



Case Study

A Western U.S. City Provides Free Public Wi-Fi to Underserved Students and Families

Industry:
Government

CDCT provided:

- Multilayered network design
- Services in partnership with leading technology vendors
- Planning and deployment of an outdoor Wi-Fi/5G solution
- Electrical remediation services and tower construction
- Expedited solutioning and concurrent phased deployment
- Ongoing network monitoring and maintenance
- Professional Services
- Support Services

Connected Workforce services:

- Labs Integration Services
- Service desk support
- National Repair Center “Hot-Swap” support

The client

The client is a city in the western U.S. that is home to more than 538,000 residents. Within the city’s greater metropolitan area are five school districts as well as several collegiate institutions.

With one of the highest poverty rates out of all western U.S. Metropolitan Statistical Areas, approximately one in five residents live below the poverty line, with higher rates of poverty among families and school-aged children.

The challenge: Ensuring education and economic opportunity for students and workers

Historically underserved neighborhoods in the city face more than just health concerns brought on by the COVID-19 pandemic. Of the city’s roughly 212,000 households, more than 44,000 households are in poverty and more than 32,000 households have no reliable internet access.

Between poverty, infrastructure limitations, and the effects of the pandemic, thousands of students, families, and workers have been left without reliable access to work and education.

Prior to the pandemic, the City had already been considering options for improved connectivity and next generation technologies via Smart City vision and strategy. When the pandemic hit, the city government received \$3.5 million in CARES Act funding, and the conversation pivoted quickly to investing in infrastructure that will make broadband internet access available to the city’s populations suffering the effects of this critical digital divide.

The solution: A comprehensive metropolitan Citizen Broadband Radio Service (CBRS) network with accelerated execution

The client put together a request for proposals, requiring responses include all solutions rolled into a single contract with final pricing and single-point accountability. Building on our existing 10+-year relationship with the City, Insight Cloud + Data Center Transformation (CDCT), in collaboration with Connected Workforce, Tilson Technology, JMA Wireless, Sierra Wireless, and Geoverse, won the bid for this large-scale, time-sensitive project against several leading competitors.

The Insight services team has begun Phase 1 implementation, to be completed in phases over an expedited 30–45-day schedule per federal requirements: surveys and design, cell construction, go-live, maintenance break/fix support, and transition to managed services. Beginning in early 2021, Insight teams will begin implementation of Phase 2, in which service will be expanded to add approximately 7,000 more public Wi-Fi endpoints across 50–70+ sites.

Insight teams are leading entitlement efforts with close support from third-party engineering, project management, and manufacturers. JMA Wireless is supporting the build with cutting-edge X-RAN® technology, with installation and commissioning of a MIMO network spanning 40 total sites carried out by Insight and Tilson. Five thousand Sierra Wireless® AirLink® RV55 endpoint devices will be deployed in residential locations. Post-deployment, Geoverse and Sierra Wireless, in conjunction with Insight, will provide remote monitoring and end-user support for the network infrastructure and end-user devices. Additionally, Tilson will pre-stage several IoT-based gateways at selected sites in support of a Smart City-based Cisco® LoRaWAN® project initiative, leveraging additional support from Insight's Digital Innovation team.

Having performed extensive due diligence, and with a clear roadmap for execution, Insight and client teams are confident in completing Phase 1 within the federally required 30–45 day timeline.

The benefits: Free, reliable internet access for more than 12,500 city residents

Through working with Insight and strategic solution partners, the client will be able to provide free public Wi-Fi internet access to 5,000 households — more than 12,500 individuals — in Phase 1 alone. The first 5,000 endpoint devices will be installed with a specific focus on both city teleworkers and student homes to improve the community's access to education.

In Phase 2, endpoints and network core infrastructure will be deployed with a strategic focus on public transportation and other public areas to maximize resident access. The network design leverages as much existing infrastructure as possible, including cell locations on police and fire department properties, to expedite services delivery and control costs. The exceptional service delivery and rapid response of Insight teams in support of our long-time client will improve educational and economic opportunity for resident students and workers for years to come.

Benefits:

Free public Wi-Fi access for

12,500+

students and teleworkers

5 school districts supported

with strategic placement of in-home endpoints



Cost-effective solution design leveraging existing infrastructure

Fully managed and optimized network through an expert support team



Phase 2 implementation for 2021 to deploy

7,000+

additional endpoints and additional CBRS network sites