

CROWN CASTLE BUILDS 5G WIRELESS INFRASTRUCTURE TO POWER CONNECTIVITY AND GROWTH

Imagine operating a business with connection speeds up to 100 times faster than they are today. That idea will soon become a reality with the 5G Revolution – the advent of the next-generation wireless network that will power connectivity across the U.S.

Since 2007, Crown Castle has been installing fiber optic lines and small wireless antennas, known as "small cells," to build the backbone of 5G. This will give Chicago residents, visitors and businesses

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the coverage and capacity they need. Crown Castle is deploying this technology because 5G has the ability to help build safer and better-connected communities.

"Chicago is increasingly recognized as a future global tech hub, and wireless bandwidth is a critical component of that," said Jonathan Hart, Government Affairs Director, Central Region, Crown Castle. "Whether it's the mayor's focus on recruiting tech companies, the efforts of the Chicagoland Chamber and tech incubators to support the startup community, or the growth of smart city apps, Chicago's future is directly tied to the success of 5G."

Dependable wireless access is no longer a luxury, it's a necessity. 50% of U.S. households rely on mobile phones instead of landlines, and 80% of 911 calls are made from mobile devices. Further, 77% of Americans now rely on smartphones to talk, text, access the internet, navigate travel and much more. It is estimated that by 2022, the average smartphone user will triple their data

<u>consumption</u>. There is no plateau in sight for the demand for reliable mobile connectivity.

The 5G network is also critical to the growth of the "Internet of Things" (IoT), which includes embedding computing devices in everyday objects so they can

send and receive data. The "IoT" encompasses autonomous vehicles, smart home appliances, remote medical monitoring, smart energy grids, and much more. The "IoT" will be powered by 5G networks

that will provide speeds 100 times faster than current 4G networks while handling 1,000 times the data traffic.





Wireless antennas called "small cells" are part of the backbone of 5G, which will provide connection speeds up to 100x faster than today.

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These 5G networks will serve as the nervous system for all "IoT" devices.

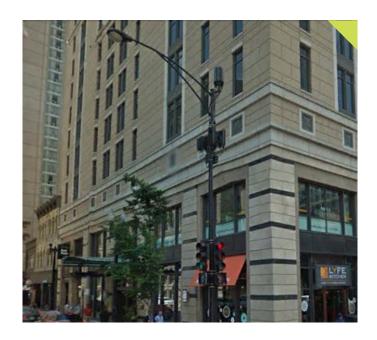
The combination of safety, utility and better living is also expected to create economic opportunity. According to projections, large cities like Chicago could see as many as 90,000 jobs created and as much as \$14B added to their total GDP's from the buildout and eventual implementation of 5G.

Regulations generally have not kept up with the technological advances, although that is changing. A new Illinois law, known as the Small Wireless Facilities Deployment Act, establishes standards for the relationship between small cell providers and the municipalities that own poles on the public right-of-way. The law sets the threshold for the small cell application fees and rates that providers must pay to locate antennas on city poles. It also limits the size of small cell equipment and provides a clear time frame for cities to accept or reject an application. While this is state law, the City of Chicago is exempt.

As the regulatory discussion continues, the roots of Chicago's fast-approaching 5G network are spreading. Crown Castle is in the process of installing small cells across the city, bringing greater connectivity to consumers. It is all part of Crown Castle's \$400 million investment in wireless infrastructure in Chicago.

"Investment in railroads, highways and airports made Chicago the transportation crossroads of the country," said Hart. "Further investment in small cell technology will secure the city's leading role as an economic engine and innovation leader."

Crown Castle owns, operates and leases more than 40,000 cell towers and approximately 60,000 route miles of fiber supporting small cells and fiber solutions across every major U.S. market. This nationwide portfolio of communications infrastructure connects cities and communities to essential data, technology and wireless service - bringing information, ideas and innovations to the people and businesses that need them. More information about Crown Castle can be found at crowncastle.com.



About the Chicagoland Chamber of Commerce

The Chicagoland Chamber of Commerce is the largest, most influential business group in the Chicago region. It's comprised of 1,000 members, from all industries, that employ 400,000 people and generate more than \$24 billion in local annual revenue. Being a Chamber member means being a relevant, connected, influential leader of your industry and the Chicago business community. The Chicagoland Chamber focuses on delivering value for its members, making Chicagoland a world-class place to live and work.







