


Cumberland Connect Turns Network Resiliency Into a Winning Competitive Differentiator



The Challenge

Cumberland Connect is the fiber subsidiary of Cumberland Electric Membership Corporation (CEMC). Their large service area covers more than 100,000 locations across five counties in mid-Tennessee. In urban areas, they compete with Tier 1 cable and telecom providers, but, in many rural areas, they were the first to deploy high-speed fiber.

Despite deploying a state-of-the-art network, Cumberland Connect is not immune to outages. In the major storms that hit their community in March 2023—the worst for the area in nearly 30 years more than 110 mainline locations suffered service-impacting damage.

This highlighted the need for a more effective outage management system with real-time updates on impacted locations. Cumberland sought to identify issues quickly, respond efficiently, and proactively communicate with subscribers throughout the resolution process.

The Solution

Cumberland Connect built their state-of-the-art fiber network on the Calix Broadband Platform. On the access side, Cumberland runs the Calix Intelligent Access EDGE™ E7-2 modular system, allowing them to simplify operations and scale with demand.

This end-to-end platform enabled Cumberland to build a highly available and resilient network designed to eradicate any single point of failure. For example, using geographically diverse data centers, Cumberland's network rings now have more than one route to the core network. This allows everything to seamlessly failover to the back-up location during an incident.



COMPANY

Cumberland Connect

YEAR FOUNDED

2019

COMPANY TYPE

Cooperative

WEBSITE

www.cumberlandconnect.com

HEADQUARTERS

Clarksville, Tennessee

SERVICES

Internet, Phone, Business

SUBSCRIBERS

38,000+





Case Study

In the rare occasions when outages do occur, Cumberland's operations team benefits from the actionable insights in Operations Cloud to quickly identify the outage's root cause and dispatch the right team—reducing mean time to repair (MTTR). The platform also enables Cumberland with [Calix Cloud®](#), including [Operations Cloud](#) for instant insights and visibility into everything occurring in the network; [Service Cloud](#) for highly personalized customer support; and [Engagement Cloud](#) for data-driven marketing and engagement campaigns.

By leveraging the full power of Calix Cloud, Cumberland is significantly improving the speed and quality of communications between internal teams. This ensures that operations, field, and customer service all have access to relevant outage information at their fingertips.

The Results

Network reliability—and Cumberland's quick response to outages when they occur—is a key differentiator. In one instance, a larger rival had a significant outage that lasted more than two days and, as a result, lost nearly 300 subscribers in one week. Cumberland's reputation for network reliability—a sentiment shared on local social media—was why subscribers switched to them.

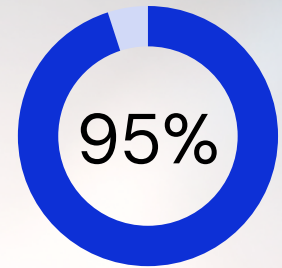
Cumberland's outage management system was tested during the March 2023 storms. Using Operations Cloud, Cumberland received critical alarms from the optical network terminals (ONTs) and optical line terminals (OLTs) affected by the power outage. Cumberland combined this data with their parent company's electric grid information to generate real-time maps of impacted systems.

With this information, Cumberland can quickly identify the outage's root cause, dispatch the right team, and reduce MTTR. The accuracy of the data means Cumberland has reduced their unnecessary truck rolls to just 5 percent—a 95 percent increase in truck roll efficiency. They also leverage insights from Calix Cloud to proactively keep subscribers informed throughout the repair process, minimizing calls to service centers. This proactive approach—often informing subscribers of issues before they are aware has driven Cumberland's exceptional +90 Net Promoter Score and 98 percent customer satisfaction (CSAT) rating.

[Watch our webinar](#) to learn more about how Cumberland designed a highly available network and robust outage management system.

"By using the Calix Broadband Platform, we continue to reduce costs and mean time to repair while boosting customer satisfaction. It has been critical for us to have the right tools to react quickly during a mass outage, allowing us to respond efficiently and effectively to the needs of our members."

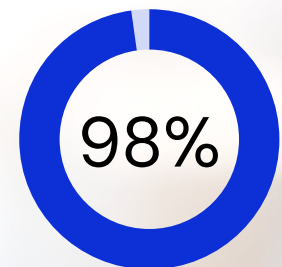
Mike Neverdusky,
Network Operations Manager



Increase in Truck Roll Efficiency

+90

Net Promoter ScoreSM (NPS[®])



Customer Satisfaction (CSAT) Rating

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