# INNOVATING STATE AND LOCAL GOVERNMENT WITH DELL TECHNOLOGIES SOLUTIONS

Government agencies can be more responsive to residents and transform the delivery and management of services.

DELL Technologies

## CONTENTS


Achieving the best possible technology outcomes for constituents and communities 2

Addressing the most pressing issues facing government IT 3

Maximize internal resources and shorten the time-to-benefit with Dell Technologies services 6

What's next for your government agency? 7

Enable greater flexibility and agility in government agencies 8

Customer Success Stories:

- City of Doral builds the foundation for a Digital City 9
- Baker County Sheriff's Office leaves outdated IT behind and furthers its mission to protect and serve 10
- City of Amarillo modernizes IT for a data-driven future 11
- Williamson County: digitally transforming government 12

Provide employees with a seamless experience and power productivity anywhere 13

Customer Success Story: City of Pittsburgh boosts municipal services by empowering employees 14

Translate data assets into insight and service innovations 15

Customer Success Story: Town of Gilbert relies on cybersecurity to enable Smart-City transformation 16

Secure data and applications throughout your technology landscape 17

Customer Success Story: State of Oklahoma transforms government IT and protects digital assets 18

Next steps 19

# ACHIEVING THE BEST POSSIBLE TECHNOLOGY OUTCOMES FOR CONSTITUENTS AND COMMUNITIES

At all levels of state and local government, technology is critical. Residents and government employees rely on software applications and hardware to access information and to deliver and receive services. IT must provide a broad portfolio of services that range from supporting social and health services, public safety, and law enforcement to facilitating digital service and resources for residents.

State and local governments look to technology and information to help improve the quality, speed and responsiveness of their services and operations. Data plays a key role whenever constituents interact with state and local governments, when technologists plan and manage services, and when officials make decisions. How well government entities manage and safeguard data is key to their service delivery and improving the constituent experience. Although agencies may share data centers and infrastructures, differing service and security requirements often result in logically separated data storage, potentially making information less accessible and useful.

Technology leaders need to determine which strategy is the best for generating benefits from the cloud, mobility, analytics and emerging technologies. That can be challenging for state and local IT organizations with limited time and budget.

As a partner to state and local government leaders, Dell Technologies has a presence in all U.S. states, territories and the District of Columbia. With the industry's broadest, most innovative portfolio of technology and services for the public sector, Dell Technologies will stop at nothing to help state and local governments be ready for what's next in the digital era. Dell Technologies government and technical experts provide strategic guidance and operational support to help government agencies of all types and sizes deliver the best possible services and drive transformational agenda.

# ADDRESSING THE MOST PRESSING ISSUES FACING GOVERNMENT IT

The National Association of State Chief Information Officers (NASCIO) conducts an annual survey to understand the priorities and most pressing challenges of the CIOs in state government.[1] Research conducted for Dell Technologies largely confirms the NASCIO findings.[2] We also observe that municipal, county and local governments share similar priorities. The most pressing technology challenge we heard about from IT managers in state and local governments was managing security risks and compliance. Other concerns in the NASCIO top 10, like digital services, workforce, and legacy modernization, also rank as both concerns and opportunities with the state and local government agencies that Dell Technologies collaborates with.

State and local governments can go a long way toward transforming their services and operations by focusing on the high-promise opportunities we discuss below.

## Mitigate risks and ensure the security of digital assets

When government entities modernize their technologies, offer digital services to constituents and enable employees to work from anywhere, they must mitigate potential risks that could impact service delivery. Bad actors are highly aware of security gaps, know how to take advantage of network vulnerabilities and are continuously broadening the scope of their activities. Ransomware attacks are now so prevalent in 2023 that they've been coned a "Trend.".[3]

Resident access to data and apps, employee self-service for technology services, a large fleet of mobile devices, evolving cloud infrastructures and a growing volume of data can all increase the risk and impact of security events. Compliance requirements to secure data and applications can make risk management even more complex. However, with the right cybersecurity strategy and solutions, IT managers master these challenges and minimize the consequences of cybersecurity threats for residents and government departments.

**NASCIO reports state CIOs' top-10 priorities for 2023**

According to NASCIO's survey findings, these are CIOs' key concerns when it comes to strategies, policy issues and management processes:

1. Cybersecurity and Risk Management
2. Digital Government and Digital Services
3. Workforce
4. Legacy Modernization
5. Identity and Access Management
6. Cloud Services
7. Consolidated Optimization
8. Data and Information Management
9. Broadband and Wireless Connectivity
10. Customer Relationship Management

## Enhance digital government with anytime, anywhere access for residents and employees

Today, practically everyone expects to be able to do work, access government services, conduct business and use apps from anywhere. Government agencies can elevate their constituents' experience by providing apps and online tools that function on any device. They also need to enable their many mobile and home-based employees with the services and devices to do their jobs and communicate effectively, no matter where they are. Whatever technologies and processes IT leaders put in place, they have to remain manageable and flexible when operating conditions change.

## Enable digital communities and services

City, county and state governments are transforming their infrastructures, processes and services to serve constituents more efficiently and respond immediately to changing conditions. They gather and process edge data to manage crowds, traffic and facilities; understand power consumption patterns and avoid supply shortages; keep residents and workers safe; and much more.

Worldwide, Digital Communities are expected to invest close to $41 trillion over the next 20 years in edge data technologies.[4] Proven, innovative solutions and practices can help governments deliver on the promise of digitally powered communities.

## Move workloads to the cloud and manage cloud environments

State and local governments can choose from many different solutions that are designed to meet their compliance and operational requirements. Expertly engineered, managed cloud and hybrid-cloud infrastructures can make a huge difference in keeping applications and services available, secure and running at great performance levels, even during demand surges. When large parts of the workforce are remote and roaming, and the public needs to access digital services, the cloud offers the scalability and availability to support any number of use cases and information needs.

## Modernize IT with greater flexibility

In many government agencies, legacy technology and disparate data sources can complicate decision-making and operations management, and they can force IT to spend the vast majority of resources on everyday operations instead of enabling digital government innovation. At the same time, technology budgets may be constrained, making it difficult for IT to invest in transformational projects. By deploying hyperconverged, virtualized, cloud-enabled technologies to replace legacy infrastructures, IT managers can spearhead transformative change and deliver more value to residents and government entities. Because these solutions can generate measurable efficiencies and process improvements, they can help reduce costs and enable IT organizations to achieve more with limited budgets.

## Enable government workers to be effective anywhere and improve resident experiences

As service providers roll out 5G connectivity with extremely low latency and fast speeds, government agencies can think about how they could take advantage of 5G performance to enhance services, streamline data management and serve residents more effectively. On a 5G infrastructure, it also becomes possible to process and manage edge data with greater efficiency. For the many municipalities that are considering Future-Ready City initiatives or are already in the middle of their digital cities journey, it can be challenging to support the data volumes from systems used in traffic management, crowd control, public safety, facilities management, and other areas of operations. On a 5G foundation, that becomes significantly easier.

In many government agencies, leadership and employees could also benefit from the speed and robustness of 5G connectivity on their mobile devices. In remote and isolated locations, laptops or tablets that come with 5G ultra-broadband built in could not only help keep people working, but also maintain service delivery without disruption.

## Innovate with data in planning and decision-making

The public sector produces a wealth of both structured data, like forms and databases, and unstructured data, such as videos or emails. Agencies can harness their data assets to improve planning, decision-making and operations management, thereby improving their responsiveness to constituents and service delivery. Accomplishing this takes the right technology to store, manage, safeguard and analyze that wealth of data.

Employees, in turn, need appropriate, secure access and the right devices to work effectively with data. It takes thoughtful planning to deliver data and software services to the many people who need them, including executives, administrators, first responders, public-safety workers, case managers and transportation services managers.

## Reduce and manage costs

Today, many leaders in government are aware that technology can help them address their constituents' needs and concerns more effectively and ensure the transparency of their processes and decisions. They know that modernizing IT requires substantial investments, but may not always understand how technology can reduce costs. However, many possible modernizations — including virtualized infrastructure, data-center consolidation and hybrid cloud — can contribute to savings in the costs of acquiring and managing technology.

Some examples of how transformative IT can contribute to cost control:

- Data-driven decision-making and role-based access to information help agencies become more cost-efficient with more realistic forecasting and planning.
- Augmenting cybersecurity can help avoid or minimize the costs and penalties associated with compliance failures, disrupted productivity, malware, phishing and other types of fraud.
- Making it easier for residents and businesses to interact with their government through digital services reduces the time and effort needed to bring in revenue from license fees, permits, applications and taxes.

# MAXIMIZE INTERNAL RESOURCES AND SHORTEN THE TIME-TO-BENEFIT WITH DELL TECHNOLOGIES SERVICES

Agency agendas may need to change rapidly in response to challenging times, thus increasing the urgency of evaluating, acquiring and implementing transformative technology. Dell Technologies expertise can shorten the time-to-benefit of your investments and help avoid detours and errors in deployments and IT operations. Our consultants who work with state and local governments have a deep understanding of the public sector and the many benefits of technology. We can collaborate with you at any stage of the technology lifecycle.

- **Consulting Services** work with you to develop your technology strategy and plan initiatives to achieve the best possible outcomes for constituents and government agencies. We assist you in empowering the workforce to be effective anywhere, innovating digital services by putting your data assets to work, streamlining for more flexible IT management, and securing data and applications.
- **Deployment Services** help you implement data-center and cloud solutions, as well as roll out new devices to agency teams. We can provide technical assistance to your team or manage entire projects from beginning to end. We emphasize simplicity and speed to fuel your vision for human progress and innovation.
- **Support Services** augment your internal resources with the right level of expertise and access to address any issues before they disrupt constituent services or agency productivity. Ongoing support can also help improve the performance of your systems and applications and progressively enhance cybersecurity.
- **Dell Financial Services** helps state and local governments achieve the greatest impact from their budgets. With planning assistance and a variety of new, flexible payment modes designed for as-a-Service acquisitions, we help you take advantage of the Dell Technologies portfolio to empower government agencies and drive service innovations.

# WHAT'S NEXT FOR YOUR GOVERNMENT AGENCY?

In the U.S., state and local governments are rapidly innovating their service delivery and operations management by using digital technology. Constituents' expectations for service quality and transparency are high and many government executives have ambitious goals for showing improvements and results. IT managers need to be efficient and focused as they act on the most promising opportunities and the most pressing concerns where technology can be of benefit.

We have organized Dell Technologies solutions, services and thought leadership into a handful of practical focus areas to enable productive, outcome-driven collaborations with government agencies that are ready to take a leap forward:

- **Bring greater agility to agency operations with flexible IT**. Transform static IT into responsive, on-demand, robust IT services that can fuel your agency's agenda while keeping administrative workloads small.
- **Empower employees to succeed, anytime and anywhere**. Technology users in government have always been a mixed population of mobile and office-based workers. Today, they need to be able to work productively from anywhere — agency offices, remote locations and in transit.
- **Spur innovation by making better use of data assets**. Purpose-designed data storage and processing can help you simplify and secure data management and translate information into innovations and decisions that benefit constituents.
- **Augment cybersecurity across agencies, services, applications, devices and systems**. In addition to using secure devices and infrastructures, you can deploy and integrate targeted solutions to safeguard user identities, data, and systems, and to recover quickly from digital attacks.

# ENABLE GREATER FLEXIBILITY AND AGILITY IN GOVERNMENT AGENCIES

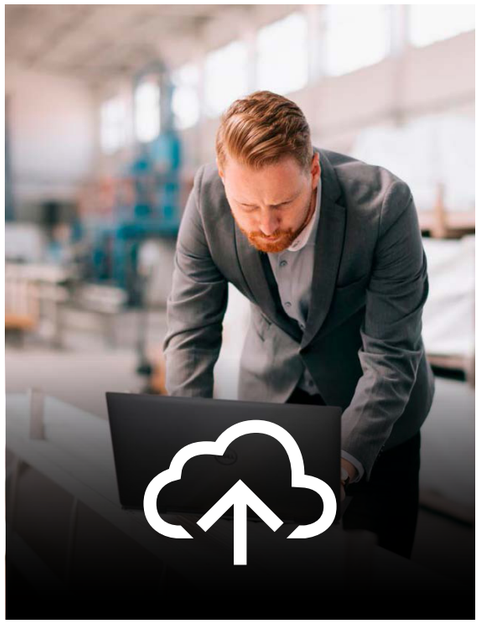
You can rely on a vast portfolio of hardware and software solutions, consulting, architecture designs and guidance to pursue your agency's mission. Flexible, scalable technology can quickly adjust to changing needs as you deliver promised service levels and productive user experiences.

### Modernize legacy infrastructure.

Make a smooth transition as you refresh aging technology with future-proof, versatile solutions. We can help you plan your project with the best available technology solutions and procurement method. Dell Technologies ProConsult Advisory Services can assist you in transitioning workloads. Hyperconverged solutions like Dell VxRail can keep data-center operations efficient and maintain fast, reliable performance.

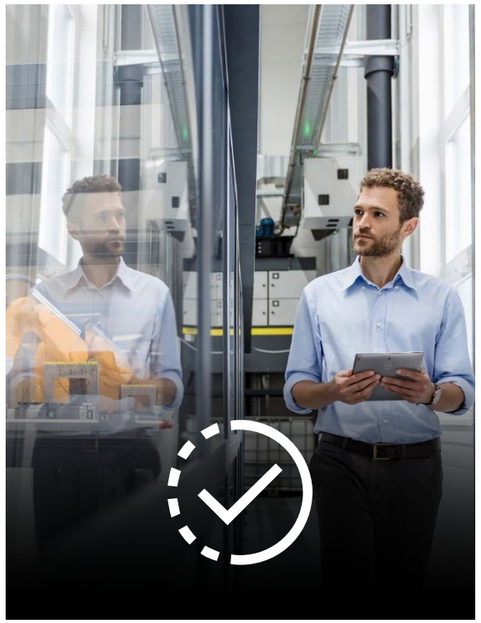
### Scale technology as you like.

Across the Dell Technologies portfolio — no matter whether you're deploying Dell PowerEdge servers or Dell PowerScale storage — scalability is a core principle. You can take advantage of our solutions to support, manage and secure any workload and application.



### Deploy cloud infrastructure that fits your needs.

Wherever you are in your cloud journey, Dell Technologies helps you build the right cloud or hybrid-cloud foundation and manage it efficiently. Consolidated management with the Dell Technologies APEX Console enables efficient administration. A variety of proven architectural designs and computing and storage solutions help you gain a robust, secure cloud foundation that can evolve as your agency's needs change.



### Keep your infrastructure responsive.

With best practices and guidance from Dell Technologies — together with modular, robust solutions like Dell PowerEdge MX servers — you can maintain space efficiency and manageability in the data center. By enhancing your infrastructure with automation and orchestration, you can make sure that IT meets changing agency priorities.

“Our Digital City successes help the economic development team invite companies to come here. This would not have been possible without Dell Technologies.”

— Gladys Gonzalez, IT Director, City of Doral

# CUSTOMER SUCCESS STORY:
## CITY OF DORAL BUILDS THE FOUNDATION FOR A DIGITAL CITY

### Challenge

When the City of Doral decided on a Digital City strategy to boost service quality, enhance citizens’ experience and better support residents and businesses, it needed the right technology infrastructure to make the effort possible and manageable.

### Results

- Provides a foundation for creating and evolving digital city initiatives.
- Enhances citizen experiences, starting with stronger security.
- Improves municipal services.
- Attracts more-diverse businesses and families to the city.
- Obtains certifications that attest to the effectiveness of Doral’s digital city leadership.

Read the full City of Doral story.

# CUSTOMER SUCCESS STORY:
## WILLIAMSON COUNTY: DIGITALLY TRANSFORMING GOVERNMENT

### Business needs

- Secure vast quantities of unstructured data, mission critical systems and VMs on trusted, reliable storage and servers.
- Simplify digital evidence management with scalable storage to manage an influx of new data.
- Improve employee and operational efficiency with innovative, cost-effective solutions.

### Results

- Successfully migrated 350+ virtual servers in just a few days with Dell PowerStore.
- Improved sustainability by reducing data center storage footprint by 94%.
- Reduced rack space, power, and overhead footprint for greater cost efficiencies with citizen's tax dollars.
- Secured petabytes of crucial evidence data on  Dell PowerScale.

Read the full Williamson County story.

“We saved $800,000 in recurring hardware-refresh costs for our police cars by making our VMware Horizon VDI a mobile solution supported by Dell VxRail.”

— Richard Gagnon, CIO, City of Amarillo, Texas

# CUSTOMER SUCCESS STORY:
## CITY OF AMARILLO MODERNIZES IT FOR A DATA-DRIVEN FUTURE

### Challenge

Amarillo’s aged IT infrastructure was complicated and costly to operate and maintain, with widespread security vulnerabilities. Departments and employees worked with such a patchwork of different technologies that they were not as effective or productive as they could be, which ultimately affected the quality of citizen services.

### Results

- Cut first-responder response times by 60%.
- Saved $800,000 in police car hardware costs.
- Set up a 75-person call center in 1.5 days.
- Consolidated 7 storage platforms to 1.
- Improved endpoint and data center management and security.

Read the full Amarillo story.

# CUSTOMER SUCCESS STORY:
## CITY OF MONROE EXCEEDS EXPECTATIONS FOR IT SERVICE DELIVERY

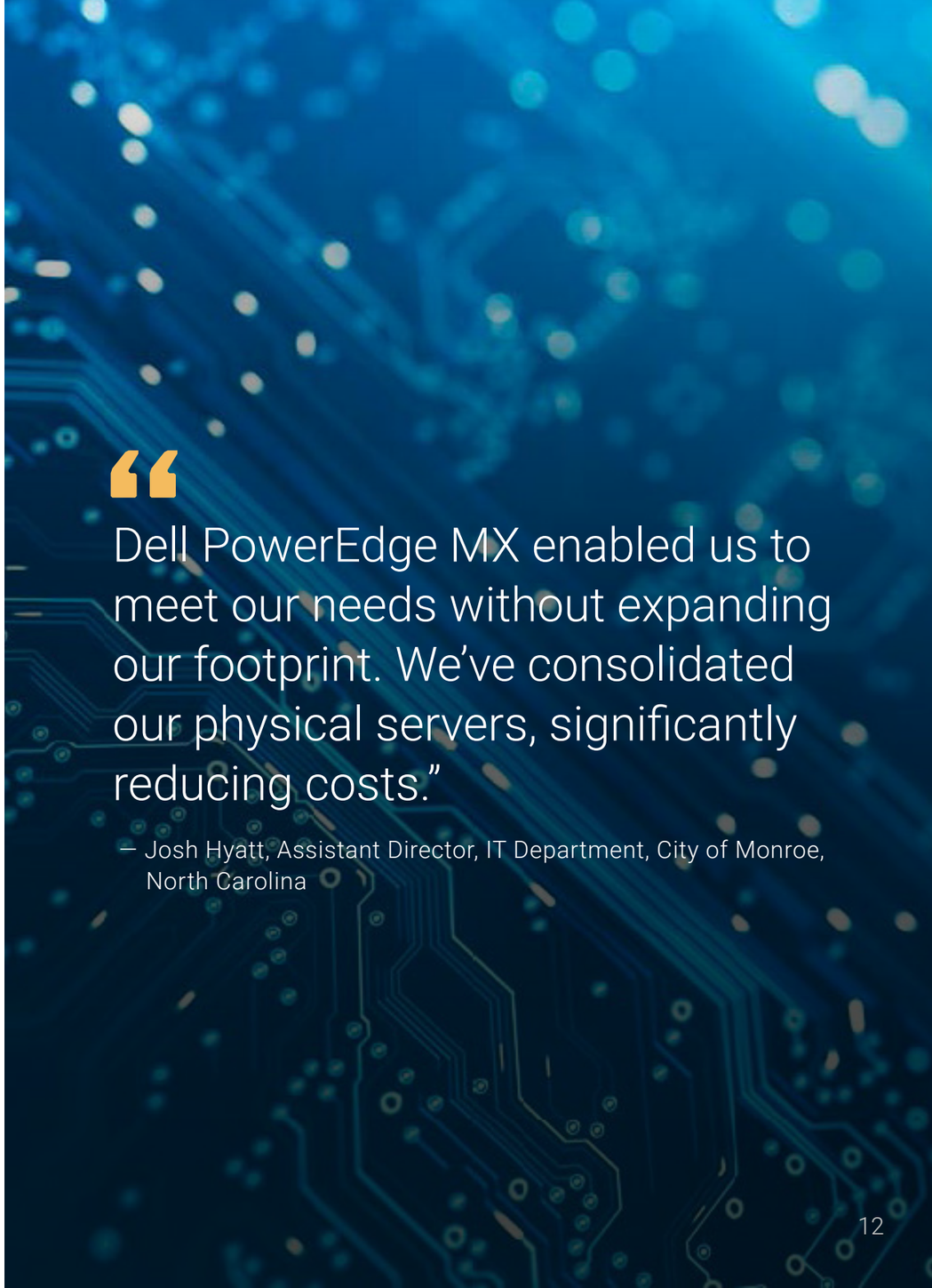
### Challenge

Located within the fast-growing Charlotte metropolitan area, Monroe had to find a way to stay ahead of the city's expanding IT requirements. This would ensure that residents and businesses have access to a wide range of critical city services and public utilities such as water, electricity and gas.

### Results

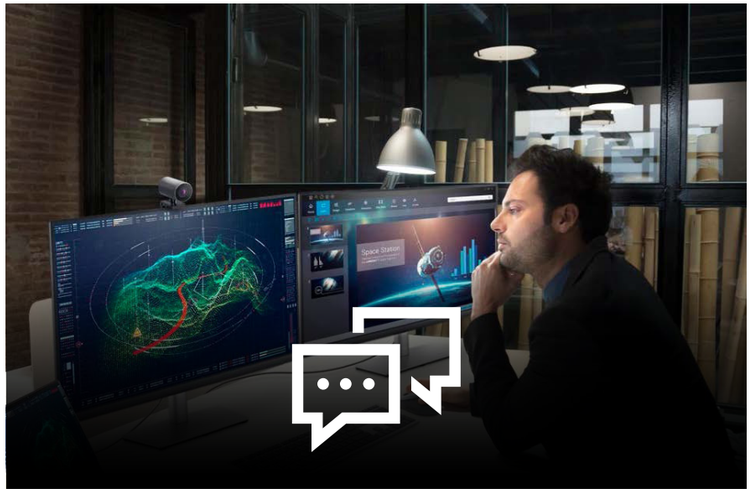
- Provides the high performance and reliability to deliver city services 24x7.
- Consolidated servers in colocated data centers by 60%.
- Significantly reduced power and cooling costs.
- Deployed and in production in as little as 2 hours.
- Ability to dynamically reallocate compute and storage resources without disruption.

Read the full City of Monroe story.



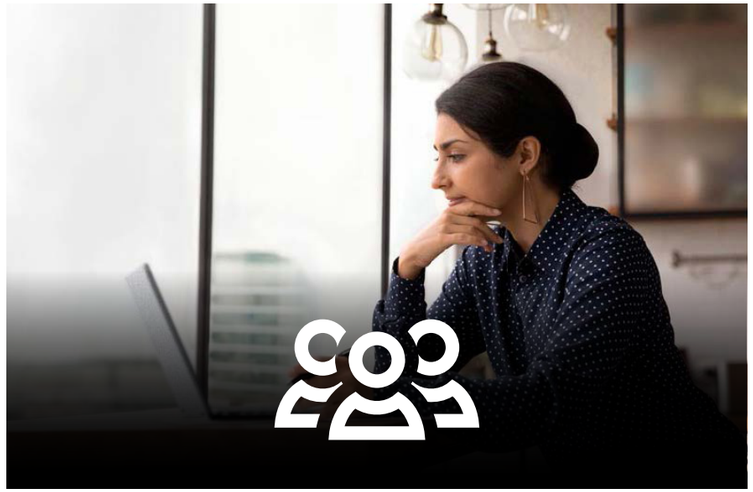
# PROVIDE EMPLOYEES WITH A SEAMLESS EXPERIENCE AND POWER PRODUCTIVITY ANYWHERE

Providing staff and constituents with secure and up-to-date data empowers them all to make better informed decisions, helping to reduce errors or duplication of efforts and improving overall communication and service delivery. Workforce transformation can also be enabled through powerful and flexible mobile devices and tools that help you attract and retain workers.



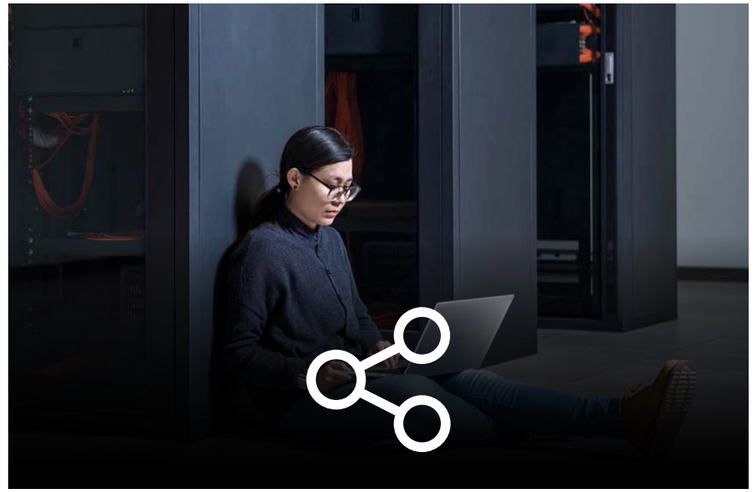
### Drive productivity and enable effective collaborations.

IT can help agency teams innovate and streamline services. From rapid device rollouts, to performance optimization and workload management, to efficient refreshes, you can boost the productivity and performance of individuals and teams as they fulfill their agency's mission.



### Support all user personas.

Government executives and employees who work at home or in agency offices, operate service vehicles, and run facilities have diverse requirements for computing and application access. Dell Technologies offers a rich portfolio of robust, secure devices and peripherals that are fast and easy to use. And they come in a variety of form factors for every individual and role in state and local government. They include Dell Rugged solutions, which can withstand extremely challenging environments and climates, even with 5G connectivity designed directly into the mobile device.



### Simplify endpoint management.

With a digital console like VMware Workspace ONE or a virtualized desktop initiative (VDI), you can centralize device management with greater visibility and control. Software tools like the Dell Client Command Suite automate and streamline the management of endpoint devices throughout their lifecycle.

# CUSTOMER SUCCESS STORY:
## CITY OF PITTSBURGH BOOSTS MUNICIPAL SERVICES BY EMPOWERING EMPLOYEES

### Challenge

The City of Pittsburgh needed to quickly replace a large number of laptop and desktop computers that were no longer going to be supported. At the same time, municipal technology managers realized that they did not know city employees' actual computing needs, and set about closing that gap.

### Results

- Meets real-life technology needs based on city employees' input.
- Offers multiple options to address any user requirement.
- Enables immediate transition to working from home during the pandemic.
- Enhances constituent services.
- Ensures timely completion of 800-device technology refresh.

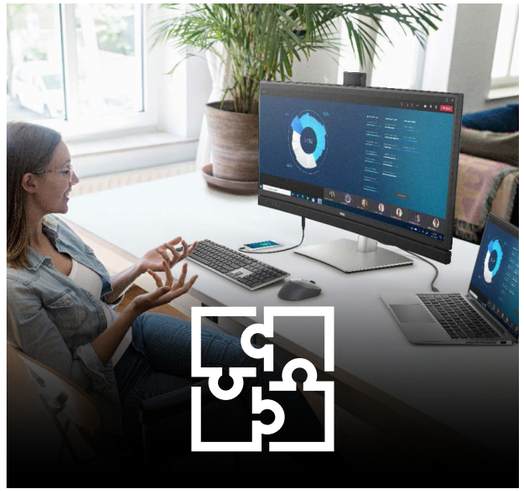
Read the full City of Pittsburgh story.

"Responding rapidly, Dell Technologies was never at a loss for an excellent, high-end laptop solution when desktops were no longer a viable option."

— Gwendolyn Moorer, Assistant Director of Technology, Department of Innovation & Performance, City of Pittsburgh

# TRANSLATE DATA ASSETS INTO INSIGHT AND SERVICE INNOVATIONS

Many state and local government agencies can achieve more with their data assets when they modernize their technologies and practices for storing, processing and analyzing information. Dell Technologies helps you drive greater insight with data visibility, eliminate unhelpful data silos and use data to plan service innovations.



### Provide intelligence to agencies and executives.

Instead of being a passive asset, data can become a practical advantage for agencies that need to plan their budgets, services, projects and resources. Dell Technologies assists you with analytics-ready, scalable computing and storage like Dell ECS, Pivotal and the Greenplum data compute appliance.

### Deliver on digital city / communities use cases.

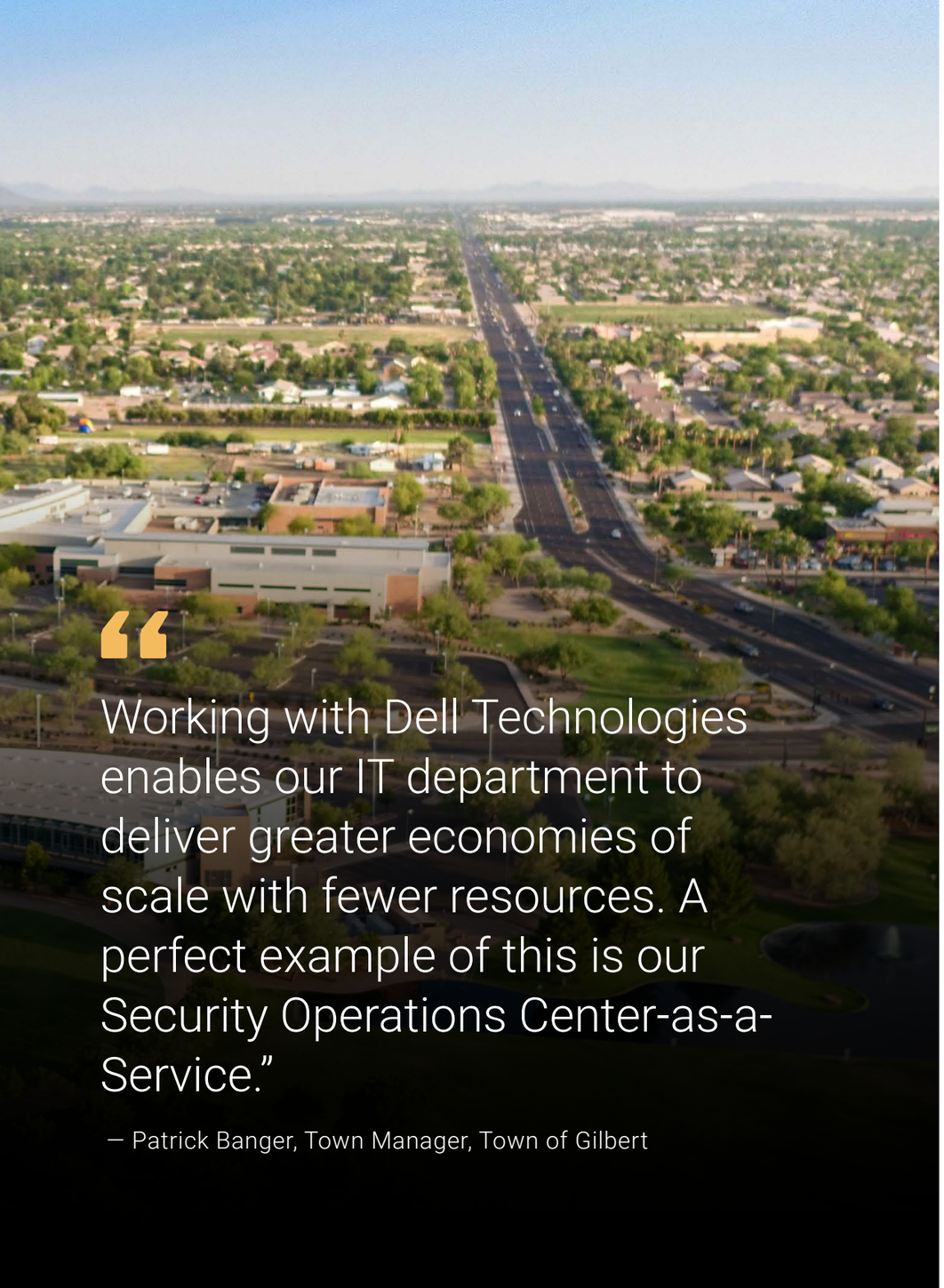
As you plan digital city initiatives, you can use Dell Technologies solutions like the Dell Edge Gateways to gather and process data from edge devices, sensors, cameras, license plate readers, access security and other systems for analytics to improve constituent services and agency decision-making.

### Simplify data management with greater flexibility.

Let data flow to support agency leaders and employees while maintaining appropriate security. With the Dell Streaming Data Platform, you can ingest, store and analyze streaming data in real time. You can use Dell DataIQ to classify unstructured data and easily move it between your on-premises storage systems and cloud resources.

### Create value from data that was previously out of reach.

When AI is done right, organizations can make big decisions and bold moves based on data-driven insights. Whether you're new to AI or ready to take it to the next level, accelerating intelligent outcomes requires alignment, optimization and scale.



“Working with Dell Technologies enables our IT department to deliver greater economies of scale with fewer resources. A perfect example of this is our Security Operations Center-as-a-Service.”

— Patrick Banger, Town Manager, Town of Gilbert

# CUSTOMER SUCCESS STORY:
## TOWN OF GILBERT RELIES ON CYBERSECURITY TO ENABLE SMART-CITY TRANSFORMATION

### Challenge

Gilbert, Arizona — at one time a small, suburban community — today pursues digital government transformation as it becomes a City of the Future. Information technology plays a critical role within that built environment. Cybersecurity, in turn, helps unleash the potential of technology to facilitate municipal services.

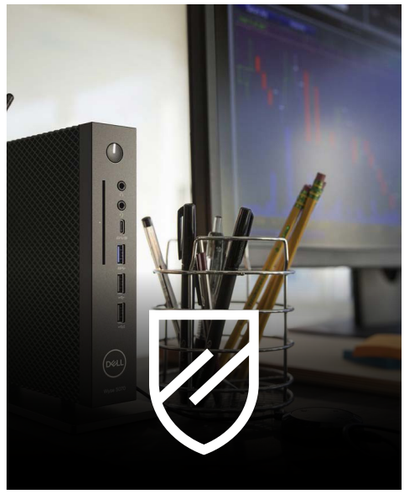
### Results

- Enables immediate incident response and remediation.
- Safeguards data from malware and other threats.
- Ensures continuity in delivery of digital services.
- Allows the town to confidently pursue City of the Future initiatives.
- Gives IT team members time to drive innovation.

Read the complete Town of Gilbert story.

# SECURE DATA AND APPLICATIONS THROUGHOUT YOUR TECHNOLOGY LANDSCAPE

Instead of fragmenting your environment with disparate, specialized solutions, intrinsic and integrated security from Dell Technologies embeds security deep into the hardware design. It encompasses the supply chain and extends to on-premises and cloud infrastructures as well as to all endpoint devices.

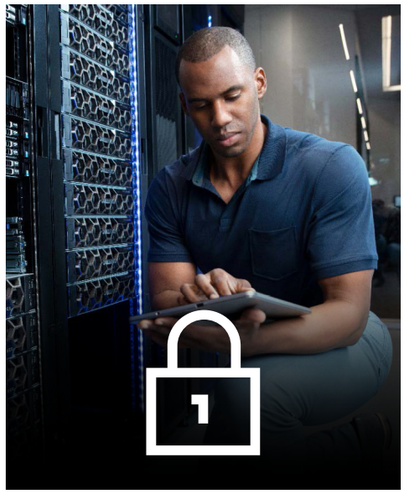


## Follow best practices for cybersecurity.

With Dell Technologies, you can build and manage a highly secure environment according to the design principles of the National Institute of Standards and Technology (NIST) framework. Aligning with NIST and similar security frameworks, you can use the RSA Archer GRC platform to gain management capabilities to address your agency's compliance and risk mitigation needs.

## Implement a trusted infrastructure.

You can adopt a unified approach to help ensure the security of application services, servers in the data center, and hybrid, public and private cloud systems. Solutions like VMware NSX Data Center, NSX Cloud, and Secureworks threat detection and response software allow proactive, seamless security management for multi-cloud environments. The VMware Tanzu Application Service assists developers in building and running cloud applications securely.

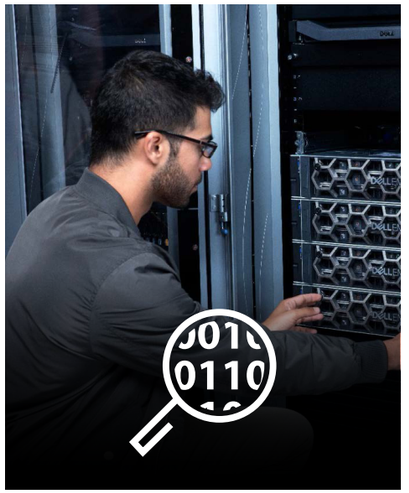


## Keep endpoints secure.

Augmenting the security that's already engineered into Dell Technologies hardware, you can use VMware AirWatch to monitor mobile devices, data, and apps. You can also take advantage of RSA, which enables advanced threat detection, cyber-incident response, and identity and access management. In addition, VMware Carbon Black extends security across devices, applications and workloads.

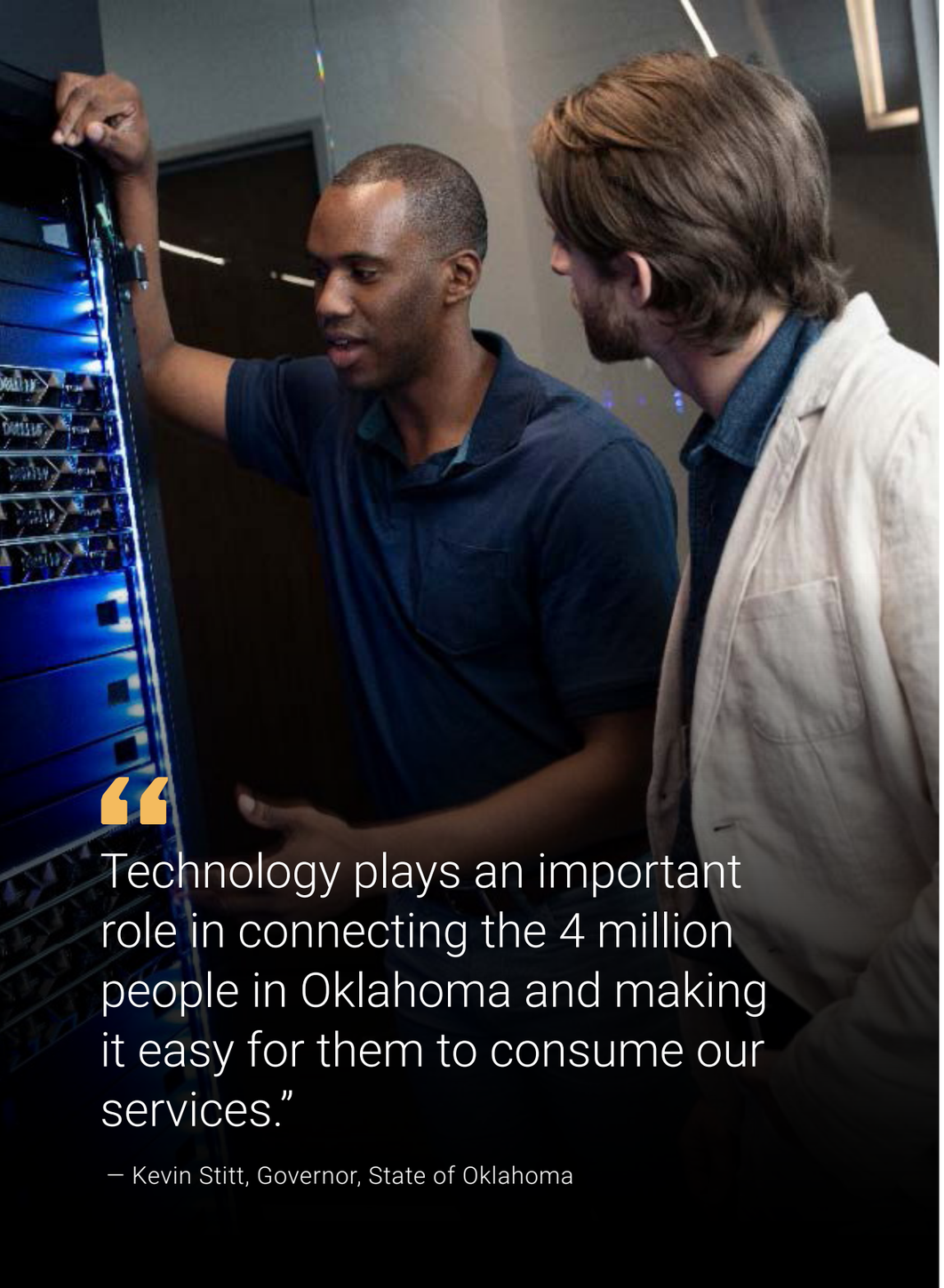
## Understand and take the right steps proactively.

IT needs efficient tools to identify and address cybersecurity risks before they impact services or jeopardize the integrity of data. Workspace ONE Intelligence simplifies security management with automation that can respond to potential threats. You can take a step further toward advanced security analytics with RSA and Secureworks.




## Protect constituent and agency data.

The public trust places high expectations on government IT to safeguard information. With cryptographic keys in the BIOS of devices and encryption in storage products, Dell Technologies embeds powerful data protection into its hardware. Data backup and protection solutions, Dell PowerProtect and Dell APEX as-a-Service, keep sensitive information available and secure without creating more work for IT staff.




# CUSTOMER SUCCESS STORY:
## STATE OF OKLAHOMA TRANSFORMS GOVERNMENT IT AND PROTECTS DIGITAL ASSETS

### Challenge

For the State of Oklahoma, the unique circumstances of 2020 made IT transformation a must. Partnering with Dell, Oklahoma moved 2.6PB of data and tens of thousands of databases to a remote data center to modernize disaster recovery. After updating processes and digitizing services, stakeholders estimate they’ve moved their information services forward by 20 years.

### Results

- Modernized disaster recovery by moving 2.6PB of data and more than 10,000 databases to a remote data center.
- Eliminates IT silos and enables innovation.
- Safeguards against cyberattacks.

Read the complete State of Oaklahoma story.

# NEXT STEPS

Dell Technologies is committed to the success of state and local governments. Whatever your agency's priorities and challenges are, we can help you achieve better outcomes to serve the public.

- Contact your Dell Technologies team for state and local government at 1-800-433-2392.
- Explore Dell Technologies' ideas, guidance and solutions for state and local government.

1. NASCIO, "State CIO Top 10 Priorities." https://www.nascio.org/wp-content/uploads/2022/12/NASCIO_CIOTopTenPriorities_2023.pdf
2. Dell Technologies, "Modernizing IT Infrastructure for State and Local Government," with research data gathered by Spiceworks.
3. MSSP Alert, "MSPs in the Crosshairs of Ransomware Gangs" https://www.msspalert.com/cybersecurity-research/msps-in-the-crosshairs-of-ransomware-gangs/
4. Smart America, "Smart Cities USA." https://smartamerica.org/teams/smart-cities-usa



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