

The infrastructure  
behind your  
wireless world.



In just a few short years, cell phones have gone from a novelty to a must-have. Today, it's hard to find anyone who doesn't have one. We use them to send texts, get directions, watch video, stream audio, check email, and yes, even make phone calls. Maintaining reliable service in the face of this changing landscape will require an expansion of the infrastructure that enables your wireless world. But which infrastructure is right for your community?



**80%**

of 911 calls are made  
from wireless phones



**60%**

of mobile traffic  
is video



**over 50%**

of households have  
wireless service only



Learn more about wireless networks at:  
[crowncastle.com/communities](http://crowncastle.com/communities)

SOURCES:

"2016 National 911 Progress Report." 911.gov, 2017.

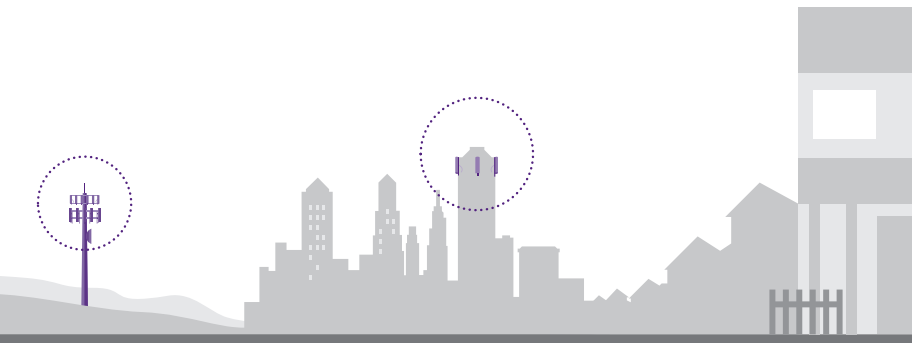
"Visual Networking Index" Cisco, 2017

"Wireless Snapshot 2017," CTIA, 2017

# The right infrastructure for your community.

Your community wants to stay connected. And to do that, we need to find the right infrastructure that will allow the expansion of networks in a way that improves your coverage. Our engineers consider several important factors, including your location, current usage, possible physical obstructions, existing nearby wireless infrastructure, and local zoning laws.

One possibility is a tower, like the ones you've no doubt seen on the side of the road or near your neighborhood. In urban areas, antennas on top of tall buildings serve the same function. Both types of cell sites provide voice and data coverage over a relatively large geographic area.



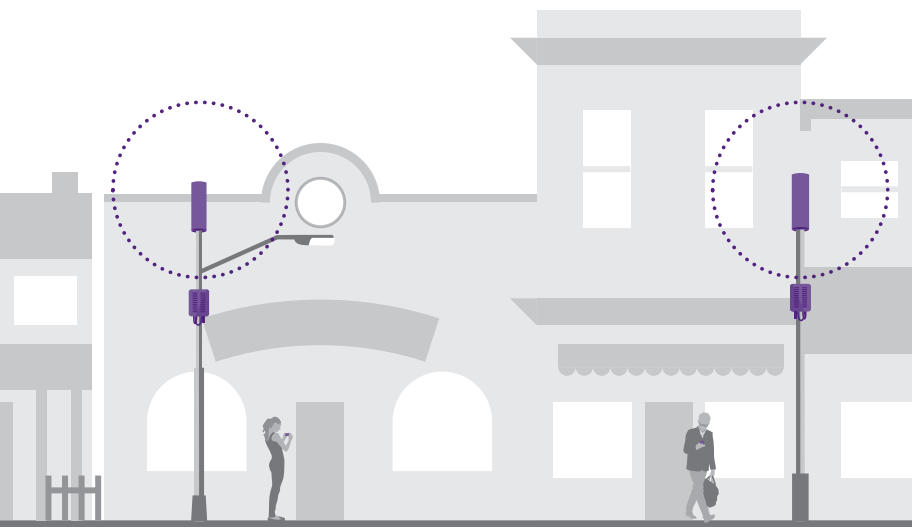
Traditional cell tower

Rooftop antenna

## Increasing capacity.

Traditional cell sites have capacity limits. It's like cars trying to crowd onto a busy highway. The increased use of apps and data means it's rush hour all day long. The infrastructure that once served your community so well now easily gets congested.

So how do carriers expand a network that's at or near capacity? One option is a small cell solutions (SCS) network. SCS use a series of small, low-powered nodes that are placed on existing infrastructure like utility poles and streetlights in existing rights of way. These nodes are then connected by fiber optic cable to maximize capacity.



Small cells on streetlights and slimline poles

# Are small cells the answer?

Every type of wireless infrastructure has its benefits, and none can completely replace another. Your community likely needs a combination of both small cells and macrocells (towers and rooftops). Because small cells use less power and more nodes can be placed closer together, they are often a good solution to relieve congestion issues. But it's important to note that an SCS is usually installed as a complement to existing infrastructure—not a replacement.



Small cells on utility poles

Everyone benefits  
from reliable wireless  
infrastructure.

**Convenient**

More reliable wireless coverage  
throughout the community

**Safe**

Access to 911 services and better-  
connected first responders

**Business friendly**

Attracts businesses and customers



[CrownCastle.com](http://CrownCastle.com)

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**About Crown Castle**

Crown Castle owns and operates approximately 40,000 cell towers and 60,000 route miles of fiber supporting small cells and fiber solutions across every major US 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.