

# Background

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## Are U.S. Telecom Networks Public Property?

*James Gattuso and Norbert Michel, Ph.D.*

Are America's telephone networks privately owned or do they belong to the government? The question seems an odd one. From the time of Alexander Graham Bell, the vast majority of U.S. telephone companies have been privately owned. Yet in the current debate over telephone regulation, some people propose that telephone network assets belong to the public because captive ratepayers funded them under a system of monopoly regulation.

This startling argument is deeply flawed. Today's telecommunication networks were not built by the government, but by private investors with private capital. Far from being a legacy of the regulatory past, today's networks are overwhelmingly the product of new investment made long after legal monopolies and guaranteed rates of return were abolished. Indeed, data from Standard & Poor's show that investors have replaced the entire capital structure of U.S. telecoms almost twice over since passage of the Telecommunications Act of 1996.

### History, Rules, and Regulations

The current debate about telecommunications regulation concerns FCC rules that require incumbent telephone companies (known as "incumbent local exchange carriers," or "ILECs")<sup>1</sup> to lease elements of

1. "ILEC" is a generic term that describes local telephone service providers that were formerly regulated monopolies. It includes the "Bell" companies (SBC, BellSouth, Qwest, and Verizon)—which have their roots in the old, integrated Bell System—as well as many smaller providers.

### Talking Points

- Recent assertions that today's telecommunications networks are "public" property are legally, historically, and economically wrong.
- Today's networks are largely the result of recent investment and are not a gift from the era of statutory monopolies.
- New investment—made after the Telecommunications Act of 1996—has totaled three-quarters of gross assets held in 1996 and 175 percent of net assets: nearly enough to rebuild the networks twice over.
- The recent court decision overturning FCC leasing rules was a step in the right direction and will encourage further investment.

This paper, in its entirety, can be found at:  
[www.heritage.org/research/internetandtechnology/bg1745.cfm](http://www.heritage.org/research/internetandtechnology/bg1745.cfm)

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214 Massachusetts Ave., NE  
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(202) 546-4400 [heritage.org](http://heritage.org)

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their networks—such as transport lines and switches—to potential challengers. On March 2 of this year, the D.C. Circuit Court of Appeals struck down a significant portion of these rules, essentially finding that the FCC had not sufficiently shown them to be “necessary” for competition to continue.<sup>2</sup>

Proponents of forced leasing argue that such regulation is in fact necessary to spur competition in telecommunications. Without access to key parts of the existing network, they claim, rivals could not hope to compete against ILECs. They overlook, however, the fact that ILECs have no economic “bottleneck” control over many elements that are subject to FCC leasing rules. Many ILEC competitors, for example, own and operate their own switches. More broadly, new technologies, such as wireless and Internet telephony, are providing substantial competition to ILECs without burdensome federal rules. Instead of fostering such competition, the FCC’s forced leasing rules undercut it by encouraging new entrants to lease network capacity, rather than building their own. Unsurprisingly, network-sharing requirements also discourage ILECs from investing in new capacity that would have to put at the disposal of their competitors.

Recently, supporters of forced leasing have come up with a new argument: that ILECs are not the real owners of their networks because the networks were constructed when telephone service was a legally protected monopoly. Boston University economist Laurence Kotlikoff is a proponent of this reasoning:

The local phone system is not only a public good, as defined by economists, it’s also a public good as in who paid for it—the definition understood by everyday folk. *Whether the regional Bell companies and their lobbyists want to hear this or not, the local phone system is not their property.* It belongs to the public, having been built over the last century at enormous *public* expense. True, the federal government never directly paid for the phone system. Instead, it licensed a single company—the Bell Telephone System

—to construct this network by charging the public phone rates far above the actual marginal costs of transmitting calls and guaranteeing the Bells an essentially risk-free return [*Italics in original*].<sup>3</sup>

Legally, there is absolutely no basis for Kotlikoff’s assertion that the network is not the ILEC’s property. While this statement is undoubtedly rhetorical, such a casual dismissal of property rights—the basis of the U.S. legal system—is dubious and unsettling.

Kotlikoff’s history is flawed, too. First, he misstates the nature of the monopoly/regulation trade-off under which the Bell System (and other, independent phone companies) operated for much of the twentieth century. It is true, as Kotlikoff recounts, that telephone companies were given legal monopolies, and that they were allowed to charge rates above “marginal” costs: After all, the marginal cost of a single phone call is essentially zero. However, this does not mean that firms were free to reap monopoly profits because regulators limited overall prices so as to ensure telephone companies earned only a set rate of return. As a result, phone company stocks were widely viewed as essentially risk-free, but low-yield investments.

This system has now been largely abandoned. Most regulators eliminated rate-of-return regulation in the 1980s and 1990s. It was replaced with a mix of price caps and rate freezes. While imperfect, this new system eliminated telephone companies’ guaranteed returns and exposed them to economic risk. Telephone companies were still required to charge set prices, but their profits (or losses) could vary by performance.

Second, another critical change overlooked by Kotlikoff was the abolition of legally protected telephone monopolies, which began in many states as early as the 1980s. The Telecommunications Act of 1996 eliminated all remaining statutory monopolies in telecommunications: States could no longer grant exclusive rights to any provider.

Since that time, telephone companies have had to compete for voice and data service customers.

2. United States Telecom Assoc. v. FCC, F3d \_\_ (D.C. Cir., 2004).

3. Laurence J. Kotlikoff, “A Telecom Tutorial for George Gilder,” *Tech Central Station*, March 15, 2004, at <http://www.techcentralstation.com/0315041.html>. (March 15, 2004).

Roughly 15 percent of wired lines are now provided by competitive carriers, although only about a quarter of these use their own network facilities. The ILECs, however, face greater competitive challenges from wireless and Internet telephony. According to one survey, 20 percent of Americans consider their wireless phone to be their primary connection. In broadband Internet service, the ILECs are not even the market leader: Cable television firms hold two-thirds of the market. Whatever their histories, ILECs no longer enjoy government protection and monopoly power, and haven't since at least 1996.

### So How Much?

The timeline above gives us a basis to address Kotlikoff's point: Is the current network an asset created and given to the ILECs in the days of monopoly regulation? The answer is *no* for the simple reason that, for the most part, yesterday's network no longer exists. Advances in telecommunications technology, from fiber-optic lines to digital switches, made much of that old network obsolete, and telecom companies have invested to replace it.

To determine the size of these investments and how much of the old network still remains, we studied financial data from the largest ILECs (Bell-South, SBC, Verizon, and Qwest). The Standard & Poor's Compustat database includes financial data from over 10,000 U.S. publicly traded companies, including one statistic that is an excellent measure for this study: cash used to increase "property, plant, and equipment" (PP&E). This number represents a company's annual investments in tangible fixed property, such as land, buildings, and mechanical equipment.<sup>4</sup>

Two basic measures of PP&E are reported: "gross" and "net." Gross PP&E represents the actual cost of a company's tangible fixed property, while

PP&E Investments by Incumbent Local Exchange Carriers (in Millions \$)	
Gross Property Plant and Equipment, 1996:	\$307,140
Net Property Plant and Equipment, 1996:	\$134,673
Cash used to add to PP&E, '96 to '02:	\$236,211
Percent of Gross PP&E:	76.91%
Percent of Net PP&E:	175.40%

Source: Heritage Foundation Calculations using Standard & Poor's Compustat data.

net PP&E represents the cost of that property after depreciation. In other words, net PP&E reflects the cost of the company's outstanding capital less the portion that has been "used up." Of course, net PP&E is only an approximation of the "true" economic usefulness that remains, but it is probably the best available measure of a company's productive physical infrastructure.<sup>5</sup>

To determine how much ILECs spent on their networks between 1996 and 2002, we compared the cash that they invested in PP&E during those years with both their net and gross 1996 PP&E.<sup>6</sup> (See Table 1.) At the end of 1996, the ILECs' gross PP&E stood at more than \$307 billion, and their net PP&E stood at nearly \$135 billion. From 1996 through 2002, the ILECs invested nearly \$236 billion in new capital.

With their 1996 gross PP&E as a baseline, the ILECs' spent enough to replace over three-quarters

4. The PP&E measure includes only those assets used by the company to produce revenue.

5. Even the "economic depreciation" estimates in the U.S. Department of Commerce's National Income and Product Accounts (NIPA) are based on corporations' reported values.

6. All figures are adjusted to 2001 dollars using the Consumer Price Index for all items, less food and energy.

of their existing stock of fixed property (about 77 percent). And with their 1996 net PP&E as a baseline, the ILECs spent more than enough to replace their stock of fixed capital nearly twice over. In fact, the capital expenditures made by these ILECs—just four companies—amount to nearly 3 percent of all such corporate expenditures in the United States from 1996 to 2002.

## Conclusion

Far from being a gift from an age long past, today's ILEC networks are overwhelmingly the product of recent private investment. Critically, maintaining and upgrading these networks depends upon a continuation of that private investment. Declaring the networks to be “public property” would not only be legally and historically wrong, but also economically dangerous.

Likewise, the FCC's access rules—while not asserting government ownership over networks—discourage ILECs from further investment in new network technologies and capacity. Instead of increasing government's control of telecommunications networks, the FCC should reduce mandates that discourage such investment. For that reason and others, the D.C. Circuit Court of Appeals' decision to overturn the FCC's leasing rules was a step in the right direction. Rather than appeal the court's ruling, policymakers should accept it and set telecommunications on a more market-oriented, and investment-friendly, path.<sup>7</sup>

—James L. Gattuso is Research Fellow in Regulatory Policy in the Thomas A. Roe Institute for Economic Policy Studies, and Norbert Michel, Ph.D., is a Policy Analyst in the Center For Data Analysis at The Heritage Foundation.

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7. For further discussion of this issue, see James L. Gattuso, “Bundles of Trouble: The FCC's Telephone Competition Rules,” Heritage Foundation *Web Memo* No. 432, February 24, 2004, at <http://www.heritage.org/Research/Regulation/wm432.cfm>. See also Heritage Foundation, “Regulation in Brief #10: FCC Telephone Competition Rules,” at [http://www.heritage.org/Research/Regulation/regulation\\_brief030104.cfm](http://www.heritage.org/Research/Regulation/regulation_brief030104.cfm).