

# An IT modernization readiness guide for state and local government



Citizens have come to expect the same experience from state and local government agencies as they receive from the private sector. They want easy access to government services — from paying water bills online to finding out about road closures. As a result, modernizing system and networking technology has become a priority to meet constituent needs.

Modernizing legacy systems means that state and local government agencies will be able to integrate more easily with other systems, scale up or down as needed and leverage the capabilities of the cloud for efficient data migration and storage. They will also be able to introduce mobile functionality, as well as heighten cybersecurity measures — a must in this era of rapidly emerging threats.

State and local government IT leaders are ready to get started. They know that the benefits of a modernization project will far outweigh the costs and allow them to better serve constituents, as well as the agency as a whole. However, they're up against departmental siloes and resource constraints and need to get the rest of the agency on board and dispel the myths surrounding modernization.

In this readiness guide, we explore five key things to keep in mind when moving your IT modernization project forward.

### Build confidence to make the move

The U.S. government spend for information technology in fiscal year 2022 is \$97.1 billion.<sup>1</sup> However, it will cost \$58 billion to modernize the federal government's legacy technology and strengthen cybersecurity.<sup>2</sup> State and local governments see these expenses on a smaller scale; for example, the State of Wisconsin will spend \$80 million to update just its legacy unemployment system.<sup>3</sup>

\$58B

has been proposed to modernize legacy government IT systems.<sup>4</sup>

In addition to the costs associated with maintaining these legacy systems, many of them don't integrate with each other, making it difficult to add new technology and creating a duplication of efforts. Additionally, as the workforce that originally installed and programmed these systems retires, they take their knowledge of complex interdependencies and customizations with them. It becomes a challenge to find talent that knows COBOL and other older programming languages.

These challenges, along with the support of the Modernizing Government Technology Act at the federal level, are driving more state and local government IT leaders to move ahead with modernization projects that will provide the backbone for smart government initiatives. They're setting forth the benefits that their agencies will reap, including improved service to citizens, faster emergency response and cost savings.

One example is Orleans County in New York. Over the course of several years, the county modernized its networking, voice and TV solutions.

“In the last four years, we’ve got to the point where so many things are turning to an online presence that we are using more and more online bandwidth,” says Orleans County Director of Computer Services Edwin Moss. “We’ve increased our FIA bandwidth from 20 Mbps to 50, then 100, then 200. Every time I’ve increased bandwidth my user base has gobbled it up. Now we’re moving to a 1 GB circuit. This use base is, however, more productive.”

With 400 employees, the county requires its public health and emergency management offices to have cable TV access for weather reports, information about pandemic issues, regional outbreaks and daily news, explained Moss. When constructing a new building for those departments, the county worked with Spectrum Enterprise to build out an IT infrastructure that incorporated dedicated Fiber Internet Access (FIA), which feeds connectivity to their other campus through an Ethernet network, and cable TV access for 24/7/365 operations.

“They were with me in lock-step to provide the SIP and PRI Trunking which allowed us to invest in our VOIP phone system, saving us money and attaining our unified communication goals,” adds Moss.

To budget for these and other IT infrastructure improvements, Moss takes a holistic view regarding upgrades while planning each minute detail. That means asking simple questions such as, what switches are on either end of the fiber? What patch cables are we going to need? Do we have the patch panels and cable management in our racks? Or the tough questions like single mode versus multi-mode? Conduit required or direct bury?

“These are all the little details that you really have to concentrate on,” says Moss, who advises municipalities to build a 5 percent buffer into any IT modernization cost estimate. “All of the ancillary pieces and parts need to be factored into the process.”

### Areas of focus for your IT modernization project

- Maintenance.
- Support.
- Improvement.
- Integration.
- User experience.

## 5 considerations for a successful IT modernization project

### 1. Analyze current systems to determine what is and isn’t working

Every municipality is different when it comes to modernization. Some have been using legacy systems for decades, others have built their own homegrown solutions and still others are using a combination of “frankensystems” to cover all of the bases. Before embarking on an upgrade, analyze all your systems — newer and older — to determine where you want to start. You may be surprised to learn that some newer systems, including those that enable mobile and remote work, may not be considered legacy, but will soon no longer be supported by the vendor.

For example, as of May 2021, any municipality that was using Windows 10 will no longer be eligible to receive new security updates, non-security hotfixes, free assisted support options or online technical support.<sup>5</sup> This is just one example of the many different considerations that should be considered upfront.

To get started, focus on the following areas, each of which may present multiple “sub challenges” that can be addressed during the IT modernization project:

- **Maintenance** — determine the allocation of time and money for maintenance on an annual basis.

- **Support** — determine depth and breadth of vendor support for the product.
- **Improvement** — determine if the solution will keep up with modern-day technology advancements.
- **Integration** — determine if the system will collaborate with other systems.
- **User experience** — determine if this a user-friendly solution for employees.

## 2. Identify what results you want from your IT modernization project

Begin the modernization endeavor with realistic expectations, but also have a few goals and must haves in mind for the project. You can develop goals and a strategy by asking yourself questions like:

- What do we ultimately want to achieve with this project?
- What are the top problems that this project will solve for us?
- How will it solve those problems?
- How will we get there? What roadmap will we use?
- Why do we want to hit these goals?
- How will these efforts help our department or municipality advance?
- What is our expected return on investment (ROI)?
- What other undiscovered needs might we be able to fulfill with this project?
- Which team members and stakeholders should be involved, and why?
- What roles will those individuals play in the process?

As part of the planning process, more cities and states are carefully assessing total cost of ownership (TCO) of their infrastructure and factoring in long-term maintenance and support costs — versus just the lowest upfront costs — when making IT decisions.

Historically, for example, Orleans County spent about \$2,500 per month on two different phone circuits at its East and West campuses. To make a cross-campus call, users had to dial a “9” and then a three-digit code and then the phone number. When the county moved to a unified communications platform, it started paying less than \$1,000 per month for an improved experience that no longer requires the extra dialing.

“We’re saving \$17,000 a year right there,” says Moss, “and because we don’t need a third-party vendor to manage the phone support anymore, that’s another \$10,000 in savings.”

## 3. Determine which projects take priority

State and local governments rarely have the funding to modernize everything all at once. To get the most out of available budget allocations, agencies need to conduct a triage of sorts and determine which to focus their efforts.

### Advantage of a phased IT modernization approach

- Lets users adjust to changes over time.
- Creates less of a disruption.
- Allows you to test individual components before going live.

The advantages to taking a phased approach to modernization let users and stakeholders adjust to the changes over a period of time, as well as creating less of a disruption and allowing you to address potential problems as they arise. While the timelines for implementation are longer, it allows you to test individual components before going live and ensure that priority projects are getting attention.

At Orleans County, Moss prefers the phased-in approach due to budgetary issues. “We don’t have a huge taxpayer levy,” he explains, “so we tend to think long-term/big-picture and then break that down into smaller pictures that we can accomplish.”

#### **4. Make IT modernization part of your municipality’s overall vision**

Attempting to modernize and maintain IT environments without an architecture to guide and constrain investments may result in systems that are duplicative, not well-integrated, costly to maintain, inefficient and ineffective in achieving institutional goals and performance measures.

Don’t just modernize for the sake of it; have a well-thought-out plan in mind and make sure that plan aligns with your municipality’s overall vision. Skip this step and you’ll wind up leading a costly project that doesn’t sustain itself (and a lot of frustrated users and stakeholders).

Make sure that finance, IT, procurement, security and other impacted departments are all aligned and working from the same playbook. If, for example, the project is being phased in — and if teams are going to have to support two systems for an extended period of time — make sure they know that and help them prepare accordingly (i.e., with a solid training program that preps them on how to use the new system).

To get buy-in from the top for Orleans County’s modernization projects, Moss develops spreadsheets and crunches the numbers before deciding to move in a particular direction. “Have the right data on the front end and know what it’s going to cost upfront and over time,” he points out. “Every dollar that I save for Orleans County is a straight-out win for the county.”

To keep the momentum going, schedule regular check-in meetings to ensure that everything is going smoothly and to explore expanded uses of the technology. Include all stakeholders in those conversations, define the metrics that they want to improve, establish ways to record those metrics and use a feedback mechanism that key stakeholders can use to report on progress (and problems).

#### **5. Pick a trusted partner to work with**

When picking an IT partner to shepherd your municipality through the modernization process it’s important to focus on expertise, skillsets and experience working with the government. Look for a partner that:

- Has a fiber network that provides reliability and security for its connectivity solutions.
- Provides scalable solutions for modernizing technology and integrating systems across agencies that produce operational efficiency.

- Offers internet, networking and voice solutions that make it easier for citizens to interact with government — and departments to collaborate — to get the information they need.
- Has experience working with state and local governments and can provide guidance and technical support to ease the adoption of new IT solutions.
- Offers cost-effective solutions that help increase operational efficiency and reduce costs.
- Enables reliable, technology-rich smart governments to meet demands for improved constituent services.
- Is committed to and investing in its network.
- Offers security capabilities to alleviate the impact of attempted cyberattacks.
- Is dedicated to ensuring an exceptional client experience with top-ranked service, local account teams and technicians and 24/7/365 support.

To find the best provider, ask for referrals and talk to them about their experiences. Lay out your requirements, request an initial assessment and make sure that assessment includes an honest look at the state of your organization's various IT elements.

### Ready to get started?

By following these IT modernization readiness strategies, municipalities can implement successful plans that help them achieve their goals.

"We either evolve or standstill, which technically, since everyone else is evolving, we're de-evolving, so we have to continually move forward with anything we are doing," says Moss.

Learn more about how connectivity solutions and managed services can support your modernization effort at [enterprise.spectrum.com/gov](https://enterprise.spectrum.com/gov).

1. "Our information technology investments at work," Executive Office of the President Office of Management and Budget, accessed September 29, 2021.
2. Katie Malone, "Biden budget proposes \$58B to take on legacy tech, cybersecurity." CIO Dive, June 2, 2021.
3. Mitchell Schmidt, "State plans to spend \$80 million in federal funds to update antiquated unemployment system," Wisconsin State Journal, September 30, 2021.
4. Katie Malone, "Biden budget proposes \$58B to take on legacy tech, cybersecurity." CIO Dive, June 2, 2021.
5. "Products Ending Support in 2021," Microsoft, Sept. 29, 2021.

### About Spectrum Enterprise

Spectrum Enterprise, a part of Charter Communications, Inc., is a national provider of scalable, fiber technology solutions serving many of America's largest businesses and communications service providers. The broad Spectrum Enterprise portfolio includes [networking and managed services solutions: Internet access, Ethernet access and networks, Voice and TV solutions](#). The Spectrum Enterprise team of experts works closely with clients to achieve greater business success by providing solutions designed to meet their evolving needs. For more information, visit [enterprise.spectrum.com](https://enterprise.spectrum.com).