It is now beyond debate that our country is facing a spectrum crunch. As recently as 2007, a mere 4 percent of the U.S. mobile consumers owned a smartphone. By the end of 2008, the number had grown to approximately 15 percent. Today, a majority of Americans have smartphones, which generate many times more data traffic than the old standard mobile phones. In 2009, the iPad hadn't been introduced. Today, more than one-third of Americans have tablets or e-readers, adding materially to demand on spectrum. These devices are being adopted faster than any communications or computing device in history and, as a result U.S. mobile data traffic grew almost 300 percent last year, and mobile traffic is projected to grow an additional 16-fold by 2016.

We saw this coming, and in 2009 sounded the alarm on the spectrum crunch.

In our National Broadband Plan, we set aggressive targets for freeing up spectrum for broadband, licensed and unlicensed, and introduced new ideas for doing so. Since then, incentive auctions have moved from proposal to law, with the Commission moving strongly and swiftly to implementation. We have moved forward on a next generation of unlicensed spectrum use, building on the concept that gave us Wi-Fi. And we are on track to meet our target of freeing up 300 MHz of spectrum by 2015.

Today's action is a major step toward unleashing an additional 100 megahertz of spectrum for broadband use.

It is also progress on major innovations in spectrum policy and technology. This is important because, to achieve our ambitious spectrum goals, we must continue look beyond traditional approaches and supplement them with new ways to unleash the airwaves for broadband. Spectrum is a scarce asset with transformative power – power to drive private investment, innovation, and economic growth; strengthen our global competitiveness; and provide broad opportunity to all Americans.

Specifically, today's proposal promotes two major policy and technology innovations that will advance our global competitiveness, and demonstrate our leadership in mobile: spectrum sharing and small cells. These innovations will help seize the opportunity of wireless broadband, economic opportunities as well as advances healthcare, education, energy and other uses yet to be discovered that touch people's lives every day. Both of these policies will help consumers capitalize on the massive opportunities presented by the expansion of wireless broadband.

Small cells are key elements of next-generation mobile networks, providing additional coverage in underserved areas and additional capacity where macro networks are overburdened, and improving the user experience for consumers and businesses. In the future, millions more small cells will be deployed, adding capacity and sucking up data demand. Earlier this year, global deployment of small cells surpassed macrocells.

Providing a dedicated band for small cell use will encourage further innovation and investment in this technology and facilitate the development of new business models, advancing our economy and benefitting consumers.

To maximize use of this band, today's proposal sets forth a comprehensive spectrum sharing model that reflects the Administration’s commitment to exploring innovative ways to make use of scarce
spectrum resources, which also includes the recent launching of incentive auctions. These accomplishments would not have been possible without bi-partisan efforts.

The proposal envisions a three-tiered spectrum access model that broadly reflects the innovative thinking and recommendations made in a report this past summer by the President’s Council on Science and Technology (PCAST), which includes distinguished members from academia, the technology industry, and the public interest community. The three tiers of service are Incumbent Access, Priority Access, and General Authorized Access.

The proposal will enable widespread deployment of small cell technologies across the 3.5 GHz Band, while ensuring that incumbent federal operations are protected from harmful interference. The General Authorized Access tier will permit innovative uses of small cell technology by the general public. The quality-assured Priority Access tier will be available on a hyper-local basis to important facilities such as hospitals, utilities, government facilities, and public safety entities for applications such as private broadband networks. Access to the 3.5 GHz Band would be managed and controlled by a dynamic spectrum access system, building on database technology used in the Television White Spaces.

Today’s proposal reflects close cooperation and extensive coordination with NTIA and the Department of Defense, in particular. I thank all our federal partners for their engagement. We will continue to work closely with these and other affected federal agencies throughout the process.

I also look forward to continuing our productive dialogue with the members of PCAST, public interest groups, the technology community, wireless carriers, researchers, and others as we seek to ensure that the 3.5 GHz Band is put to its highest and best use.

America has regained global leadership in mobile. We have more 4G LTE subscribers than the rest of the world combined, and we are setting the pace on innovation in mobile software and devices. This leadership means that, like it or not, we face a particularly acute challenge in addressing exploding mobile demand.

This proposal today is one of many steps we are taking to meet that challenge.

Thank you to each of my colleagues on the Commission for continuing to work together to free up spectrum for broadband use and innovative approaches to spectrum management. Thank you also to the Wireless Telecommunications Bureau, Office of Engineering and Technology, and International Bureau for your thoughtful, creative and profoundly important work in this area and on this item. Thank you in particular to John Leibovitz in the Wireless Bureau for his leadership on this issue.