Fact Sheet: Administration Provides Another Boost to Wireless Broadband and Technological Innovation

The President today announced several new Administration initiatives to bolster American leadership in wireless broadband and technological innovation, leveraging the latest advances in the wireless sector to accelerate job creation. These new initiatives are the latest in a series of actions the Administration has taken over the past four years to ensure American businesses and workers have the infrastructure they need to compete in the 21st century economy. Also, the White House will release a report, *Four Years of Broadband Growth*, showing the vast progress we have made towards expanding broadband access in recent years, thanks, in part, to those actions. The report's findings include that:

- Since 2009, the percentage of American homes reached by high-speed broadband networks have more than quadrupled (from less than 20% to more than 80%) and average broadband speeds have doubled.
- Between 2000 and 2010, the percentage of American households with a home connection to broadband has surged from 4.4% to 67%.
- Annual investment in U.S. wireless networks grew more than 40% between 2009 and 2012, from \$21 billion to \$30 billion.

Today's initiatives include a Presidential Memorandum directing Federal agencies to enhance the efficiency of their use of spectrum and make more capacity available to satisfy the skyrocketing demand of consumer and business broadband users. The Memorandum directs agencies to increase their collaboration and data-sharing with the private sector, so a full range of stakeholders can contribute its collective expertise to maximizing spectrum efficiency, including through greater sharing of spectrum between Government and commercial users. These efforts will provide access to more spectrum for wireless broadband providers and equipment vendors as they respond to increasingly rapid consumer adoption of smartphones, tablets, and other wireless devices.

The Memorandum also calls upon Federal agencies to increase public-private research and development (R&D) activities, emphasize spectrum efficiency in Government system procurements and spectrum assignments, and improve the accuracy and scope of their reporting on spectrum usage. It empowers a White House-based Spectrum Policy Team to oversee implementation of the Memorandum and make further recommendations. At the same time, the Memorandum requires appropriate safeguards to protect Government systems that rely on spectrum to keep Americans safe.

These actions build on the executive action the President took last week by launching ConnectED, a program that will build high-speed digital connections to America's schools and libraries, ensuring that 99 percent of American students can benefit from advances in teaching and learning. The Administration will continue to take action and build on our multi-faceted wireless agenda that is helping American innovators and entrepreneurs unleash productivity in all sectors of the economy and society while introducing an avalanche of apps and services for the convenience and benefit of consumers.

Other aspects of today's announcements include:

Federal investments of \$100 million in spectrum sharing and advanced communications: By September, the National Science Foundation will award \$23 million in spectrum-sharing research and development (R&D) grants and the Defense Advanced Research Projects Agency will announce the first

of an expected \$60 million in spectrum-sharing contracts to be awarded over the next five years. In FY '14, the National Telecommunications and Information Administration (NTIA) and the National Institute of Standards and Technology (NIST) at the Department of Commerce will devote another \$17.5 million towards spectrum and advanced communications research as well as accelerate public-private collaboration at Federal laboratories.

<u>Technology Day:</u> NTIA and NIST announced plans to co-host a Spectrum Technology Day to showcase advances in spectrum sharing and other innovations aimed at satisfying the Nation's surging demand for wireless services and applications.

Background

A combination of American entrepreneurship and innovation, private investment, and smart policy has vaulted the United States to a position of global leadership in wireless broadband technologies. Annual investment in U.S. wireless networks grew more than 40% between 2009 and 2012, to \$30 billion from \$21 billion, and is projected to rise to \$35 billion in 2013. The U.S. wireless broadband industry contributes more than \$150 billion in GDP annually; the United States is home to most of the world's subscribers to cutting-edge 4G wireless service; U.S. companies dominate the market for smartphone operating systems and produce about a quarter of all smartphones; and two U.S. companies are responsible for more than 80% of mobile application downloads. Continuing demand for wireless apps and services creates the opportunity for a virtuous cycle of greater productivity and innovation, but only if we make available sufficient spectrum to fuel that cycle.

Today's announcements follow on a string of Administration initiatives and commitments to promote American leadership in wireless innovation:

- In a June 28, 2010 memorandum, *Unleashing the Wireless Broadband Revolution*, the President directed NTIA to work with the FCC to repurpose 500 MHz of Federal and nonfederal spectrum to wireless broadband use within 10 years. Based on NTIA's recommendations, the FCC could repurpose up to 335 MHz of federally assigned spectrum in the next couple of years.
- In his January 2011 State of the Union address, the President committed to making cutting-edge 4G wireless broadband service available to 98% of Americans by 2016, a goal the Administration is on track to meet.
- In the American Jobs Act, the Administration proposed an array of spectrum-related provisions, the substance of which was enacted as part of the Middle Class Tax Relief and Job Creation Act of 2012. That legislation expanded the authority of the FCC to auction particular bands of spectrum to wireless broadband providers, including spectrum voluntarily relinquished by TV broadcasters via a reverse auction. The law also authorized the FCC to allocate more spectrum for innovative unlicensed uses, such as wi-fi, which is absorbing an increasing share of wireless data traffic and thus easing the crunch faced by commercial wireless providers. Further, the law established FirstNet, an independent authority within NTIA empowered to design and deploy—in collaboration with state, local, and tribal authorities—a nationwide interoperable wireless broadband network for first responders. FirstNet is directed to partner with the private sector to maximize the efficient and shared use of spectrum and infrastructure.

Today's actions will create opportunities for more efficient and innovative approaches to spectrum policy in line with the recommendations made in a July 2012 report from the President's Council of

Advisers on Science and Technology (PCAST), Realizing the Full Potential of Government-Held Spectrum to Spur Economic Growth and a new report from the White House Office of Science and Technology Policy and National Economic Council, Four Years of Broadband Growth, released today.