

# Maintain or Modernize?

## How governments can strike the right balance with managed SD-WAN

**State and local governments are contending with several urgent and ongoing challenges that have been exacerbated by the current global situation.** With much of the workforce now remote or on a staggered schedule, public sector agencies must prepare for hybrid working styles that are secured and supported by technology. This combined with declining tax revenues is causing significant budget shortfalls that financially strapped states and cities will grapple with for years to come. Additionally, citizens expect their government communications and services to be digitally available, on-demand and ever responsive.

Network modernization has never been more critical. But these compounding issues make the “when” and “how” of network modernization a delicate balance for government agencies to reconcile against maintaining the status quo of citizen service delivery. However, these challenges also present an invaluable opportunity for state and local governments to embrace a future-forward approach and long-term digital strategy for delivering a better constituent experience.

### The time is now

Before a network outage or downtime occurs — especially during a crisis — government leaders should assess their business needs and make strategic technology investments that align with them. A managed software-defined wide area networking (SD-WAN) solution is one investment to consider. Here's why.

SD-WAN is a centralized, virtual WAN architecture that leverages multiprotocol label switching (MPLS), broadband and other connections to better direct network traffic and improve application performance. Instead of going through the expensive, time-intensive process of overhauling network hardware, organizations can take a software-defined approach that makes the network they already have smarter through automation and analytics. This, in turn, can lay the groundwork for future innovation.

To become more future forward, the public sector needs to integrate emerging technologies to improve connectivity, application and network performance, and enterprise security. Software-defined networks can help state and local governments transform their network architecture and take advantage of modern technologies and processes like cloud managed solutions and virtualization.

Traditionally, state and local governments have relied on fiber networks, physical data centers and MPLS connections to manage and transport traffic to its intended destination. However, this approach consumes more bandwidth and increases latency, affecting the agility and efficiency of agencies, which can lead to a poor citizen experience.

SD-WAN addresses these issues. Here's how: This virtual solution, which can run on top of legacy MPLS networks or third-party internet circuits, finds and routes the best path for network traffic. With this approach, traffic for business-critical applications can move across the network more quickly.



But with a growing number of cloud applications, connected devices and increased bandwidth demand, enterprise WANs have become more challenging to manage. Governments looking to gain more efficiencies from their SD-WAN should consider a managed services approach. With a managed SD-WAN solution, a provider fully oversees the solution, reducing the time and expense for an organization's IT staff in terms of ongoing maintenance and security. Agencies achieve a single pane of glass view across their entire network, allowing them to better understand which applications are being used, where they are being used and the amount of network resources they consume. As a result, network management is simplified and future modernization efforts are ignited.

## Managed SD-WAN is how

A managed SD-WAN solution has several benefits for state and local governments and gives them the ability to:

**Generate cost savings.** States could face a cumulative budget shortfall of \$555 billion over the next two years,<sup>1</sup> which makes it all the more critical to leverage IT to generate short- and long-term cost savings.

A managed SD-WAN solution enables state and local governments to improve network connectivity and performance without the high cost of infrastructure upgrades. Rather than overhauling their current network hardware or purchasing point solutions that result in vendor lock-in and more silos, they can turn to a managed SD-WAN without a significant increase in their budgets.

With this virtual WAN technology, state and local governments can move away from MPLS connections that often come with increased bandwidth and connectivity costs and instead achieve greater cost control as they modernize their IT infrastructures.

**Improve digital service delivery.** Citizens now demand faster, more responsive service, and to meet these needs state and local governments must become more agile. However, they can't achieve this with legacy infrastructures.

A managed SD-WAN enables better service delivery because it allows government organizations to automatically prioritize traffic for business-critical applications and route them on the best path with lower latency, while using public internet or broadband connections for lower-priority traffic. For example, traffic to NextGen 911 emergency response networks or a city's department of social services may be prioritized to allow constituents to access help right away or recertify for benefits through public assistance programs.

**Power a hybrid work environment.** Forty-two percent of Americans now work from home.<sup>2</sup> With more employees working in different locations, state and local governments must find a way to manage an all-locations workforce without compromising enterprise security or productivity.

A managed SD-WAN is more than capable of handling the demands of a remote workforce. It can better manage network traffic from branch sites — whether it's an employee's home or an agency's satellite office — and route it across a virtual private network (VPN) to enhance security and performance. In this way, a managed SD-WAN can ensure traffic that requires a higher level of protection will be routed using more secure private connections. IT teams also gain visibility into WAN traffic across the network, allowing them to assess and remediate performance issues that remote employees may experience.

**Enhance enterprise security.** Ransomware has become an increasing threat for government agencies. Baltimore provides a stark example of this. In May 2019, the city experienced a ransomware attack that rendered employees unable to access government systems and deliver several services, including property transfers. The attack cost the city at least \$18 million in remediation and recovery costs.<sup>3</sup>

SD-WAN helps ensure optimal network performance as state and local governments adopt cloud-based enterprise security and disaster recovery solutions. Minimizing downtime and improving uptime and reliability are critical when bringing systems back online after a security incident. A managed SD-WAN solution can help facilitate automation that minimizes the impact of outages and service disruptions, whether they're caused by a malware attack, human error or a failed software upgrade.

## Digital government starts with network transformation

If the current situation has taught us anything, it's that government needs to become more agile.

Now is the time for state and local governments to make the right network investments and embrace a future-forward approach that accelerates their transformation into digitally driven organizations. This enables governments to become smarter and supports frictionless citizen experiences.

By working with a managed service provider to implement a managed SD-WAN and execute a network transformation strategy, state and local governments can address latency and performance issues to improve both the experience for constituents and the employees who serve them.

Every public sector organization has to start somewhere. A managed SD-WAN can lay the foundation for IT transformation and equip state and local governments with the capabilities they need to embrace a new normal and take big, bold steps forward into the future.

*This piece was written and produced by the Center for Digital Government Content Studio, with information and input from Frontier Business.*

1. <https://www.cbpp.org/research/state-budget-and-tax/states-continue-to-face-large-shortfalls-due-to-covid-19-effects>  
2. <https://siepr.stanford.edu/research/publications/how-working-home-works-out>  
3. <https://www.baltimoresun.com/maryland/baltimore-city/bs-md-ci-ransomware-email-20190529-story.html>