

# Modernizing IT Infrastructure for State and Local Government

A review of the challenges and opportunities to  
improve access, security, and cost savings



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## INTRODUCTION

State and local governments have a tremendous opportunity to better serve their residents with technology. Yet, many agencies have tight IT budgets, with significant expenditures committed to maintaining and operating legacy infrastructure. A modern IT infrastructure is critical for boosting reliability, performance, and IT efficiency for today's agencies, while also enabling secure access to any app, hosted on any cloud, from any device.

Meanwhile, cybersecurity threats in the public sector are on the rise, with increases in total number of breaches and the amount of damage inflicted. Studies found that in 2019, there was a surge of ransomware attacks on state and local governments.<sup>1</sup> Many public-sector agencies deal with increased risk due to IT resource constraints, including limited funding, staffing shortages, and a lack of specialized skills.

### **How do state and local governments plan to modernize their IT infrastructures, and where does cybersecurity come into play? What are the top barriers and opportunities?**

Spiceworks recently conducted a survey of state and local government IT decision makers to find the answers to these questions and more. Respondents from a range of public-sector agencies of all sizes and spanning many roles—from IT managers or directors to C-level IT professionals to those in non-IT roles—participated in this informative survey.

This eBook explores the results of that survey, providing deep insights into how state and local governments are deploying IT solutions to meet their communities' ever-evolving needs. We will examine why a modern data center makes sense for the public sector, with its ability to make operations more secure, affordable, and efficient, which in turn, better serves the residents of every community.



CHAPTER 1:

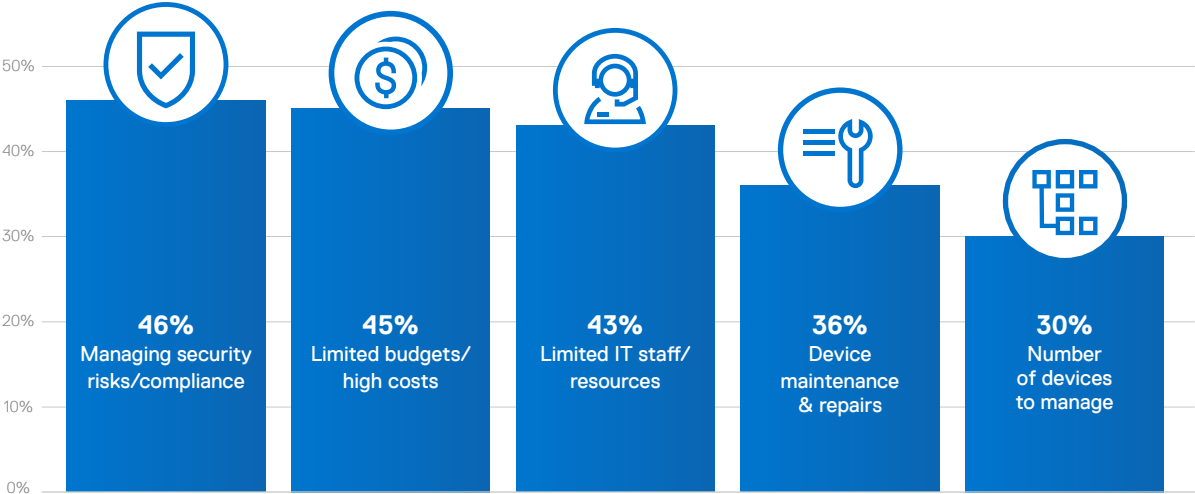
# Public-sector IT infrastructure in 2020





For decades, the technology in state and local governments has lagged behind the private sector.<sup>2</sup> But these aging IT infrastructures can result in dangerous gaps in security, and be costly to support and maintain. According to the Spiceworks survey, 46% of state and local government IT decision makers say that managing security risks is the top challenge in their current IT infrastructures, while a similar proportion of respondents noted tight budget and limited staff resources.

### CURRENT IT INFRASTRUCTURE CHALLENGES



What are the reasons for these challenges? Traditionally, government IT organizations were perceived as cost centers and rarely achieved positive ROI. While that opinion is changing, challenges still arise around technical debt, budget constraints, and skills gaps. Many state and local governments are also faced with complex IT infrastructures, with deployments on-premises as well as in private, public, and hybrid clouds.



### Staying Up-to-Date

“Modernizing means getting the most bang for our buck in the latest technology.”

“It means keeping up with the latest technology while staying within a set budget.”

“Modernization means cloud and network enhancement to deliver services on demand.”



### Improving User Experiences

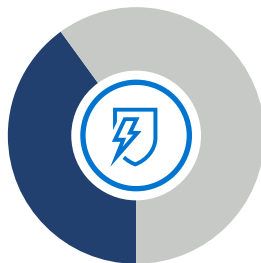
“I think it means making changes in infrastructure to provide our users an efficient experience.”

“Modernization brings more efficiency and a central approach to the use of technology.”

“It involves implementing more flexible solutions so our staff can effectively support the community.”

Survey respondents say that IT infrastructure modernization is about staying up-to-date and improving user experiences in the most budget-friendly manner. Half of all respondents (50%) view IT infrastructure modernization as a way to increase end-user productivity and efficiency. Maintaining continuity of government services is also critical, with 40% saying that reduced risk of downtime and reliable disaster recovery are desired outcomes. Future-ready infrastructure (39%) and the ability to combat the latest cybersecurity threats (36%) round out the list.

## TOP FIVE DESIRED OUTCOMES FROM IT INFRASTRUCTURE MODERNIZATION



Reduced risk of service interruption: **40%**



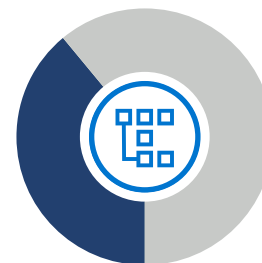
Enhanced cybersecurity threat prevention: **36%**



Increased end-user productivity and efficiency: **50%**



Reliable disaster recovery and data backups: **40%**

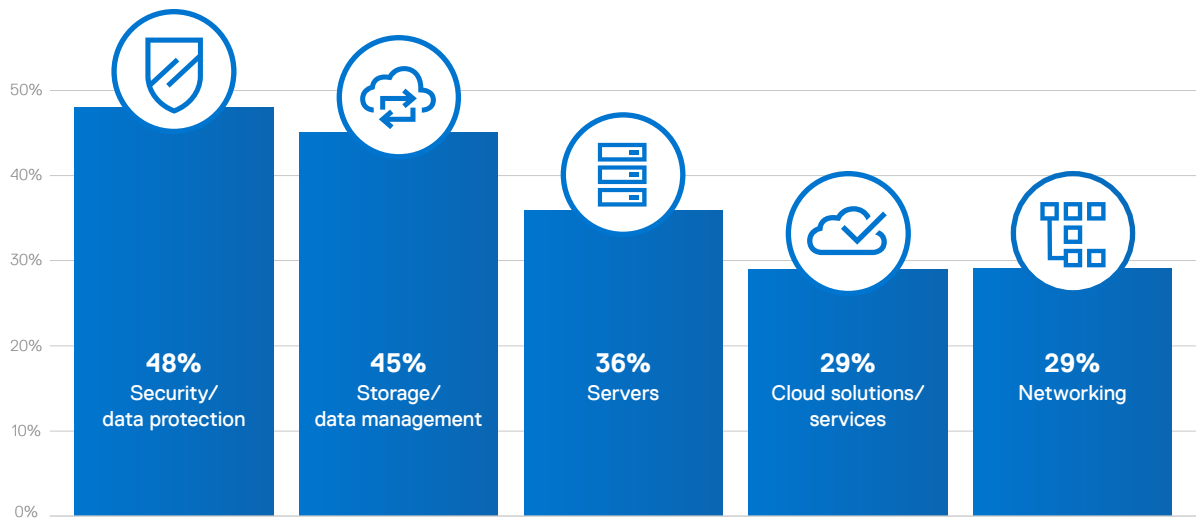


Future-ready infrastructure to meet needs: **39%**



**Given these desired outcomes, where do IT decision makers plan to focus their infrastructure modernization efforts?** Security/data protection (48%) and storage/data management (45%) are the biggest priorities. Core IT infrastructure (servers, networking, cloud solutions, etc.) are also critical areas for modernization—particularly to meet the needs of an increasingly remote workforce.

#### TOP AREAS IN NEED OF IT INFRASTRUCTURE MODERNIZATION





CHAPTER 2:

# Trends in public-sector IT infrastructure modernization



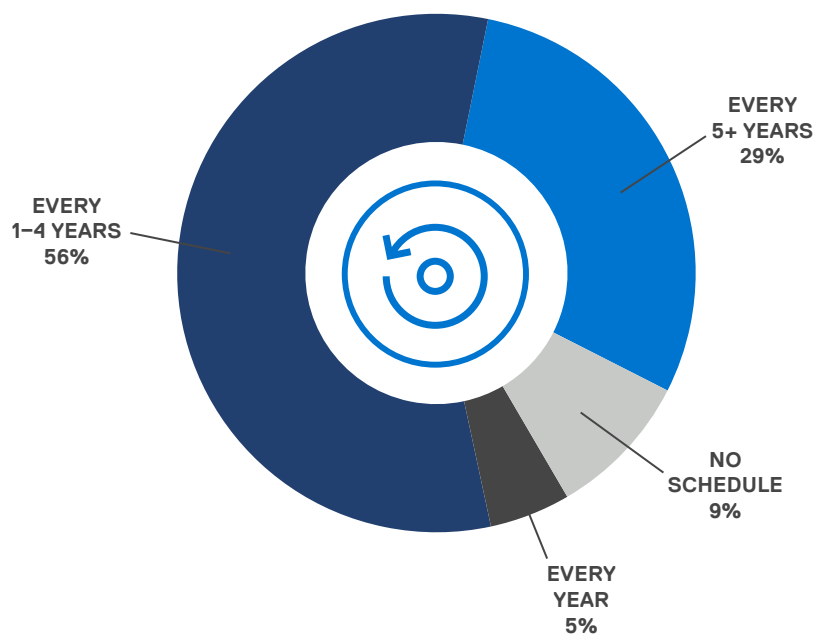




State and local governments depend upon a complex mix of legacy systems, cloud applications, and citizen-friendly portals and applications. When it comes to refreshing IT infrastructure, they have to make every investment count.

The survey found that agencies typically refresh IT infrastructure every 1 to 4 years (56%), but a large number (29%) are on a refresh cycle of 5 years or more. One reason? Many agencies use CapEx funds for IT infrastructure, so there needs to be a useful life (say, 3 to 5 years) to meet that amortization schedule. Most of these public-sector agencies (72%) use some type of consulting service from vendors, consultants, and/or third-party suppliers to support the refresh.

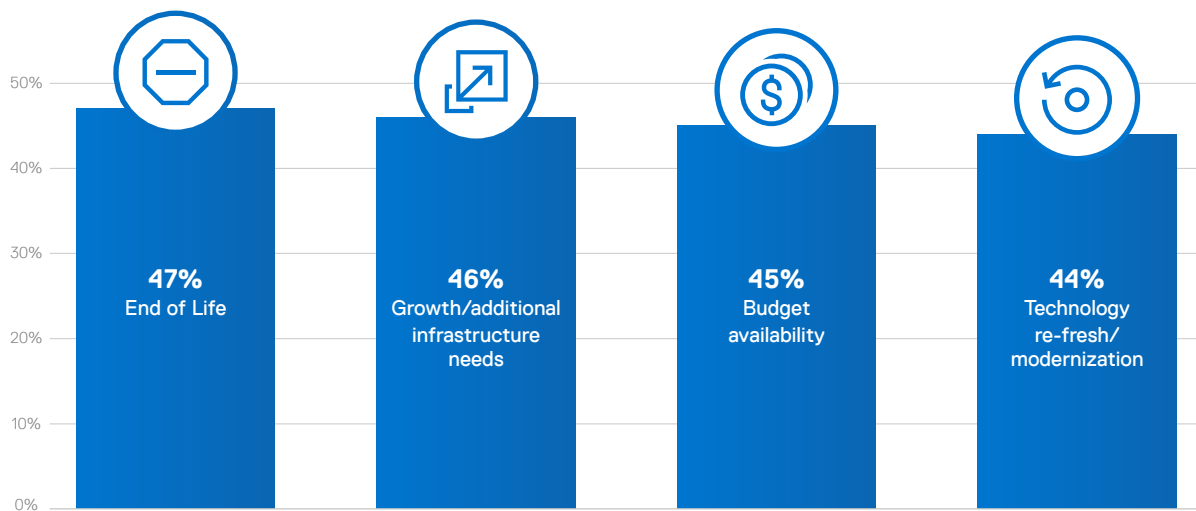
### TYPICAL REFRESH CYCLE





**What are the triggers for IT infrastructure modernization?** Budget availability is a key factor for many agencies (45%), along with the increased need for new solutions due to end-of-life products (47%), organizational growth (46%), and advances in technology (44%). In order to serve a public with ever-changing needs, modern tools are essential for communication, collaboration, and innovation.

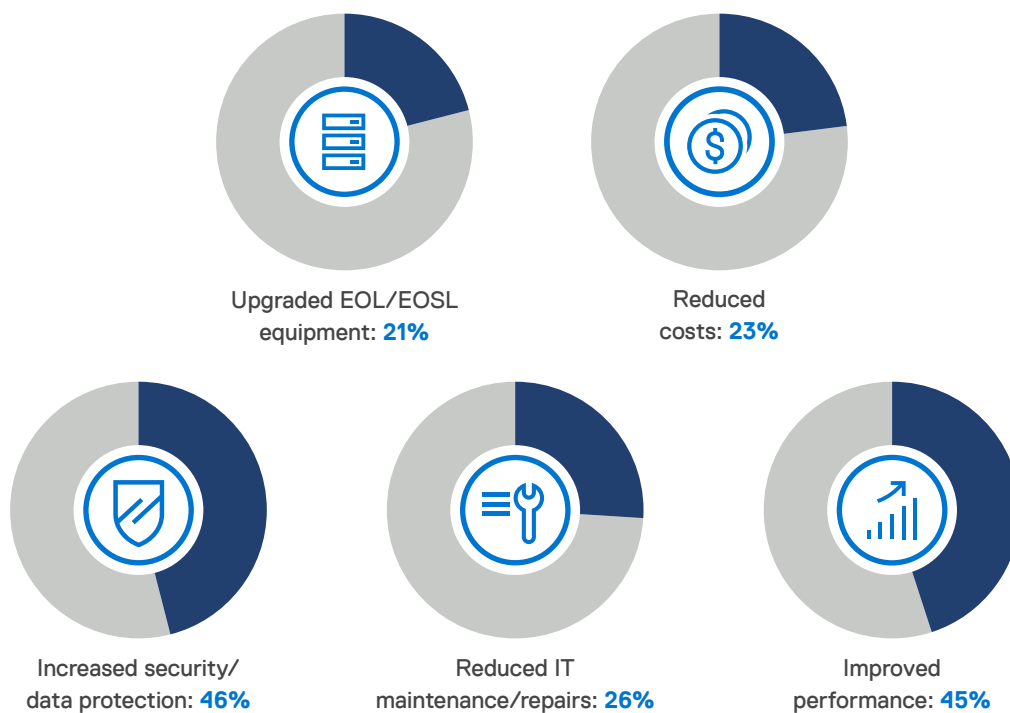
### TRIGGERS TO NEW IT INFRASTRUCTURE PURCHASES



State and local government IT decision makers see improved service delivery as the greatest benefit of infrastructure modernization. Specifically, they expect to increase security/data protection (46%) and performance (45%) in their environments. Reduced IT maintenance needs, reduced costs, and extended hardware life—that is, upgrades of end-of-life (EOL) and end-of-service-life (EOSL) equipment—are also expected benefits.

## EXPECTED BENEFITS FROM IT INFRASTRUCTURE MODERNIZATION

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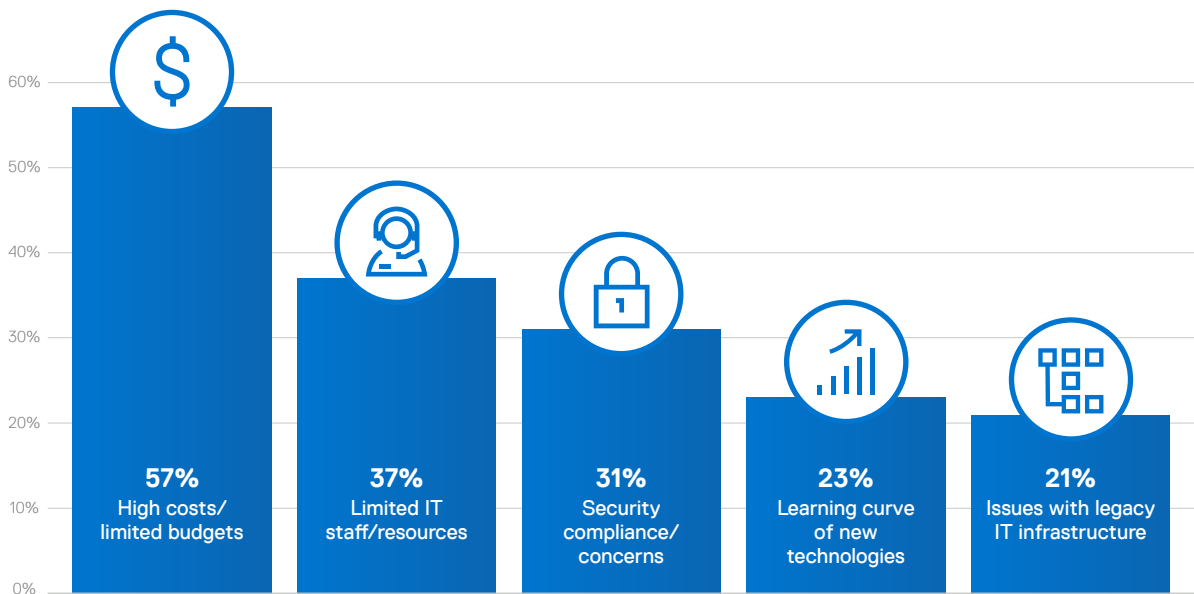


Despite these clear benefits, IT staff and managers still struggle to justify and win approval for new IT purchases. Business cases for government IT infrastructure need to be tied to new capabilities, whether the investments are needed to support new applications or to streamline management of the infrastructure itself. Modernization also enables agencies to strengthen cybersecurity and reliability in a world of ever-increasing cyberattacks.



Most survey respondents (57%) say that high costs/limited budgets are the top barrier to modernization. Limited IT staffing/resources (37%) and security/compliance concerns (31%) are also tough challenges that can prevent their agencies from moving forward.

### BARRIERS AND CHALLENGES TO IT INFRASTRUCTURE MODERNIZATION





CHAPTER 3:

# Working with IT infrastructure providers



**Where do state and local governments go for help with IT modernization?** Respondents look for IT infrastructure providers with proven expertise. Overall, they want IT infrastructure solutions that are easy to deploy and maintain, ensure best-in-class security, and offer great value at a reasonable price.

**Here's how IT decision makers describe what they're looking for in a trusted provider:**



#### **EXPERIENCE**

*"I want to see how they performed on other government contracts."*

*"We look for specific certifications that prove their knowledge."*

*"Their ability to support a large diverse workforce is key."*



#### **PRICE/VALUE**

*"We want a reasonable price with technical assistance."*

*"Their equipment should give me the most bang for my limited budget."*

*"One explicit goal is for the partner to deliver value."*



#### **SECURITY**

*"A vendor must keep our data safe at a reasonable cost."*

*"They must have the security capabilities to support our needs."*

*"We don't look only at costs, but also at what's the best level of protection."*



#### **PARTNERSHIP/SUPPORT**

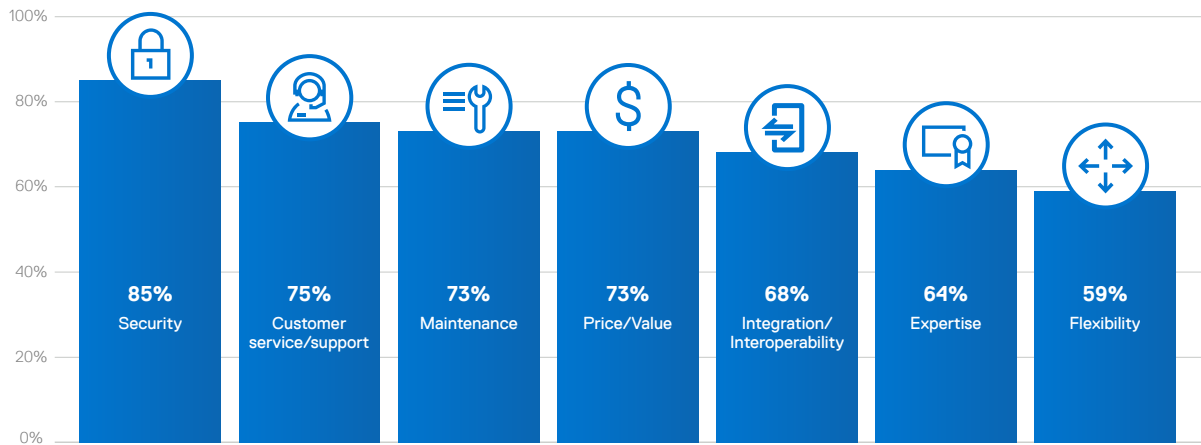
*"They should understand our environment and how to meet our specific needs."*

*"No salesmanship. I want to know the options without any jargon."*

*"We need a reliable source to help us make well-informed decisions."*

When it comes to purchasing solutions, government IT decision makers rate a number of factors as “very important” in their decision process. Security tops the list, followed by customer service/support, maintenance, price/value, and integration/interoperability.

### FACTOR IMPORTANCE IN AN IT INFRASTRUCTURE PROVIDER





CHAPTER 4:

# Dell Technologies: Trusted provider for state and local governments





## WHY DELL TECHNOLOGIES FOR IT INFRASTRUCTURE MODERNIZATION?

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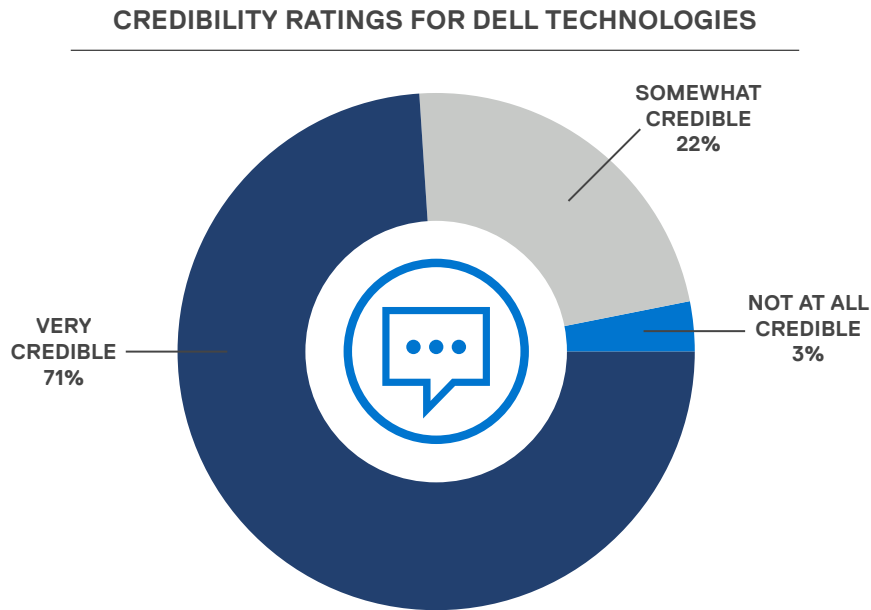


In this time of accelerating change, Dell Technologies is the trusted provider for state and local governments looking to deploy new IT infrastructure—rapidly, securely, and cost-effectively. Dell Technologies has a long history of delivering industry-leading solutions for the public sector. From the edge to the core to the cloud, Dell experts are helping state and local governments to build and secure a modern IT infrastructure, and in the process, transform the way they serve residents.

Dell Technologies builds state-of-the-art security into every IT solution, including our devices, so government agencies can be protected from the today's threats, as well as be prepared for those launched in the future. The Dell SafeGuard and Response portfolio, powered by VMware Carbon Black and Secureworks, provides a comprehensive approach to endpoint threat management. Artificial intelligence and machine learning proactively detect and block endpoint attacks. And Dell's security experts help identify and eliminate threats across your endpoints, network, and cloud—so the bad-actors don't disrupt public services.

Dell EMC PowerProtect solutions help secure and control your agency's sensitive data, while adhering to all government compliance requirements. They provide software-defined data protection across dynamic and evolving physical, virtual, and cloud environments. Backup and restore operations can be easily performed, from within their native applications.

It's no wonder that 93% of IT decision makers agree that Dell Technologies is a credible provider of IT infrastructure solutions. Keep in mind that most survey respondents are deploying physical servers, cloud infrastructure, and data storage solutions within the next 12 months.



### Why do state and local government IT decision makers trust Dell?



#### HERE'S WHAT THEY HAD TO SAY, IN THEIR OWN WORDS:

"Dell keeps up with technology. Each product is better and faster than the last ones."

"Dell Technologies is our current vendor. We have a great relationship with them."

"Dell has an excellent reputation, and they can back it up with positive outcomes."

With Dell Technologies, government agencies can focus on delivering better services to residents, backed by IT infrastructure solutions with integrated security, simplified management features, and expert technical support.

# Evolve to future-ready IT infrastructure with Dell Technologies

To keep your workforce productive and your citizen data secure, Dell Technologies delivers a proven foundation for success. In fact, all 50 U.S. states rely on Dell Technologies public sector IT solutions, along with 20 of the largest U.S. counties.<sup>3</sup> In addition to high-performance hardware, Dell Technologies provides industry-leading solutions for security, data protection, and future-ready IT infrastructure. So you can count on our experts to deploy the right solutions for your agency environment—from the edge to the core to the cloud.

**Ready to modernize your IT infrastructure?** Learn how Dell Technologies can help your agency deliver a new level of citizen services and peace of mind in a rapidly changing world.

[Learn More](#)

#### Intel solutions for government

IT infrastructure solutions powered on Intel® Xeon® Scalable processors help government IT reduce data center TCO and footprint while boosting performance, efficiency, reliability, and security. Comprehensive, flexible, and cost-effective, hybrid cloud solutions built on Intel® architecture allow IT to deploy workloads and application environments that make the most sense for their agency—either on premises or in a public cloud. [Learn more](#)

#### VMware solutions for government

To accelerate transformation in state and local government, Dell Technologies and VMware partner together to provide integrated support, co-engineered technologies, and turnkey solutions to increase productivity and reduce total cost of ownership (TCO), enabling organizations to deliver innovative citizen experiences, simplify management, secure data everywhere, and drive new digital capabilities. [Learn more](#)



#### About the survey

Dell Technologies commissioned Spiceworks to conduct an online survey in May 2020. This survey targeted IT decision makers in state and local government organizations of all sizes. Respondents were required to have refreshed their IT infrastructure within the past two years OR be considering an IT refresh within the next two years. The objective of the survey was to understand current challenges, perceptions, and practices around IT infrastructure modernization, including security considerations and impact on productivity. Survey results reflect responses from 150 participants located in the U.S.

#### Sources

<sup>1</sup> VMware Carbon Black, "2020 Cybersecurity Outlook Report," February 2020. <https://www.carbonblack.com/resources/threat-research/cybersecurity-outlook-report/>

<sup>2</sup> Alan Greenblatt, "Coronavirus Has Potential to Reshape Government Technology," Governing, April 2, 2020. <https://www.governing.com/next/Coronavirus-Has-Potential-to-Reshape-Government-Technology.html>

<sup>3</sup> Dell EMC government customers in U.S.; Dell EMC customers of top 20 Counties by revenue