

# Boosting Domestic Production Of 5G Technology Is Important To Ensure Long Run U.S. Economic Primacy

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Russia's invasion of Ukraine and China's increasingly bellicose rhetoric across the Asian Hemisphere have caused policymakers to realize that we cannot depend on these countries for materials critical to the U.S. economy, not to mention our national defense.

To its credit, Congress has taken steps to ameliorate this vulnerability. For instance, last month it passed the [CHIPS Act](#), which calls for spending billions of dollars to encourage chip makers to construct new plants in the United States. The Biden Administration has also moved to ensure that the U.S. becomes less reliant on the importation of strategic minerals like [titanium](#), [uranium](#), and [lithium](#), among others, from geopolitically unreliable countries.

However, one vulnerability that the CHIPS Act [could have done more](#) to address is some that is becoming increasingly critical in the high-tech economy: The technology needed to build out our 5G cellular networks.

5G is the newest standard for wireless networks, and it promises users faster speed and reduced latency in accessing the internet: To take one example, [downloading a movie](#) would take six seconds on a 5G network but seven minutes on the previous 4G network. The new 5G technology will also expand the network's capacity and improve its overall reliability.

But 5G is not just another G: It is far more than a speed boost: It is, in fact, a

critical technology that will underpin virtually all future innovation. For instance, Jon Pelson, author of the influential book [Wireless Wars](#), observed that with an ubiquitous 5G network every element of a city or public infrastructure would be linked. Such a development would have tremendous economic benefits.

Every single device that includes the hardware chips in the CHIPS act will be reliant on the 5G piece of the legislation – although it was only a small portion of the funding.

Additionally, our water, national grids, military and so much else are all dependent on it, so it is vitally important to support and protect it.

The wireless telecom companies are in the process of rolling out their networks nationwide. For instance, [Verizon's network in Washington D.C.](#) offers 5G ultra-wideband along a few heavily traveled corridors and a slower version of 5G across much of the rest of the District.

In the next decade Verizon, ATT and T-Mobile will each spend tens of billions of dollars to expand and upgrade their networks. Currently, though, most of the technology they need to do this is manufactured abroad—much of it in countries that are not necessarily reliable allies. That must change.

In 2020 the Trump Administration recognized the security problems inherent in having 5G equipment provided by Huawei, a Chinese company that has links to the Chinese military, and led an international campaign to exclude it from the 5G infrastructure of the U.S. and other western countries. One fear was that the equipment could somehow be used to spy on the U.S. government.

The Biden Administration has continued the effort to encourage U.S. firms to make their supply chains less reliant on China, but further investment is

needed to protect our 5G equipment supply chain.

Fortunately, some efforts to induce the reshoring of 5G technology are already occurring, and government agencies are showing important leadership. The Department of Defense, for example, recently launched a [5G Challenge Preliminary Event](#) to hasten the development and adoption of open interfaces, interoperable components, and multi-vendor solutions, which it hopes will boost the domestic development of 5G technologies. It has also been reported that the DoD is working to [deploy standalone 5G networks](#) at military bases.

There are some positive signs that a domestic 5G manufacturing industry is developing in the U.S. For instance, a New York-based wireless company called JMA Wireless [opened a 5G manufacturing campus](#) in Syracuse earlier this summer – the first and only U.S.-owned facility of its kind in the country.

The demand for 5G technology is only going to grow over the next decade, and it is important that U.S. technology companies have an unfettered access to it, given the increasing importance that it is going to have in the American economy.