



Solution: Cradlepoint NetCloud Service for Mobile • Industry: Law Enforcement • Use Case: Police Vehicles

Burbank Police's Always-Connected Digital Tools Protect Community

Cradlepoint Wireless Edge Solutions Help Police Department Access Important Data From Axon Through LTE & Wi-Fi



Cradlepoint NetCloud is amazing. I use it for everything, such as monitoring each vehicle's data usage and troubleshooting on the fly. And I do it all from a mobile app on my phone."

Garen Essakhanian,

Operations Manager, City of Burbank's IT Department

Success Story Highlights

Challenge — The Burbank Police Department's fleet of high-tech cruisers features the digital tools to help the agency build new levels of public safety and internal efficiency for years to come. However, LTE coverage gaps posed by the geography and terrain of this California community were making it impossible to consistently keep the vehicles' MDTs, video cameras, license plate readers, and other connected devices and applications connected to the Internet.

Solution — Burbank Police deployed Cradlepoint's NetCloud Service for Mobile and ruggedized in-vehicle wireless edge routers featuring built-in LTE modems and robust Wi-Fi, in conjunction with specialized external antennas. The cruisers also leverage Axon's Fleet 2 video camera system, Axon Body 3 body cameras, and the Axon Evidence platform.

Benefits — A comprehensive solution of technologies by Axon Enterprise, Inc., and other companies, all connected by Cradlepoint, ensures critical video footage and other data can be securely connected to the Internet 24x7.

Background & Challenges

The Burbank Police Department (BPD) in Southern California has deployed critical technical equipment to help officers protect and serve the community while keeping citizens and officers as safe as possible. Each BPD cruiser is outfitted with a variety of essential policing tools, including:



MDT



Built-in dashboard screen



Axon's Fleet 2 in-car video system



Video inverter that sends information from an onboard PC to the dash screen



Automatic License Plate Reader (ALPR)



Automatic Vehicle Location (AVL) system that sends GPS coordinates to a server

In 2019, BPD decided to expand its in-vehicle technology even further by adding body-worn cameras from Axon. All of these on-board devices and applications require highly reliable connectivity — including stable Wi-Fi in and around the vehicle and an LTE link from the car to the cloud and headquarters.

However, as BPD continued to expand its digital footprint, it had a few key networking challenges to account for:

Connection Challenges in Mountainous Region

Burbank's landscape includes many mountains and extreme terrain, which makes it difficult to ensure consistent network availability in fast-moving vehicles. Also, the density of vehicles on local roads varies a great deal throughout the day. Because of these variables, there are many spots where one cellular carrier offers much better coverage than other carriers.

Limitations of USB Modems

Previously the department had used USB modems to connect laptops inside its law enforcement vehicles. However, those modems are built for consumer use; they didn't provide Wi-Fi, they lacked durability, and they were difficult to manage and unsuitable for sensitive data.

Solution

To ensure constant connectivity for its many safety-focused technologies and applications, BPD deployed Cradlepoint's NetCloud Service for Mobile and ruggedized in-vehicle wireless edge routers featuring built-in LTE modems. This comprehensive solution includes high-performance LTE and Wi-Fi connectivity, integrated data security features that can be scaled up as needed, centralized network management, and support for nationwide public safety networks.

Connected by Cradlepoint, Axon's Fleet 2 in-car video system, Axon Body 3 body cameras, and Axon Evidence platform ensure that important footage protecting residents and officers can be uploaded and offloaded anytime.





Benefits

Consistent Network Connectivity Across the City

With support for multiple wireless carriers and interoperability with a vast array of external antennas, Cradlepoint routers with built-in LTE modems provide BPD's officers in the field with steady network access throughout this uniquely situated city — and the option of introducing automatic cellular failover to a second network operator if the need arises.



The flexibility of Cradlepoint routers helped us drastically improve network connectivity and signal strength in our police vehicles."

Garen Essakhanian, Operations Manager, City of Burbank's IT Department

Wi-Fi-as-WAN for Fast Video Offload

When officers drive within range of strategically placed hotspots around the city, they can use Cradlepoint's Wi-Fi-as-WAN feature to automatically send video evidence footage from the Axon Fleet system to the Axon Evidence platform.



Network Management & Rapid Troubleshooting From Anywhere

NetCloud makes it easy for the department's IT team back at headquarters, at home, or anywhere to centrally monitor and adjust network performance and data usage, respond to outages, and make security updates. Time that formerly would have been spent troubleshooting each vehicle in person is now much better utilized.

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Scalable Security Options for Protecting Sensitive Information

BPD uses a carrier-provided private network through its Cradlepoint routers to protect citizens' private information. The solution supports other security measures, too, including VPN tunneling as well as IPS/IDS to detect and prevent cyberattacks.

Through NetCloud Manager, the IT team also can monitor an array of security analytics from a single dashboard.

Learn more at cradlepoint.com/mobile-routers

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