heights, Troy, Wayne and Canton Township.

Outcome: The cable services were sold to WOW in 2001.

136 WOW, what a deal,” Telephony, June 4, 2001
137 Michigan Bell 1995 Annual Report
138 Michigan Bell 1993 Annual Report
139 Ibid.
140 Michigan PSC Assessment of Alternate Regulation, 12/94
141 From FCC 3rd video Competition report: CS Docket No. 96-133
142 WOW, what a deal,” Telephony, June 4, 2001
8.0 Pacific Telesis

- Pacific Bell California
- Nevada Bell Nevada

8.1 California

In November 1993, “Pacific Bell announced a capital investment plan totaling $16 billion over the next seven years to upgrade core network infrastructure and to begin building California’s ‘Communications superhighway’. Using a combination of fiber optics and coaxial cable, Pacific Bell expects to provide broadband services to more than 1.5 million homes by the end of 1996, 5 million homes by the end of the decade.” The plan was called “California First”. The Pacific Telesis 1994 Fact Book increased the number of homes to 5.5 million completed by 2000. Pacific Bell also stated it would spend $100 million to connect more than 7,400 schools, community colleges and libraries to computer and video networks. The company predicted that by 2000, “every classroom will be wired to handle voice, data and video telecommunications." By then end of 1996, Pacific Bell would “install four digital lines, called ISDN, free in every public school, community college and public library in its service areas by end of 1996. Costs of installation and one year’s usage would be waived.”

Video Dialtone: Pacific Bell outlined upgrades to 1,310,000 households would be upgraded.

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Location</th>
<th>Homes</th>
<th>Proposal</th>
</tr>
</thead>
<tbody>
<tr>
<td>12/20/1993</td>
<td>Pacific Bell</td>
<td>Orange Co., CA</td>
<td>210,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/1993</td>
<td>Pacific Bell</td>
<td>So. San Fran Bay.</td>
<td>490,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/1993</td>
<td>Pacific Bell</td>
<td>Los Angeles, CA</td>
<td>360,000</td>
<td>permanent</td>
</tr>
<tr>
<td>12/20/1993</td>
<td>Pacific Bell</td>
<td>San Diego, CA</td>
<td>250,000</td>
<td>permanent</td>
</tr>
</tbody>
</table>

State Action: In 1995, Pacific Bell received alternative regulation, which was estimated to bring $1 billion in extra profits by TURN, a California watchdog group. Pacific Bell also took a $3.4 billion tax deduction for accelerated depreciation in 1995.

143 Pacific Telesis 1993 Annual Report
145 San Diego Union Tribune, February 15, 1994, page C-1
146 San Diego Union Tribune, February 15, 1994, page C-1
148 Bloomberg Business News and Associate Press, December 21, 1995
149 Deduction was part of “FAS71”, Pacific Telesis 1995 Annual Report
New Networks Institute

Outcome: According to the San Diego Union’s timeline of California’s broadband plans, by June 1997, SBC Communications put a halt to the deployments and took a $553 million deduction for the project, which included the closing of the Texas cable project.\textsuperscript{150} Pac Bell cable services had 8,000 customers.\textsuperscript{151}

9.0 Southwestern Bell

- Southwestern Bell: Arkansas, Missouri Texas, Kansas, Oklahoma

Southwestern Bell was the phone company for Kansas, Arkansas, Texas, Missouri and Oklahoma. In 1996, the company changed its name to SBC Communications and, through mergers, became AT&T. Southwestern Bell made few announcements pertaining to broadband, but that is because the history of the company was based on an aggressive plan to deploy ISDN in the 1980’s, receiving alternative regulation to deploy these products.

Video Dialtone and Cable: In 1995, SBC Media Ventures was formed (with partner Media Ventures) serving the suburban Washington, D.C. area, Montgomery County, Maryland, and Arlington County, Virginia. At the end of 1995, these systems passed 420,000 homes and served 258,000 customers.\textsuperscript{152} SBC also announced it was constructing a broadband network that could handle cable and interactive services to “up to 47,000 Dallas area households in 1996”.\textsuperscript{153}

State Commitments: Each state had commitments for network upgrades, which included ISDN. According to the 1993 Southwestern Bell Annual Report, the company committed, as of 1990, to make network upgrades totalling $900 million; approximately $329 in Texas over a four-year period, $180 in Missouri over an eight-year period, $160 in Kansas over a five-year period and $231 in Arkansas over a four-year period as of 1994.\textsuperscript{154} In 1995, Texas received deregulation and was required to spend $1.1 billion to offer 45Mbps services to schools, libraries, hospitals, among other institutions and government agencies.

\textsuperscript{150} SBC 1997 Annual Report
\textsuperscript{152} Southwestern Bell 1995 Annual Report.
\textsuperscript{153} “GTE to join Disney, Ameritech, BellSouth and SBC in Home Entertainment partnership,” press release, July 7, 1996
\textsuperscript{154} Southwestern Bell 1993 Annual Report
In 1995, the Texas Legislature passed HB No. 2128, which granted the phone companies alternative regulation to build out the networks. Southwestern Bell committed to spending $1.1 billion and would be required to supply bi-directional broadband digital service capable of at least 45Mbps services to educational institutions, libraries, nonprofit telemedicine centers of academic health centers, public or not-for-profit hospitals, or licensed health care practitioners, public or not-for-profit hospitals; and projects funded by the Telecommunications Infrastructure Fund.

Cable and Broadband Buildout: SBC announced plans to wire Richardson, Texas to offer 47,000 customers service.

Outcome: Richardson, Texas was closed in 1997. The state auditor report on the Texas Telecommunications Infrastructure Fund agency stated, “The Agency has distributed approximately 25 percent ($382 million) of its fund without adequately identifying Texas’ telecommunication needs, effectively collaborating with other agencies, or developing written procedures for its day-to-day operations.”

Southwestern Bell received partial deregulation for “Telefuture2000”, which made commitments to spend $180 million on “advanced technology” which included ISDN deployment.

Outcome: The Missouri PSC ordered rate reductions in 1993, as well as required annual capital investment of $275 million because the previous milestones were not met, based on a settlement with MPSC, Office of Public Counsel (OPC) and Southwestern Bell,
Missouri. In 1995 it was taken to court and overturned, then appealed and lost. The company was able to “eliminate the prospective commitments under the settlement agreement, including a rate review moratorium and capital investment commitments.” By 1995, there were no available residential ISDN services or lines.

9.3 Oklahoma

In 1989, the Oklahoma Corporation Commission ordered an investigation into the reasonableness of the telephone company's intrastate rates. In 1992, an order called for a refund or $148.4 and annual rate reductions of $100.6 effective September 1992, and required an investment of $84 in network modernization for rural Oklahoma over five years, among other items.

Outcome: According to the Southwestern Bell, the Telephone Company paid a cash settlement of $170 to business and residential customers, and offered discounts with a retail value of $268 for certain Telephone Company services, with other caveats. The settlement also provides that no overearnings complaint can be filed against the Telephone Company until January 1, 1998. According to a legal challenge, In 1995, the Telephone Company was supposed to have paid a cash settlement amounting totaling $638 million dollars. The lawsuit claimed that the company “failed to make all of the cash payments, provide all of the agreed-upon services and “fraudulently concealed the fact that it paid less than it owed under the agreement.” But was denied.

In 1997, the Oklahoma Corporation Commission found “$91.6 million annually in excess revenues”. This information was based on a “1995 settlement of a State Supreme Court case in which Bell agreed to furnish the commission with the minimum filing requirements for conducting a rate case. The information reflects Bell operations during 1996.” House Bill 1815, enacted by the Oklahoma Legislature in 1997, prohibits the
Corporation Commission from conducting a rate case to consider Southwestern Bell earnings until 2001.”

9.4 Kansas

“In 1990, an alternative regulatory plan called TeleKansas was enacted, that abandoned historic rate-based regulation in favor of price regulation.” SBC agreed to spend an additional $140 million to modernize its infrastructure within Kansas...In 1993, Southwestern Bell requested the Kansas Commerce Commission to agree to continue with price regulation after TeleKansas expired. “K.S.A. 66-1,197 (TeleKansas II), passed in 1994, required the completion of a fiber optic network for public high schools in areas served by Southwestern Bell in Kansas.” This legislation required Southwestern Bell to spend an additional $64 million on infrastructure within the state of Kansas.

Outcome: The KCC was taken to court by Citizens Utility Board (CUB) in 1997. State law prohibited auditing or the phone companies’ books. The Court wrote: “The result is a final order that fully protects incumbent Local exchange companies (LEXC) by shifting lost revenues from one corporate pocket to another while requiring all other providers and consumers to bear the financial burden of ‘revenue neutral’ regulation. The funding methodology also precludes meaningful review of whether local exchange companies are using services that are not competitive to subsidize services that are subject to competition.”

In 1996, “The Kansas Telecommunications Act of 1996 required each local telephone company to commit to provide existing and newly ordered “broadband” or high-speed telecommunications services to schools, hospitals, libraries, and other State and local

169 Ibid.
170 Southwestern Bell 1993 Annual Report
Performance Audit Report, High-Capacity Telecommunications Services; Examining Local Telephone Companies’, Compliance With The 1996 Telecommunications Act 00-11 A Report To The Legislative Post Audit Committee, By The Legislative Division Of Post Audit, State Of Kansas, April 2000
173 Ibid.
government entities at discounted prices. This requirement is spelled out in K.S.A. 66-2005(b)(1).\textsuperscript{174}

Outcome: In an order dated March 30, 1999, the Commission concluded that Southwestern Bell had met its requirements. “TeleKansas Education Service has been widely deployed throughout the state, including independent telephone company territories. Southwestern Bell attests to services in 74 classroom sites, predominantly in rural high schools.”\textsuperscript{175}

10.0 SNET

SNET, (Southern New England Telephone) originally the Connecticut-based company announced “I-SNET, a $4.5 billion investment, is expected to be completed by 2007”. It was based on a “new broadband technology through a hybrid fiber/coaxial cable”.\textsuperscript{176} In March 1996, the state commission granted alternative regulation, (price based), that replaced traditional rate of return regulation.\textsuperscript{177} The company also took a $1.2 billion depreciation write-off.\textsuperscript{178} In 1995, SNET also filed an FCC application for video dialtone of 1 million permanent upgraded lines.\textsuperscript{179} In 1996, SNET also received a statewide cable franchise.\textsuperscript{180}

OUTCOME: By 2000, “SNET provided cable television services to approximately 31,000 households in Connecticut,”\textsuperscript{181} which offered basic cable service, not 500 channels. In 1998, SNET was purchased by SBC.\textsuperscript{182} By 2001, SBC closed the SNET cable service.\textsuperscript{183}

\textsuperscript{174}\url{http://www.kslegislature.org/postaudit/audits_perform/00pa11a.pdf}
\textsuperscript{175}Ibid.
\textsuperscript{176}SNET 1996 annual report
\textsuperscript{177}SNET 1996 Annual Report
\textsuperscript{178}SNET 1996 Annual Report
\textsuperscript{180}SNET 1996 annual report
\textsuperscript{181}SBC 1999 Annual Report
\textsuperscript{182}SBC 1998 Annual Report
\textsuperscript{183}SBC 2000 Annual Report
Video dialtone: BellSouth filed a video dialtone application to “construct a broadband fiber optic-coaxial cable network for video and telephony, initially offering each subscriber 70 analog channels and approximately 240 digital video channels” as a test in Georgia to 12,000 homes. In 2004, BellSouth claimed it brought fiber optic technology to more than 100,000 homes.

State Commitments: BellSouth received alternative regulations to deploy broadband services. Some states focused on schools, libraries, hospitals and government agencies.

BellSouth Telecommunications, Louisiana received alternative regulation titled “Consumer Price Protection Plan” in April 1996. In 2000, BellSouth Louisiana received an upgraded alternative regulation plan to deploy broadband services. The company agreed to spend “not less than $1 billion in network capital for the period of January 1, 2000 to December 31, 2003. This shall include an amount of not less than $140 million over this period on the deployment of advanced technology to include broadband initiatives (e.g., ADSL and fiber to the home).” Note: The $1 billion dollars is only an additional $50 million annually as the company was spending $200 million a year.

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184 FCC No. CC-95-14, February 7, 1995
185 BellSouth 2004 annual report
187 Louisiana Public Service Commission Order No. U-24802, Louisiana Public Service Commission Ex Parte, Docket No. U-24802 - In Re: Extension of BellSouth’s Consumer Price Protection Plan to And, through April 1, 2004 With Additional Requirements. (Decided At Business and Executive Session Held April 19, 2000)
188 “PSC orders BellSouth to add high-tech systems,” The Advocate (Baton Rouge, LA.) April 21, 2000
11.2 Alabama

In September 1994 the company announced network linking schools, hospitals, colleges, and government offices.\(^{189}\)

11.3 Florida

In 1995, the Florida Telecommunications Reform Act was approved that gave BellSouth alternative price regulation. BellSouth also guaranteed linking up to the information superhighway Florida's public schools, universities, community colleges, rural hospitals and public libraries.\(^{190}\)

11.4 South Carolina

In 1996, BellSouth was granted price regulation plan approved by the South Carolina Public Service Commission (PSC).

Outcome: In April 1999, the South Carolina Supreme Court invalidated this price regulation plan, but in July 1999, a new state statute was adopted. The South Carolina Consumer Advocate petitioned the Public Service Commission, seeking review of the level of our earnings during the 1996-1998 period.\(^{191}\) In 2004, a final settlement resulted in a $50 million dollar bill credit; the advocate estimated the total value to be $100 million dollars.\(^{192}\)

\(^{189}\) “Aspects of Telecommunications Reform: Results of a Survey of State Regulatory Commissions” The National Regulatory Research Institute, NRRI 95-05, February 1995.


\(^{191}\) BellSouth 2003 Annual Report.

\(^{192}\) South Carolina Office of Consumer Affairs, April 22md, 2004 Release 04-15
12.0 Qwest

- Mountain Bell: Arizona, Colorado, Idaho, Montana, New Mexico, Utah, Wyoming
- Northwestern Bell: Minnesota, North Dakota, Nebraska, Iowa, South Dakota
- Pacific Northwest: Idaho, Washington, Oregon

Formerly US West, Qwest is the only remaining Bell company, which controls 14 states including: North Dakota, South Dakota, Wyoming, Utah, Washington, Oregon, Colorado, Arizona, New Mexico, Iowa, Idaho, Montana, Minnesota, and Nebraska.

US West’s 1993 Annual Report\(^\text{193}\) stated the company was planning to build a ‘broadband’, interactive telecommunications network. “US West anticipates converting 100,000 access lines to this technology by the end of 1994, and 500,000 access lines annually beginning in 1995.” In 1995, US West stated they would have a ‘trial’ in Omaha NE, and offer “basic, premium and pay-per-view video services”.\(^\text{194}\)

Video Dialtone: US West filed applications to offer video dialtone to 1,064,000 homes, of which 60,000 were part of the “Omaha test” This included 330,000 in Denver, Colorado, 132,000 in Portland and 292,000 in Minneapolis/St. Paul, Minnesota. US West said it will spend at least $750 million to upgrade 750,000 homes by 1995 and businesses in the four cities, on top of the Omaha project.\(^\text{195}\)

Outcome: The Omaha service was closed down in 1996.\(^\text{196}\)

<table>
<thead>
<tr>
<th>Date</th>
<th>Company</th>
<th>Location</th>
<th>Homes</th>
<th>Type of Proposal</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Omaha, NE</td>
<td>60,000</td>
<td>technical/market</td>
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<tr>
<td>01/10/94</td>
<td>US West</td>
<td>Denver, CO</td>
<td>330,000</td>
<td>permanent</td>
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<td>Portland, OR</td>
<td>132,000</td>
<td>permanent</td>
</tr>
<tr>
<td>01/24/94</td>
<td>US West</td>
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<td>292,000</td>
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<tr>
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</tr>
<tr>
<td>total</td>
<td></td>
<td></td>
<td>1,064,000</td>
<td></td>
</tr>
</tbody>
</table>

\(^{193}\) US West 1993 Annual Report
\(^{194}\) US West 1995 Annual Report
\(^{195}\) “US West accelerates its dial tone plans”, Multichannel News, January 17, 1994
\(^{196}\) US West 1996 Annual Report.
New Networks Institute

Outcome: In 1995, US West stated that it did not “intend to expand this service offering beyond the Omaha area”\textsuperscript{197} In 1993, the company took a $3.1 billion dollar tax deduction for accelerated depreciation.\textsuperscript{198} In 1996, the company took a tax deduction for the Omaha video trial \textsuperscript{199}

Cable: In November 1996, US West merged with Continental Cablevision, Inc, then the nation's third largest cable operator, serving 4.5 million domestic customers and passes 7.4 million domestic homes. Continental holds significant domestic and international investments. The total purchase price was $11.7 billion.\textsuperscript{200} US West also had a stake in Time Warner and other cable companies in the US and internationally.

In 1996, the company believed that “hybrid fiber-optic and coaxial ("HFC") broadband networks provide the best and most economical platform for delivery of video, data, telephony and broadband services.”\textsuperscript{201} It stated it would upgrade its cable systems to provide “high-speed Internet access, telephony and digital video offerings.”\textsuperscript{202}

Merger with Qwest

In 2000 US West merged with Qwest International. During the merger meetings in each state, such as in Montana, “the merged company will bring advanced voice, data and broadband Internet services to customers in Montana,”\textsuperscript{203} and would use “Qwest's advanced broadband network with U S West’s local service offerings and leadership in providing digital subscriber line (DSL) technology. The merger will produce significant procompetitive benefits that will result in substantial benefits for customers that will result in substantial benefits for customers.”\textsuperscript{204}

\textsuperscript{197} US West 1995 Annual Report
\textsuperscript{198} Ibid.
\textsuperscript{199} US West 1996 Annual Report “Also contributing to the increase was a reserve adjustment associated with billing and collection activities performed for interexchange carriers and a charge related to the discontinuance of the Omaha broadband video service trial. Reduced access expense (a portion of which relates to the 1996 implementation of the MTCPs in Iowa and Nebraska) and a reduction in allocated costs from U S WEST partially offset these increases. Allocated costs from U S WEST were $88 and $116 in 1996 and 1995, respectively.
\textsuperscript{200} Ibid.
\textsuperscript{201} Ibid.
\textsuperscript{202} US West Annual Report 1996
\textsuperscript{203} Service Date: May 9, 2000, Department of Public Service Regulation, Before the Public Service Commission, Of The State Of Montana
\textsuperscript{204} Ibid.
12.1 Utah

In 1995 the state legislature passed the Utah State Legislature passed H.B. 364, the Telecommunications Reform Act. The goals were to increase local and broadband competition to the state. Alternative regulations were granted based on a price ceiling. By 2000, the rate-of-return regulation of US West was ended.

Outcome: By 1999, competition had not taken hold and broadband had not been deployed with any rigor. 205

12.2 New Mexico

In 2000, House Bill 400 was passed by the state legislature. It eliminated the rate of return regulation and establishment of alternative form of regulation (AFOR). Qwest agreed to invest $788 million over five years in New Mexico. 206

Outcome: Qwest was taken to task for not fully investing and in 2006 the company was required to pay $250 million as well as a $10 million refund to customers. 207 The settlement requires Qwest to “bring high-speed Internet capabilities to 83 percent of the homes and businesses in its service area over three years, including at least 50 percent in rural areas”. 208

12.3 Montana

Qwest Merger statements: According to the application, the merged company will bring advanced voice, data and broadband Internet services to customers in Montana. The “the merger will combine Qwest’s advanced broadband network with US West’s local service offerings and leadership in providing digital subscriber line (DSL)” 209

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205 The State of the Telecommunications Industry in Utah Second Annual Report to the Governor, Legislature, the Public Utilities and Technology Interim, Committee, and Information Technology Commission By, The Public Service Commission of Utah, November 5, 1999
206 New Mexico Public Regulation Commission 2000 Annual Report
http://www.utilityregulation.com/content/reports/NMprcarpt00.pdf
208 Ibid.
technology. The merger will produce significant procompetitive benefits, according to the applicants, that will result in substantial benefits for customers.

12.4 Oregon

In 1991, the Oregon Public Utility Commission (Commission) adopted an Alternative Form of Regulation (AFOR) plan for US WEST Communications, Inc, (USWCs). The basis of the deregulation was to “modernize its infrastructure” “continued access to state-of-the-art telecommunications”, which included “Video Dialtone Service (VDT) (currently renamed Open Video Systems (OVS)): provides for broadband network deployment for interactive video and other multimedia customer services”.

Outcome: In 1996, the Commission terminated the AFOR as of May 1, 1996, because of service quality problems. In 1997, the Commission reduced USWCs revenue requirement by $97.4 million; adopted an authorized rate of return for USWC of 10.2 percent and ordered USWC to refund $102 million to ratepayers. USWC appealed the Commission’s order. The Commission appealed the judgment to the Court of Appeals, and USWC cross-appealed. By 2000, the refund was set at $53 million a year reduction (as of 1996) and a $58 million dollar refund. In 2004, Senate 622 passed. The company stated it would spend $70 million on building a fiber-optic "self-healing" rings throughout Oregon and $50 million in investment for broadband connections to Oregon schools, as well as for libraries and rural health care providers. Also, rural carriers and Internet Providers claim that it “increased in the cost of circuits that are leased.”

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211 Ibid.
212 Ibid.
213 Ibid
214 Before the Public Utility Commission, Of Oregon UT 125/UT 80, In the Matter of the Application of U S WEST Communications, Inc., for an Increase in Revenues., Order, No. 00-190, Entered Apr 14, 2000
215 Ibid.
217 Ibid.
Executive Summary
A National Fiber Optic-Based Broadband Plan, 1991-2004

In many respects, America is again discussing how to bring broadband to all of its citizens and businesses. In the 1991 presidential campaign and then administration, Vice President Al Gore and President Bill Clinton focused on the creation of the ‘information superhighway’, a proposed plan to have America’s copper networks upgraded with fiber optic broadband that former Vice President Gore had been talking about for over a decade.

At the time, there were discussions of whether government or the private sector (*the incumbent phone companies) should be the funders and builders of the national, fiber optic deployment. The Bell companies (and GTE and SNET) all decided to upgrade their utility networks as part of the national plan --- wire all homes and businesses, schools and libraries, government agencies and hospitals – and most plans called for completion by 2010. The companies also made financial commitments, as well as received state-based ‘alternative regulations’ (sometimes called “incentive” or “price cap” regulation) to fund these new, fiber-based, broadband networks.

Primary Findings:

- By 2000, America should have had an estimated 46.1 million homes upgraded with fiber-optic/coax wireline networks capable of 45Mbps, bi-directional services.

- Financial Commitments: Based on announcements in annual reports, state filings and press accounts, the companies would collectively spend $53.4 billion to have 36.1 million homes upgraded, mostly by the year 2000. AT&T stated it would spend $36.1 billion on 12.5 million homes, and Verizon stated $16.6 billion on 21 million homes.

- State Alternative Regulations and commitments were granted in virtually every state based on broadband commitments and competition. AT&T, Verizon and Qwest received alternative regulations in all states. Previously, the companies were regulated under ‘rate-of return’, which examined profits and controlled depreciation rates.

- Though the commitments varied by state, most states agreed to this deregulation to fund fiber optic broadband to homes and offices, as well as schools, libraries, hospitals, and government agencies, and in some states to bring in competition to the local phone provider.
Outcome: Kushnick’s Law. “A regulated company will always renege on promises to provide public benefits tomorrow in exchange for regulatory and financial benefits today.”

By 2000, less than 1% of lines had been upgraded. AT&T, Verizon and Qwest combined had deployed 1.8 million ADSL lines over the existing copper plant, representing 3.9% of any broadband deployed as compared to their announced deployments.

Video Dialtone: Except for tests, none of the 35 video dialtone projects services were deployed. Instead, some of the companies created cable networks, which, through mergers, were sold off or closed.

In many states, the companies were allowed to supply ADSL over the copper wiring, such as Oregon and Louisiana, even though the original deployments were fiber-optic based.

In many states, including Wisconsin, Texas or Indiana, schools, libraries, hospitals were not wired as discussed in the original plans.

The phone companies’ stated expenditures were usually not based on ‘additional’ monies but a reinstatement of the current network upgrade obligations.

Profits: As a direct result of alternative regulation, the phone companies’ return on equity from 1993-2000 went from the traditional 14.9% return to a 29.1% return; a 9-year increase of 126%.

Alternative Regulations are still generating broadband expenses to phone customers. The New York state Department of Public Service stated that the Verizon could raise rates to pay for ‘fiber optic’ services. To date, there has been a 90% increase on all local services since 2004.

The FCC Data on this topic has been missing for a decade, creating faulty broadband policies.

The FCC’s Advanced Network reports based on Section 706 never acknowledged the state obligations, including the fiber optic-based commitments or financial incentives that were granted through state deregulation. Conversely, the FCC never evaluated state funding mechanisms based on phone ‘rate increases’ or the state-based

Source: SBC, Verizon and Qwest annual and quarterly reports.

http://www3.dps.state.ny.us/pscweb/WebFileRoom.nsf/Web/B849A020314983A3852575D900530827/$File/pr09054.pdf
commitments to deploy fiber-based broadband to homes, schools and libraries, hospitals or government agencies. One has only to cross-check the materials presented – from public sources – with the FCC’s reports to prove the point.

- America is 15th in the world in broadband. Based on the data presented, it is clear that the reason we lost an entire generation of infrastructure deployment is because of a failure of the regulators to make hard investigations, properly track deployment plans, and use enforcement and regulation to make sure when financial incentives are given, there is a legal obligation and consequences for a failure to not fulfill the obligations.

New Networks Institute conclusions through 2010.

- Verizon, AT&T and Qwest have collected over $320 billion\(^{220}\) and counting for fiber optic services that were never delivered. Because of unchecked deregulation, money is still being collected today through rate increases to local service and other related services.
- By 2010, an estimated 117 million fiber optic lines\(^{221}\) should have been installed throughout America, including rural areas, low income areas, residential and business customers, as well as schools, libraries and hospitals (in most states).
- As of June 2009, AT&T and Verizon, combined, have 4.1 million upgraded TV-capable wireline broadband homes in service.\(^{222}\)

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\(^{220}\) New Networks has published our calculations on overcharging in numerous documents, including $200 Billion Broadband Scandal\(^{\text{TM}}\), which was filed with the FCC as comments in the national broadband policy discussion.

\(^{221}\) Ibid.

\(^{222}\) AT&T and Verizon Quarterly report for June 2009.
Appendix II
Implications for America’s Broadband Future

Summary:

1) The statements and promises made by AT&T, Verizon and Qwest, about fiber-optic deployments are an untrustworthy guide for regulators because providers often fail to deliver on their promises.

2) “Incentive Regulation” failed to bring fiber optic broadband because of a lack of vigorous and transparent reporting, monitoring and unquestionable penalties and fines.

3) Kushnick’s Law applies to incentive regulation: “A regulated company will always renege on promises to provide public benefits tomorrow in exchange for regulatory and financial benefits today”.

4) Competition, net neutrality, common carriage, ubiquitous deployments were the basis of state and federal deregulation for copper-based and fiber-based broadband networks.

5) This is not a history lesson – Fiber optic broadband funding sources and state obligations are still on the books in many states.

6) The FCC has always closed its eyes to all data on state-based fiber optic commitments.

7) In many states, anchor institutions remain underserved while the excess costs levied to connect them remain on the books.

8) Rewriting history: Video dialtone and open video access networks are part of ‘state incentive regulation’ plans.

9) The strip-mining of the State utilities is underway as state laws conflict with the FCC regulation.

10) The wrong-headed view will cost America our competitive Digital Future.

11) The future: what we can expect.
Discussion:

The Columbia Institute for Tele-Information (CITI), based at the Columbia Business School, has been tasked to supply the FCC with a report that, among other topics, analyzes “the public statements of companies as to their future plans to deploy and upgrade broadband networks as well as an historical evaluation of the relationship between previous such announcements and actual deployment.” The FCC adds: “By focusing on data analysis -- of investment plans and deployment figures of upgraded broadband infrastructure in this century.”

CITI’s historical evaluation only goes back to 2004. We believe that the FCC would benefit from an analysis that covers the major fiber-optic broadband announcements and commitments to rewire entire states as well as schools, libraries, and hospitals, and the monies collected under deregulation to fund these deployments from 1990 to the present day.

1) The statements and promises made by AT&T, Verizon and Qwest, about fiber-optic deployments are an untrustworthy guide for regulators because providers often fail to deliver on their promises.

Based on annual reports, state filings and press accounts, the companies should have collectively spent $53.4 billion to upgrade 46.1 million homes, mostly by the year 2000. AT&T stated it would spend $36.1 billion on 12.5 million homes, and Verizon promised $16.6 billion for 21 million homes.

By 2000, less than 1% of lines had been upgraded. AT&T, Verizon and Qwest combined had deployed 1.8 million ADSL lines over the existing copper plant, representing 3.9% of any type of broadband deployed.

In terms of the Federal fiber optic-based broadband plans, the FCC received 35 different video dialtone applications, which were to be ‘permanent’ upgrades of the telephone plant, representing 8.6 million homes upgraded by 2000. (This term was changed to “open video systems” in the Telecom Act.) Not one plan was ever completed and serving customers beyond ‘tests’ and ‘trials’.

Some of the plans were turned into ‘cable services’, as in Connecticut, Ohio, Illinois, Georgia, and GTE territories, only to be sold off post-merger or closed down, (even

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224 Phone company annual reports, press releases and articles as footnoted in the report.
225 Ibid.
though in almost every case, these services were directly tied to funding through state incentive regulations).

The money was promised and never spent. Pacific Bell (now AT&T) claimed they would spend $11 billion by 2000 to deploy 5.5 million homes in California. Pacific Bell spent approximately 1.6% of the money. Bell Atlantic claimed it would spend $11 billion on 8.75 million homes and businesses (not counting GTE or NYNEX) and spent only 1.8%, and Qwest spent approximately 5.8% of the announced financial commitments. All companies took tax write offs on what little money they spent. In the 26 states examined in this report, all gave the telcos incentive regulations. Incentives varied. The commitments varied: upgrading the entire state to speeds of 45mbps (in New Jersey or Pennsylvania); deploying fiber optic broadband to schools, libraries, hospitals and government agencies in Texas and Wisconsin.

While the companies received hundreds of millions or even billions of dollars per state, as well as extensive tax write offs, the companies breached almost all of their promises. Thus, while CITI relies on the published statements of providers, as the history shows, these statements are a dubious guide for regulators because providers often fail to follow through on these plans. In assessing whether "the market" will adequately provide broadband, even to the extent described in the CITI report, the FCC must also consider how often these promises have been broken.

2) "Incentive Regulation" failed to bring fiber optic broadband because of a lack of vigorous and transparent reporting, monitoring and unquestionable penalties and fines.

There are "lessons to be learned" when examining "incentive regulation" in the past that can be applied to incentive regulation in the future. In order to fund the proposed fiber-based broadband networks, upgrading the copper plant for fiber-optics to provide residential and business services, as well as schools, libraries, hospitals and government agencies, state laws were modified to give financial incentives to companies. This came in the form of removing the restraints on company profits on most items paid by customers.

It is clear that incentive regulation did not bring fiber optic broadband to America. It failed miserably because "incentive regulation" needs vigorous and transparent reporting, monitoring and unquestionable penalties. Regulators change and the company managements change and unless there is continuous reporting, monitoring and enforcement, the commitments are simply forgotten and other priorities take over. Some of the plans were turned into 'cable services', as in Connecticut, Ohio, Illinois, Georgia, or some of the GTE territories, only to be sold off post-merger or closed down,
(even though in almost every case, these services were directly tied to funding through state incentive regulations).

The outcome has been major price increases, a failure to upgrade the Public Switched Telephone Networks, (PSTN) and America lost an entire generation of infrastructure-based growth. The phone companies, conversely, were able to get deregulation that gave the companies freedom from the examination of profits, and in turn more than doubled their profit margins.

3) Kushnick’s Law applies to Incentive Regulation: “A regulated company will always renege on promises to provide public benefits tomorrow in exchange for regulatory and financial benefits today.”

After examining 26 states’ alternative regulation plans, it is clear that Kushnick’s Law is grounded in evidence. “A regulated company will always renege on promises to provide public benefits tomorrow in exchange for regulatory and financial benefits today.”

As the FCC and states decide to allow rate increases or any other sleight of hand that charges customers more money, the FCC should examine the history of the original projections, the monies collected through deregulation, and the overall impacts, and then weigh them against the likely outcomes.

4) Competition, Net Neutrality, common carriage and ubiquitous deployments were the basis of state and federal deregulation

In most state regulations, the new networks being built or upgraded were to have direct competition at all levels. Common carriage obligations were to be enforced, and this was echoed in the original video dialtone proceedings as well as the Telecom Act.

While the FCC grapples with ‘Net Neutrality’, it is clear that the FCC has not examined how state incentive plans, not to mention the video dialtone and “Video Open Access” services, as well as the Telecom Act of 1996, all required the companies to have ‘open’ networks -- open to all competition.

Nor has the FCC examined telcos’ ‘common carriage’ obligations.

In fact, under incentive regulation it can be argued that Net Neutrality was already agreed to in principle – i.e., customer-funded networks had to be ‘open’.
The fact that the FCC is examining the idea of net neutrality demonstrates the extent of the failure of the previous Administration to enforce pro-competition laws and prevent the re-monopolization of the Bell phone system.

With actual competition, if a customer feels their service is being harmed, blocked, etc. they can simply pick another competitor. The previous FCC Administration’s decision to remove line sharing obligations, and denying the need for competition on any and all fiber-based networks was simply the most recent example of this failure to enforce the fundamental preconditions for competition.

It also violated basic state and federal laws.

And all deployments were supposed to be 'ubiquitous'; rural, urban and suburban areas, rich and poor would equally by fiber-ized as ALL customers were paying for the upgrades. And equally important, phone service went to everyone as the upgraded utility was going to do.

5) **This is not a history lesson – Fiber optic broadband funding sources and state obligations are still on the books in many states.**

In most states, state laws were never rewritten to refund the monies collected when the telcos broke their promises -- and some states have even applied new rate increases to pay for broadband.

For example, the New York State Department of Public Service in June 2009 raised local rates claiming that Verizon needed money for “fiber optic investments”. Since 2004, Verizon, New York has had 90% rate increases of basic service and other services, from Call Waiting to inside wire maintenance.

Many states not only have had increases, but also have separate funding for broadband such as the California Advanced Services Fund, an additional tax on California customers.

Then there are the commitments. Verizon, New Jersey is supposed to have completed a fiber optic deployment to the entire state, capable of 45 Mbps in both directions, by 2010. Pennsylvania’s law requires 100% completion by 2015. Also on the books today in many states are previous requirements to wire schools, libraries, hospitals, government agencies with fiber optic deployments.

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New Networks Institute

6) The FCC has always closed its eyes to all data on state-based fiber optic commitments.

The data presented in this report has never been included in any of the wireline FCC Advanced Network reports based on the requirement of Section 706 of the Telecom Act to supply "a notice of inquiry concerning the availability of advanced telecommunications capability to all Americans (including, in particular, elementary and secondary schools and classrooms)" and "The Commission shall determine whether advanced telecommunications capability is being deployed to all Americans in a reasonable and timely fashion."\(^{228}\)

The FCC never acknowledged the state obligations (including the fiber optic-based commitments or financial incentives) that were granted through state deregulation.\(^{229}\) Conversely, the FCC never evaluated state funding mechanisms based on phone 'rate increases' or the state-based commitments to deploy fiber-based broadband to homes, schools and libraries, hospitals or government agencies.

7) In many states, anchor institutions remain underserved while the taxes levied to connect them remain on the books.

According to a recent article, (November 2009) "Libraries are dying for bandwidth—where's the fiber (and cash)? 60 percent of US libraries don't have enough Internet bandwidth to serve patrons effectively. In some cases, money is the issue; in many others, though, the bandwidth simply doesn't exist to be purchased."\(^{230}\)

Though each state is different, many states (including California, New Jersey, Maryland, Wisconsin, Ohio, Texas or Florida) had incentive regulation plans that called for schools, libraries, hospitals, and government agencies to be upgraded to a fiber optic service by 2000. In some states, like Kansas or Oregon, the states allowed for an inferior product, DSL, to fulfill the broadband obligation (even when phone company filings at the state commissions in 1992 clearly laid out that DSL was an inferior technology). Worse, the incumbents are, in many cases, the only providers of the services (or the monies that are being allocated under state law can only be used to pay for incumbent services) and can control who is and who is not upgraded.

\(^{228}\) From Section 706 B of the Telecom Act of 1996.

\(^{229}\) We have been filing with the FCC about this topic since 1998. http://www.newnetworks.com/alonefccrefute4.html

The other problem is that there are a host of different ‘financial incentives’ to connect schools, libraries, etc., with little or no oversight of the entire collection of funds.

If the FCC wants to get anchor institutions connected, the first step is to list ALL of the funding sources and benefits to the incumbents, and the outcome of the state and federal plans to upgrade these institutions.

8) Rewriting history: Video dialtone and “Open Video System” networks are part of ‘state incentive regulation’ plans.

From 1993-1995, over 35 video dialtone applications from almost all of the phone companies filed with the FCC to offer fiber optic-based broadband and cable services. There are a number of mistaken analysts, phone company staffers and regulators who have promulgated a story that Verizon and AT&T had no remaining obligations when all 35 applications were withdrawn. State laws were created and changed based on the video-dialtone commitments.

We bring this up because the FCC has never investigated the affect of the video dialtone promises on state laws.

9) The strip-mining of the State utilities is underway as state laws conflict with the FCC

Incentive regulation’s primary premise is that customers pay for network upgrades. In fact, the video dialtone and state laws all made it clear that a phone company was not to ‘cross-subsidize’ a competitive service.

Customers were funding the utility. The promise was clear. It was ubiquitous, bi-directional 45 Mbps networks, open to all competition.

Verizon’s FIOS and AT&T’s U-verse are closed networks, being deployed where the company wants, at speeds slower than the 45 Mbps promises, even as the world goes to 100 Mbps or even 1 Gbps services.

The CITI Report shows that the major telephone companies have shifted investment from their “legacy” telephone networks to wired broadband, with broadband capex expected to reach nearly 60% of total wireline capex in 2011.

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Thus, the majority of customers are getting squeezed with price increases on service delivered over basic, essential infrastructure that is now being abandoned.

However, the CITI report didn’t discuss the harms to the legacy PSTN customers, who are now the funding the fiber [and cellular] buildout. Annual Reports show that AT&T, Verizon and Qwest Wireline construction expenditures have been down since 2000.\textsuperscript{232} In 1984, construction expenditures accounted for almost 25% of revenues, and remained over 20% until 2000. (This includes Y2K upgrades.) Post 2000, construction expenditures have been as low as 14%, and the current expenditures are around 18%, but that figure includes ALL wireline expenditures, including FiOS and U-Verse. Removing the construction budgets for FiOS and U-Verse, Verizon and AT&T under-spent on the PSTN by over $25 billion dollars from 2005-2008.\textsuperscript{233}

Besides the cost shifting, the other shift that the FCC is examining is between "Voice Over the Internet Protocol" (VOIP) vs the “circuit switched” meaning wireline telephone service. This is not simply about a technology. VOIP is an ‘interstate information service” while phone service is a ‘telecommunication’ service and the regulations that apply are different and it could mean harming all those using the utility.

Since the FCC has no data by which to actually create new rules, and has not addressed the larger issue of whether customer-funding the utility should also be funding what is a competitive service, and whether the utility and essential infrastructure is being short-changed in all of these dealings, is the real question at hand.


Some of the phone company supporters, those who supported ‘incentive regulations’, will say that diverting money from the PSTN to fund wireless and FiOS and U-Verse—the services of the future—is exactly right and that the FCC should encourage the “networks of the future.”

This false market fundamentalism ignores the fact that the telcos are using copper-customer funding to pay for glass and wireless networks. The money being spent is customer-rate-increases, not free market profits.

\textsuperscript{232} "25 Year Analysis of Key Financial Indictors for the Bell Companies – AT&T, Verizon and Qwest.”, May 2009,
\textsuperscript{233} Ibid.
Wall Street is partly to blame, as telco stocks drop any time the phone companies discuss raising their capital expenditure. But the FCC should feel obliged to step in to ensure that U.S. broadband prices are not among the highest in the world.

If America wants to compete, it needs to upgrade its infrastructure and open networks supply low prices, deliver faster speeds.

In order to secure our future, the FCC should closely read the report from Harvard Law School’s Berkman Center for Internet and Society.  

America is 15th in the world in broadband because the regulators failed to regulate the phone companies and thus we lost a generation of technology, innovation and economic growth. In Hong Kong today, customers get 100 mbps speeds for less than $20 dollars – less than the cost of copper-based DSL. And it is worth pointing out that between the incentives and commitments for fiber optic upgrades, the phone companies retained the old copper wiring.

If the FCC were wise, they would first investigate ALL of the funding for broadband currently, and all of the previous and still current commitments made. We’ve laid out those commitments and the outcomes of the incentive regulations to help this process.

Then the FCC should decide if it has been in the best interests of the country and the economy to have customers fund vital infrastructure that is controlled by AT&T, Verizon and Qwest, the companies that broke so many promises.

Today, in most states, rural areas were to be upgraded. Customers in rural areas paid for those upgrades, but there is little likelihood their investments will ever become actual services in their municipalities -- unless they pay the entire cost of the buildout again to a third party such as UTOPIA in Utah.

Similarly, how many times will customers paid for the wiring of schools, libraries, hospitals and government agencies? Shouldn’t all of the funding sources and incentives be examined and an investigation of why many of these areas were not completed be at least discussed?

The FCC claims it wants to be data driven, yet so far it has yet investigated any of our previous claims. We hope that by supplying the FCC with a clear data analysis -- of “investment plans and deployment figures of upgraded broadband infrastructure” we will ensure that the same old profitable lies finally fail to win new taxes.

11) **The future: what we can expect.**

a) The phone and cable companies will continue to claim that they will deploy broadband to America, but they will redline neighborhoods and even entire states.

b) America will fall farther behind unless the FCC intervenes to fix basic issues.

c) Seniors, low volume customers, rural customers, and those who rely on the current Public Switched Networks will be forced onto more expensive packages, or pay outrageous fees for basic service.

d) The FCC and Congress will fail to examine the actual funding sources and practices of the phone companies.

e) Citizens in rural areas will not be given new services, yet they will continue to pay for the services they have not received.

f) There will be no appreciable competition, as the duopoly continues to plague America.

g) Cellular service, which is largely owned by the telcos, will continue to fail to compete with wireline broadband. Fixed wireless service will serve customers, but not many, as ISPs fight to obtain access to closed middle mile networks.

h) The failure to reopen the networks will harm video content and the growth of services in the U.S. as the duopoly will 1) start tiered pricing to reduce video usage, and 2) attempt to block video that they don’t get paid on.

i) The basic issues are 1) the high fees being charged for ‘special access’, raising broadband rates, 2) out of control USF, being given mostly to the phone companies, even ones who do not ‘need’ the money for profitability, 3) raising local rates, 4) Bundled pricing, where the prices increase 50% or more after one year and the headline prices are deceptively advertised, 5) reopening the networks.

j) AT&T will harm its 22 states as it is rolling out an inferior broadband product over the old copper wiring and not upgrading the essential facilities in 22 states.

k) Verizon will harm all utility customers through rate increases, price squeezes, picking and choosing who does and who does not get upgrades, thus harming rural areas.
No regulator will fix these issues because they will never examine the actual role of the customers as funders of broadband nor examine take on the phone or cable companies in a meaningful way.