



WifiForward

Economic Value of Unlicensed Spectrum to Reach More Than \$834 Billion by 2020

WifiForward Releases New Economic Assessment Outlining the Over \$525 Billion in Value Added to the U.S. Economy in 2017 and the Potential for Future Innovation Unlocked by Unlicensed Spectrum

May 17, 2018 09:01 AM Eastern Daylight Time

WASHINGTON--(BUSINESS WIRE)--Today, [WifiForward](#), a coalition of companies, organizations and public sector institutions, released a [new economic report](#), which finds that the value of unlicensed spectrum to the U.S. economy has grown by 129% since 2013.

For additional assets and further details, please visit: <http://isbx.it/108d4>.

The study, authored by Dr. Raul Katz, Director of Business Strategy Research at the Columbia Institute for Tele-Information, and President of Telecom Advisory Services, LLC, assesses the current and future value of Wi-Fi spectrum in the U.S. Building on a prior study completed by Dr. Katz in February of 2014 and a subsequent study completed in August of the same year, the report finds that unlicensed spectrum generated \$525.19 billion in value to the U.S. economy in 2017, \$29.06 billion of which contributed to the U.S. GDP, and projects the economic value of unlicensed spectrum in the U.S. to reach \$834.48 billion by 2020. Dr. Katz will unveil topline findings from the report, "A 2017 Assessment of the Current and Future Economic Value of Unlicensed Spectrum in the United States," during a main stage presentation at [Wi-Fi NOW USA 2018](#) at 2 p.m. PT today.

While evaluating the economic impact of unlicensed spectrum in the U.S., Dr. Katz focused on tackling three sets of key issues:

- Evaluating the assumptions of prior estimates of economic value and how they have changed since 2014.
- Identifying what the resulting scenario would be of a forward-looking extrapolation of current trends, in light of recent industry changes.
- Measuring whether new applications, technologies and business models have emerged since 2014 that should be added to the estimation of current and future economic surplus.

“As an enabler of innovation, unlicensed spectrum continues to contribute to the United States’ economy more than ever imagined and the economic value will continue to increase, reaching a total of over \$834 billion by 2020, an annual increase of 17%,” said Dr. Raul Katz. “The unprecedented increase in economic value of unlicensed spectrum for the next three years will be driven on one side by the persistent growth in existing applications and technology, but, more importantly, the deployment of 5G networks, the efficiency contribution of IoT in vertical markets and an expansion of the Bluetooth-enabled ecosystem.”

The report also draws three topline conclusions:

- **The economic value of unlicensed spectrum increases over time:** Because of its intrinsic characteristic as an enabling factor of production, unlicensed spectrum is a platform that complements other technologies (such as cellular) and promotes innovation (such as Bluetooth). In the future, 5G deployment and the Internet of Things (“IoT”) will become critical growth drivers.
- **While economic value continues to grow, the sources of economic value of unlicensed spectrum vary over time:** While the economic value of unlicensed spectrum grows over time, the contribution of some technologies may increase and decrease following their specific product life cycle. That is the case with Wi-Fi tablets, which were a key source of value in the 2013 estimate, but started declining as a result of competitive and product substitution dynamics. But other Wi-Fi-dependent devices, such as video game consoles and intelligent personal assistants, produced far more value than predicted in 2013 (e.g. Amazon Echo, Apple HomePod and Google Home).
- **If future assignment of unlicensed spectrum is not fulfilled, it is plausible to consider that economic value creation would be at risk:** In the context of accelerating adoption of applications operating in unlicensed spectrum, it would be relevant to ask the question whether there is enough spectrum space to accommodate the expected growth. As noted by several analysts, congestion could result either from the density of devices used for a given application or when one set of devices of a given application interferes with a set of devices running another application. When Wi-Fi hotspot deployment accelerates and transmission bandwidth increases, so does the risk of congestion.

WifiForward will convene a discussion in Washington, D.C. on May 24 at 9:30 a.m. ET with Dr. Katz and Federal Communications Commission (FCC) Commissioners Mike O’Rielly and Jessica Rosenworcel to further discuss the findings of the report and the massive value of unlicensed spectrum.

Industry response:

“CTA commends WifiForward and Dr. Katz for releasing today’s report. Unlicensed spectrum is a critical engine for connectivity. One visit to CES®—the global stage for innovation—and it’s clear that unlicensed spectrum is driving innovation. Let’s continue to work together with our legislators, regulators and technologists to free spectrum for unlicensed use.” - *Julie Kearney, Vice President, Regulatory Affairs, Consumer Technology Association*

“Unlicensed spectrum is an invaluable asset for the thriving startup ecosystem in the U.S. Those open airwaves—and the networks and devices that run on them—add hundreds of billions of dollars to the U.S. economy and have helped create an open, level playing field for startups.

"Unlike licensed spectrum, which comes at a high cost and is typically only held by the large incumbents that can afford to pay for it, unlicensed spectrum has a much lower barrier to entry, making it particularly useful for new and small startups. It also fuels the Wi-Fi networks and short-range wireless connectivity that everyone from online video streaming platforms to file-sharing apps to connected device manufacturers depend on." - *Evan Engstrom, Executive Director, **Engine***

"In our era of constant connectivity, Wi-Fi has become an essential part of our lives and the primary way that cable broadband customers experience the Internet. The availability of unlicensed spectrum is critical to providing a robust connected experience in and out of the home. The report by Telecom Advisory Services underscores the tremendous value of unlicensed spectrum bands to the U.S. economy and the importance of new unlicensed designations to continue growing this important sector that benefits nearly every American." - ***NCTA - The Internet & Television Association***

For all industry statements, please visit: <http://isbx.it/108d4>.

About WifiForward

WifiForward is an ad hoc, broad-based group of companies, organizations and public sector institutions working to alleviate the Wi-Fi spectrum crunch and to support making Wi-Fi even better by finding more unlicensed spectrum. For more information on WifiForward including a full list of coalition members, visit the website at www.wififorward.org.

Contacts

WifiForward

Ellen Satterwhite

esatterwhite@glenechogroup.com