



AN INTELLIGENT NETWORK FOR A SMART COMMUNITY

8 Smart Community Success Stories

Table of Contents

Chapter 1: The Top Challenges in State and Local Government	3
Chapter 2: Cybersecurity and Risk Management	5
Chapter 3: Legacy Migration and Modernization	9
Chapter 4: Optimize Data and the Journey to the Cloud	12
Chapter 5: Increasing Demand for Digital Services and Enhancing Citizen Experience	16
Chapter 6: Reimagining Your Community with Extreme Networks	20
Related Resources	22



The Top Challenges in State and Local Government

The Top Challenges in State and Local Government

Many state and local governments across the country are on digital transformation journeys with the goal of leaning into technology to provide better experiences for their communities and efficiency in their operations. As this journey unfolds, numerous challenges come to the forefront, many of which align with the top priorities of state CIOs, as revealed in the latest NASCIO survey.

First and foremost, they must address cybersecurity to safeguard critical data and ensure secure, scalable connections. There's also a rising demand for user-friendly digital government services to make life easier for citizens. To deliver these services, state CIOs need to update their outdated systems and tackle staffing shortages that IT teams everywhere are currently facing. Plus, optimizing their data and embracing the cloud is vital for a successful digital transformation.

It's a complex road ahead, but it's essential for a more efficient and accessible government.

State and local governments can conquer obstacles by adopting new ways of working that will yield better outcomes. They should prioritize citizen data protection and cybersecurity by using dynamic risk management and gaining full visibility of their networks with a modern IT infrastructure and cloud management system. They can also improve the citizen experience by using network data to offer better digital services.

Updating their old network technology is crucial for success, ensuring smooth government operations, future adaptability, and the ability to do more with the staff they have. These strategies help governments provide efficient and accessible services to their communities

TOP CHALLENGES AND PRIORITIES IN STATE AND LOCAL GOVERNMENT



Cybersecurity and Risk Management



Digital Government and Digital Services



Workforce



Legacy Migration and Modernization



Cloud Services

According to the "[State CIO Top Ten Policy and Technology Priorities for 2023](#)" report published by NASCIO.



Cybersecurity and Risk Management

Cybersecurity and Risk Management

Cyberthreats are everywhere. With ransomware attacks on the rise and hackers getting smarter, it is more important than ever that you have a dynamic risk management strategy in place to protect your citizens and information.

When you upgrade to a more modern network, you will gain visibility that will allow you to reduce threat detection time and minimize risk to operations. This also gives you the necessary tools to better protect you and your citizens' data. This can give your employees the peace of mind they need to focus on the work at hand for them and create strong relationships with citizens within the community backed by trust.





BUILDING A NETWORK AROUND PUBLIC SAFETY NEEDS: LOUDOUN COUNTY

Loudoun County is committed to creating a safe community for its citizens. To do that, they realized they needed a complex and resilient network that would help to decrease disruptions and keep their public safety departments running smoothly. When a call comes into the 911 dispatch center, they want to ensure that their network is reliable enough for that dispatcher to take the call and communicate with the police and fire departments to get help to those in need promptly.

New Ways:

- Extreme Fabric is based on Shortest Path Bridging (IEEE 802.1Q) and IS-IS routing protocols. Fabric provides virtualized network services that connect users and devices across the network infrastructure.
- Extreme support teams provided unparalleled customer support, acting as an extension of the county's IT team.
- ExtremeCloud IQ - Site Engine provides a centralized dashboard view of the entire network with visibility of all network devices without having to piece together multiple applications and enables in-depth visibility and control over its users, devices, and applications.

Better Outcomes:

- Network fabric enabled Loudoun County to hyper-segment their network to better secure all the different information across all the departments.
- Improved network reliability has enabled their 911 dispatch center to promptly respond to emergencies in the community, giving them the ability to contact police and fire departments and reduce response times.
- Network analytics enabled Loudoun County IT staff to reduce time to identify and resolve issues, leading to improved network performance, application functionality, and time savings.

“The goal for the network team is to make sure that we are always working towards a more reliable, resilient network for the overall business and services, but especially with public safety services. When we switched to ExtremeCloud IQ – Site Engine we saw more of that single-pane of glass experience that helps us overall see the network which is a dramatic improvement from what it was before.”

KEN OLSON, NETWORK MANAGER FOR LOUDOUN COUNTY



SECURING THE COMMUNITY: CITY OF MILWAUKEE, WI

The City of Milwaukee was the first customer to ever use Extreme Fabric Connect back in 2011. Since then, Extreme Networks has been able to work with the City of Milwaukee to solve unique IT challenges and business initiatives within the community, many of which involved working to keep their community safe.

New Ways:

- A network fabric designed on separate virtual levels to increase security and resilience for the many offices and emergency services departments throughout the city.
- Extreme Fabric can rapidly extend the existing network for emergencies or other on-demand scenarios.

Better Outcomes:

- Improved cybersecurity to eliminate back door entry points and prevent hackers from accessing confidential information and citizen data.
- Increased network resiliency enables departments to communicate and work together seamlessly to serve and protect citizens.

“Non-events are my goal and consistently made possible with Extreme Networks. Without outages or bugs or errors, network users don’t notice changes. It’s actually harder for me to explain that we avoided network issues for what could have been a catastrophic event to prove its true value.”

DAVID HENKE, CIO FOR THE CITY OF MILWAUKEE



Legacy Migration and Modernization

Legacy Migration and Modernization

As the world becomes more digitized, the need to upgrade legacy technology has become more apparent than ever before. Over the last few years, many governments have realized that their outdated technology cannot meet the new levels of demand that are necessary to keep their communities running smoothly and efficiently. Outdated technology is not a cost-effective solution anymore, in fact, it is likely to cost you more than you even realize.

As your community looks to keep up with the new digital trends of the world, it is critical that you make sure you have a resilient network that can meet the demands of your citizens and employees, no matter where they all might be.





It's real.

INNOVATIVE COMMUNITY ADVANCEMENTS: CITY OF SEGUIN, TX

The City of Seguin prides itself on balancing modern technology with old-school charm. In 2018 the city underwent a major network transformation project to completely rebuild their IT infrastructure from the ground up. The goal of this was to enable the implementation of new technologies, digital government services, and be able to support the growing community.

New Ways:

- A modern IT infrastructure designed to better support all digital initiatives planned throughout the community's different departments.
- ExtremeCloud IQ uniquely provides unified management and insights for an end-to-end view of Extreme and third-party networks.

Better Outcomes:

- Enhanced network reliability and security have not only ensured uninterrupted public safety services but also significantly reduced emergency response times, contributing to the community's overall safety and efficiency.
- Network data provides the IT team with the information they need to effectively prove why certain solutions are necessary to simplify budgeting conversations.
- With the right foundation in place, the City of Seguin has been able to take on projects like implementing a new video management system and a fire station alerting system to improve their community.

"When I applied for this opportunity two years ago, I told the City Manager we'd put Seguin IT on the map. A lot of productivity is coming out of this incredibly talented and enthusiastic group, and Extreme Networks is the technological foundation for everything that's being accomplished. I don't know if there's anything on our radar that our staff and network can't handle. When you marry strong tech with a can-do country IT approach it really is something special."

SHANE MCDANIEL, CIO FOR THE CITY OF SEGUIN



ADVANCING OPERATIONS WITH MODERN TECHNOLOGY: GEORGIA PORT AUTHORITY

The Georgia Ports Authority plays a pivotal role in advancing commerce and fostering economic development in Georgia. Operating around the clock, it serves as a crucial gateway for the uninterrupted flow of imports and exports from various corners of the globe through its facilities.

New Ways:

- Extreme Universal Wired and Wireless infrastructure is designed to scale with the growing operations providing zero downtime to support the 24/7 functions of the port authority.
- ExtremeCloud IQ provides increased visibility into what devices are on the network and how and what they are doing.

Better Outcomes:

- A network that always keeps devices connected to track cargo flow keeps everything running smoothly.
- Access to network data to identify inefficiencies or opportunities to create better systems and processes.

“Our team brought the expertise of our terminal, the expertise of our infrastructure, and our business needs to Extreme. Extreme brought us a migration plan and an implementation plan and executed that plan on behalf of us, and it was done in a very collaborative way”

MILL LAWSON, DIRECTOR OF IT INFRASTRUCTURE FOR GEORGIA PORTS AUTHORITY



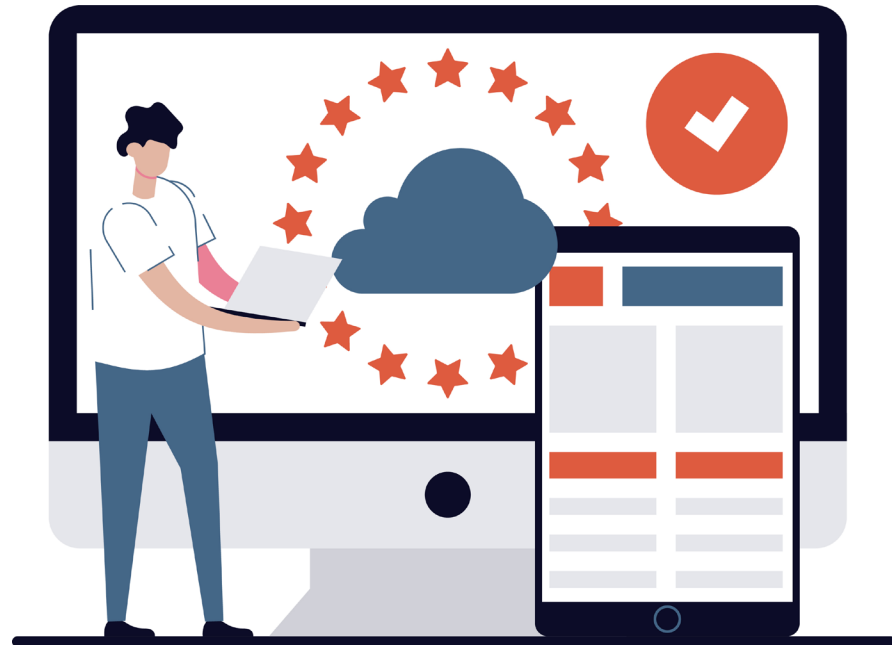
Optimize Data and the Journey to the Cloud

Optimize Data and the Journey to the Cloud

The cloud can help your community accelerate its digital transformation by providing a simple-to-use network management solution that is flexible and secure, keeping your information safe and your community running smoothly.

When you migrate to the cloud, you will be able to elevate your workplace productivity and engagement by creating an easier system for your IT staff to manage your network. The cloud will allow them to automate certain tasks so they can focus on more important matters such as the security of your information and keeping operations running, enabling other employees to work in a hybrid work environment without any interruption.

A resilient network paired with a cloud management system also can provide your organization with access to real-time network data that can empower you to make informed decisions to make improvements throughout your community.





MANAGEMENT MADE EASY: CITY OF LITTLETON, CO

Located just outside of Denver, the City of Littleton, Colorado is home to around 48,000 citizens and was looking to expand the current scope of their government services to offer more digital services. Their plan to digitize their government was forced to accelerate as a result of the global pandemic, so the City of Littleton turned to Extreme Networks to help move their digital transformation along.

New Ways:

- Extreme Fabric Connect creates a flexible and resilient network equipped to handle modern technology efficiently and securely.
- ExtremeCloud IQ provides end-to-end management and monitoring of the wired and wireless infrastructure.

Better Outcomes:

- The community can support new devices, applications, and scale as it grows over time.
- Access to predictive analytics that give insight into where new access points might be needed based on demand levels, connection strength, and coverage.

“It’s just so easy to go to one tool and have everything need there that gives us a great vantage point into our network. We can pop in and out of access points, everything is easy to find within the interface, and it’s very easy for us to make any policy changes, network changes, and anything else. I can certainly recommend ExtremeCloud IQ.”

SCOTT ROGERS, INFRASTRUCTURE AND PLATFORM SERVICES MANAGER FOR CITY OF LITTLETON, CO



UTILIZING THE CLOUD: CITY OF MEMPHIS, TN

The City of Memphis is committed to providing an exceptional citizen experience. The city wanted to deploy a smart, flexible network to enhance public services and enhance community operations.

New Ways:

- Universal Wired Access and Extreme Fabric Connect enables the City of Memphis to automate some network management tasks.
- A segmented fabric network that allows the creation of private virtual networks and the ability to isolate critical services.
- ExtremeCloud IQ provides a 360-degree view of the wired and wireless network so that the IT team can see what users, devices, and applications are on the network.
- ExtremeAnalytics provides real-time insights into application usage, users, locations, and devices and can determine what devices and applications are using the most bandwidth.

Better Outcomes:

- IT teams can focus on more important digital initiatives as automation takes care of tedious network management activities.
- Secure digital operations and decreased attack surface to reduce the risk of cyberattacks.
- Increased visibility and real-time insights allow the IT team to quickly identify what might be slowing down the network and reduce time spent troubleshooting the issue.

“The City’s vision is to use technology to tackle some of our most difficult challenges, from pollution and traffic to health and public safety. As we move toward that future, we need a robust, secure, software-driven infrastructure that can interface with third-party solutions and provide a path to automation. The solutions that Extreme provides will be instrumental in making our city one of the smartest in America.”

MICHAEL RODRIGUEZ, CIO FOR THE CITY OF MEMPHIS



Increasing Demand for Digital Services and
Enhancing Citizen Experience

Increasing Demand for Digital Services and Enhancing Citizen Experience

The best communities are those with engaged citizens. Communities that can gather input from their citizens and address their areas of concern see the most success and an enhanced citizen experience.

Smart technology is the key to increasing citizen engagement and understanding their wants and needs. Following the implementation of different smart technologies throughout the community, you can begin to gather data that can be used to identify areas of conflict and create solutions that will leave your constituents satisfied.

Citizens' wants and needs are constantly evolving. The pandemic made that clearer than ever before, as governments had to adapt to meet the new need for digital services to be offered to reach citizens in a safer yet still efficient manner. However, most governments have found that their existing technology is not able to meet that new level of demand.



HARRY REID INTERNATIONAL AIRPORT

IMPROVING THE TRAVELER EXPERIENCE: HARRY REID INTERNATIONAL AIRPORT

As one of the busiest airports in the United States and the primary gateway to Las Vegas, Harry Reid International Airport welcomes millions of travelers. It is critical that the airport staff provide a smooth and hassle-free experience for passengers, in the digital age that all starts with the network.

New Ways:

- Extreme Fabric Connect provides end-to-end unbreachable security, superior user experience, and more efficient management.
- Access to network analytics can help identify potential problems with the network and other challenges throughout the airport faster.

Better Outcomes:

- Increased visibility into and control over the entire network to provide IT teams with the tools they need to improve the digital customer experience.
- Strong connectivity throughout the airport, from ticketing and security, to when passengers must pull up their mobile boarding pass at the gate.

“We have a main commercial location and then two additional general aviation airports that we maintain through Fabric Connect, meaning my team is essentially managing the network for three airports. Extreme has made life for my IT team much easier; we can manage the ticketing and gating systems for each airline seamlessly while ensuring better performance for devices and applications, from those that passengers use to download mobile tickets to the Office 365 apps and others used by our onsite staff.”

TROY ALLEN, NETWORK SUPERVISOR FOR HARRY REID INTERNATIONAL AIRPORT



REVAMPING THE CITY: CITY OF PHARR

The City of Pharr is located in southern Texas and is home to over 78,000 residents. In 2019, the city began to undergo a transformation that would involve improving road and drainage infrastructure, renovating parks, and constructing a new building to house their Public Safety Communications Department and data center. As they looked to begin this revitalization project, they realized that they needed to build a foundation of reliable technology to get this project done with minimal interruption to regular operations to ensure that their community's needs were still being met.

New Ways:

- A modern, upgraded IT infrastructure built with standardized switching and additional network equipment.
- ExtremeCloud IQ provides better network visibility for the IT team to monitor what is happening within the network.

Better Outcomes:

- The easier-to-manage network saves the IT team time that they can now dedicate to other important initiatives through the community.
- A seamless network with 100% uptime to ensure that critical services can run efficiently to address citizen needs.

“We are going to host other agencies on this system, so we needed a network that was redundant, easily scalable, and won’t ever go down. We use Extreme Networks’ products because they allow us to build a lot of redundant paths so that we are always fully operational.”

JOSE J. PENA, DIRECTOR OF INNOVATION AND TECHNOLOGY FOR THE CITY OF PHARR



Reimagining Your Community with Extreme

Reimagining Your Community with Extreme

THE VISION FOR A MODERN COMMUNITY

A modern community is one that puts the wants and needs of its citizens first to create a positive experience. This can be achieved with the help of the right technology that can provide better insight and engagement between citizens and government agencies, digital government services, and the use of data and analytics to help you make decisions rooted in fact.

MAKING THAT VISION A REALITY WITH EXTREME

The optimal community described is achievable. Extreme Networks can help you and your community create a technology backbone that is adaptable, creating a seamless path for the integration of future applications and upgrades as they become available.

[Learn how you can partner with Extreme Networks](#) to reimagine your community.



WWW.EXTREMENETWORKS.COM