



Case Study

Citizens Telephone Cooperative
Partners With Calix Premier Support
to Improve Mean Time to Restore
by 88 Percent



COMPANY

Citizens Telephone Cooperative

COMPANY TYPE

Regional full-service communications provider

WEBSITE

citizens.coop

LOCATION

Floyd, Virginia

SERVICES

Residential and business services including internet, VoIP, IPTV, web and email hosting, and security

MEMBERS

6,000 members

THE CHALLENGE

Citizens Telephone Cooperative can trace its roots back to 1914 when landline telephone service was first established in rural Floyd County, Virginia. Since then, the member-owned cooperative has expanded to provide a range of services to residents and businesses including internet, voice, TV, hosting services, and security. The mission has always been to provide quality service, excellent support, and advanced technology.

In 2016, Citizens completed a fiber to the home (FTTH) project in the town of Floyd, expanding a year later to build out the rest of its traditional service footprint. Citizens also operates a regional open access fiber network to provide wholesale transport and internet bandwidth to a variety of service providers, as well as services to first responders, educational institutions, and medical facilities.

Citizens faced several support-related challenges. Though Citizens serves more customers and spans a larger service area than ever, there's a disproportionately lean operations team that keeps everything running smoothly. With four central office (CO) technicians and three customer care support specialists, they work to resolve as many calls as possible in business hours. A third-party network operations center (NOC) handles overflow calls and provides after-hours support. Citizens' staffing challenge is also exacerbated by a phenomenon known as "boomer brain drain," where highly experienced staff retire taking with them years of accumulated knowledge that is hard to replace.

A related priority is keeping up with rapidly changing technology, particularly in the customer premises where the number of connected devices, services, and applications is exploding. Many subscribers don't have a deep understanding of the technology in their homes, so they turn to Citizens for assistance for help with any problem—large or small.

As a co-op, Citizens is keenly focused on ensuring that members receive the best possible service. While Citizens doesn't experience frequent network outages, insights when any issues occurred were incredibly helpful. They also wanted to be able to optimize their operations and vendor support to keep up with network expansion and the rollout of new services.

THE SOLUTION

The Citizens network is a complex, multi-technology environment. For the fiber infrastructure, they have deployed an end-to-end Calix network including the Intelligent Access EDGE platform and E7-2 Intelligent Modular Systems, as well as the Revenue EDGE for residential subscribers. The Citizens CO team also maintains traditional Calix platforms as well as infrastructure from other vendors.

To augment network operations, Citizens partnered with Calix Premier Support Services. Premier Support gives Citizens fast, direct access to top-notch expertise. Whether it's to help resolve a complex network problem, turn up new services, or streamline time-consuming processes such as software upgrades, Calix Premier Support has become an extension of the Citizens operations team.

As part of the onboarding process, Calix developed a Citizens network "wiki" that details the Citizens network topology. It also provides VPN connections for Calix Support Engineering Specialists to log in to the network if a TeamViewer isn't available. The Calix Support Engineering Specialists also familiarize themselves with the customer's network. This extra step ensures that Calix Premier Support has a deeper understanding of the BSP's network and systems which aids in speeding up support activities.

Citizens also needed to simplify and streamline the process of running software upgrades for customer premises systems. Because upgrades are so time-consuming and impact service, Citizens would typically complete them during an overnight maintenance window. Rather than designating a Citizens technician to stay up all night (and possibly multiple nights) for software upgrades, Premier Support now takes care of it for them. Citizens cut the number of hours their techs spend running upgrades to zero.

Citizens Central Office Manager Neil Bolt explained:

When we were considering Calix Premier Support, the biggest deciding factor for me was the fast response. When you have a service outage, the knowledge that in less than 30 minutes, you'll have the support to guide you through is quite comforting. One of my team members said that Premier Support has kept him from getting ulcers. That really says it all."

Calix Premier Customer Support



24/7 Access

Calix expertise available around the clock.



Fast Response

Sub-30-minute response for all service-affecting issues.



Access to Experts

Support Engineering Specialists know the network and technology.



Software Upgrades

Experience Innovation Platform software upgrades four times per year.



Skills Building

Discounts on critical AXOS and EXOS education courses.



Technical Guidance

Biweekly office hours with Calix technical experts.

THE RESULTS

Through their partnership with Calix Premier Support, Citizens saw big changes across several areas of their support operations. With a focus on the exceptional subscriber experience, a major goal was to reduce outage times. Citizens also wanted to be able to resolve issues on the first call—or ideally, avoid calls altogether by addressing problems before subscribers were aware. In just five months with Premier Support, Citizens slashed their mean time to restore (MTTR) by **88 percent**. They also cut their mean time to close by **29 percent** in the same period.

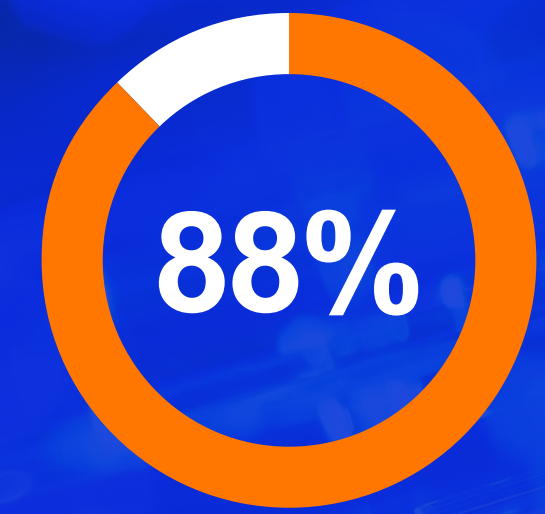
One recent episode underscores the value that Premier Support brings to Citizens. The cooperative suddenly had an outage in an area served by an ERPS (Ethernet Ring Protection Switching) ring. The Citizens operations team didn't initially know what was causing the issue, but they could see that the ring was being flooded by data. It turned out that one of their Active Ethernet customers generated a multicast packet storm that took one ring down—then cascaded into other rings.

This was not an everyday situation, so they contacted Premier Support immediately. Although many of the 900

residential and business subscribers on the ring were impacted by the outage, Premier Support was able to quickly triage the situation, isolate the problem, and restore service. What would have normally taken hours to resolve took minutes.

“Working with Calix Premier Support has transformed how we work. We're able to be more proactive, getting the upgrades out on the equipment when we may have skipped it previously due to the time it takes,” continued Bolt. “We've been able to elevate our service and expand the capabilities of our team. That has been critical for us, as we have such a small team with varying levels of experience and skills. With Premier Support we always have a virtual team of experts, just a phone call or a few keystrokes away.”

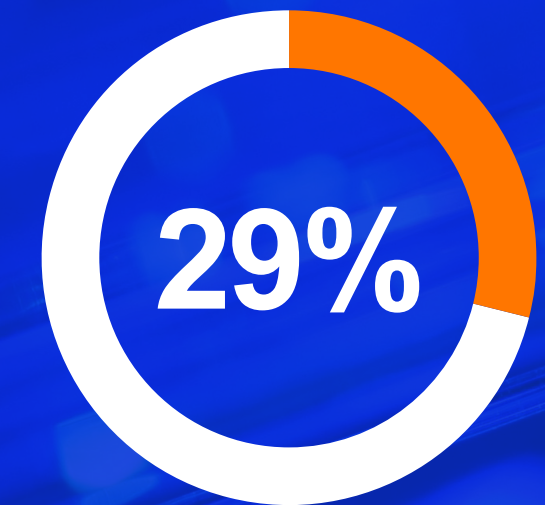
Find out more about Calix Support by scheduling a [360 Services Consult](#) today.



Reduction in Mean Time to Restore

(time to get the customer back up and running).

They have seen another **23%** year to date as well in 2022.



Reduction in Mean Time to Close

(time to resolve the case in its entirety).

For 2022, they have improved that number by **26%** as well.