

## A low-profile upgrade for a high-profile event.

From the Philadelphia Museum of Art to the Franklin Institute to *The Thinker* statue, Philadelphia's tree-lined Benjamin Franklin Parkway is home to some of the nation's most famous icons. In 2015, the city and the wireless carriers who serve the Parkway found themselves with just nine months to prepare for the arrival of a completely different kind of icon—the pope.

Nearly 900,000 people greeted the pope when he arrived in Philadelphia for a public mass during the 2015 World Meeting of Families. To accommodate the anticipated wireless demand and to prepare for future events, Crown Castle was brought in to expand the existing fiber and install additional wireless infrastructure.

### The Need

For many people, the image of Philadelphia is the view from the Parkway to the Museum of Art and its famous "Rocky Steps." There were several challenges we had to overcome to ensure that our installation was unobtrusive and preserved this image.

- Crown Castle coordinated with the planner of the event and obtained approvals from six separate departments: the Philadelphia Streets Department, the Parks Department, the Permitting Department, the Office of Emergency Management, Philadelphia Electric (PECO) and Philadelphia Gas Works (PGW), in addition to obtaining permits from the Pennsylvania State Historic Preservation Office (SHPO).
- Each piece of infrastructure needed to be fully utilized as a shared solution across multiple carriers to preserve the beauty of the Parkway.
- The solution needed to be fiber-based to provide the data capacity necessary to support such large crowds.
- Design, approval, fiber and equipment installation, testing and calibration all had to be completed in less than nine months.
- People would need access to high-bandwidth wireless services like video streaming, photo sharing and social media posting.
- The installation would need to accommodate large crowds at future events such as the 2016 Democratic National Convention, concerts, Fourth of July fireworks and more.



## The Solution

We submitted a proposal for a solution capable of handling the coverage and capacity needs of all the wireless carriers on the Parkway. Leveraging our long-standing relationships in Philadelphia, we were able to quickly get to work expanding our existing network. We installed 37 new small cell nodes on poles in the public right of way, designed to blend in with the existing streetlights. As with other historic Crown Castle installations, like Central Park in New York or the French Quarter in New Orleans, the installation was visually unobtrusive and met the high standards of the Parks Department.

When the crowds gathered and the pope arrived, the network withstood the surge in demand. One carrier reported over 12.6 terabytes of data usage on their network—almost 7.5 times as much as they reported for 2015's biggest NFL game. Wireless customers were able to share their experiences with friends and family around the world, and access to essential emergency services remained available. It's an upgrade that will serve the city and carriers well into the future.



Small cells are installed on utility poles in Philadelphia.

## 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.

### Scalable solutions

Because we design, build, and maintain shared infrastructure, we can seamlessly increase data capacity.

### Collaboration

We involve our partners in every major decision so everyone has a say in the solutions that are deployed.



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.