

How Technology Helps State and Local Governments Meet Key Challenges



Today, many state and local governments are faced with budget shortfalls due to reductions in tax revenues, depletion of stimulus dollars and the fact that people are spending less on taxable goods. Even with these fiscally limited circumstances, citizens still expect reliable government services to be delivered securely. Communications technology is key to meeting these challenges.

Introduction/Overview

In the face of declining budgets and aging technology, state and local governments are feeling the impact of economic pressures. Agencies are continually asked to do more with less. While technology in general continues to improve, these agencies often struggle to make the business case for upgrading—even when the return on investment would be beneficial to both the agency and the citizens it serves.

This white paper will explore some of the key challenges that state and local governments face today. It will also suggest solutions for some of these challenges, and reveal how the right technology partner can help agencies serve the public in cost-effective ways.



Covered topics include:

- Benefits of telework and the unique challenge of mobility in state and local government
- Meeting the public where they are—enabling more efficiency and improved communication with those served
- Increasing interconnectedness of communications technology and public safety
- The strain that legacy technology can put on government agencies and how to create a transformation plan to move your agency technology forward
- How unified communications can save not only dollars, but also lives

Successfully meeting the unique technology challenges you face as a state or local government agency is not just a matter of improving services. It can also be a matter of ensuring public safety. Make sure you have the right technology partner at your side.



Telework Can Improve Operational Efficiency

When created strategically, telework programs can have huge economic benefits for state and local governments. These programs can provide cost savings while helping agencies meet objectives, achieve their missions and serve citizens.

Today's workplace is increasingly digital. In fact, 2.5 percent (3.7 million employees) of the U.S. workforce now teleworks at least half the time. An estimated 50 percent of the U.S. workforce holds a job that is compatible with at least partial telework. Up to 90 percent of the U.S. workforce say they would like the opportunity to telework at least part time.¹

The financial impacts of telework are substantial. When state and local government in the Thurston County, Washington, region did the math, they discovered that when 30 percent of their workforce worked remotely twice per week, the organization would save approximately \$58 million per year.²

Some government agencies are taking advantage of this trend and new technology to create a more mobile, productive and information-driven work environment. Other agencies, however, are struggling to catch up. Organizational culture, legacy IT systems and business processes, stretched IT budgets and lack of critical IT skills are large hurdles for many government CIOs, according to Gartner.³

Taking a leadership role in creating a more digital workforce has many benefits beyond the financial. It lays the foundation for a better future for state and local government agencies by providing more effective use of budget dollars, improved staffing capabilities and talent management, and improved ability to serve the public.

Facing the Challenge of Mobility

Mobility is the cornerstone of teleworking, but many agencies struggle to manage it. Agencies say they are unprepared to handle the influx of smartphones and tablets securely, lacking the strategy, tools and support necessary to do so, according to a survey from Mobile Work Exchange. Nearly 60 percent of the agencies surveyed stated they were not prepared to deal with a mobile-enabled workforce.⁴

Like so many private-sector organizations have also experienced, public-sector agencies are realizing that dealing with BYOD as well as the access and transmission of sensitive data requires preparation, infrastructure and ongoing support. Some of these considerations include:

- Expanding telework eligibility and providing mobile training for end-users
- Creating incentives to stimulate mobile adoption
- Addressing security concerns
- Building and maintaining an IT infrastructure that supports and sustains mobility

State and local governments should take notes from the other industries that have gone mobile before them. Successful and sustainable mobility requires a strategic approach—and a technology partner who understands the unique needs of government agencies.



¹<http://globalworkplaceanalytics.com/telecommuting-statistics>

²<http://www.trpc.org/ArchiveCenter/ViewFile/Item/53>

³<http://www.gartner.com/newsroom/id/3069117>

⁴<http://www.channelnomics.com/channelnomics-us/news/2370323/state-and-local-government-agencies-wrestle-with-mobility>

Citizens Want Convenient E-Government Solutions

The growing number of digital interactions between government agencies and citizens are broadening communication capabilities, improving safety and security, and encouraging cooperation and connection. Collectively, these digital exchanges are being called “e-government,” or sometimes “civic tech.”

The Center for Technology in Government at the University at Albany has identified four key dimensions of e-government:⁵

- **E-services** – Digital delivery of government programs, information and services
- **E-democracy** – Digital technology enabling citizen participation in public decision-making
- **E-commerce** – Electronic financial transactions, including purchases, bill paying and registration
- **E-management** – Using information technology to improve and streamline government operations and business processes

E-government is more than just an easy way to meet the public where they are, however. It expands the scope of services. With it, citizens and businesses can communicate with government agencies and find vital information from anywhere at any time.

- Civic technology is growing 14 times faster than traditional IT spending.
- The field of civic tech grew 23 percent from 2008 to 2013.
- 33 percent of state and local governments have an open data policy (making information resources accessible, discoverable and usable by the public) for at least one department.⁶

With the right e-government strategy in place, the possibilities are endless for state and local governments to serve and connect with the public. With the right technology, agencies can save lives, spur conversation and streamline service delivery. Agencies should be careful to choose a technology partner who understands the unique requirements of state and local governments, particularly with respect to connectivity and security.

Big Data for Better Government

Big data is a growing resource for state and local agencies. Governments have more access to big data than most private-sector organizations, simply by virtue of the services they provide. Every networked device that gathers data—from traffic cameras to digital parking meters—adds to the collection of big data to which governments now have access.

Though managing the data is an ongoing challenge for most agencies, the number of uses that data can be put to continues to grow. Traffic can be improved, crime can be prevented and emergency response can be quickened. With big data comes big potential.

Catching Up With the Broadband Revolution

U.S. citizens use the Internet daily to shop, bank, do research and communicate. It's no wonder they expect to be able to get service and information from government agencies in the same way.

Broadband-enabled online services can help with the following to improve how state and local government agencies serve the public:

- Relocate forms online, improving efficiency
- Provide more self-directed services and self-help options, eliminating need for on-site staff
- Eliminate paperwork and postal mail, eradicating paper clutter and decreasing some security risks
- Enable social media for public communication

For agencies to keep up with this demand, fast and reliable broadband is a necessity.

⁵http://www.ctg.albany.edu/publications/reports/future_of_egov?chapter=2

⁶<http://www.accela.com/images/civic-tech-infographic-idx.jpg>

Communications Technology is Vital to Public Safety

Citizens are communicating in new ways, and technology is becoming a more integral part of reaching them today—especially in emergency situations. When an emergency occurs, people dial 911 or check in with loved ones from their cell phones, turn on the television to get important news and check Twitter for up-to-the-second updates. As the number of natural disasters, terrorist attacks and public violence continues to grow, updated communications technology is no longer a nice-to-have item. It saves lives.



This technology facilitates communication between law enforcement and the community. It also improves the operational effectiveness and efficiency of state and local government agencies—especially important in public safety situations. How do these agencies contend with this new requirement when they are being asked to do more with less? This is where smart technology investments come into play.

Big Data

Advancing big data analytics can enable agencies to identify places where the potential for crime is high, prevent fires from happening (or fight fires more effectively when they do happen) and observe patterns of incidents to quickly identify areas with higher probabilities of certain activity.⁷

The Cloud

Hosting solutions in the cloud helps maintain critical services if local infrastructure is damaged or becomes inaccessible. Moving to the cloud can be a challenge for law enforcement because of security requirements—but the right technology partner can smooth this transition.

Intelligent Building Systems

Smart building sensors collect critical data constantly. This is great for helping agencies uncover broken systems or identify places where they can save money. When the right technology is in place to enable these systems to communicate with one another, intelligent building systems also facilitate timely action when emergency situations arise.

E-911

Since September 11, 2001, and Hurricane Katrina, the Federal Communications Commission (FCC) has worked hard to improve 911 services and other critical communications to ensure they remain operational when disasters strike.⁸ One of the biggest improvements has been with E-911.

E-911 (also known as Enhanced 911) links emergency callers with appropriate public resources—even when they dial from a mobile phone or from certain VoIP services (which requires the cooperation of mobile service providers). For this to work effectively, state and local governments require technologies such as next-generation call handling systems, computer-aided dispatch, call recording, IP selective routing and network solutions. A good technology partner will provide your agency with an end-to-end solution.

⁷<http://www.firstresponder.gov/Pages/Big-Data-and-Public-Safety.aspx>

⁸<https://www.fcc.gov/guides/emergency-communications>

Aging Legacy Technology Creates Challenges

Aging and unsupported hardware and legacy applications can both pose threats to state and local governments. When mission critical systems run on these unreliable platforms, it's only a matter of time before operations are seriously compromised.

Updating legacy applications as they fail is part of any agency's plan of operation. Keeping up with modern standards and demands, however, is a different story. Cloud computing, mobility, big data and cybersecurity are becoming obligatory, but many agencies are struggling to find the funds to implement these new technologies.

When it comes time to present a business case for these technology upgrades, there are more benefits to consider than just "keeping up with public demand." Improved technology makes government agencies more agile and simplifies communication with the public. This technology helps agencies keep up with the increasing demand for more IT-enabled citizen services. Ultimately, updated technology can overcome roadblocks to improved public services.

Limited financial and IT resources are the biggest obstacles to upgrading this infrastructure. Complex procurement procedures also pose a challenge. The best way to overcome these challenges may be to create a transformation plan.

Partner with your technology provider to create a road map for improving technology over time. This road map should prioritize each system according to business impact, citizen impact and return on investment (ROI). The last piece, ROI, is especially important, as demonstrating early program success can help spur the rest of the transformation forward with less pushback.

The Case for Unified Communications

Unified communications (UC) is a huge opportunity for state and local governments to improve relations with their public citizens. Until recently, PBX was the most cost-effective way for agencies to provide internal and external voice

communication. Now UC provides more options for voice service and enables other forms of communication as well:

- Video calls
- Voice conferencing
- VoIP
- Desk phone and smartphone integration
- Electronic directory-enabled presence monitoring
- Instant messaging

UC integrates these multiple media types into a single user interface. Not only does that improve internal efficiency and expand the agency's ability to communicate with the public, it potentially reduces costs as well.

The city government of Tuscaloosa, Alabama, was thankful they had implemented a unified communications system and trained their staff well in advance of the devastating tornado that hit their city in 2011. They lost their entire emergency management department when the tornado touched down, but their UC system maintained their ability to communicate on the rest of their systems.⁹



⁹<http://www.govtech.com/wireless/Unified-Communications-Helps-Localities-Replace-or-Upgrade-Aging-Phone-Systems.html>

Technology Planning Considerations for State and Local Governments

State and local governments are in a challenging position. They need to improve their technology to better serve their citizens, but are being asked to do so on ever-shrinking budgets and with ever-expanding procurement requirements. Frontier understands your unique challenges, and we are ready to help you meet your needs with the right technology.

While you focus on serving citizens, we are focused on providing the advanced telecommunications and data solutions that you need to serve them better and keep them safe. Our broad solutions set increases your agency's productivity while lowering the overall cost of your technology investments.

From connectivity to unified communications, Frontier knows and understands the technology you need to keep up. We are your trusted provider, and we offer products and services to meet state and local government needs, including:

- **E911 Solutions:** Next-generation E911 capabilities and technologies, and Frontier presence across the U.S.
- **Connectivity:** IP VPN, Ethernet and Business High Speed Internet/broadband
- **Managed Wi-Fi Solutions:** We offer municipality-wide (indoor/outdoor) managed Wi-Fi services to enable Internet access, video surveillance cameras, automatic meter reading, intelligent transportation systems and more
- **Voice Communications Solutions:** Including VoIP, local/long distance calling and unified communications
- **Text Messaging:** Services that expand your agencies capabilities for emergency alerts, weather updates, event cancellations and facility closures

Frontier Provides End-to-End Solutions for State and Local Governments

When it's time for your agency to plan an upgrade of communication and networking systems, partner with Frontier. We'll help you meet your unique challenges while working within budget constraints and providing a well-rounded solution.

Frontier sales executives are experts in the technology solutions that state and local governments need to serve their citizens and keep them safe. Set up an appointment to discuss our growing portfolio of solutions and how they can meet your requirements.



To find out what Frontier can do for your agency, please visit us at frontier.com/businessedge.

