



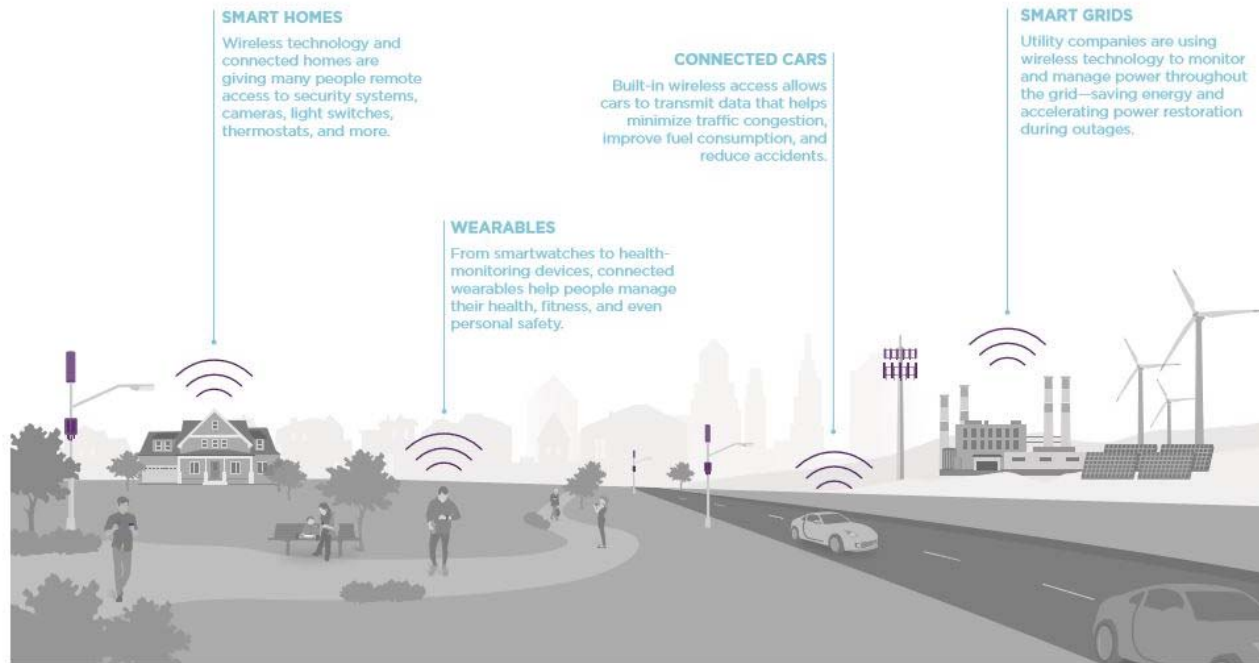
The pathway
to possible.

Heterogeneous Networks

The “Internet of Things” and the infrastructure that enables it.



The internet revolution changed the way we use computers. Then wireless internet came along and made our phones smart and tablets possible. But that was just the beginning. Wireless data is changing the way we exercise, drive our cars, manage our homes, and even deliver power to our cities. It's called the “Internet of Things.” And our infrastructure is enabling the wireless connections that make it possible.



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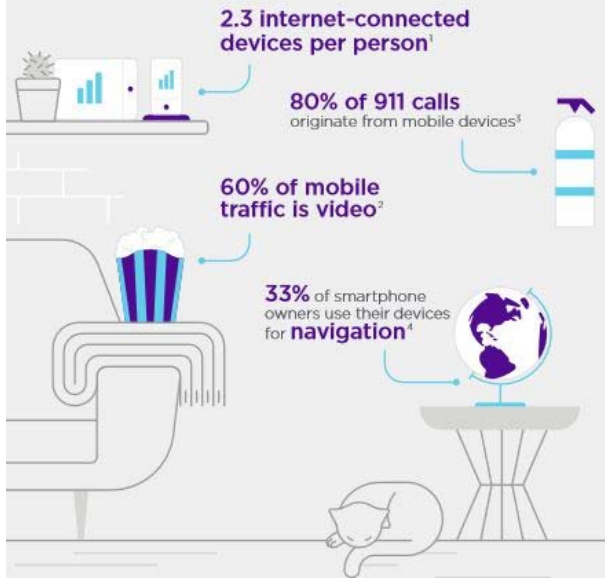


A more connected life.

How technology is driving wireless demand.

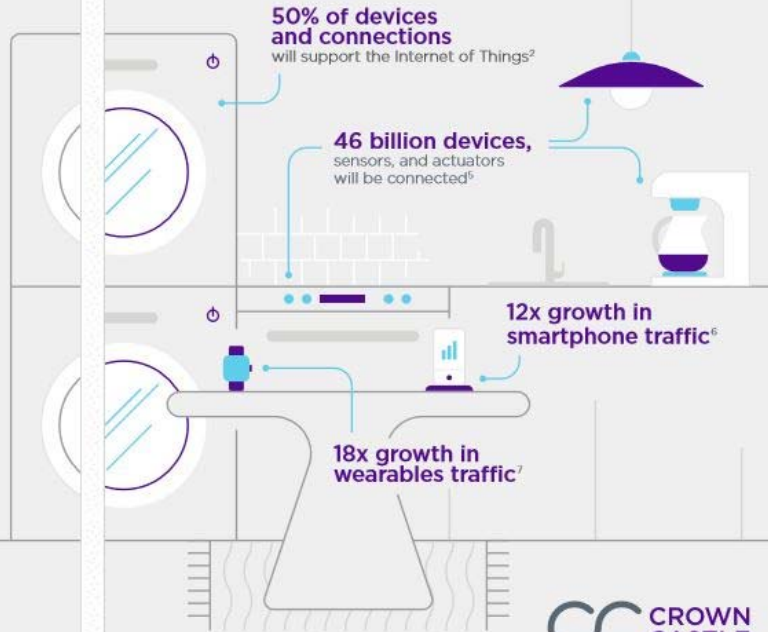
Where we are: today

We rely on mobile data now more than ever. Smarter devices, bigger screens, and faster data have led to a dramatic shift in the way we consume information and media—leading to a significant increase in mobile traffic.



Where we're going: 2021

In the next 5 years, new developments like 5G and the Internet of Things (IoT) will drive even more of our lives—and things—online. This new technological growth is projected to bring about even greater data demand and usage.



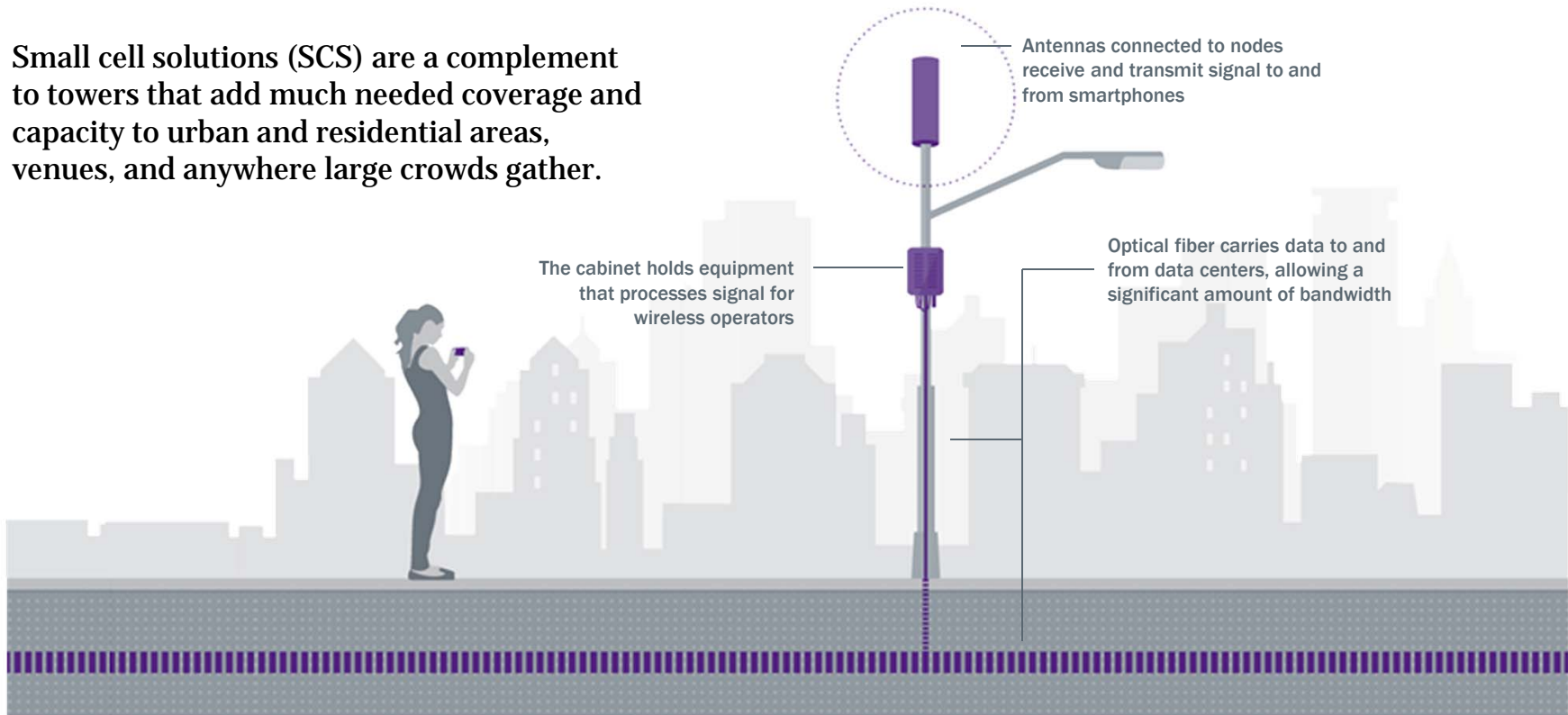
1. "The Zettabyte Era: Trends and Analysis," Cisco, June 2017 2. "Visual Networking Index," Cisco, June 2017 3. "2016 National 911 Progress Report," National 911 Program, December 2016 4. "U.S. Smartphone Use in 2015," Pew Research Center, April 2015 5. "The Internet of Things: Consumer, Industrial & Public Services 2016-2021," Juniper Research, December 2016 6. "Mobility Report," Ericsson, June 2016 7. "Visual Networking Index," Cisco, February 2016

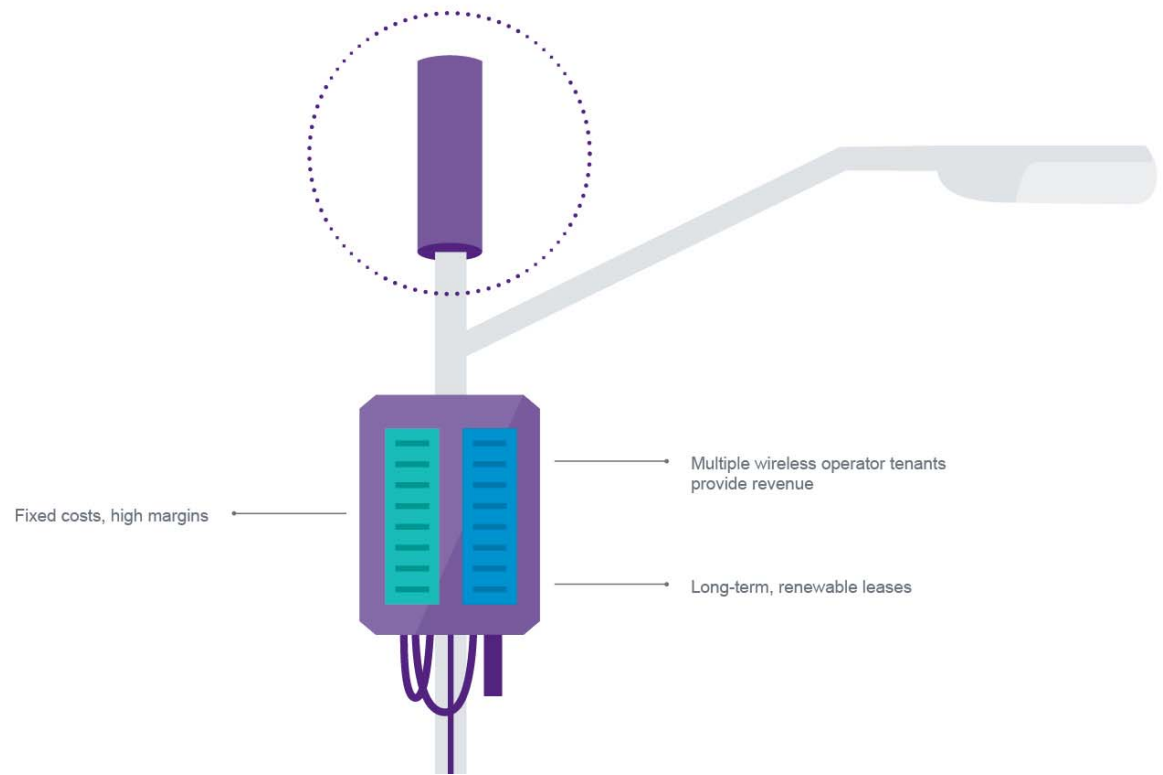


Small Cells

What are small cell solutions?

Small cell solutions (SCS) are a complement to towers that add much needed coverage and capacity to urban and residential areas, venues, and anywhere large crowds gather.





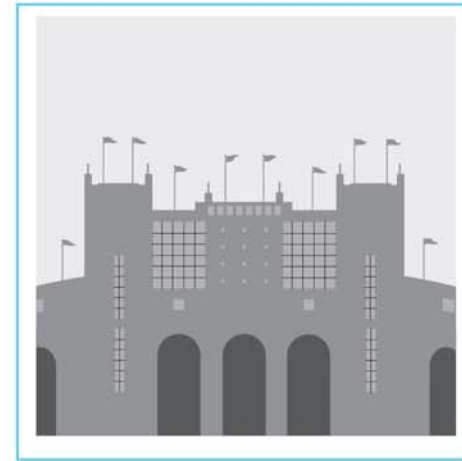
Where small cell solutions soar.



In densely populated areas

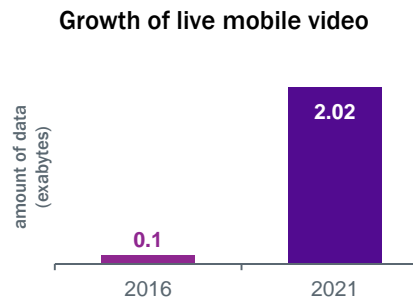
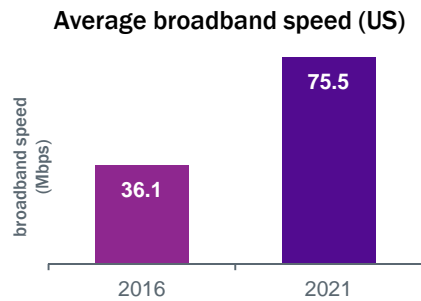
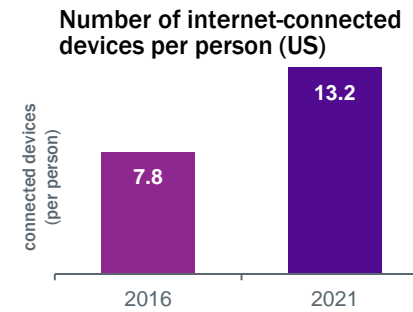
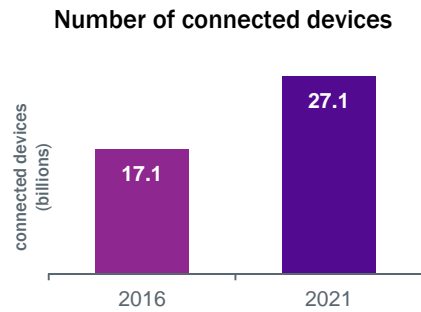


In challenging geography



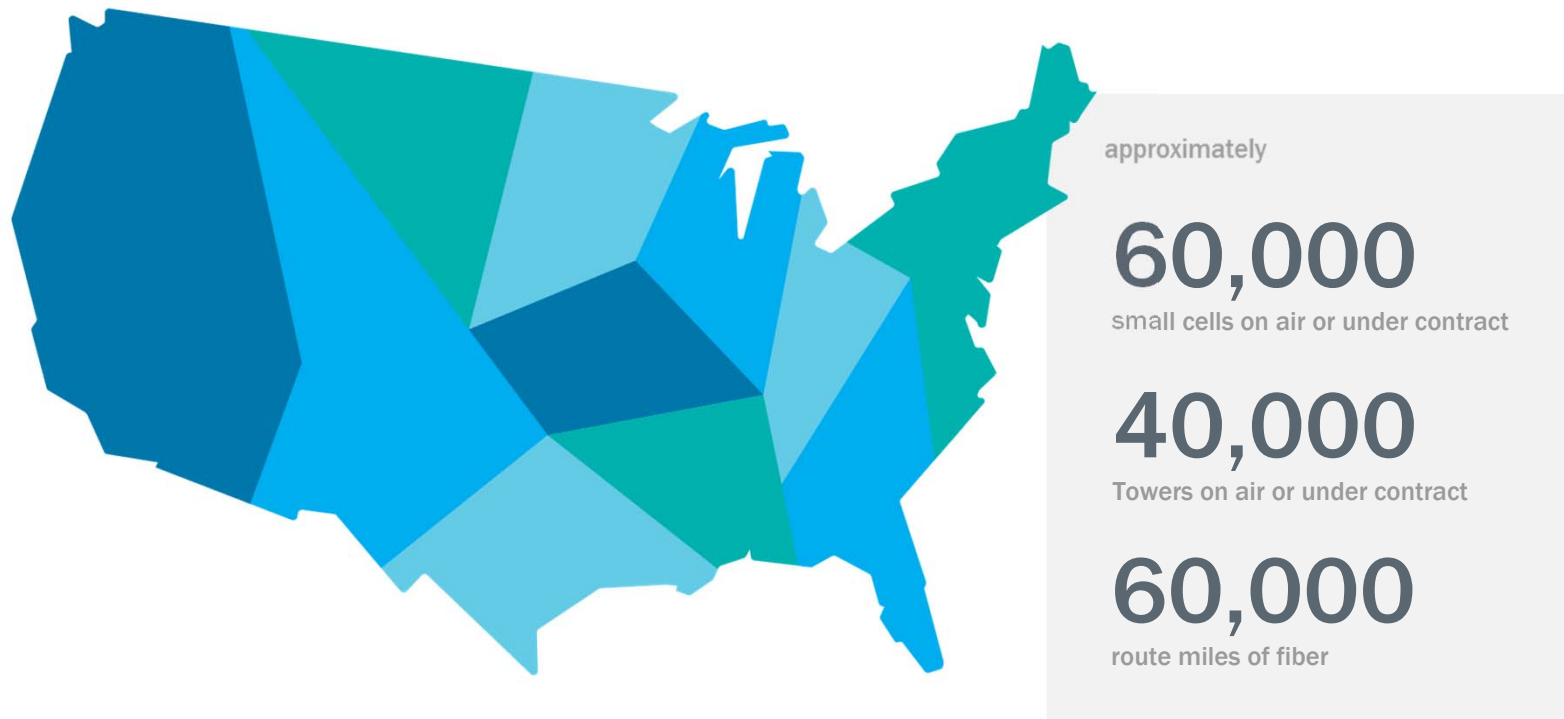
In venues that accommodate large crowds

New technologies are driving greater data demand and usage.



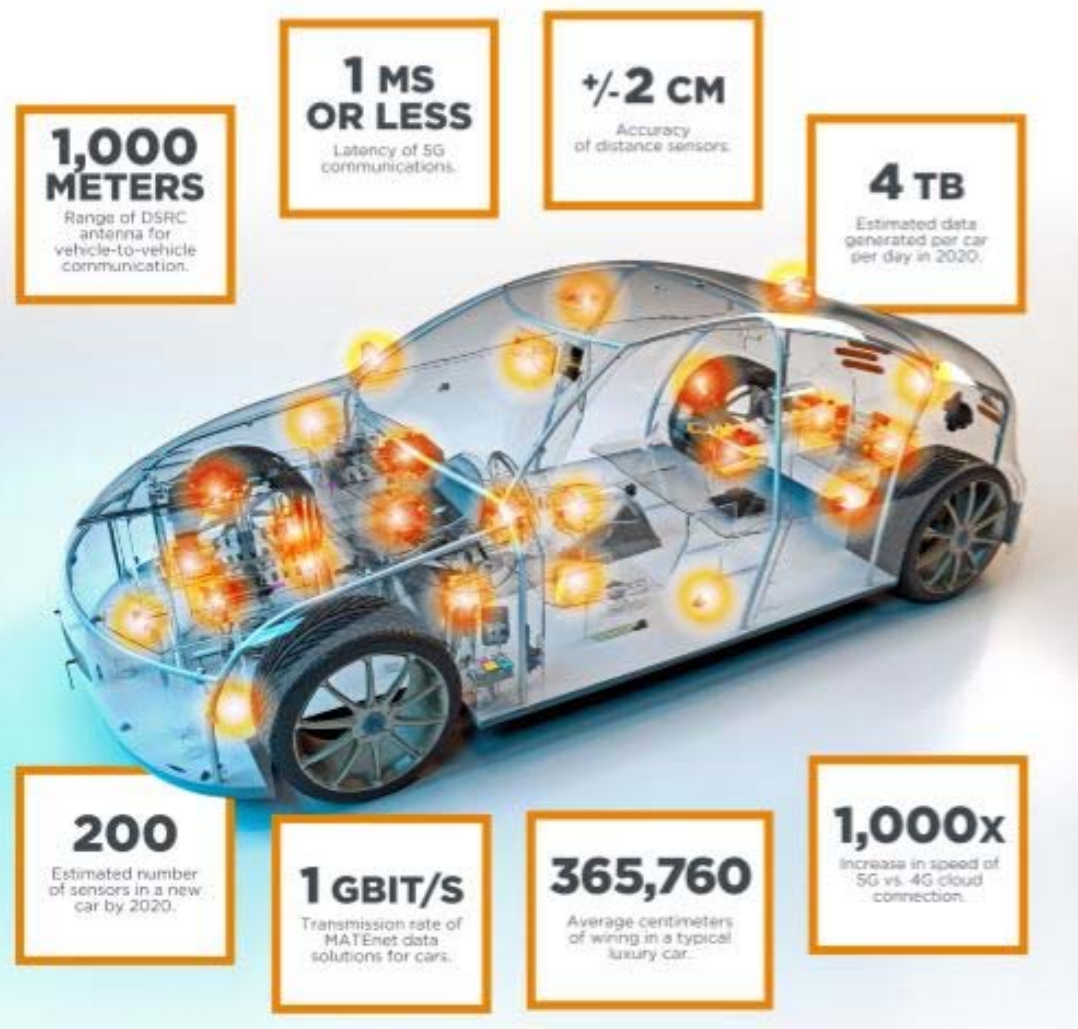
Source: Visual Networking Index, Cisco, June 2017.

Our reach: 60,000 small cell nodes and 40,000 towers supported by approximately 60,000 route miles of fiber.



How the Industry Works

Where is the Industry going?

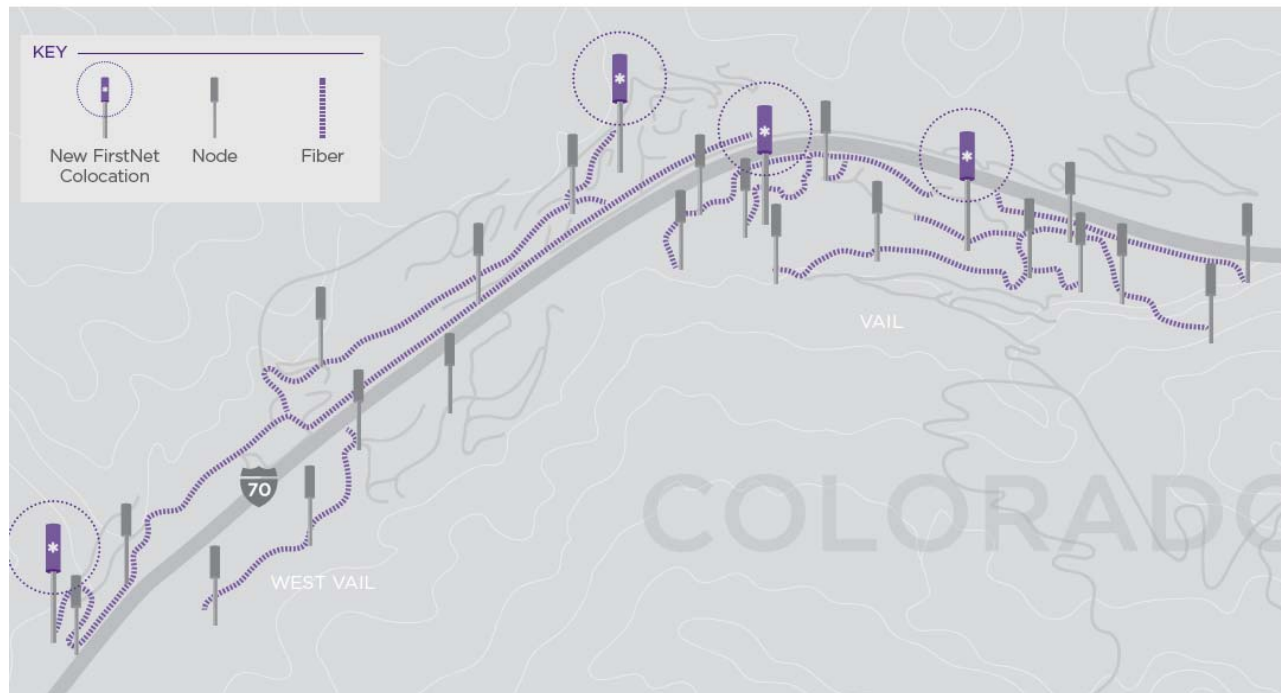


Vail

Breaking new ground for emergency networks.



At the FIS Alpine World Ski Championships, local, state, and federal government entities will be using the FirstNet spectrum for an LTE demonstration. The state of Colorado's FirstNet team led the efforts on this first-of-its-kind deployment, utilizing the Band Class 14 spectrum over DAS (Distributed Antenna System), a type of small cell solutions (SCS) installation. Crown Castle's existing SCS nodes and fiber within the Town of Vail were ideally placed for the rapid deployment.



Vail Video

Q&A