Smart cities e onde radio millimetriche

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CAMBIUM NETWORKS

Wireless Fabric by CAMBIUM NETWORKS

A look abroad…North America

- **Lead times for fiber cabling is in the range of 12-16 months**
- **Lead times for ONTs and other critical components also significant**
- **Skilled labor shortages contributes to extend deployment timelines**
- **Many communities are overloaded with permission requests**

Balancing Increasing Costs and Competition

- **Fiber deployment costs remain high in rural and hard to reach areas**
- **Meanwhile, competition continues to increase, creating urgency to deploy**
- **Operators are realizing they need flexibility in access network technologies to achieve goals**
- **Growing number of operators using hybrid fixed wireless and fiber networks**
  - Both for residential and small/medium business customers

60 GHz Deployments Popping Up Everywhere

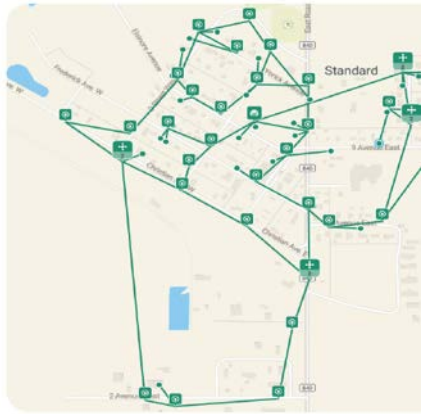
60 GHz is Proven Gbps Infrastructure

Verticals

- Service Providers (WISP's, Carriers, Fiber)
- Enterprise (MDU's, Logistics, Retail)
- Industrial (Oil/Gas, Freight Rail)
- Municipalities (Public Wi-Fi, City Services)

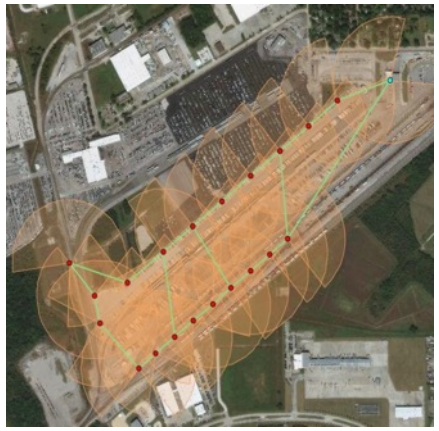
Solutions

- CCTV/Video Surveillance Backhaul
- Wi-Fi Backhaul
- Campus Connectivity
- Residential/Business Internet Access



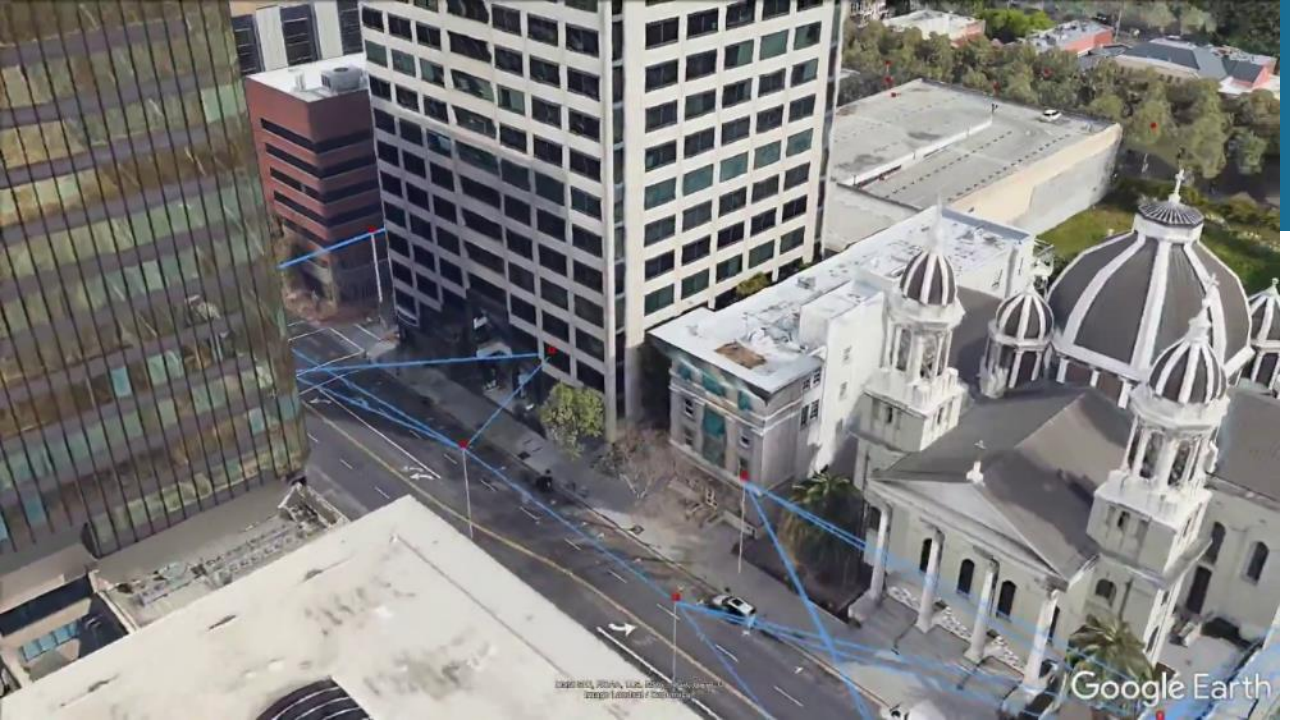
Municipality
Alberta, Canada

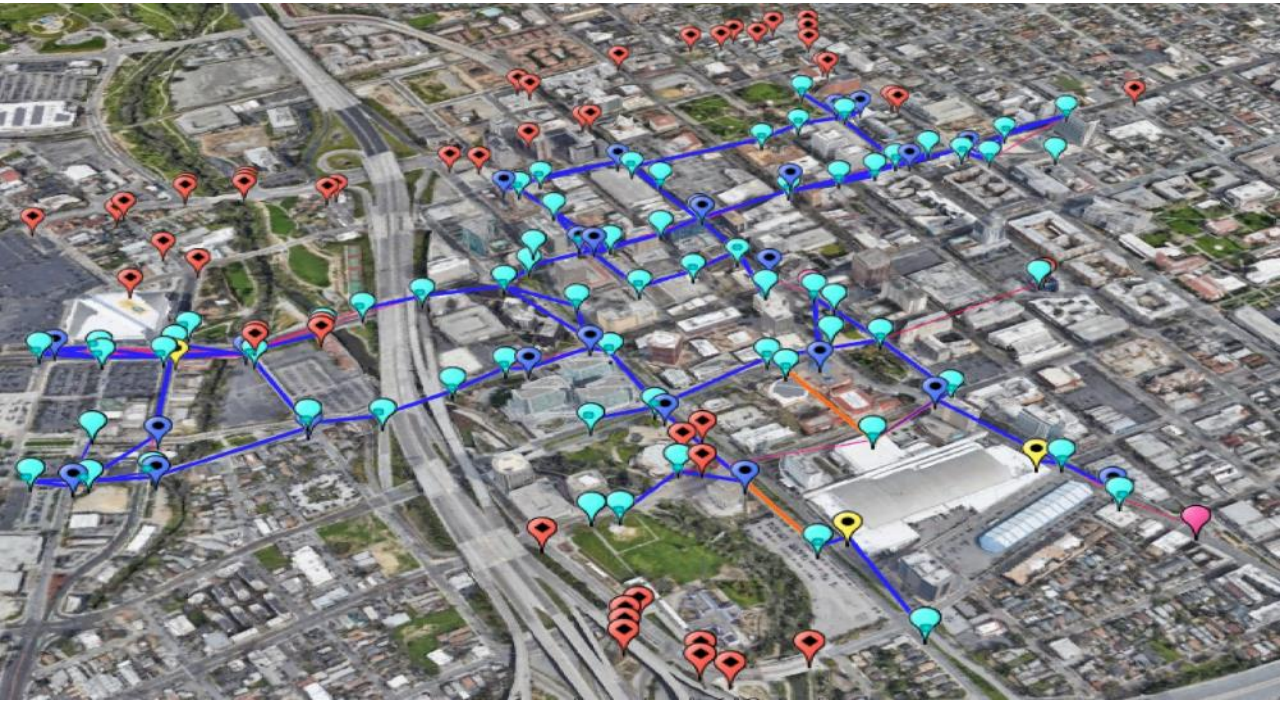
Shopping Mall
Orange County, CA



Freight Railyard
Montreal, Canada

Service Provider
Perth, Australia





City of San Jose

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REQUIREMENTS

- Improving the City's existing digital infrastructure to support San Jose's Smart City Vision and improve digital inclusion.
- Understanding options to improve residential and business broadband internet choices, quality and pricing.
- Promoting availability of gigabit level broadband internet to support economic development and inclusion.

SOLUTION

- Deploying Cambium 60 GHz cnWave V5000 and V1000, provide multi gigabit backhaul solution for City Wi-Fi network transport and campus area networking.

City of Aurora, CO

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- **REQUIREMENTS**
- Improve IT infrastructure, which would benefit public safety, voice and data, LAN extension, video applications and credit card processing.
- With the increasing demand for capacity, City of Aurora desired to deploy a gigabit speed solution to replace existing 50 Mbps links.

SOLUTION

- Deploying 60 GHz cnWave V5000 and V3000 with Mesh configuration to handle the high-density areas.

Private Network: Rail Yard Coverage

REQUIREMENTS

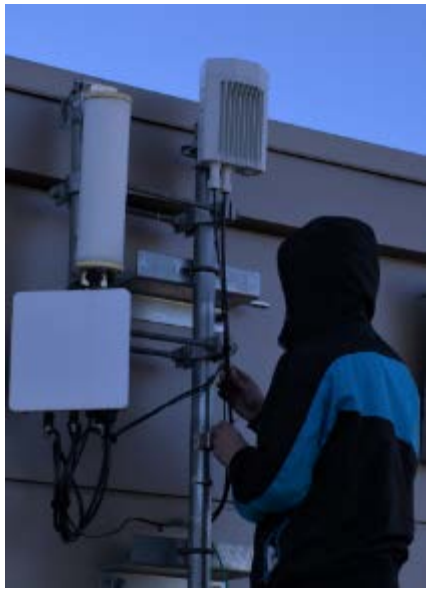
- Provide backhaul for Wi-Fi coverage and video surveillance network.
- Off load large telemetry and video data payloads (Gigabyte/Terabyte) from the train.

SOLUTION

- Deploy 60 GHz cnWave V5000, V3000, and V1000 with Point-to-Point, Point-to-Multipoint, and Mesh configurations.

cnWave 60 GHz
Multi-Gbps at a Fraction of the Cost of Fiber

- **Fast and Simple:**
  - Ladders/rooftops vs. tower climbs
  - Couple of hours vs. days/weeks/months
  - No trenching
- **Familiar Tools**
  - Layer 2 bridged networks
  - PoE power
  - Unlicensed spectrum doesn't interfere with 5 GHz
- **Fiber-like speeds wherever needed**
  - Building to Building connectivity
  - Wi-Fi extension
  - Video Surveillance
  - IoT
  - Temporary events



THANKS

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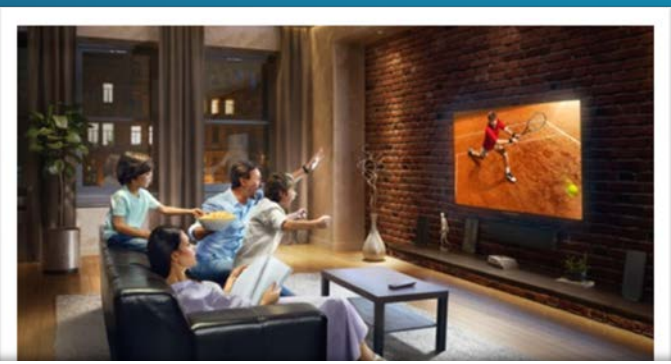

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