#### FEDERAL COMMUNICATIONS COMMISSION FREES UP AIRWAVES TO EASE WI-FI CONGESTION ACROSS THE COUNTRY

#### NEW RULES WILL INCREASE UTILITY OF 100 MHz OF SPECTRUM AVAILABLE FOR HIGH-CAPACITY, HIGH-SPEED WI-FI

Today, the Federal Communications Commission approved new rules that will make 100 MHz of spectrum in the 5 GHz band available for greater unlicensed use, offering more spectrum for Wi-Fi in homes and congested spaces like convention centers, parks, and airports and increasing the potential for more innovations. The new rules will allow for transmission speeds of up to 1 gigabit per second.

Spectrum is the invisible infrastructure used by wireless devices, such as smartphones and tablets, to provide communications services. Every day, Americans are becoming more dependent on wireless connectivity.

- The share of people in the U.S. who own a smartphone increased from 35 percent in May 2011 to 58 percent in January. (Pew)
- The percentage of adults 18 years old and older who own a tablet computer jumped from 8 percent to 42 percent during the same period. (Pew)
- The amount of data downloaded from the Internet using a wireless device will surpass the amount of online information flowing through wired connections in 2016. (Cisco)
- By the end of 2014, the number of mobile-connected devices will exceed the number of people on earth. (Cisco)

## Unlicensed spectrum is spectrum that is open or shared, can be used by anyone, and is a platform for innovations like Wi-Fi, Bluetooth, and Near Field Communication.

- Unlicensed spectrum enables Wi-Fi hotspots, and wireless devices such as headsets, cordless phones, security alarms, garage door openers, baby monitors, mobile payments, and vehicle radars, to name just a few.
- Unlicensed spectrum generated \$222 billion in value to the U.S. economy in 2013 and contributed \$6.7 billion to U.S. GDP. (WiFi Forward)
- Unlicensed devices play an important role in meeting public demand for wireless broadband service, particularly wireless local area networking and broadband access.

# Wireless carriers use unlicensed spectrum to off load mobile data traffic from licensed, cellular networks to fixed networks or unlicensed networks like Wi-Fi.

- Globally, 45 percent of total mobile data traffic was offloaded onto a fixed network via Wi-Fi in 2013. (Cisco)
- The amount of Internet traffic offloaded from smartphones will be more than half 51 percent by 2018, and the amount of traffic offloaded from tablets will be 69 percent by 2018. (Cisco)
- By 2017, Wi-Fi devices will power a majority of all Internet traffic. (Cisco)

### Specifically, the new rules will greatly increase the utility of 100 MHz of unlicensed spectrum in the 5GHz band, enabling more high-capacity, high-speed Wi-Fi across the country by:

- Increasing the utility of the 5GHz band already available for unlicensed use, while protecting incumbent users from harmful interference.
- Removing the indoor-only restriction on unlicensed use from 100 megahertz of spectrum in the 5 GHz band to provide more flexibility for Wi-Fi and to take greater advantage of the latest Wi-Fi standard known as 802.11ac to move more data at faster speeds and support deployment of outdoor Wi-Fi hot-spots.
- Modifying existing rules to require device manufactures to use secure software to prevent modifications that can cause harmful interference to radio services.

