

Proxim reduces congestion on the streets of San Jose, USA

Introduction

Often referred to as the 'Capital of Silicon Valley' and home to one of the largest concentrations of technology companies, the City of San Jose is one of the fastest growing cities in the USA. Mindful of the population and traffic growth, San Jose decided to upgrade its traffic management system and subsequently secured a \$20 million grant for the Traffic Light Synchronization Program.

Challenge

For the new system traffic system, the San Jose team required a wide area network (WAN) to cover the metropolis of San Jose, enabling approximately 900 traffic signals and 320 traffic surveillance cameras traffic signals to be managed from the city's traffic management center. The WAN would also support traffic information sharing between regional traffic management centers, public safety service providers and emergency operation centers. Additionally, other transportation infrastructure, such as LED street lights, and vehicle speed feedback signs, would rely on this WAN to support real time management capabilities.

For the WAN infrastructure, the city's IT team decided to rely on an extensive network of fiber, copper, and for far-off traffic signals, wireless infrastructure would be deployed. However, due to dense foliage, typically over 30 feet and present throughout the city, the paramount concern for the team was to procure a wireless solution that could communicate despite the obstructions and the severe non line of sight conditions.

Solution

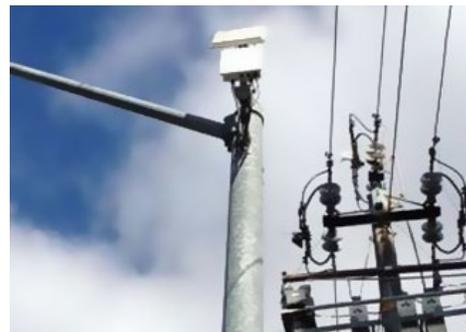
Tsunami[®] multipoint radios were selected as the best solution to meet the stringent outdoor requirements. Leveraging the advantages of WORP[®] and nLoS functionality, the Tsunami[®] multi-point products were able to meet the needs of the city. Tsunami[®] radios relayed real-time information with QoS and high uptime despite being installed between dense foliage obstructing wireless line of sight. The Tsunami[®] network supports over 130 traffic signal controllers, dozen LED street lights gateways, and several vehicle feedback signs.

"Since deployment, more than 50% of the links have been installed among trees and foliage and have worked well, even exceeding our expectations," said Ho Nguyen, Project Manager for the City of San Jose. Over 200 units of Proxim's high power point to multi-point Tsunami[®] 8200 base stations and subscriber units have been installed to ensure San Jose ITS applications are consistently available.

Result:

Proxim's Tsunami[®] product proved itself, demonstrating high performance and extended coverage. **"We wanted to get the best data rate we could to give us flexibilities in the future,"** said Ho. **"On the service side, Proxim has continuously demonstrated its capabilities as a collaborative partner. Proxim has provided superior customer support. They've helped us through the entire process, and we're looking to them for support, both now and in the future."**

By choosing Proxim radios, the City estimates that it has saved over \$10 million in costs and reduced installation time by 70% over implementing a wired solution.



Highlights

- By eliminating the massive process of trenching and cabling, San José City government saves over \$10 Million
- Proxim provides wireless links to over 130 traffic signal controllers, dozen LED street lights gateways, and several vehicle speed feedback signs
- Installation time reduced by almost 70% when compared to wire implementations

About Proxim Wireless

Proxim Wireless is a pioneer and global leader in advanced Wi-Fi, point to point, and point to multipoint outdoor wireless systems that deliver high performance and high availability communications.

With over 30 years of wireless experience, Proxim is recognized for its unparalleled reliability, superior performance and drive for innovation.