

LATEST DATA SHOW BROADBAND INVESTMENT SURGED IN 2013

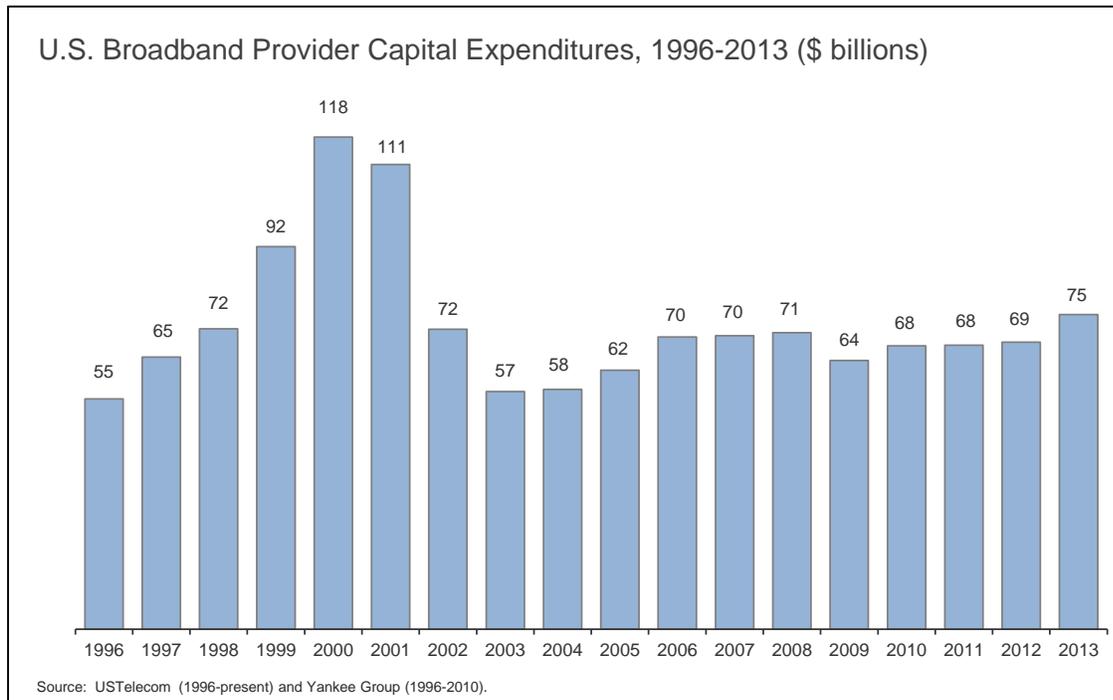
By Patrick Brogan, Vice President of Industry Analysis

U.S. broadband providers invested \$75 billion network infrastructure in 2013, according to a new USTelecom analysis of company capital expenditures data. Broadband provider capital spending grew by more than \$6 billion, or almost 10 percent, from \$69 billion in 2012. Furthermore, the data show that broadband providers have made more than \$1.3 trillion in capital investments from 1996 through 2013 (see Chart 1, U.S. Broadband Provider Capital Expenditures, 1996-2013). The analysis demonstrates that the industry continues to make a significant effort to deploy more and better broadband across the country. The 2013 release updates the data series USTelecom published [last year](#). There is a minor revision to the historical series, which is discussed in detail below.

Broadband investment is yielding clear benefits for American consumers in the form of more choices and better services. Nearly all Americans have a choice of multiple broadband providers. According the [data](#) from the national broadband map, more than 95 percent of Americans now have access to fixed broadband and 88 percent of households can choose from two or more fixed providers. More than 99 percent of Americans can get mobile broadband and 97 percent can have a choice among three or more mobile providers. Additionally, broadband speed offerings continue to improve dramatically. As of the end of 2013, 99 percent of Americans could get broadband at 10 megabits per second (mbps) download or greater, up from 84 in mid-2010. Mobile broadband at 10 mbps or greater was available to 97 percent of Americans, up from only 1 percent in 2010. Broadband at 25 mbps download or greater was available to 86 percent of Americans in 2013, up from 50 percent in 2010. Meanwhile fixed broadband at 50 mbps download or greater was available to 83 percent of Americans, up from 46 percent in 2010, and 100 mbps download or greater was available to 63 percent of Americans, up from only 11 percent in 2010.

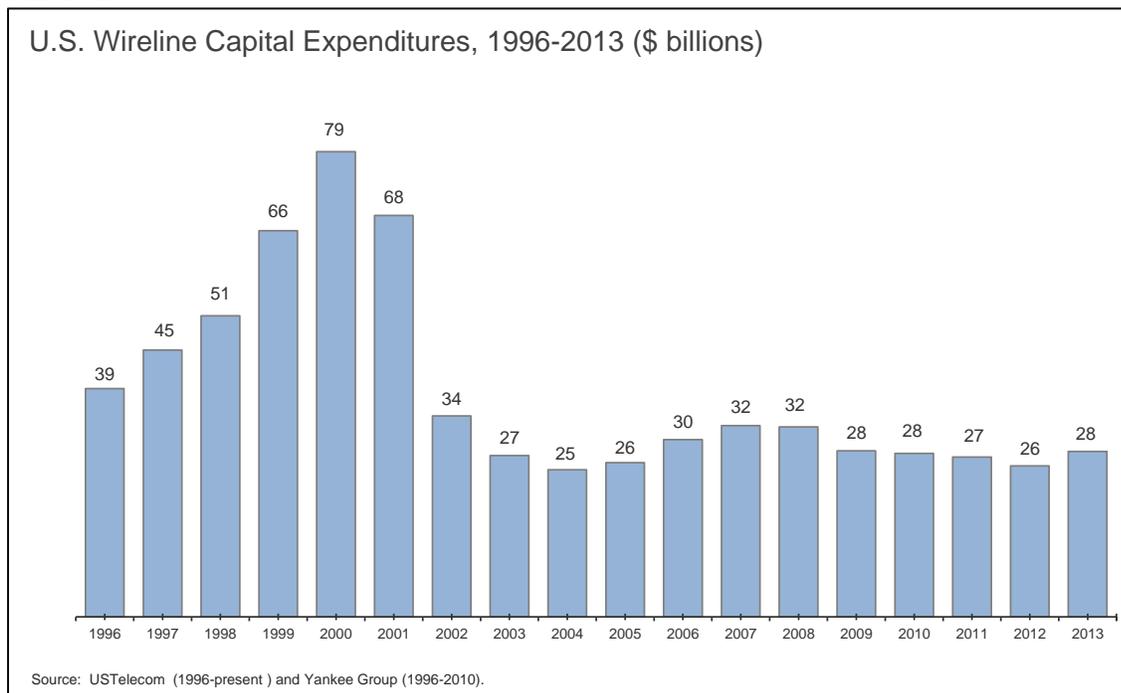
Ongoing broadband investment in expanded capacity is essential as demand for more bandwidth and [Internet usage](#) grows each year. In this way, broadband investment enables increased adoption of innovative network technologies and services, such as online video, mobile broadband, and cloud computing. It will help to build the innovative communications [infrastructure of the future](#), characterized by an accelerated transition to Internet Protocol (IP), customer mobility, and greater reliance on data center and cloud-based service delivery. It will also help the U.S. to maintain its international leadership in broadband and information technology. As discussed below, the U.S. has invested more per capita in broadband infrastructure than almost all other industrialized nations. Essential long-term investment in the U.S. information technology infrastructure will enhance our consumer welfare, standards of living, productivity, and international competitiveness over time.

Chart 1



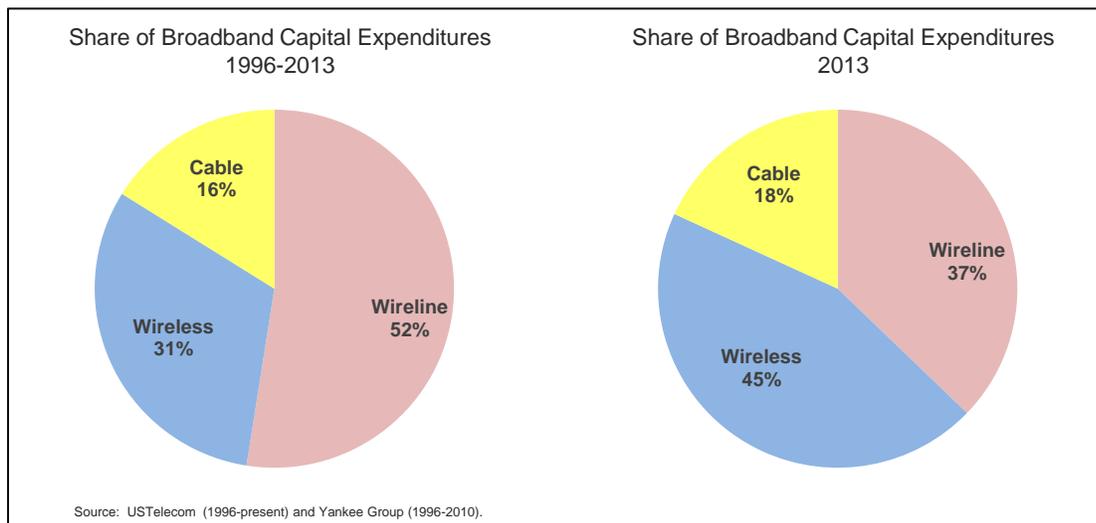
The wireline industry continues to contribute a significant portion of broadband industry capital spending. In 2013, the wireline industry invested \$28 billion, up from a revised \$26 billion in 2012. From 1996 through 2013, it invested more than \$690 billion (see Chart 2, U.S. Wireline Broadband Provider Capital Expenditures, 1996-2013).

Chart 2



The wireline portion of the \$1.3 trillion in broadband provider capital expenditures from 1996 through 2013 was 52 percent. The wireline segment continued to contribute a significant portion of industry capital in 2013: 37 percent, compared to 45 percent for wireless and 18 percent for cable (see Chart 3, Share of Broadband Capital Expenditures 1996-2013 and Share of Broadband Capital Expenditures 2013).

Chart 3

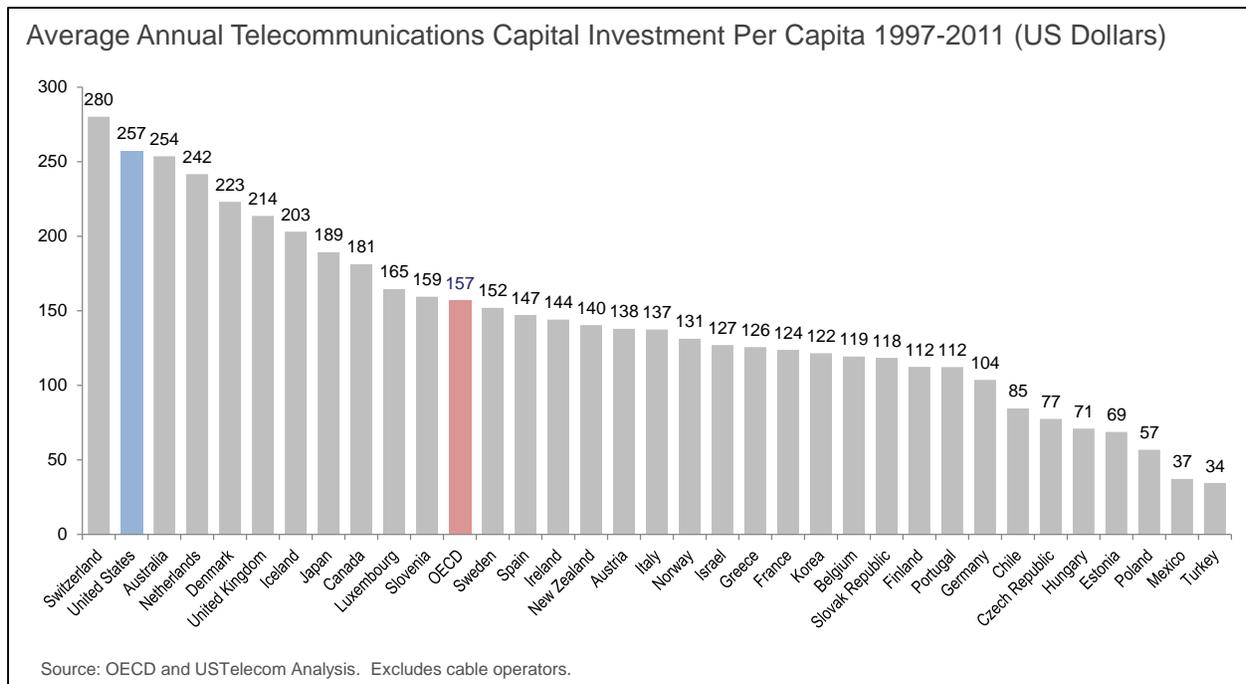


The wireline industry nonetheless invests a significant amount of capital in order to provide an essential component of our nation’s network infrastructure. High-speed fixed access and fiber core networks are essential to carry the large volume of data traffic, which has [grown](#) from the equivalent of 100 million DVDs per year in 2000 to more than 42 billion DVDs per year in 2013, and which is expected to [nearly triple](#) again over the next five years. Video over fixed networks remains the largest driver of bandwidth demand at greater than four-fifths of U.S. data traffic in 2013 and rising. Business applications for enterprises and small businesses, such as cloud computing and video conferencing, require high-speed, low-delay fixed connections using fiber or other high-capacity fixed network technologies. Nearly all of U.S. wireless data traffic, the fastest growing data traffic segment, utilizes fixed network connections. Fixed backhaul connections link cell towers to the network and, increasingly, mobile data traffic is offloaded onto Wi-Fi enabled fixed network connections via dual-mode Wi-Fi-cellular devices in order to alleviate mobile network capacity limitations.

As we continue to build the network infrastructure of the future, wireline provider investment in fiber and other technologies will be critical. Consumers will need faster networks to fulfill their growing for online video entertainment, video calling, in-home networks, and new applications based on the Internet of things. Small and large business will need faster connections to deploy the latest enterprise applications and to leverage the latest cloud computing capabilities. Demand for data center capacity and connectivity for cloud computing is growing. Cell towers and WiFi routers must be upgraded with faster fixed backhaul connections to accommodate rapidly growing wireless data usage. Core backbone networks must be upgraded to aggregate and transport the growing volume of traffic across the nation and the globe.

The U.S. is among the world leaders in broadband investment. On a per capita basis, U.S. providers invest more in broadband than nearly all industrialized nations and far greater than the average of those industrialized nations comprising the Organization for Economic Cooperation and Development (OECD) (see Chart 4). In part this is a function of geographic size – the U.S. covers a wide geographic area and has lower population density than many OECD countries, and therefore it faces heavier deployment costs. But the results are also strong compared to other countries. For example, according to [Cisco data](#), the U.S. generates more Internet usage per user or per capita compared to nearly all other countries and has closed much of the gap with world leader South Korea in recent years. The U.S. has [greater facilities-based competition](#) than most of the rest of the world. According the [European data](#), the U.S. has more widely deployed fourth generation wireless networks and greater availability of faster broadband.

Chart 4



Conclusion

Broadband providers have invested tens of billions of dollars annually and well over a trillion dollars in since 1996 in order to accommodate data traffic that has been growing continually with no signs of abating in the foreseeable future. Consumers, businesses, and the nation have benefited from broadband investment. Ongoing investment will be essential to accommodate the expected data traffic growth and enable the continued adoption of more powerful information and communications technologies. Wireline broadband providers, in short, are among the critical contributors to our nation’s innovative capacity. They will build the consumer, business, and data center networks of the future. Maximizing U.S. broadband investment in an economically efficient manner will pay off in the form of consumer welfare, business productivity, and global competitiveness.

Notes on Methodology

USTelecom analyzed capital expenditure data for wireline telecommunications, wireless telecommunications, and cable broadband providers in order to approximate industry aggregates. Other providers, such as satellite providers, telecommunications resellers, and electric utilities are excluded. Figures are rounded. Previous years may include minor revisions.

The majority of telecommunications data were taken from company financial statements, taking into account business segment reporting, mergers, and spin-offs. The analysis is subject to the reporting practices of individual companies. Capital expenditures may include investment in property, plant, and equipment; capitalized software; capitalized interest during construction; corporate, directory, and other capital expenditures; and intra-company eliminations. USTelecom made reasonable efforts to eliminate double-counting, non-U.S. investment, and non-capital spending. We made estimates for non-reporting companies.

Additional market research and government sources were consulted for comparison, including the United States Census Annual Capital Expenditures Survey, the Yankee Group Global Capex Forecast 2010, the Skyline Marketing Capex Report 2010, data from the Cellular Telecommunications & Internet Association (CTIA), New Paradigm Resources Group, and the Association for Local Telecommunications Services (ALTS). Cable data are from the National Cable & Telecommunications Association (NCTA), at www.ncta.com, citing SNL Kagan.

The 2013 release of broadband provider capital expenditure data includes small historical revisions to wireline data to reflect better information on competitive wireline providers. The results of the restatement are shown in the table below.

Table: Impact of Historical Revisions 2010-2012

	2010	2011	2012
2013 Revised			
Total	68	68	69
Wireline	28	27	26
Wireless	27	28	30
Cable	13	13	13
Telecom (Wireline + Wireless) Subtotal	55	55	56
2012 Prior			
Total	67	67	68
Wireline	27	26	25
Wireless	27	28	30
Cable	13	13	13
Telecom (Wireline + Wireless) Subtotal	54	54	55
Change			
Total	1.0	1.2	0.9
Wireline	1.0	1.2	0.9
Wireless	0.0	0.0	0.0
Cable	0.0	0.0	0.0
Telecom (Wireline + Wireless) Subtotal	1.0	1.2	0.9