THE 5G ECONOMY

5G in America.

5G is here and Americans all over the country are using it to create the future and enhance America's economic competitiveness.

Interactive Map



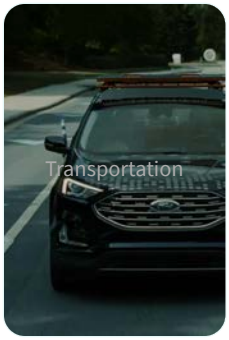


5G will reduce transportation emissions by:

90%

5G cuts transportation costs each year by:

$450B









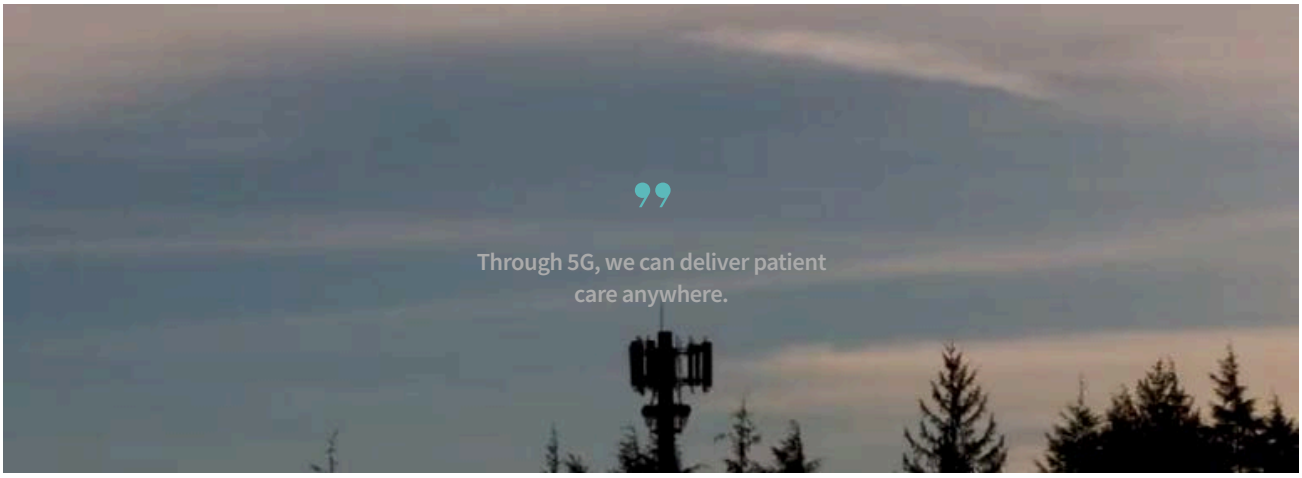
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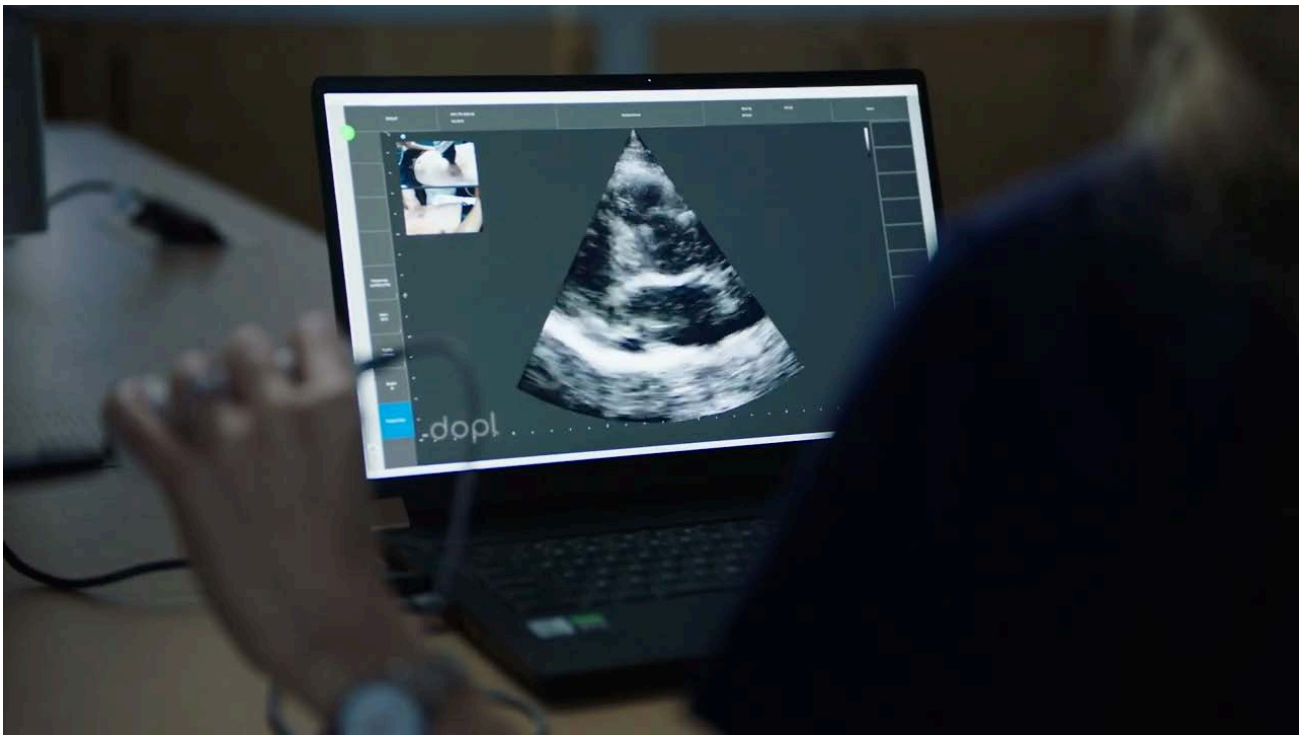
APPLE 1037
Apple v. Apex Beam
IPR2025-00900

SECTIONS

5G is connecting kids to learning opportunities, making farms more sustainable, fighting wildfires, making manufacturing smart and driverless cars a reality.

America leads the world in 5G thanks to historic investment from America's competitive wireless providers who challenge each other every day to build the world's biggest, broadest and most secure 5G networks. Explore these stories and learn more about how the wireless industry is helping secure America's leadership of the innovations and industries of the future.





Healthcare

5G-enabled innovation is redefining healthcare across the country, breaking down geographic barriers to critical care access in rural communities and creating cost savings of $305 billion annually. When more care providers and patients are able to connect to the information they need faster and more efficiently, health outcomes improve.

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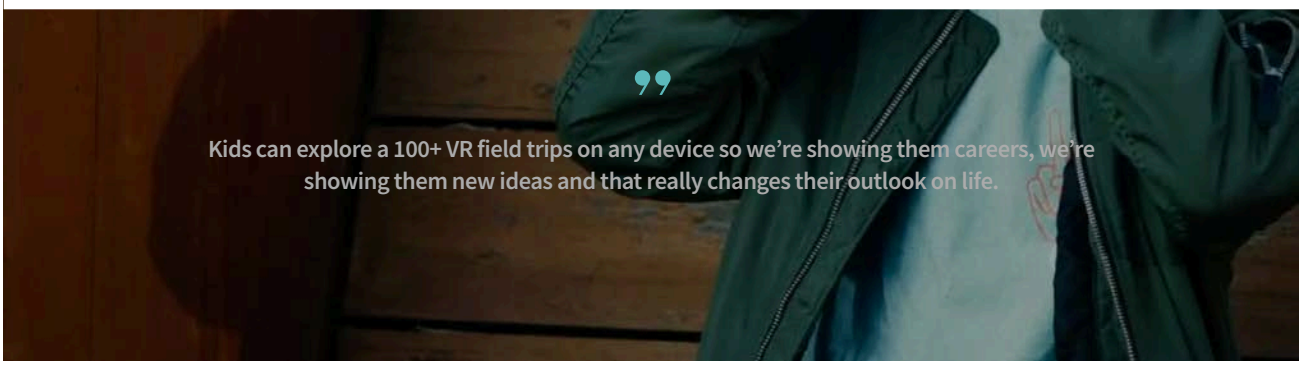


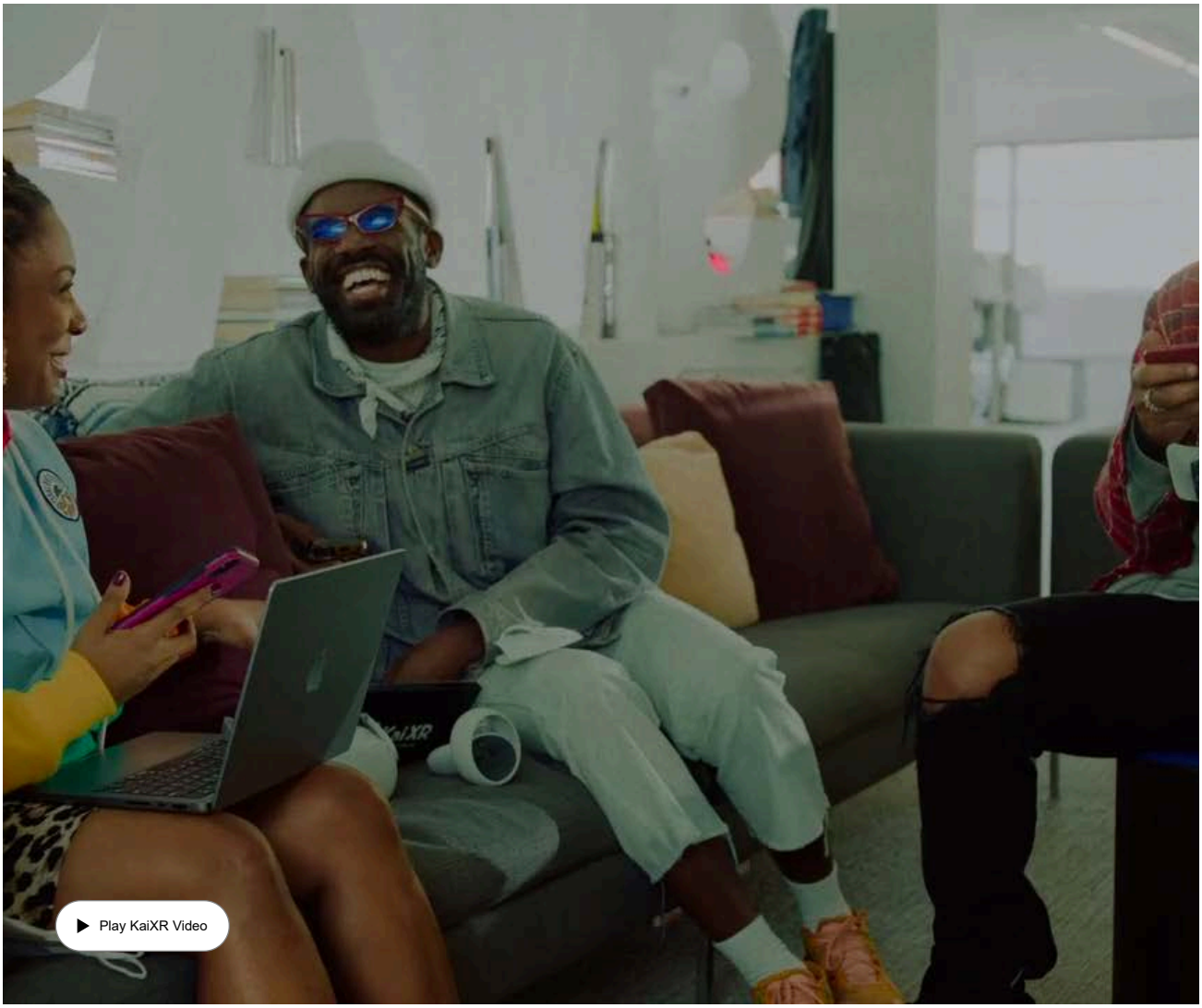


Education

5

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Investment

The wireless industry invests billions of dollars every year to build, upgrade, and maintain its networks. Wireless carriers have invested $705 billion to date—and $190 billion of that investment has been spent since 2018, the year 5G was launched.

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Accelerating travel by:

40%

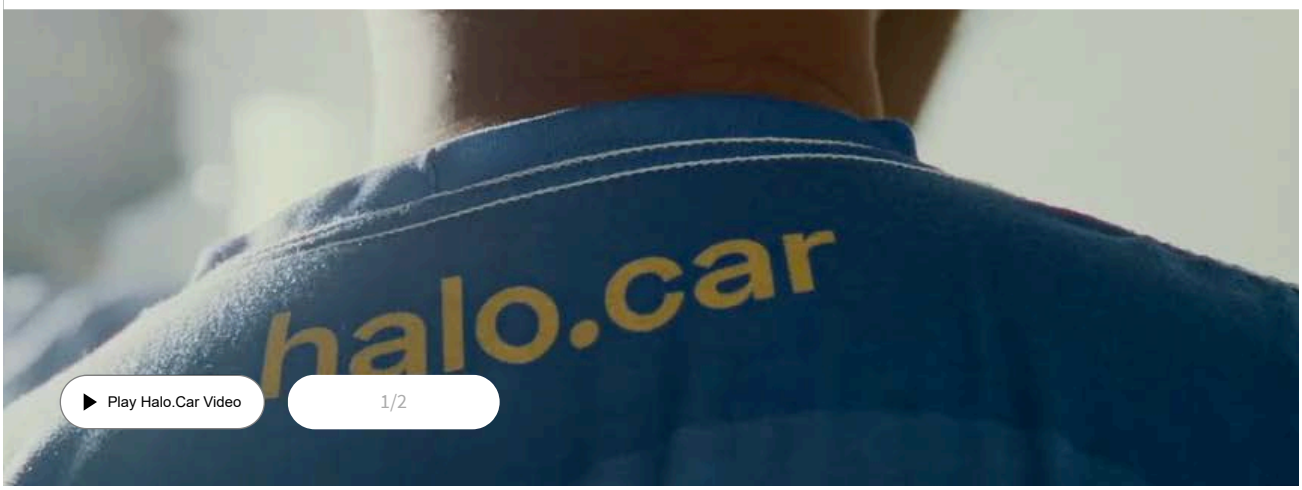
Cutting transportation costs each year by:

$450B

Reducing transportation emissions by:

90%

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5G Rollout

Since 5G was launched in 2018, three nationwide networks—and regional provider networks across the U.S.—already cover 330 million Americans. The first 5G network achieved nationwide coverage 2x as fast as 4G, and all three built nationwide networks 42% faster than 4G.

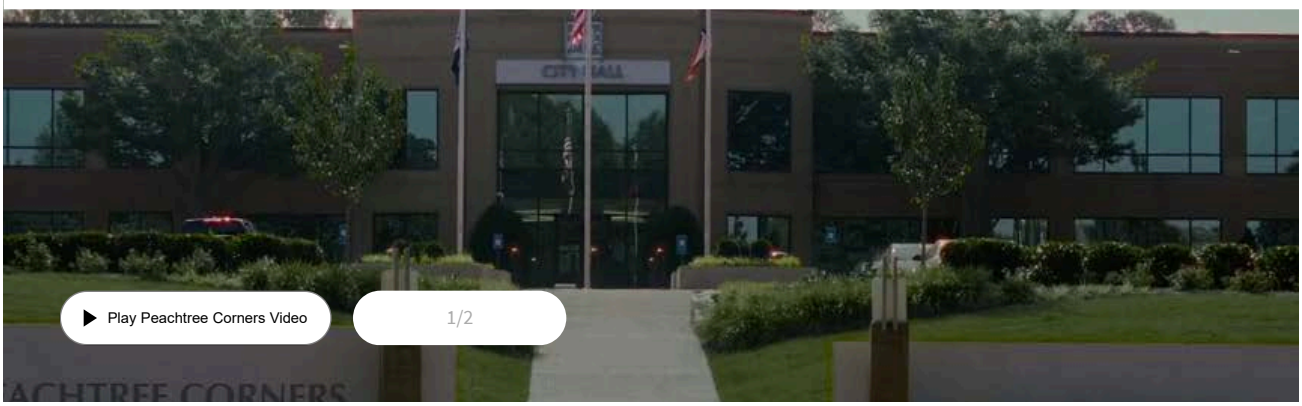




Smart Cities

5G is the engine of smart city innovation, with wireless-powered smart city solutions expected to deliver $160B in benefits and savings through things like lower energy use and less congestion. Sensors will monitor the health and safety of critical infrastructure like buildings, roads, and bridges, while connected trash cans, bus stops, light poles and more will help cities operate more efficiently.

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Economic Growth

Explore our interactive map to see how 5G is growing America's economy and creating jobs.

Explore The Data

4.5M

New Jobs

$1.5T

In Economic Growth

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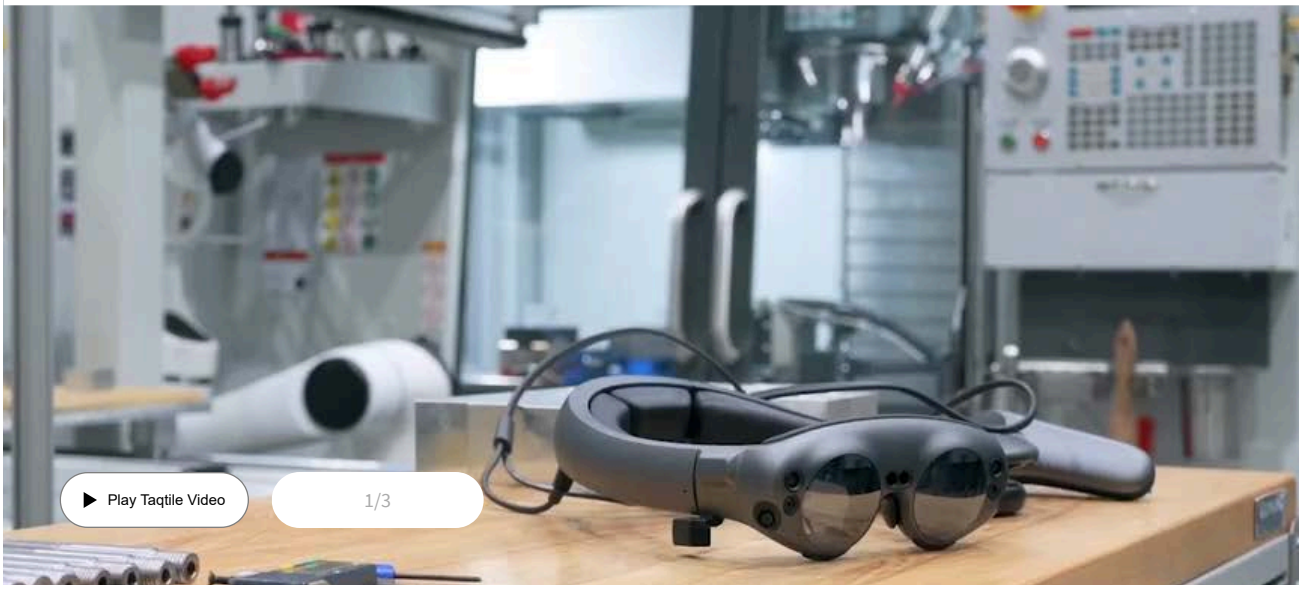
Manufacturing

Advanced manufacturing is critical to our nation's competitiveness, economic growth and quality of life. 5G is helping American factories springboard into the future of safety, sustainability and innovation, thanks to AR and VR training, advanced robotics, and real-time information sharing.



5G spectrum gives us tons of bandwidth which is really important for the great amount of new use cases, for instance the AMRs, autonomous mobile robots, get their missions over 5G. 5G helps you collect more data and collect it faster and react more quickly.

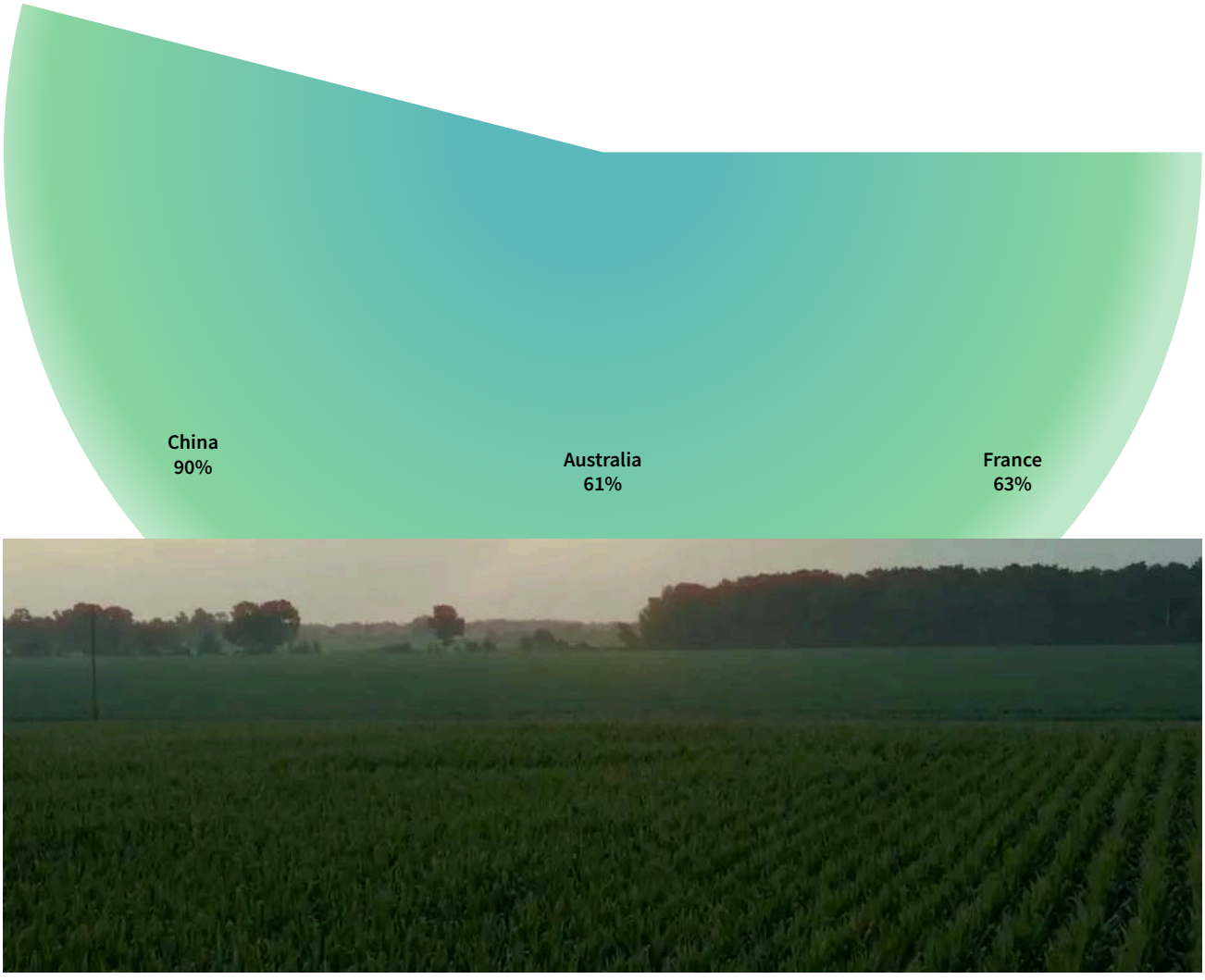
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Availability

America was the first large country to have three nationwide 5G networks and is one of the world leaders in 5G availability—which refers to how often 5G-capable cellphones connect to a 5G network. More spectrum is needed to secure our 5G leadership.

SECTIONS



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Agriculture

5G's fast speeds, high capacity and low latency are helping reimagine and enhance food production from farm to fork, enabling precise applications of water and fertilizer, and giving farmers more data about their operations and fields.

> In the past, farmers just turned the water on when they thought the field was dry and were wasting a lot of water. We're helping the farmer to precisely irrigate that field.

SECTIONS

Adoption

Americans are flocking to 5G. Today, nearly 40% of all wireless devices—from phones to smartwatches, IoT devices, and more—have a 5G connection, a 34% increase over 2022.

2020	**465M** Wireless Connections **14M** Active 5G Devices
2021	**499M** Wireless Connections **86M** Active 5G Devices
2022	**523M** Wireless Connections **162M** Active 5G Devices
2023	**558M** Wireless Connections **216M** Active 5G Devices

2023
40%

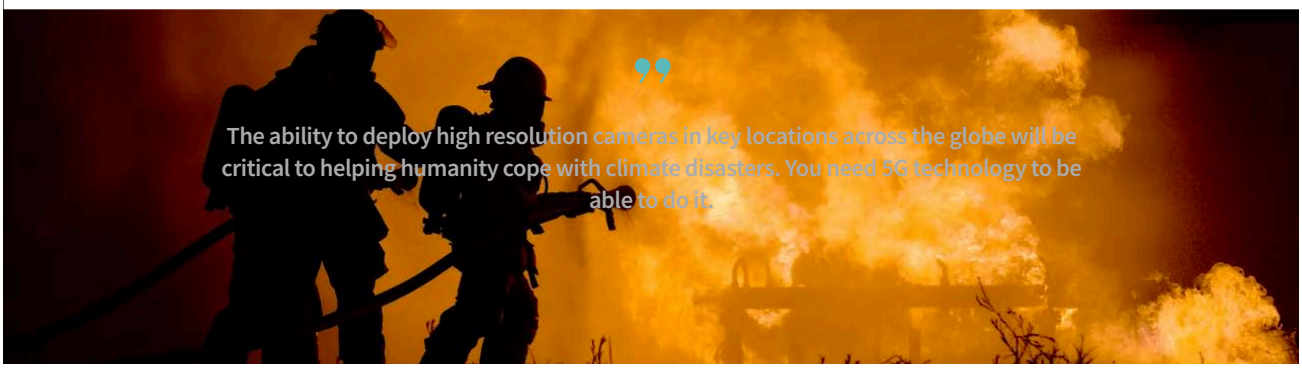
2022
31%

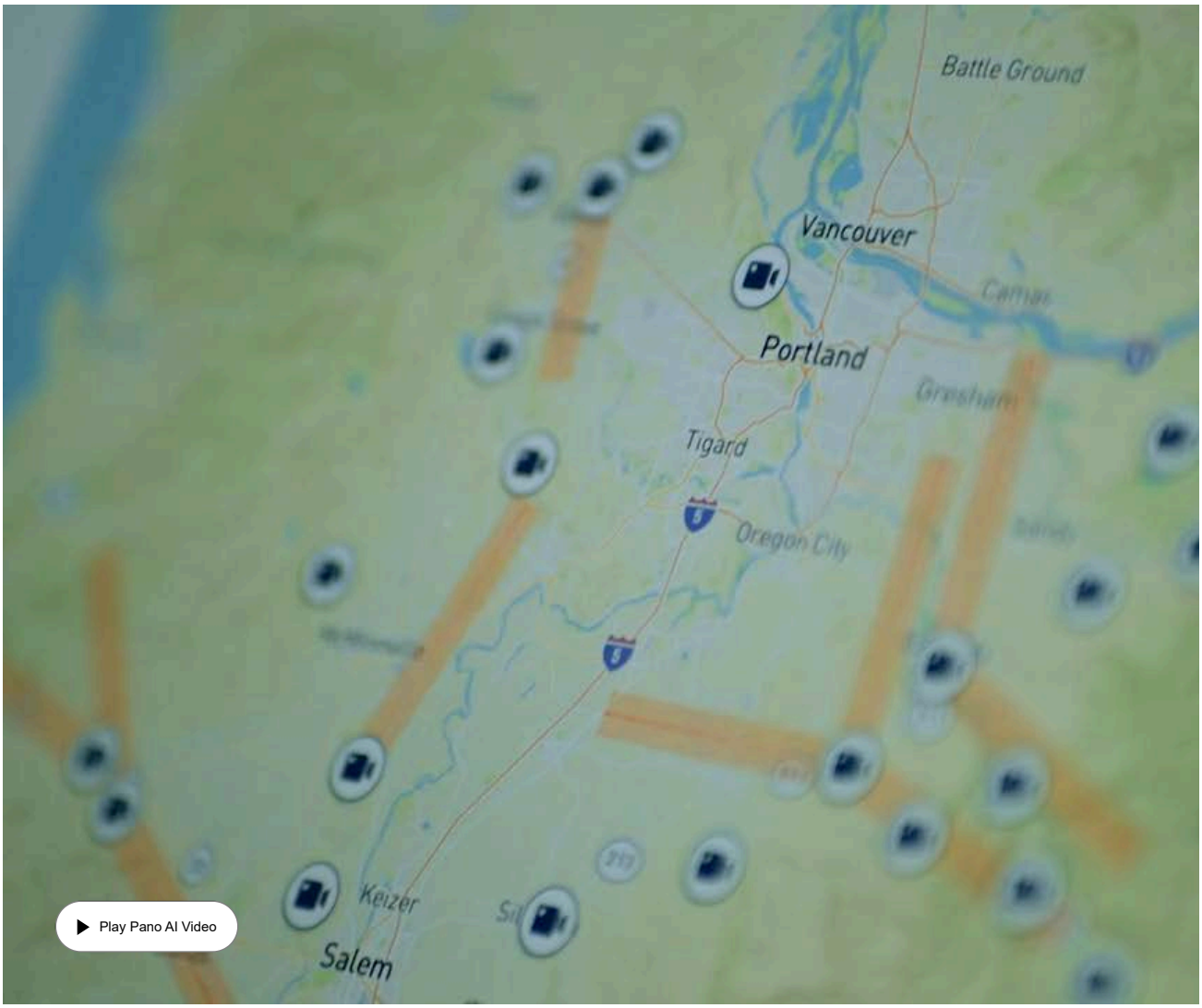
2021
17%

2020
3%



Public Safety



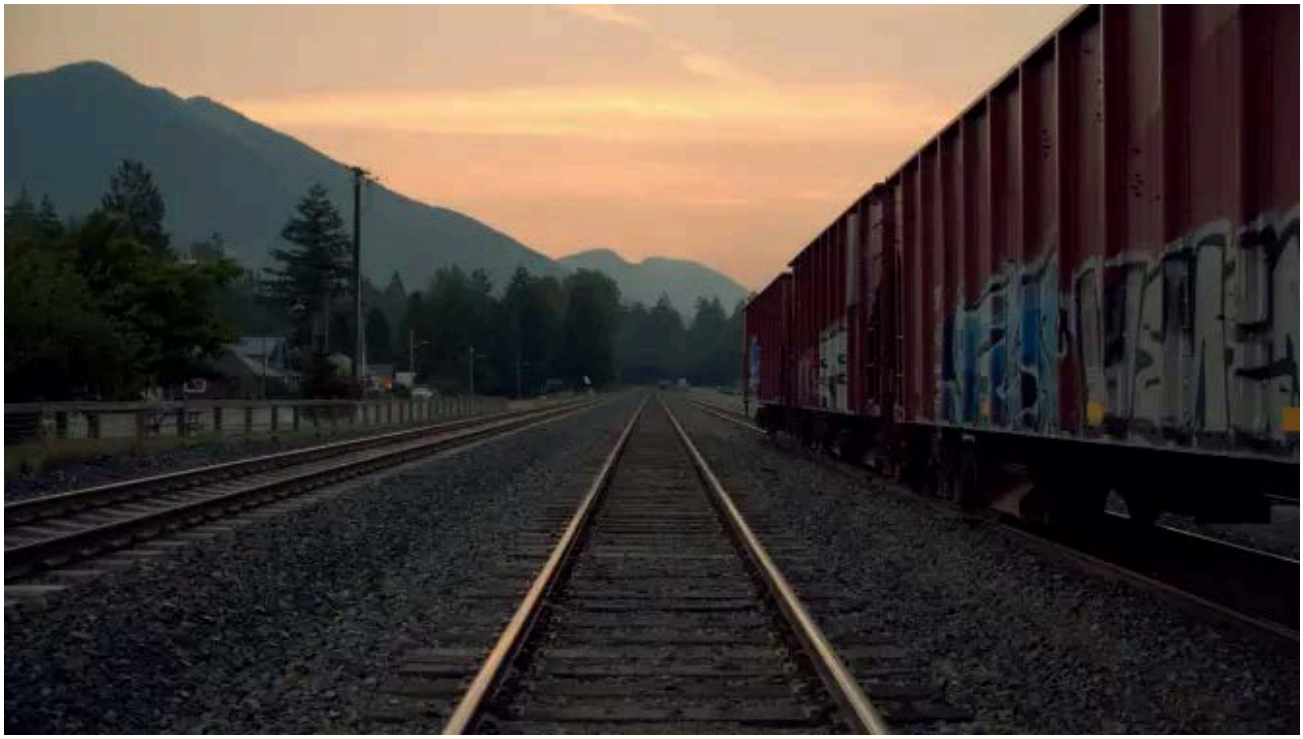


Speed

After growing fast out of the gate (5x faster than 4G in the first years after launch), 5G is getting better every day. As new mid-band spectrum is put into service, median download speeds are now routinely over 100 Mbps, and continually getting faster.

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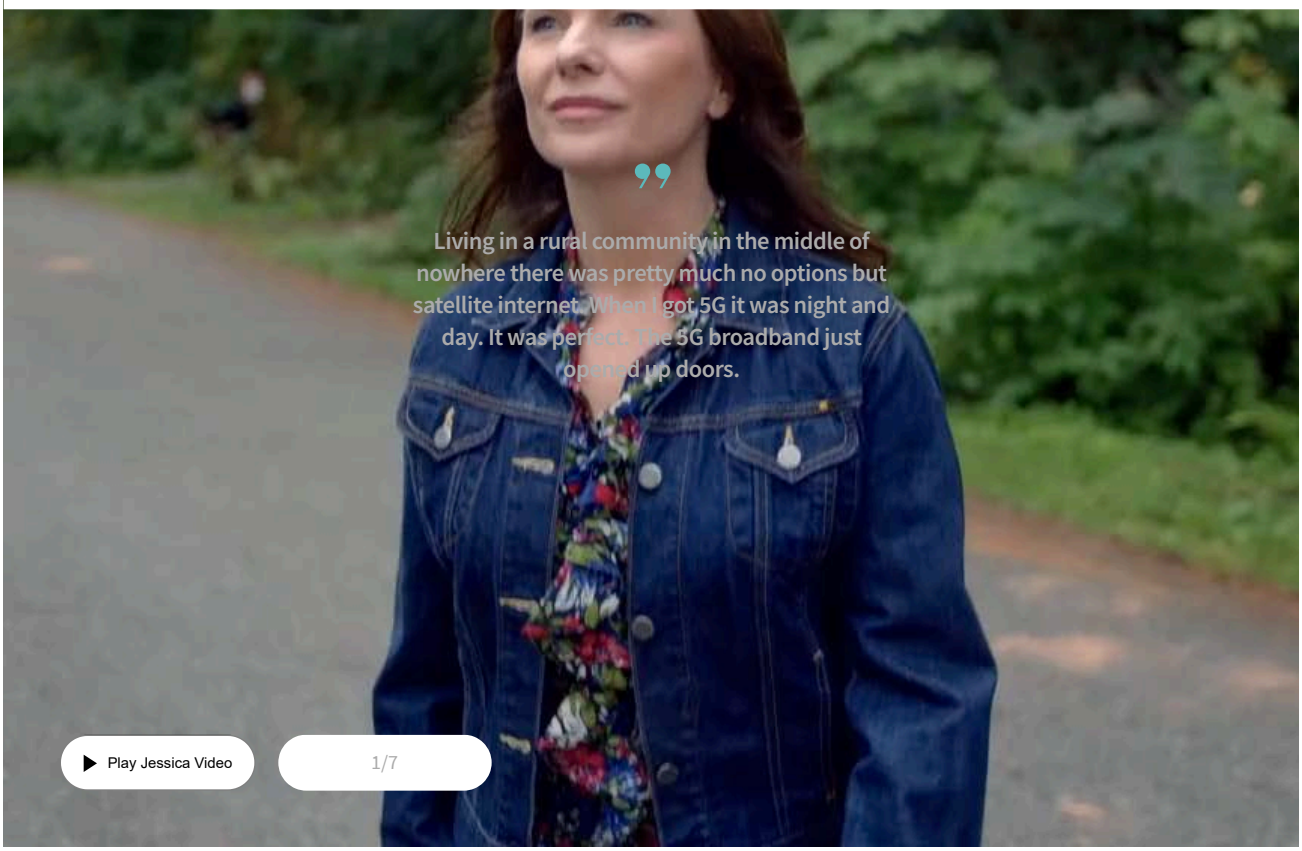




Home Broadband

From rural communities to our biggest cities, more and more Americans are turning to 5G to get the reliable, high-speed broadband they need to live, work and learn. For some, it's the first time they've had a choice. For others, it's the first connection they've ever had. Together, they've made 5G America's fastest growing home broadband service.

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5G Home Broadband Adoption

5G home was the connection of choice for 96% of new broadband subscribers in 2023.

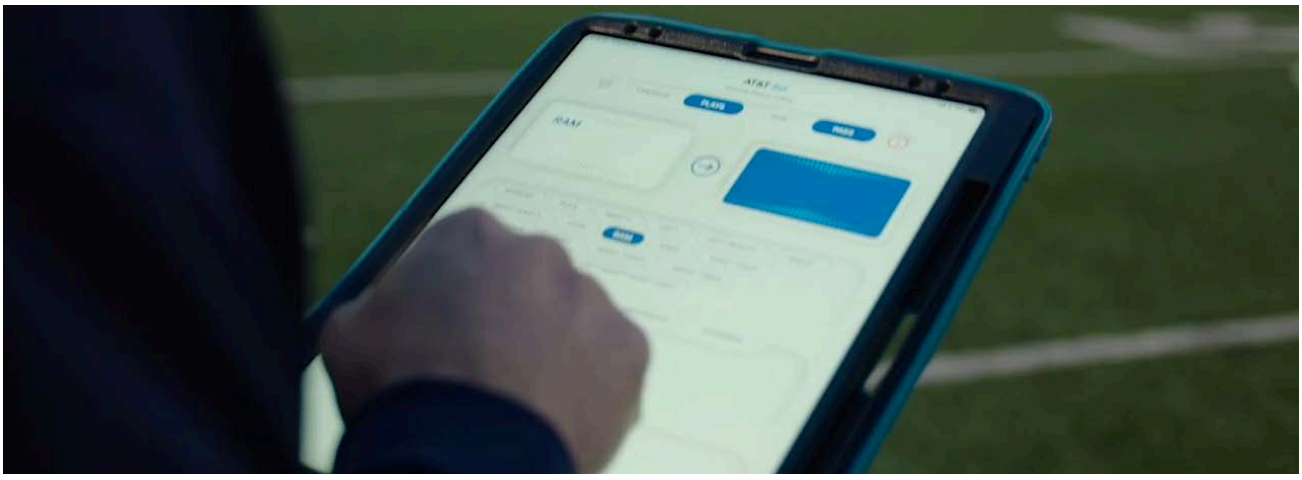
94M households are covered
by 5G home broadband

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Accessibility

Now more than ever, wireless connectivity is essential to our daily lives – allowing us to stay in touch with friends and family, work, track and improve our health and fitness and much more. 5G is playing a key role in enabling this for all Americans, breaking down barriers and enhancing opportunity.



SECTIONS



Auction Revenue

In addition to capital expenditures, the industry has also spent billions of dollars on spectrum licenses to fuel our 5G ambitions. Since 1993, wireless providers have invested $233B in FCC spectrum auctions to power mobile networks—over $108B since 2020 alone.

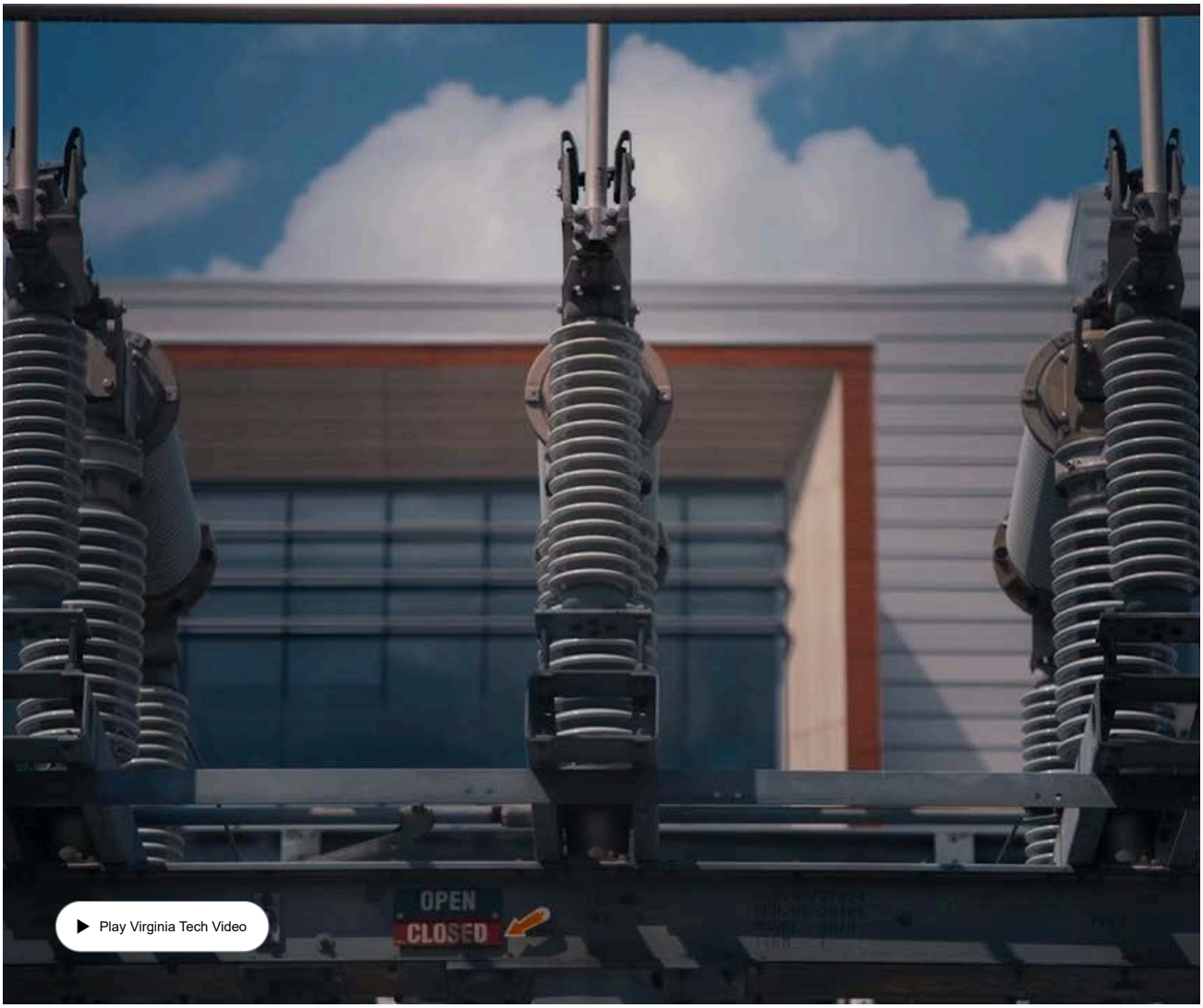
SECTIONS





Energy

be able to talk to each other, maintain communication and maintain the quality of service that we require from them. To get 100% renewables, we need to have 5G.



1. The Importance of Licensed Spectrum and Wireless Telecommunications to the American Economy, Compass Lexecon, December 7, 2022, at https://www.ctia.org/news/the-importance-of-licensed-spectrum-and-wireless-telecommunications-to-the-american-economy.

2. How 5G Can Help Municipalities Become Vibrant Smart Cities, Accenture, January 12, 2017, at https://www.accenture.com/t20170222T202102__w__/us-en/_acnmedia/PDF-43/Accenture-5G-Municipalities-Become-Smart-Cities.pdf.

3. 5G Promises Massive Job and GDP Growth in the US, Boston Consulting Group, February 2, 2021, at https://api.ctia.org/wp-content/uploads/2021/01/5G-Promises-Massive-Job-and-GDP-Growth-in-the-US_Feb-2021.pdf.

4. Wireless Connectivity Fuels Industry Growth and Innovation in Energy, Health, Public Safety, and Transportation, Deloitte, January 19, 2017, at https://api.ctia.org/docs/default-source/default-document-library/deloitte_2017011987f8479664c467a6bc70ff0000ed09a9.pdf.

5. Wireless Connectivity Fuels Industry Growth and Innovation in Energy, Health, Public Safety, and Transportation, Deloitte, January 19, 2017, at https://api.ctia.org/docs/default-source/default-document-library/deloitte_2017011987f8479664c467a6bc70ff0000ed09a9.pdf.

6. How 5G Can Help Municipalities Become Vibrant Smart Cities, Accenture, January 12, 2017, at https://www.accenture.com/t20170222T202102__w__/us-en/_acnmedia/PDF-43/Accenture-5G-Municipalities-Become-Smart-Cities.pdf.

7. Commercial Wireless Networks: The Essential Foundation of the Drone Industry, CTIA, November 11, 2017, at https://api.ctia.org/docs/default-source/default-document-library/drone_whitepaper_final_approved.pdf.

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