ATARC

TOP TAKEAWAYS

Agencies push forward on modernization amid rising mission demands

As agencies modernize legacy systems and prepare for AI-enabled operations, leaders are rethinking how they build secure, scalable and resilient infrastructures that support evolving missions.

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State and Local Government agencies are navigating a period of rapid change. Mission demands are evolving, cybersecurity threats are growing more sophisticated and emerging technologies like AI are raising both opportunities and expectations. Yet many IT environments are still anchored in aging, siloed systems that were built for another era.

Mandates such as zero trust adoption and the move to modern network contracts are accelerating change, even as budget constraints and workforce shortages push agencies to do more with less. Modernization is no longer optional; it is essential to ensure mission continuity, improve citizen services and safeguard national security.

Here are four key insights that emerged from a recent ATARC federal roundtable, sponsored by Lumen, on building intelligent, resilient IT systems.

1 Take a layered approach to zero trust

Zero trust is central to the federal cybersecurity strategy, but implementation is complex. Agencies must modernize while still relying on legacy systems, often layering new tools to close security gaps.

Legacy infrastructure was not built for zero trust, so progress requires strategic planning, close industry collaboration and sustained investment.

"You can't rely on a single solution," one cybersecurity architect explained. "A strong posture requires multiple layers working together — identity, network inspection, endpoint detection, policy enforcement. Each plays a distinct role."

Leaders also cautioned that too many tools can slow performance, especially in high-compute environments. Effective security should protect the mission without hindering operations. As one federal IT manager put it, security strategies must "protect the mission, not slow it down."

2 Smarter acquisition can unlock agility

Technology now evolves faster than traditional procurement can keep up. Long timelines, limited contracting staff and rigid processes often stall modernization and lock agencies into outdated pricing.

"OneGov isn't a new contract vehicle," explained one technology expert. "It's a way to leverage government buying power more strategically, negotiating smarter and avoiding zombie contracts that don't serve mission needs." In practice, this means moving away from one-off purchases and toward coordinated, governmentwide strategies that maximize scale and flexibility.

Using shared acquisition resources, pre-negotiated pricing and centralized contracting can cut costs and speed adoption. But tools alone are not enough. Success depends on building the right acquisition strategies and skill sets. By planning smarter from the outset, agencies can avoid overpaying, stay aligned with market trends and reinvest cost savings into modernization priorities that deliver real mission impact.

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3 AI success depends on data governance and network readiness

AI is moving quickly from isolated pilot projects to enterprise-scale mission applications. But the effectiveness of these tools depends on strong data and network foundations.

"Before you think about advanced AI, look at your data," one technology leader advised. If an organization's information is incomplete, inconsistent or inaccessible, AI will only amplify those problems.

AI readiness also depends on network readiness. High-bandwidth, low-latency infrastructure enables real-time analytics and secure data integration. Without it, even advanced AI will struggle to meet mission demands.

Agencies must invest in two parallel tracks: strong data governance to ensure quality and modern networks to handle the speed and scale of intelligent applications. Together, these elements create the backbone of sustainable AI.

4 Shared resources and collaboration can accelerate progress

No agency modernizes alone. Collaboration across agencies, academia and industry is key to scaling innovation and managing complexity.

Participants highlighted how interagency working groups are pooling high-performance computing resources, allowing shared access to advanced modeling without duplicating infrastructure. Others are testing zero trust and AI solutions in shared labs before large-scale rollout.

"We work closely with national labs and other agencies to leverage their data centers and AI expertise," advised a federal IT expert. "It lets us move faster and avoid reinventing the wheel."

These collaborations don't just save money, they accelerate learning. By sharing resources, best practices and lessons learned, agencies can scale innovation more efficiently and strengthen collective mission readiness.

Learn more about how Lumen is supporting federal modernization efforts