## The Building Blocks of a Smart City: Welcome to Boynton Beach

On a mission to innovate, the city of Boynton Beach needed to update the historic Town Square with a new infrastructure, additional security, and control.



The City of Boynton Beach is respected and recognized by its peers as being forward thinking and technology oriented. For years, their core infrastructure has been Extreme Networks but individual buildings and departments were not joined together. With the redevelopment project, the town leaders took on the feat of integrating technology systems to resolve limited and restricted cross department collaboration and community access. As the plan comes together, this city is becoming a high performing organization because of its ability to maintain effective and efficient service delivery as well as continued excellence through their technology support and services.

CUSTOMER OVERVIEW

A major redevelopment project was commenced for the historic Town Square, a 16-acre site in downtown Boynton Beach. The renovation project includes the historic Boynton Beach High School into a cultural center, residential and retail spaces, a hotel, playground, amphitheater, open spaces, parking garages, a fire station, and a new city hall with a new library. The art center, civic center, Madsen Center and Shuffleboard Courts, Civic Center Playground, Kid's Kingdom Playground and Library have been demolished as part of the Town Square redevelopment project. The new City Hall opened in July 2020 in Downtown Boynton, followed by the Library. The new Cultural Center, started in 2017, opened in November 2020.

This tropical city on the east side of south Florida has approximately 78,000 residents and is seeing increasing numbers in visitors every year. Its close proximity to the beautiful Palm Beaches, three major airports and abundance of seaside activities, makes it a perfect vacation spot for families. Boynton Beach offers hundreds of restaurants, shops and entertainment for residents and visitors to enjoy the tropical lifestyle.

The City of Boynton Beach strives to create a welcoming, sustainable community that provides growth and innovative opportunities for economic development. Working with STEP CG, Boynton Beach implemented an Extreme Networks upgrade, allowing city employees and residents a smooth transition to remote working and learning during the COVID-19 global pandemic.

## THE MAIN CHALLENGE

The City of Boynton Beach is on a mission to innovate. A previously outdated city hall has been demolished and a new four-story, state of the art office building and library have been built. The historic Boynton Beach High School has been transformed into an arts and cultural center, and Town Square is undergoing construction to update residential and retail spaces, a playground, amphitheater, new fire station, and a new hotel. Because of all these structural updates, the City of Boynton Beach determined it was time they updated their network capabilities as well. The city of Boynton Beach has relied on Extreme Networks to deliver network solutions that span across the entire city, including libraries, schools, city hall, and the police department for 20 years. "With STEP CG, we were able to sit down and whiteboard a design to upgrade the entire city and take our technology to where I knew we needed to go," remarked Charles Stevens.

With an increase in IoT devices, heightened commitment to security and the need for additional network control, Charles Stevens, ITS Network Manager, decided it was the perfect time to shop for a new network infrastructure. The library needed different wireless networks for children, adults, and employees. With the old system all these control functions had to be done manually and required manual backups before the new infrastructure was created.

"

The sales and engineering team were really instrumental in the design of the system. We whiteboarded the design, discussed ideas and best practices, and came up with a plan.

> Charles Stevens, ITS Network Manager

STEP CG helped steer Boynton Beach to their exact product needs. Through further discussions with Extreme Networks and STEP CG, the City of Boynton Beach decided to utilized Extreme's sweep of products to fit all their needs.

## DEPLOYMENT

Boynton Beach is currently deploying Extreme Networks throughout the city and will continue to implement these technologies over the next couple years. Today, this includes Extreme Fabric Connect in 11 city buildings, ExtremeWireless in 21 city buildings, Extreme Management Center configured in 53 switch stacks, and ExtremeControl in 5 city buildings which includes about 80% of employees.

Boynton Beach City Hall had been temporarily moved to different buildings while awaiting the construction of the new city hall. This resulted in multiple different networks, switches, and small periods of network downtime. Charles feared that switching to a new network would result in even more downtime.

With help from STEP CG, the only downtime was planned, very short, and the implementation of ExtremeWireless was smooth and simple. According to Stevens, "The project went better than expected and our IT Helpdesk team was happy that they could change device group membership themselves, because there was absolutely no programming required on the network switches." Extreme Automated Campus reduced installation and operation complexity to make future transfers simple, fast, and easy.

"

Our STEP CG engineer was an expert on Extreme Networks technologies and during the configuration of the systems transferred that knowledge to our City of Boynton Beach technicians so they can maintain the system and add additional locations as needed. It was great working with someone like that.

> Charles Stevens, ITS Network Manager

## **RESULTS • SOLUTION • FUTURE**

Extreme Management Center has simplified the management of their network. Previously the IT team had to program all network infrastructure manually, now with IoT and Guest Manager (ExtremeGuest), the helpdesk staff, and the library IT staff have control of their own networks. In combination with ExtremeFabric, the City of Boynton Beach has built a faster network with increased security and resiliency.

The new city hall and library and network control has allowed Boynton Beach to, "provide the citizens with the ability to connect to the network, either wired or wireless, in a secure fashion. Right now, because of COVID-19, our schools are operating remotely. Every lobby table is filled with people coming in to access the wireless network and attend school remotely." His goal is to continue to support the citizens of Boynton Beach as much as possible through innovative efforts.

6

Extreme Fabric Connect has drastically improved our efficiency, resiliency, and security.

 Charles Stevens, ITS Network Manager

Future plans involve expanding full wireless coverage to all city buildings. The City of Boynton Beach is on a mission to create an innovative and welcoming community.



Photo Credit: Welcome to Boynton Beach

STEPcg

513.795.6000 www.stepcg.com | info@stepcg.com 50 East RiverCenter Boulevard Technology Towers Office Building 1, Suite 900 Covington, Kentucky 41011