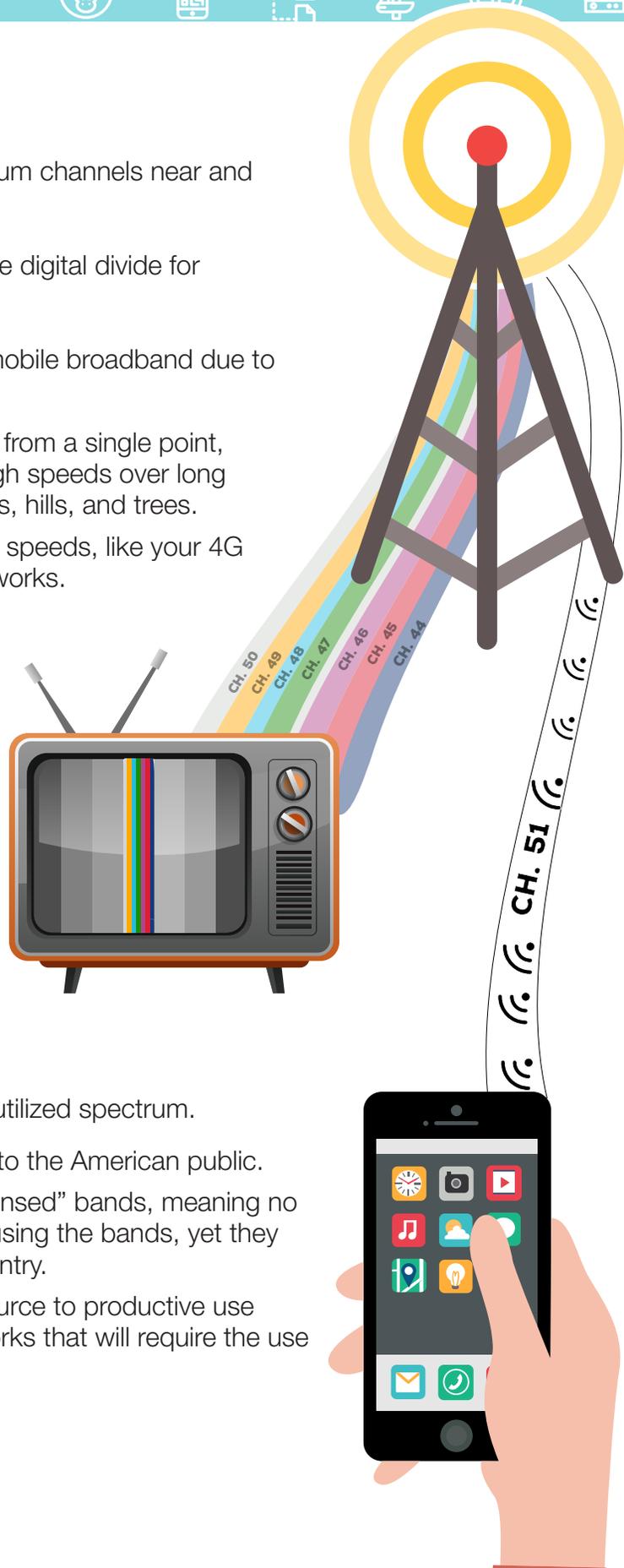


What are “White Spaces”?

- Television White Spaces (TVWS) are the unused spectrum channels near and between television broadcast channels.
- Using TVWS for wireless broadband can help bridge the digital divide for underserved populations, especially in rural areas.
- Spectrum in over-the-air television bands is ideal for mobile broadband due to its excellent propagation characteristics.
 - Just as TV broadcasts cover several square miles from a single point, White Spaces enable data to be transmitted at high speeds over long distances and through obstacles such as buildings, hills, and trees.
 - White Spaces support high upload and download speeds, like your 4G connection, and will be essential to future 5G networks.
 - White Spaces are like wi-fi on steroids: a key ingredient to bridging the digital divide affordably

Why White Spaces?

- Thirty-nine percent of rural Americans lack access to download/upload speeds of 25/3 MB per second or less, which are the speeds the Federal Communications Commission (FCC) uses to define “broadband.”
- By contrast, only four percent of urban Americans lack access to broadband, as defined by the FCC.
- White Spaces take advantage of fallow and/or underutilized spectrum.
 - Letting unused TV bands lie fallow is a disservice to the American public.
 - The FCC has designated White Spaces as “unlicensed” bands, meaning no single entity has the right to exclude others from using the bands, yet they remain largely underused in most parts of the country.
 - The FCC should allow companies to put this resource to productive use because it promotes the deployment of 5G networks that will require the use of both licensed and unlicensed spectrum.





Are they in use now?

- Yes. White Spaces are being used—on a trial basis—in many innovative ways, including:
 - Agriculture – White Spaces are supporting wireless connections to fly farmers’ drones farther and collect rich data from sensors in the soil, on the drone, and through cameras.
 - Education – White Spaces are supporting home broadband connections for students in rural Virginia, drawing from their local school’s existing broadband connection and bridging the “homework gap.”
 - Healthcare – White Spaces are supporting broadband connections in rural areas that don’t have easy physical access to a hospital, thus providing a virtual avenue between patients and doctors.



But more must be done. The FCC has only authorized pilot projects so far and needs to quickly resolve several key proceedings to unleash the potential of White Spaces. To bring their benefits and utility nationwide, the FCC must be encouraged to finalize rules governing the use of White Spaces across the country.