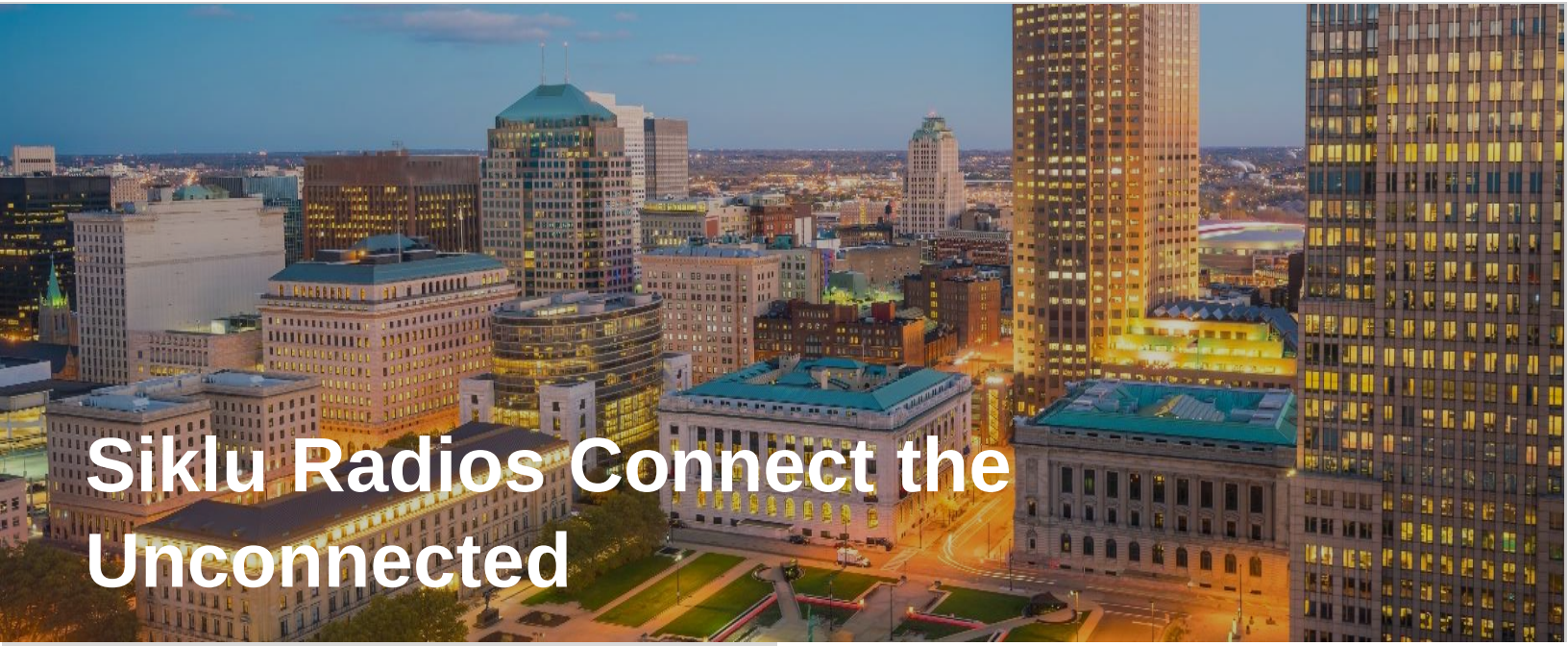
Siklu SUCCESS STORY

digital C



Siklu Radios Connect the Unconnected

The Challenge

Provide high-speed broadband connections to multi-tenant public housing and a homeless shelter in Cleveland, Ohio. There is no fiber infrastructure to the buildings.

The Solution

EtherHaul 1200 Series

The Results

156 public housing units and a homeless shelter were connected with Siklu radios, with each location receiving 1-3 gigabit throughput.

Background

Connect the Unconnected is a Cleveland initiative aimed at bridging the digital divide.

Civic organization Digital C has been working to “Connect the Unconnected” in Cleveland, a city where over 30% of residents have no access to the Internet. In addition to connectivity, recipients are also provided with the opportunity to complete a basic digital literacy training course, teaching the fundamentals of computer and internet use, after which they receive a refurbished computer to utilize at home.

Business Challenge

- Lack of fiber infrastructure to public housing, and prohibitive costs to lay out fiber, beyond the organization’s budget
- Multi-tenant buildings meant any wireless connection had to deliver high bandwidth in order to allow the residents a broadband connection each
- Non-profit organization needed to find a cost-effective solution that could be replicated in additional locations
- Reliable solution that would have high uptime and require as little maintenance as possible

Deployment/System Integration

Connect the Unconnected program brought broadband connections to approximately 800 residents of Cuyahoga Metropolitan Housing Authority high rise communities, as well as residents of the Lutheran Metropolitan Ministries Men's Shelter and students at Stepstone Academy.

Anchored to Digital C's fiber at the St. Vincent's Charity Hospital, the antenna arrays for the Connect the Unconnected network in Cleveland have between one and three antennas per building allowing them to extend fiber-like services. All the buildings in the ring are connected at gigabit speeds. The installation team from Agile Networks tethered and calibrated Siklu mmWave antennas and then connected the wireless antennas from the rooftops to the demarcation points in the respective communication rooms, typically in the basement of each of the residential towers. An Actelis G.Fast solution turbo-charged the existing copper wiring to provide residents with a symmetrical service of, on average, 25-30 Mb/s down and up.

At the Lutheran Men's Shelter, the northerly most node on ring one, the connection from the rooftop to the computer lab was done via a fiber optic cable. A group of 30 men immediately signed up for training. As the first set of computers were connected to the network, a speedtest.net was performed at each station and access at the homeless shelter is now among the fastest Internet connections in the entire City of Cleveland.

In Summary

"We believe in Digital C's mission to use technology for community impact," says Izik Kirshenbaum, Siklu President. 'We're excited to see how millimeter wave technology providing broadband speeds will impact resident's lives."

"The technical architecture of the Cleveland Connect the Unconnected program is scalable and replicable," said Lev Gonick, Chief Executive of Digital C. "It's a good example of using IT to advance the quality of life in a community and serve as a reference architecture for others."