



City of Las Vegas

Municipal Smart City IoT, public wi-fi, Intelligent Platform.

The City of Las Vegas sought to build a network infrastructure capable of supporting multiple IoT and smart city integrations along with wi-fi access in specific public spaces.

Problem:

Legacy wireless solutions were limited by a number of key factors. Traditional providers lacked the ability to make multiple hops from a single fiber node while maintaining low-degradation throughput, multiple 802.1q SSIDs, and advanced meshing capabilities. Further, existing vendors had limited ability to integrate 3rd party solutions, data streams, and hardware, and experienced difficulty maintaining wireless equipment in the harsh desert environment of Las Vegas.

Solution:

Wi-fiber's open management platform facilitates multi-departmental access to each piece of deployed hardware via a robust, bi-directional REST API. Self-forming and self-healing meshing protocols enable seamless and timely installation of Intelligent Stations, and advanced user functionality through wi-fiber's cloud management system. Finally, wi-fiber's rugged hardware has withstood the high-temperature environment without equipment failure for one full year.

In Lorenzi Park, wi-fiber deployed a six-node canopy from a single gateway, delivering full-capacity throughput at the fifth and final hop. The network maintains an open SSID for public access and a hidden, secure network for City of Las Vegas IoT requirements including environmental sensors and camera placement.

In Stupak and Doolittle Parks, wi-fiber deployed a total of seven Intelligent Stations in a pilot that tested ease of deployment, connectivity, multiple integrations, and security measures. KPIs included snap-to IoT and wi-fi functionality, stream aggregation, platform integration, analytic interpretation, and API viability. Additional KPIs were tested through integrations required for advanced video recognition and environmental sensors.

Conclusion:

Wi-fiber's unique mesh capabilities and solution-specific approach exceeded project expectations and delivered a unified data aggregation solution across multiple city departments.