

AI readiness demands network modernization

Unlock AI opportunities with a robust, resilient and secure network infrastructure.



Artificial Intelligence (AI) may be the most important and impactful technological revolution of our generation. AI promises transformational new opportunities for public sector organizations, including state and local agencies and educational institutions. AI can streamline operations, empower employees, enable innovation and improve services to constituents and students. But unlocking these opportunities hinges on a key technical capability—a robust, flexible network infrastructure.

While corporations grapple with the challenge of leveraging AI to maximize production and fuel growth, governmental agencies and educational institutions face a more practical concern—legacy networks. AI places new demands on your underlying network and the IT personnel who maintain and upgrade it. Legacy networks are often incapable of handling the workload. Imagine thousands of college students generating high-bandwidth AI queries during finals week. Or a state Department of Transportation using AI to analyze thousands of real-time video feeds. Network traffic like this is daunting—and different from traditional surges. Here's why.

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AI is shifting data center network architectures from client-to-server (North-South) paths to internal server-to-server (East-West) fabrics. Distributed AI workloads require massive horizontal data exchange before delivering final output. With AI, the general consensus is that up to 90% of data center bandwidth now remains entirely within internal cluster networks.”

Jason Trella

Associate Director, Sales Engineering,
State, Local and Education, Verizon

What does this shift in traffic mean to public sector organizations adopting AI? It's simple. AI adoption and expansion require a network capable of handling the specific demands posed by AI-driven traffic.

So is your network AI-ready?

It depends on your use cases, anticipated network traffic and the capacity of your current network. But agencies and educational institutions often find that their legacy network is a structural roadblock—the silent killer of their AI ambitions. For example, a recent networking survey found that AI-driven traffic across campus networks is expected to triple over a three-year period, with more than 70% of 3,472 IT leaders anticipating severe network capacity issues. To break through the bottlenecks, you need a reliable, secure high-performance network backbone and a carefully considered adoption strategy.

Verizon and AI

As a proven partner working with a wide range of public sector organizations, Verizon is committed to enabling AI readiness for our customers and the communities they serve, helping ensure that they maximize its benefits. Beyond that, Verizon is an AI-first organization and tech leader helping drive the AI revolution. We use AI extensively to expand and strengthen our own network to be ready for surges. For example, we recently used AI to make 70 million autonomous network configuration changes for heavy AI use. And we apply this experience and hands-on expertise to help you make AI an integral part of your day-to-day operations—quickly and securely.

Verizon can help your organization take clear steps to be ready for AI:

1. Modernize your network

Your network infrastructure needs to deliver the low latency and high bandwidth needed for AI, connecting your users to data center workloads—and keeping your organization ready for a serious increase in network traffic. Whether you're a university or a state/local agency, Verizon's agile, high-performance networks help your organization achieve its AI ambitions with a critical combination of:



Dynamic flexibility

Verizon Adaptive Network Fabric provides a self-service, rapidly deployable network infrastructure that you can customize and control via APIs. IT groups and architects can dynamically manage and prioritize network resources in near real-time to match your fluctuating AI workload demands.



Multi-layer security

Security is a major issue for public sector organizations. We leverage a private backbone network to reduce your exposure to public threats.



Scalability and disaster recovery

Agencies and educational institutions can work with Verizon to co-locate servers, storage and networking hardware within secure, carrier-grade data center facilities.



Integrated solutions

Verizon's relationships with industry leaders enable us to deliver integrated, end-to-end AI infrastructure solutions.



Working together, we help you develop and implement comprehensive, customized network solutions that meet the scale and security demands of AI. All under a clear governance framework. Your Verizon representative can help you explore the current options available via the Verizon AI Connect Suite."

Jason Trella

Associate Director, Sales Engineering—State, Local and Education, Verizon

2. Choose the right network

There is no one-size-fits-all network solution for AI. That's why Verizon enables you to choose the connectivity solution that matches your current infrastructure and achieves your AI vision. The Verizon AI Connect Suite includes a wide range of high-capacity networks capable of managing resource-intensive workloads securely and at scale. All with a managed services approach that is designed to eliminate the key infrastructure challenges of AI (e.g., space, power and cooling).



Verizon Wavelength Services

Our wavelength services provide a dedicated, pure Layer 1 service, scalable up to 400G bandwidth, that interconnects your location(s) to data centers.



Verizon Dark Fiber

Where available, this network solution offers virtually unlimited, scalable bandwidth without the restrictions of pre-defined service tiers.



Co-location

Verizon Network as a Service (provided with our partner Equinix) delivers a modern, cloud-centric network platform that serves as a flexible, programmable, scalable and reliable AI network. The result? Faster connectivity and better visibility, all in a distributed ecosystem.



3. Augment your IT resources

IT groups within state and local agencies and educational institutions can be overworked and understaffed. Verizon can bring our external expertise to your IT team, augmenting its capabilities. As a managed services provider, Verizon provides 24 x 7 x 365 network services that are designed to be secure, reliable and fast—while eliminating the management burdens of in-house network management. With this approach, your organization can adopt AI and other new technologies without extensive organizational change or increased staffing.

The gateway to creating value

With an AI-ready network in place, you can use AI to enhance and expand the services you provide, bring new efficiency to key processes and innovate in ways never before possible. Consider the possibilities. AI-driven self-service can make governmental services easier to access, from renewing drivers' licenses to applying for benefits. AI-driven applications can provide streamlined access to critical information, helping students choose and schedule classes. And automating contact centers with solutions such as Verizon Virtual Contact Center (VCC), can help agencies and schools reduce wait times with chatbots and improve first-call resolution.

"Start with an easy win, get measurable results and expand your scope from there," Trella advises organizations beginning to adopt AI. "But remember, no matter what your AI vision, it all depends on a robust network."

Work with an AI-first partner

When adopting AI, your organization needs a technology leader you know and trust. Verizon is already a proven partner to wide-ranging state/local agencies and educational institutions of all sizes. Because of our extensive experience and expertise, we can help you choose the network that matches your vision for AI.

Every organization is at a different point in its AI journey, moving from exploration to implementation to optimization. We meet you where you are today and help you take the right next move, quickly and confidently. And we serve as your ongoing partner as AI evolves and your organization's use of it deepens.

AI Readiness Tips

Beyond technical considerations, here are practical organizational steps that state and local agencies and educational institutions can take as they adopt AI.

1. Establish clear governance

Create a cross-functional AI ownership group (including technical, legal and organizational representatives) to build an effective governance framework that enables safe, effective deployment and use of AI.

2. Evaluate AI risk

Take a close look at where AI is—or could be—used in your organization, then evaluate and classify potential risk and compliance issues, drawing on existing laws and other guidelines.

3. Manage your vendors

Evaluate which AI tools are approved for your institution's data, such as FERPA for student records or HIPAA for health data.

4. Protect your data

Determine where sensitive data can't go, such as entering student personal data into consumer chatbots, and ban use of unapproved AI tools.

5. Train your people

Give your team clear, role-specific guidance and establish an efficient review/approval process for new AI use cases.

6. Evolve from adoption to optimization

Track AI use as it evolves and regulatory requirements shift—and adjust your infrastructure and policies—accordingly.

Contact us today to learn more about how to bring AI to your organization.

Reach out today >