



CASE STUDY

Wi-Fi Without Limits: How Latrobe City Council Revolutionized Public Internet Access

Customer Overview

Latrobe City Council, situated in the heart of South East Victoria, Australia, serves the municipality with a focus on enhancing business development, culture, leisure, and community information. As a local governmental entity, it operates multiple facilities, including libraries and recreational centers, primarily serving the residents of Latrobe Valley.

Business Challenge

Previously, Latrobe City Council offered public Wi-Fi only within its internal facilities. However, the Victoria State Government envisioned a broader initiative: deploying citywide, free public Wi-Fi. This project aimed to extend Wi-Fi access outdoors and into more public areas, leveraging existing infrastructure, such as light poles and building





Key Cambium Products Included:

- XV2-2T0 Wi-Fi 6 Outdoor Access Points
- XV2-2X Wi-Fi 6 Indoor Access Points:
- Cambium PTP8xx Microwave Products
- cnMaestro X Network Management

rooftops. The main challenge was to provide unrestricted, high-speed internet access throughout the city, which required a robust and extensive outdoor Wi-Fi network capable of handling a significant user load without compromising performance.

The Latrobe City Council tested both Cambium Networks' and a close competitor's equipment at one of their rural recreation reserves. They set up a temporary mast and tested the distance achieved from both vendors' access points using end-user devices, such as smartphones, tablets and laptops.

On each test, the competitor achieved around 50 meters, whereas the Cambium Networks AP supported effective connectivity over 300 meters.

Technology Solution

To meet this challenge, Latrobe City Council deployed an advanced network solution utilizing Cambium Networks' products. The technology selection focused on maximizing coverage and connectivity to accommodate the new outdoor environments.

Key Cambium Products Included:

- **XV2-2T0 Wi-Fi 6 Outdoor Access Points:** Ensured extensive outdoor coverage with advanced Wi-Fi 6 technology, capable of long-range connectivity and robust performance under various environmental conditions.
- **XV2-2X Wi-Fi 6 Indoor Access Points:** To complement the speed and extended accessibility of the deployed network.
- **Cambium PTP8xx Microwave Products:** Provided reliable backhaul connections, crucial for extending the reach of network services across urban and rural areas without the need for extensive wired infrastructure.
- **cnMaestro X Network Management:** cnMaestro is Cambium Networks' cloud management application managing all devices in the network. cnMaestro X also provides RESTful APIs that were useful to the council.

Field Results

The deployment resulted in expansive public Wi-Fi coverage across Latrobe City Council, significantly enhancing internet access in public spaces. Users can now seamlessly connect to high-speed internet in over 50 council areas and precincts. The network supports anywhere between 500 and 2,000 users per day for a variety of applications, enabling residents and visitors to use online communications platforms in outdoor settings, such as recreational reserves, libraries and car parks.



Business Value

The project successfully delivered citywide Wi-Fi coverage, transforming Latrobe City into a more connected and technologically advanced community. This enhancement has supported the council's goals of improving community services and ensuring that residents and visitors enjoy a high-quality online experience in public areas—all on a budget.

A key goal of the project was to support local jobs. The Latrobe Team designed the solution in-house and used local installers and supplies and worked closely with the local regional Cambium Distributor that is in a neighboring council area.

Conclusion

Latrobe City Council's implementation of Cambium Networks' solutions has set a benchmark for municipal Wi-Fi access, demonstrating the effectiveness of advanced networking technologies in supporting public services and enhancing community life. The project's success underscores the potential for other municipalities to leverage similar technologies to expand their public Wi-Fi offerings and improve community connectivity.



The Cambium solutions

not only met but exceeded our expectations in terms of coverage and reliability. Our community can now enjoy seamless connectivity across the city, which has significantly enhanced public satisfaction.

Latrobe City Council, as part of the funding arrangement with our project sponsor required us to report on the usage of each area where we have deployed equipment. Instead of providing access to the management portal, we were able to use cnMaestro's RESTful APIs to integrate into our existing Power-BI data warehouse and build the reports in a format they required."

- Adam Broadbent, a representative from Latrobe City Council



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.