

With its tree-laden streets and ideal mix of luxurious homes, shopping centers and prominent companies, it's easy to understand why The Woodlands is such a prestigious, sought-after community. For years, wireless coverage and capacity of this neighborhood outside of Houston, Texas, had lagged behind the expectations of residents. No one had been able to propose an infrastructure solution that could meet the high standards and detailed procedures held by the township's local governing body. We worked with officials and community members to design and deploy a small cell network that would improve wireless connectivity while preserving the beauty and aesthetics of the area. In the process, we created a repeatable process for improving coverage and capacity without causing friction for the local government or community members.

The Need

Installing a new small cell network in The Woodlands presented us with both familiar and unique challenges:

- > On trend with the rest of country, many homes in The Woodlands are wireless only. It was a safety and security risk to leave so many homes without adequate access to 911 and emergency services.
- > The parks in the community that provide an attractive venue for recreation, concerts, farmers markets and sports activities needed additional capacity.
- > The area's dense foliage interfered with wireless signals from towers.
- Many local businesses were sacrificing both productivity and sales due to inadequate wireless service for their employees and customers.
- > With complex commercial and township covenants, it was a difficult process to establish which organizations had jurisdiction over the public right of way.



The Solution

After assessing the geography of the area and the complex needs of the community, we determined that a small cell network would best serve the residents and businesses of The Woodlands. By using a shared model, we were able to eliminate the need for multiple carriers to build redundant infrastructure. The fiber-backed network provides nearly limitless capacity and reduces the complexity and cost of future upgrades. Having navigated local regulations and covenants, we now have a seamless process in place that can be easily replicated as more updates are made in the future. In the meantime, residents finally have the coverage and capacity they've needed through a network that's inconspicuous and that preserves the unique character and aesthetics of The Woodlands.



Small cell node installed on residential streetlight.

Why Crown Castle?

We have more than 20 years of experience implementing small cells in communities of all kinds, from dense urban centers to residential neighborhoods.

Discreet, innovative technology

We provide shared infrastructure that enables the wireless service you have come to depend on—all while blending in with your environment.

Long-term commitment

Our business is all about infrastructure, and you can count on us to be here no matter how technology or carriers change.

Community outreach

Our community outreach team develops community-friendly solutions and meets with residents to make sure their concerns are heard.



Crown Castle owns, operates and leases more than 40,000 cell towers and approximately 90,000 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.