SmartWAVE Technologies
Enabling the Wireless Generation...

San Jose, CA

ACCESS EASTSIDE

Eastside Union High School District
Digital Divide Project

"Every child deserves the opportunity to thrive in school, and we know that connecting to reliable high speed internet access can significantly enhance their chances of academic success."

Sam Liccardo
Mayor, City of San Jose

NETWORK TOPOLOGY

Backhaul Layer

This is fiber and wireless PTP equipment to extend internet connectivity into WiFi coverage zones. This is typically "high site" to "high site" with equipment located on towers, water towers, and city buildings.

Capacity Injection Layer

Wireless (PTMP) equipment used to inject capacity into Mesh Wi-Fi clusters throughout the coverage areas. This is typically "high site" to "low site" extension of the Backhaul layer to the Mesh layer with PTP base stations installed on towers, water tanks, and buildings and PTMP subscriber units installed on streetlights and traffic signals.

Mesh Access Layer

Wi-Fi Mesh technology extends services throughout a coverage area and provides for client access to WiFi Devices. This is typically "low site" to "low site" connection with Mesh Wi-Fi access points installed on streetlights and traffic signals.

PROJECT OVERVIEW

Access Eastside is a project to extend internet connectivity into the James Lick High School Attendance area. The project is the result of a partnership between the City of San Jose and the Eastside Union High School District (ESUHSD), with the goal of connecting underserved and low-income students in San Jose with affordable broadband internet service.

SOLUTIONS

Through the partnership, the city constructed the free network and will manage the network to provide ongoing maintenance through SmartWAVE. The school district is responsible for managing registration, providing passcodes, and offering support to help ESUHSD students and their families access the free WiFi network. ESUHSD is funding the project via voter approved bond funding.

The project goal was to provide coverage to the attendance area defined as "to the doorstep of attendee homes" in the area. SmartWAVE used the attendee address information to identify available radio mounting assets that were closest to the addresses provided resulting in optimal performance for the solution deployed. ESUHSD is complimenting the WiFi network with Sprint MiFi devices to the areas the WiFi network doesn't reach.