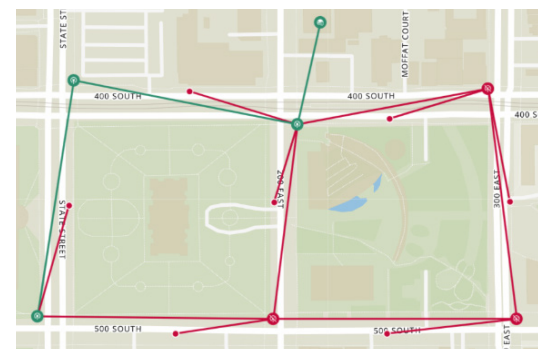**Cambium Networks™**

Salt Lake City Breaks Down Silos to Deliver Public Wi-Fi

Traditional boundaries of municipal services can be obstacles to offering new services like public Wi-Fi. By shattering barriers and building collaboration between public works, park district and city IT, Salt Lake City is able to lead the way in deploying access.

Erin Mendenhall, Mayor of Salt Lake City (SLC), Utah is determined to ensure that every resident can access all that the city has to offer. In addition to social, environmental, transportation and housing issues, she holds that access to information is highly important. City leadership was tasked to find a solution that was affordable, reliable and did not require more IT technicians on the already stretched Infrastructure Management Service (IMS) staff.

The Challenge

The City Connect program s SLC's flagship Digital Equity initiative that activates public Wi-Fi hotspots in community centers throughout the City. "The Washington Square area is in the busy city center," says Nick Kryger, Chief Data Officer, City of Salt Lake. "This is a large open park where there are many social events. Also, the library, city offices and businesses circle the park area."

> "You really need solid Wi-Fi to develop smart city applications. With a secure, quality connection, the system can be extended so people can pay for bills, conduct credit card transactions and create safer environments."
>
> - Nick Kryger, Chief Data Officer, City of Salt Lake

The Solution

The network extends the city's fiber core with fixed wireless broadband access (FWA) providing infrastructure for Wi-Fi access points. The system, which can support hundreds to thousands of simultaneous sessions, is designed to support the thousands of people who attend large events and provides PCI with secure communications for credit card transactions at the farmers' market events.

- **Fixed Wireless Access Infrastructure**

  - cnWave 60 GHz V5000 distribution node (DN) connects up to four other distribution nodes or up to 30 client nodes. V5000 can be used for PTP, PMP and mesh configurations

  - cnWave 60 GHz V1000 client node (CN) with wide-range beamforming for easy installation. Powered by 802.3af PoE, V1000 supports up to 2 Gbps throughput with 1 Gbps in the uplink direction and 1 Gbps in the downlink direction

- **Outdoor Wi-Fi Access**

  - XV2-2T0 outdoor Wi-Fi 6 access points with high efficiency antennas that deliver service up to 1km range, saving cost in equipment and installation

- **Ethernet Switches**

  - cnMatrix indoor and ruggedized switching solutions include the ability to profile devices and automatically place them in the appropriate network segment

- **Cloud Management**

  - cnMaestro offers single pane-of-glass monitoring and management of the entire network
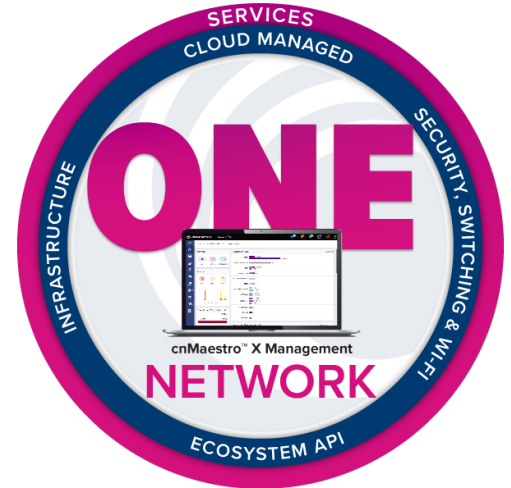
The Results

City Connect in the city park has been active since late 2022. The system has performed well in harsh winter weather and has been active during multiple winter events.

- **Total area covered:** 8 city blocks

- **Throughput on 60 GHz infrastructure:** 1 Gbps

- **% available to date:** Five 9's uptime

- **Number of users in the last 30 days:** 100s/1000s during events

- **Peak number of users to date:** Over 1,000

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Next Steps

"We are looking at extending the capabilities of the system to enable more smart city applications including smart parking, video surveillance for security and also air quality testing," says Kryger. "The team is looking at replicating the network and expanding coverage into a number of new areas where they will provide the most impact to connect people and improve the community."

About Cambium Networks

Cambium Networks enables service providers, enterprises, industrial organizations, and governments to deliver exceptional digital experiences, and device connectivity, with compelling economics. Our ONE Network platform simplifies management of Cambium Networks' wired and wireless broadband and network edge technologies. Our customers can focus more resources on managing their business rather than the network. We make connectivity that just works.

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