# **Don't Throttle** 6 GHz

The FCC's landmark move to allow Wi-Fi to share the 6 GHz band of spectrum will mean much faster speeds, for more devices at one time. But to reap benefits for a whole family, routers need the same coverage they have today.

# 6 GHz power as we know it today level: 8 dBm/MHz power spectral density (PSD)



6 GHz power level throttled down to 5 dBm/MHz PSD



Families need to work and learn from home concurrently. 6 GHz speeds will transform Wi-Fi, but to get the house-wide coverage consumers know today, the Wi-Fi power level needs to be 8 dbm.







### WIFIF@RWARD

The FCC has taken a giant step forward allowing unlicensed services in the 6 GHz band. Now the Commission should raise the power level to reap the most benefits for the American public. Next-generation Wi-Fi should be better than the previous generation.

**Raising the power level for Wi-Fi would** increase throughput and coverage.



At higher power levels consumers could improve Wi-Fi coverage by 45-75% and Wi-Fi throughput by 113-170% over what is expected at the current 6 GHz indoor power levels.

But: keeping indoor power levels too low could cost consumers serious time and money just to maintain coverage they get today.

Collectively spend up to \$500 million to purchase range extenders just to keep their current Wi-Fi coverage and throughput;

As a whole, spend millions of hours setting up those new extenders at a cost of more than \$100 million in labor.

# 6 GHz: Mixing the right ingredients for innovation

The FCC must act to ensure whole-home coverage remains readily available to consumers.

### A new class of portable Wi-Fi devices, which will use very low power (VLP) and hyper-local Wi-Fi connections, could revolutionize the way we work, get healthcare, and keep each other safe and entertained, all while protecting existing users in the 6 GHz band.

In this brand new band of airwayes, a whole new breed of devices could connect to one another without additional infrastructure and immersive AR/VR technologies could emerge. These uses could add \$69 billion to the U.S. economy over the next five years.



**INDOOR LOCATION** 

Retailers could place a battery-operated sensor next to goods in a store to help consumers quickly locate items.



#### DISPLAY

Teachers could mirror their screens to every student's device to provide real-time visuals and improve distance learning.



#### SHORT RANGE HOTSPOTS

Consumers could easily and quickly transfer large amounts of data thanks to the high bandwidth in the 6 GHz band.



#### WEARABLES OR PERIPHERALS

Medical professionals could use connected devices, such as handheld ultrasound devices that connect to a tablet, to improve the patient experience.



#### **AR/VR**

AR/VR permits immersive experiences in times of social distancing. Students could experience "field trips" or "science experiments" without leaving their classrooms or even their homes.

## WIFIF@RWARD

Rules that allow a VLP device class to work would enable portables to work outside of the home.



The FCC can adopt appropriate power levels and allow devices to operate in the entire 6 GHz band, both indoors and outdoors, without using Automated Frequency Coordination technology, while protecting existing 6 GHz users.