

The City of Cayce improves life for residents—using a smaller workforce than similar cities

From repairs to public safety, the City harnesses Ethernet and FIA to free employees to shine on the job and in the community

The City of Cayce, SC, has a population of more than 12,500 residents. Like many local governments, its workforce outgrew a central location. In 2012, IT Director Roger Marini began to meet this challenge by upgrading the City's Spectrum Enterprise infrastructure so off-site employees could collaborate, access email and share resources as efficiently as if they were working at the fiber-enabled City Hall campus. By 2017, however, a new set of challenges prompted Marini to take a fresh look at ways to improve everything from administrative procedures to public safety.

“Cayce employees, including police officers, can now respond to residents better and faster because they’re operating with access to resources at City-Hall speed, no matter where they actually are.”

—Roger Marini

Challenges

Contain rising labor costs

As with any City government, payroll is a major budget challenge for Cayce. Between the City's evolving needs and residents' expectations for new services, it was critical to increase productivity. The challenge was to do it without increasing the size (and cost) of the City's workforce.

Remove hurdles that kept the City from expanding its use of cloud resources

The existing broadband on Cayce's network supported all the City was doing with its on-premise servers, along with data replication to the cloud and Microsoft Office 365 for email. However, Marini lacked the capacity to add more cloud applications and have them run as efficiently at remote locations, such as the utilities division and waste water treatment plants, as they did for workers on the City Hall campus.

Cut work order delays

Marini says the City's paper-based process “hamstrung everything from pothole repairs to turning water on or off for residents.” Crews lost hours traveling back and forth from the field to City Hall to pick up work orders, fill out work reports and hand them



Roger Marini, IT Director
Client since 1995

Client profile



Company

City of Cayce, South Carolina

Industry

Government

Services

Ethernet Services, Fiber Internet Access, PRI Voice, Business Internet

off to someone else to enter into the computer system. When delinquent water bills were paid, for instance, it took an entire day for water to be turned back on.

Comply with FBI and SLED public safety network requirements

Since the police substation is remote from the City Hall campus, the City needed to make sure any criminal justice information flowing over the network met stringent new data encryption standards set by the Federal Bureau of Investigation and South Carolina Law Enforcement Division.

More police presence at headquarters than in the community

During their shifts, police officers had less time to be out in the community because of the hours spent traveling between their substation and City Hall to handle paperwork. In addition, vandalism at Cayce parks was increasing and police had no way to track down—or prove—who was responsible.

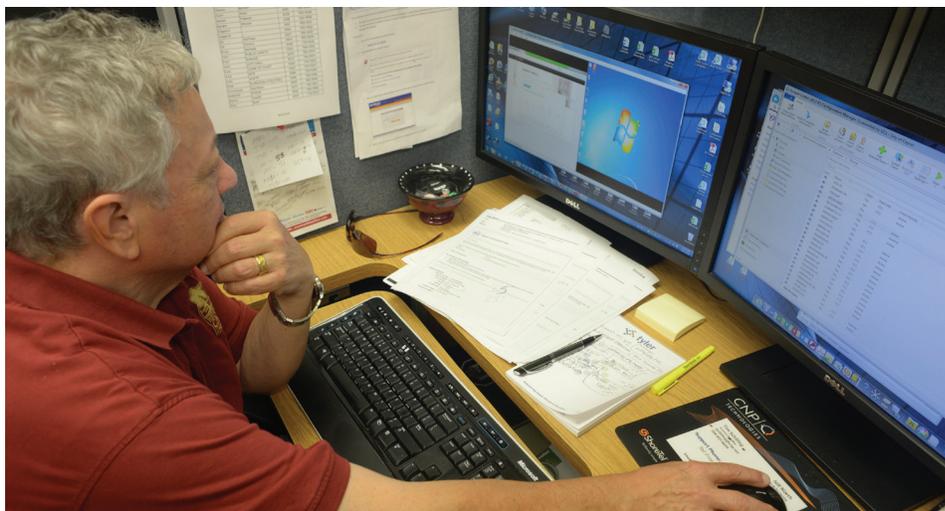
Solutions

Link locations with each other and with new resources

Cayce increased the top speed of its Spectrum Enterprise Ethernet Private Line (EPL) network from 250 Mbps to 500 Mbps, while also doubling the speed of Fiber Internet Access (FIA) circuits connecting each location to the EPL. Now, all locations are not only connected to City Hall via the Internet: even off-site facilities operate with the same high-speed connectivity to cloud-based resources as employees working inside City Hall.

Equip police substations with new public safety tools

For the police substation, FIA connectivity was increased to 100 Mbps to support video surveillance



With over 100 technology employees dispersed around the City, an Ethernet Private Line solution from Spectrum Enterprise gives everyone a seamless connection to City Hall.

cameras installed in a nearby public park. Because the EPL brings all employees onto the same domain, just one PRI voice circuit is needed. This accelerates police responsiveness because callers can reach law enforcement personnel directly and calls can be transferred between substation and headquarters personnel without delays.

Increase security safeguards

To meet the broadband and security requirements of FBI and SLED encryption standards, Marini supervised a major network redesign that harnesses fiber's capacity and Spectrum Enterprise network security features. This ensures sensitive information, such as criminal justice files, can flow from police headquarters to substations securely—but without the long wait-times that agencies often expect when sending and receiving encrypted data.

An extra layer of business continuity

In addition to the resiliency of the Ethernet solution and cloud back up, the City continues to rely on its 100 x 10 Mbps coax Business Internet

as a “back door.” If there were ever network problems at the main City Hall location, it could serve as a VPN line, enabling Marini's team to use the off-site locations' Internet connectivity as a work-around.

Results

Better services for residents with fewer employees than other cities

The network's high-speed fiber is enabling the City to re-engineer administrative processes to respond more efficiently to requests for park maintenance and repairs, business licenses, water hook-ups, and other City services. Plus, Cayce is achieving this high level of responsiveness with just 180 City workers, about half the workforce of other similarly sized cities in South Carolina.

IT costs reduced by pushing more applications to the cloud

Having employees all on one network gives Cayce's IT team better control over hardware and software configuration. In addition, Marini says, “more and more of our application providers are switching to cloud-based products. Prices for these apps have been dropping, too,

making them more attractive than server-based apps.” While he says that he hasn’t yet bought his last physical server, he’s no longer worried about slow connectivity making it difficult to use cloud-based resources efficiently. He is looking at moving some of the City’s file storage to the cloud, along with evaluating new options for financial and public safety applications.

More time focused on serving residents and less time spent on paperwork

Armed with fiber broadband, the City is re-engineering many administrative processes. For instance: crews reading water meters and repairing water lines no longer have to travel back and forth to City Hall to turn in completed-job reports and pick up new batches of work orders. Instead, work orders can be dispatched to laptops in workers’ vehicles on a faster “as-generated” basis. Workers can complete reports in the field, entering information directly into the computer. Work orders don’t pile up, workers complete more jobs each day and the person who used to enter completed-job reports into the computer has time available to focus on new initiatives within the utilities division.

Lower operating costs—and higher security

Cayce’s IT team found that tying all the locations together reduced the cost of having people work at remote sites. It also eliminated the security concerns of having employees use personal Internet and email to conduct official City business from the field.

Greater police presence in the community

Officers spend more time out in City neighborhoods. Their trips to the public safety facility on the City Hall campus are minimal. Officers file reports, get information and collaborate with on-campus personnel directly from their substations.

“Our biggest cost is labor. Our City has made a commitment to investing money in technology so the people we have can be more efficient. Because of what we’re doing with Spectrum Enterprise, we can adjust our administrative procedures and take more advantage of the technology we have.”

—Roger Marini

Vandalism has also been reduced

Because Cayce’s police substations are on the EPL, images from video cameras in the park are transmitted quickly enough so officers can monitor the parks in real-time. Footage is also recorded on a DVR so if there is vandalism or problems in the park at any hour, police can go back and see what happened. For parks that aren’t near police substations, Spectrum Enterprise connectivity enables police to access security camera recordings via the Internet. “We can figure out who the bad guys are,” Marini says. “That’s something we couldn’t do before.”

Continual improvement

From letting residents know about “boil water” alerts, to giving repair crews fast access to City maps, Cayce is committed to providing the technology workers need to do an outstanding job serving residents. “Thanks to our Spectrum Enterprise solution,” Marini says, “neither performance nor innovation is limited because we’re running out of memory, computer space or bandwidth.”

About Spectrum Enterprise

Spectrum Enterprise, a part of Charter Communications, is a national provider of scalable, fiber-based technology solutions serving many of America’s largest businesses and communications service providers. The broad Spectrum Enterprise portfolio includes networking and managed services solutions, including Internet access, Ethernet and Managed Network Services, Voice and TV solutions, Managed Application, Cloud Infrastructure and Managed Hosting Services. Our industry-leading team of experts works closely with clients to achieve greater business success by providing solutions designed to meet their evolving needs. For more information, visit enterprise.spectrum.com.

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