

# Las Vegas private 5G network fuels community, economic growth



Connectivity is the name of the game for Las Vegas as it forges a path to becoming a smart city showcase. The city has deployed the largest private 5G network in the U.S. to date, along with IoT and automation technologies, in a thriving downtown area known as the Innovation District.

The metro network infrastructure for the 5G network, powered by Juniper routing, facilitates services across city government, public schools, and tourism.

## OVERVIEW

Company	City of Las Vegas
Industry	Government and Non-Profit
Products Used	EX4300, Wired Assurance
Region	Americas

## CUSTOMER SUCCESS AT-A-GLANCE

**Largest private 5G**

Network in the U.S. as of 2023

**641,900+**

Residents in the city of Las Vegas

**42 million**

Tourists and visitors annually

**123**

Miles of fiber support electric and autonomous vehicles and transit

## CHALLENGE

# Provide amenities and last-mile services to the community

The City of Las Vegas aims to be a model smart city by 2025. To achieve that, it relies on a private 5G network and a portfolio of smart city capabilities to facilitate a host of community and transportation services. The network has been completed in the city's Innovation District, and the municipality is rapidly expanding the 5G service to surrounding areas.

"We want to make life better for our community," says Michael Sherwood, chief innovation and technical officer for the City of Las Vegas. "We are building amenities that help people in our community, whether they are visiting for one day or live here for 50 years. We want to provide those amenities in the most efficient way possible, and that's what connectivity does."

The city's network spans public spaces and serves as a platform for local businesses, government, and educational institutions to develop solutions that benefit the entire Las Vegas community.




**SOLUTION**

## Private 5G network paves the way for a smart, connected future

The City of Las Vegas is building the largest open-access municipal private 5G network in the U.S. The city's wireless network uses Citizens Broadband Radio Service (CBRS) spectrum, a band that was previously reserved for the U.S. government.

The Juniper Cloud Metro solution provides aggregation and backhaul for the wireless traffic. The Juniper ACX7024 Cloud Metro Routers and Juniper EX4300 Switches powering the metro network are managed using Juniper Mist Wired Assurance, an AI-driven cloud service that brings visibility and automated operations and service levels to the Juniper switches.

Systems integrator NTT worked with the city to design and build the network. The future-ready network is open and intelligent, allowing any third-party application or end-user device to connect. "You want to be open to what the future has in store," says Sherwood. "We can connect all types of new equipment.."


**OUTCOME**

## Connectivity advances education, community services, and more

Las Vegas is expanding its smart city network beyond the Innovation District to help the broader community advance, including Las Vegas city schools, public safety, and social services. Information generated by connected city systems can be used to make a positive impact on the day-to-day lives of residents and visitors and allow city leaders to make data-driven decisions.

The private 5G network also allows the City of Las Vegas to reduce traffic congestion with creative last-mile transportation solutions and efficient traffic flow for self-driving electric cars along "The Loop" transport tunnels.

The City of Las Vegas chose Juniper not just for its products. Juniper demonstrated a willingness to listen to the city's tech leaders and become an engaged partner, helping Las Vegas and its IT department succeed in the quest to be a smart city showcase.



**"We are building amenities that help people in our community, whether they are visiting for one day or live here for 50 years."**

**Michael Sherwood**  
Chief Innovation and Technical Officer, the City of Las Vegas

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