

# Harness the power of 5G for your business



**The network of the future has started to arrive, and this emerging technology goes beyond faster connection speeds. 5G network technology will ultimately alter user experiences and business efficiencies in dramatic, exciting ways. Additionally, it will eventually enhance Internet of Things (IoT) technologies, augmented reality (AR), virtual reality (VR), artificial intelligence (AI), and machine learning (ML) across all verticals, in every corner of your business.**

5G will have a significant impact on how businesses work and engage with their customers. AT&T is pioneering 5G breakthroughs that will help enable smarter everything – from cities to hospitals to manufacturing. These breakthroughs will ultimately create a world of new economic opportunities, greater mobility, enhanced health, security, and smarter connectivity for individuals, businesses, and society as a whole.

The 5G cellular network of the future will ultimately deliver lower latency, better reliability, faster

speeds, and greater capacity almost anywhere, any moment, and through virtually any device. Instead of relying on your fiber network as the backbone of your most important business-critical digital functions, in the future, 5G will be able to handle your current functions, as well as provide optimal performance for emerging technologies.

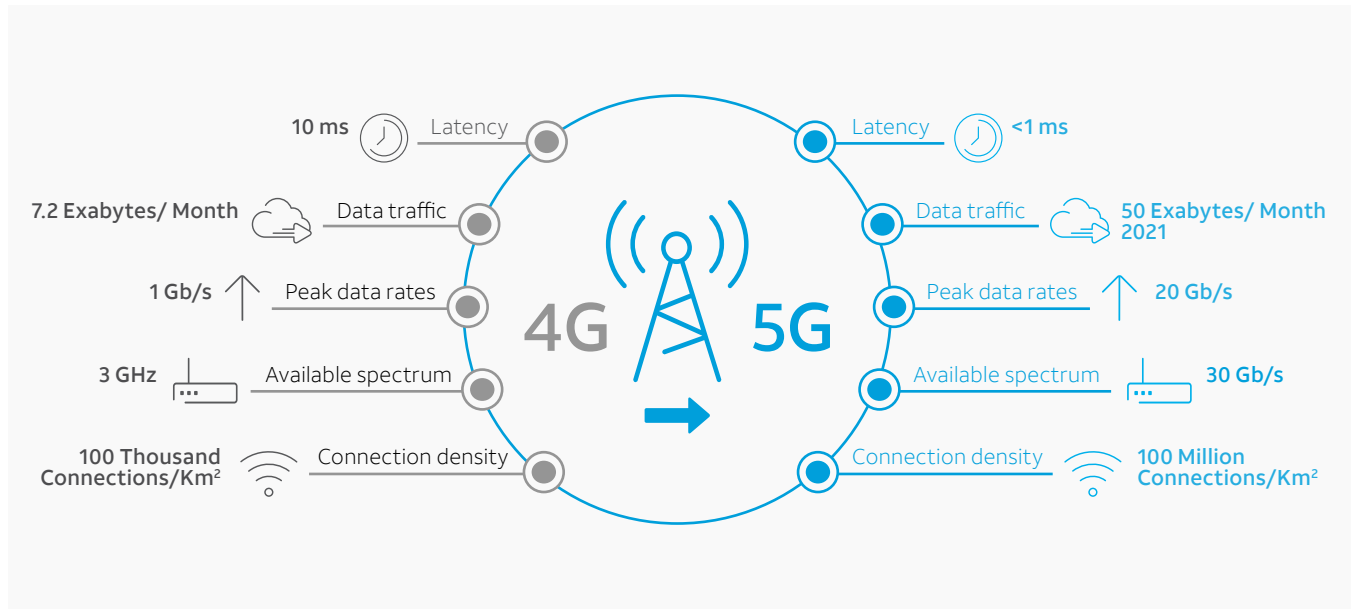
When it comes to your business, 5G will ultimately create new, significant economic opportunities and better experiences for people and businesses across industries.

## Features and benefits of 5G from AT&T

AT&T has been innovating communications and connections for over 100 years; 5G is the next leap in that technology.

- We're the market leader, with the first standards-based mobile 5G network in the U.S.
- We're investing in our LTE infrastructure to cover more of the U.S. with 5G by the end of 2019
- We're partnering with innovative enterprises to trial 5G proof of concepts in retail, manufacturing, and healthcare
- We're on track to virtualize 75% of our network by 2020 – 5G is the first wireless network born in the cloud
- Our services and solutions are already 5G-primed, so your business will be ready to leverage the efficiencies and power of 5G

## Comparing 4G and 5G



### What to know about mmWave 5G

Here are some of the characteristics that make mmWave so unique:

- Significantly larger spectrum allocations possible; high data rates enabled
- Antenna arrays used to overcome loss
- Reduced coverage range per cell site-but very small antennas are minimally obtrusive
- Limited penetration through objects, but still allows for use cases with clear line-of-sight

### Moving from 4G to 5G

A common misconception is that 5G will be incompatible with 4G technology and devices. Contrary to what some believe, 4G and 5G technologies actually complement each other, and 5G technology is being designed to work in tandem with 4G. This is an important detail for AT&T.

In technology terms, we're upgrading and enhancing our existing LTE network in select locations of some cities to serve as a parallel runway to 5G, primed for the future of connectivity. The result is enabling faster speeds now, while making the network 5G-ready.

### 5G is all about the journey

Technologies like augmented reality and machine learning offer great potential, but require high bandwidth and low latency for optimal performance. As one of the first to utilize 5G, your business is in a position to tap the significant advantages of new technologies, and eventually gain efficiencies, empower your workforce, and drive innovation.

5G from AT&T will help bring the edge of the network to you, along with improved security expectations and the benefits of 5G industry standards that AT&T is helping to develop with the entire ecosystem of developers, device makers, and providers.

Businesses located within geographies covered by 5G mmWave and, with capable devices, will be the first to begin innovating and exploring 5G capabilities, such as:

- Creating zones in densely populated areas for mobile users with capable devices to begin to experience the speeds and low latency previously only available through a wired connection
- Enhancing engagement through 5G technology in outdoor venues, cafes, coffee shops, retail locations, and parks
- Helping to enable functionality for mobile or outdoor workers (insurance adjusters, car dealerships, construction sites, freelancers)



The first 5G-enabled device is here: The NETGEAR Nighthawk® 5G Mobile Hotspot is the first standards-based mobile 5G device in the U.S. able to access a live millimeter wave mobile 5G network. This compact device provides an easy connection to the AT&T 5G mmWave network with the ability to connect up to 20 devices with Wi-Fi. An LCD touchscreen and powerful battery that lasts up to 24 hours on a single charge makes this a great device when working on the go or in a fixed location. And since it's compatible with 4G LTE and LTE-LAA, when not in 5G range, you can connect virtually anywhere.

**Why  
AT&T**

AT&T can help you prepare for and implement 5G—from one edge of your business to the other. We offer the expert consulting and support services you need to transform your business for the 5G future.

To learn more about how AT&T can help transform your business for the 5G future – visit <https://www.business.att.com/learn/5G>.