

We Need More Wi-Fi

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Americans love Wi-Fi, plain and simple. On World Wi-Fi Day, it's worth considering—how do we love Wi-Fi? Let us count the ways.

Wi-Fi is how we get online. It is an essential onramp for the Internet. Wi-Fi is responsible for making our connections both more convenient and a less costly.

Wi-Fi has a big bottom line. Wi-Fi services, products, and activities contribute more than \$140 billion in economic activity to the United States every year.

Wi-Fi and the unlicensed airwaves where it resides are a force for innovation. Wi-Fi features in so many things we use every day from baby monitors to traffic applications. As more devices around us incorporate wireless connectivity, Wi-Fi can lead the way. Entrepreneurs can use these airwaves without permission, making Wi-Fi the perfect place to experiment, dream big, and create.

For all of these reasons, inspired Wi-Fi projects are taking place all across the country. In New York City, for instance, old payphones are being remade into new Wi-Fi hotspots. More than 7000 of these facilities will soon be available across the city, expanding connectivity and democratizing online access in the Big Apple.

But creative Wi-Fi projects are not limited to urban America. Exciting things are happening in rural communities, too. Take Coachella, California. It's an agricultural community, with soil prized for its ability to grow dates, table grapes, and citrus fruits. Many of the students in Coachella schools are the children of migrant farm workers. For too long, they struggled with getting homework done because few of them have the broadband service at home they need to complete basic school assignments. To help them out of this homework gap, the school superintendent turned to Wi-Fi. He installed Wi-Fi routers on school buses, and turned ride time into connected time for homework.

Stories like these are the good news. But the less than good news is that our affection for Wi-Fi has a price. Its popularity means that the unlicensed airwaves where Wi-Fi services make their home are getting crowded. In other words, we need more Wi-Fi.

Today is World Wi-Fi day. So there's no better time than the present to identify how we can make more Wi-Fi opportunity in our skies.

We can begin by identifying additional spectrum for Wi-Fi and unlicensed activity. Right now the Federal Communications Commission has a golden opportunity to add more Wi-Fi services to the upper portion of the 5 GHz band. It would make it possible to introduce wideband channels that can deliver Wi-Fi speeds that are faster than ever before. But this band is presently reserved for the auto industry. So we need to test to make sure introducing Wi-Fi in these airwaves will not impact roadway safety—and we need to get this testing underway as soon as possible.

In addition, we can take a fresh look at how Congress values our airwaves. Traditionally, the legislative process has overlooked the value of the unlicensed spectrum and favored licensed spectrum. This is not because of some rancorous partisan divide. It's not because of some unsavory battle between industries. Instead, it simply reflects the way the non-partisan staff of the Congressional Budget Office assign value to spectrum when it is licensed and sold at auction. As a result, bills that direct the FCC to sell licensed spectrum get high grades, while legislation that creates more spectrum for Wi-Fi get low marks.

This accounting method is outdated. It fails to take into account the economic activity Wi-Fi and unlicensed spectrum create every year. But we can address it if every time we identify spectrum to auction for licensed use, we also identify spectrum for unlicensed use. Call it a cut for Wi-Fi—or the Wi-Fi dividend.

We love Wi-Fi. But if we want our devotion to last, we need to do more than simply express our admiration for this service. We need to plan now for more unlicensed spectrum in the future. This is the best way to grow opportunities for Wi-Fi and keep the cool things it has created coming our way.

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