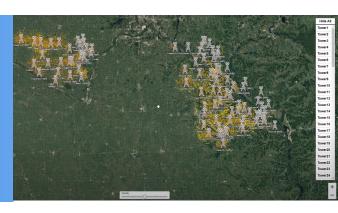


# Hiawatha Broadband Communications Discovers New Connections With cnHeat



"Using cnHeat allows us to avoid spending time on failed installs. Now, we are able to focus on installations that we know will work and prioritize installation time."

JOSEPH GLENDE, WIRELESS NETWORK ENGINEER, HRC





This potential customer called in asking for service; with cnHeat, Joseph Glende is able to see if they have service without having to visit the site.

#### Overview

**IN THE AGE OF COVID-19,** internet service is essential to keep workers connected, students prepared to learn and businesses running. But before internet service can be established for a customer, providers need to determine whether a potential customer can be served or not. Usually, this means an engineer needs to go to a home or business to see if a customer can be installed.

However, with cnHeat, Hiawatha Broadband Communications (HBC) often eliminates the need to send engineers to a site to determine service availability. HBC is a service provider that offers high-speed internet via wireless and fiber to homes and businesses. During the pandemic, HBC has been able to increase install efficiency and successfully meet the increased number of customers requesting service in cities, towns and rural areas throughout southern Minnesota and western Wisconsin utilizing cnHeat on 96 of their sites.

### The Challenge

PREVIOUSLY, THE PROCESS TO FIND whether a customer was qualified for service or not was complicated. Each time a customer asked for service, a visit was required to see if they had service. Nearly 50% of the time, installations were inadequate. This led to increased costs for installation, inefficiencies for installation time and end customers being left without answers about service. To respond to these challenges, HBC aimed to decrease overall cost for successful installations, eliminate failed installations and selectively target market customers that were already within their service area.

#### The Solution

HBC CHOSE CAMBIUM NETWORKS' cnHeat a radio frequency (RF) planning service that generates highly accurate RF predictions using Geographic Information Systems (GIS) data down to one-meter precision. Because optimal locations are identified beforehand, installers can place equipment in the predetermined location.

For each installation, an installation engineer was sent to a potential customer to see if service could be provided. If service was available, the installation proceeded. If service was not available, the installation was abandoned. With cnHeat, HBC's challenges were resolved.

# WHY HBC CHOSE CAMBIUM NETWORKS

- Cambium Networks provides one-meter resolution heatmaps that accurately predict coverage heights at every square meter. This allows for the best installation location to be chosen for a
- cnHeat also tells the installers if an installation is not possible at a location. Using cnHeat saves time on failed installations. With this tool, HBC can focus on what they know will be successful installs and optimize installation time.

#### The Results

**SINCE USING** cnHeat, HBC has been able to accurately predict which customers have service and where to install subscriber modules. "Instead of sitting behind a windshield, we are able to do installs," says Joseph Glende, wireless network engineer at HBC. cnHeat has resulted in decreased time per successful customer install, time saved on failed truck rolls and fewer expenses for the installation team. HBC's customers are experiencing the benefits from cnHeat, too. Less time spent on failed truck rolls and the ability to immediately locate a prime spot for installation quickens the process and decreases the number of visits they need to pay for.

Throughout the COVID-19 crisis, requests for installations have tripled for HBC. This is mostly to meet the needs of customers who suddenly must work remotely and students who need to continue their education from home. With cnHeat on 96 sites, HBC has been able to keep up with the demand and expand their customer base without missing any customers due to a lack of time.

Additionally, HBC used cnHeat to find a connection to a town they previously believed was not reachable: Dodge, Wisconsin. With cnHeat, HBC discovered an intermediate path from a tower on a farm to the town. Now, 100 customers who had limited wireless broadband from a satellite provider can receive high-speed wireless broadband from HBC.

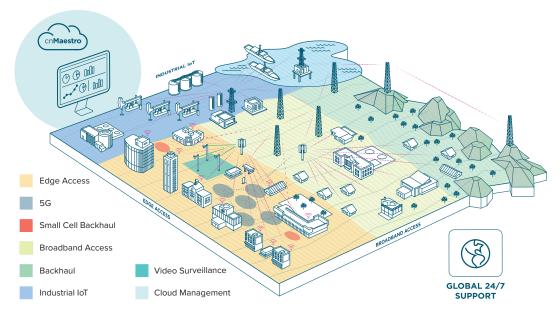
Highlights include:



100 new customers added in one town, previously believed to be unreachable



cnHeat on 96 sites, allowing HBC to keep up with demand



Cambium Networks' gigabit wireless solutions enable municipal, enterprise and service provider operators to tailor connectivity to meet exact requirements and grow as needs evolve.

## **Next Steps**

**CNHEAT CONTINUES TO HELP HBC** find ways to provide coverage to currently unconnected customers. Their findings from cnHeat gives them the insight they need to expand their network and add more clusters of service areas.