



Department of
**Finance &
Administration**

Strategic
Technology Solutions
FY25 Strategic Plan

**Navigating the Intersection
of Enabling Technology,
Service Delivery, and Security**

August 2024

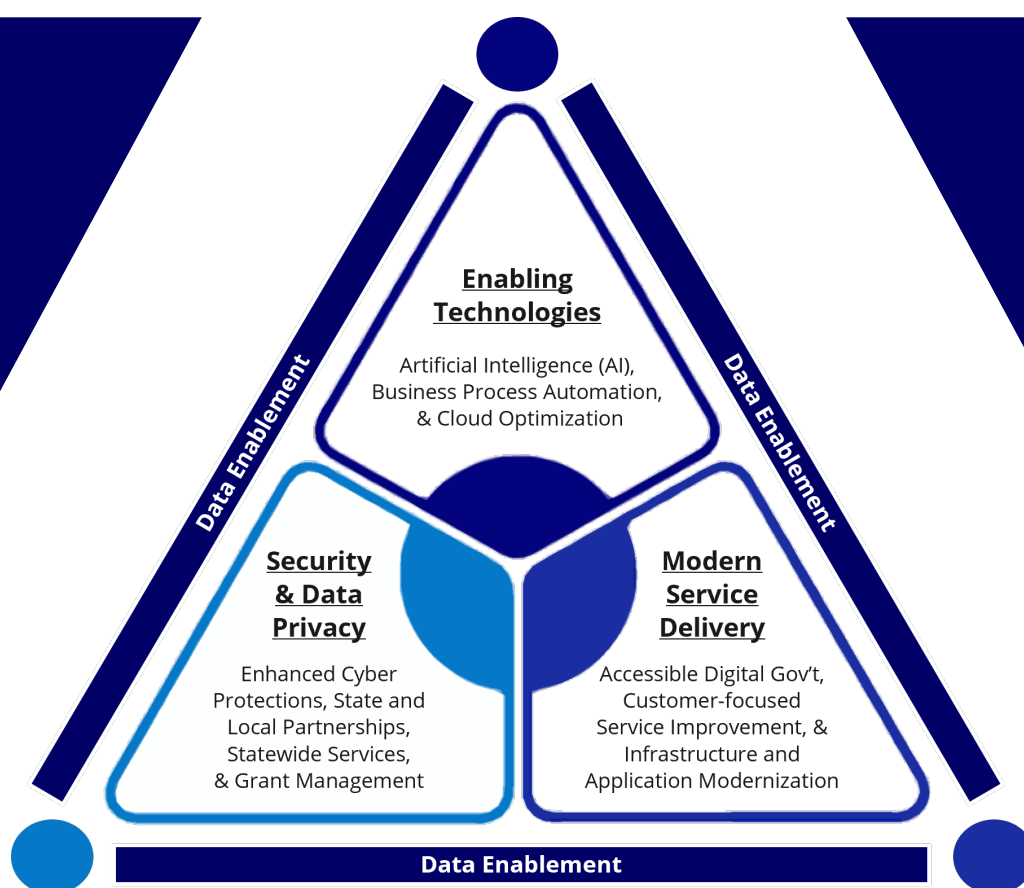
Overview

Navigating the Intersection of Enabling Technology, Service Delivery, and Security

Strategic Technology Solutions (STS) serves as the state's centralized information technology (IT) organization, delivering solutions and services to support state government and improve the quality of life for Tennesseans. STS delivers innovative IT application solutions, enterprise initiatives, and infrastructure enhancements as a valued and trusted partner to state departments and our customers. In today's evolving technology ecosystem, public-sector business and IT leaders must align critical strategic priorities and their investments in technology to address service delivery challenges and keep pace with the rapid advancements in digital innovation. STS intends to meet Tennessee's customer and stakeholder needs through future initiatives and investments outlined in this *FY25 STS Strategic Plan*.

The public sector's current technology landscape emphasizes advancing digital government capabilities and improving citizen experiences. Like the rest of the U.S., most of our major IT projects in Tennessee focus on creating or improving secure digital services. Our pursuit of enhancing service delivery to our citizens, modernizing infrastructure and applications, and attaining operational efficiencies drives all significant STS projects, initiatives, and efforts in 2024 and beyond with robust support to individual departments, business domains, and the state as an enterprise. We are committed to providing technology services and developing or procuring solutions that empower our departmental customers to achieve their core business objectives.

STS is dedicated to improving our service delivery and customer service approach and implementing a series of strategic technology initiatives within three focus areas that will better position the State of Tennessee as a leader in digital government: enabling technologies, service delivery, and security and data privacy. The underlying connector between each of these strategic areas of focus is data enablement.



The initiatives that fuel the *FY25 STS Strategic Focus Areas* are poised to propel us ahead of peer states, mitigating risks while expanding accessible online digital services, accelerating the delivery of business applications, automating labor-intensive processes, and equipping customers with insightful tools to enhance program efficiency. The initiatives support the alignment of state business and information technology, ultimately empowering us to offer expanded services, maintain flexibility in the face of unpredictable circumstances, and proactively provide advanced tools and services for the betterment of our state's employees and its citizens. All initiatives are essential for the future of the State of Tennessee, and each considers the need to increase the State's digital services footprint.

Artificial Intelligence (GenAI Focus)

The State of Tennessee intends to safely and effectively leverage Artificial Intelligence (AI) to augment human capabilities, reduce time-consuming efforts, and improve efficiency. AI technologies can understand and interpret data, learn from patterns, and make decisions. Generative AI (GenAI) has recently emerged, enabling rapid analysis and generation of new content in various forms.

While predictive-based AI has been used in the State for years, GenAI has the potential to automate tasks, analyze large datasets, and improve accuracy. However, its widespread use comes with risks that must be carefully managed to ensure data security, avoid bias and disinformation, maintain compliance, and avoid liabilities.

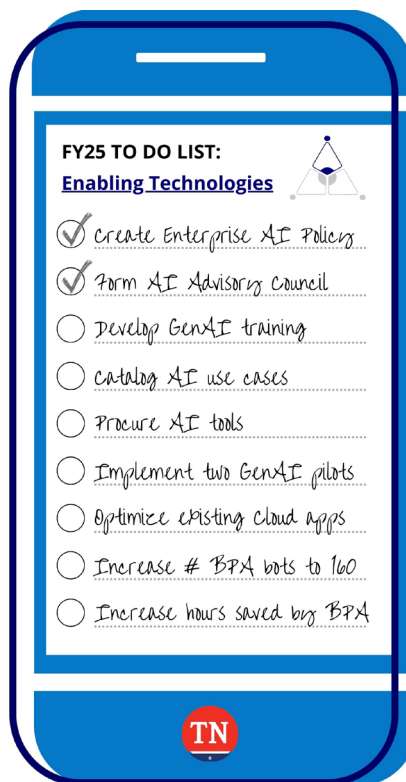
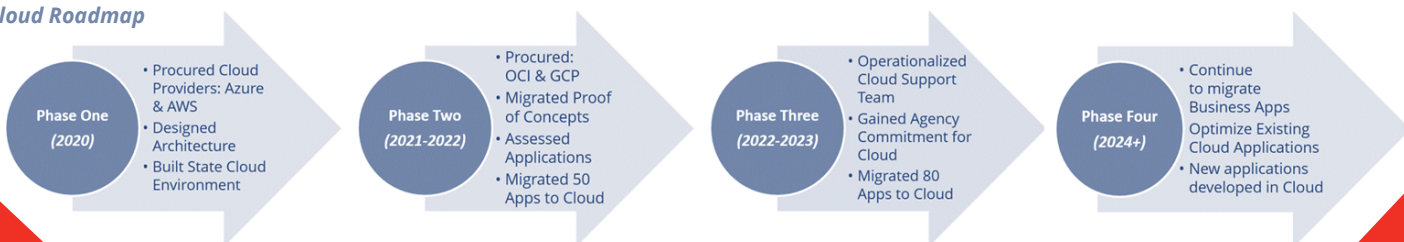
To cultivate the responsible use of AI, in 2024 an enterprise Information Systems Council policy on GenAI was created for the Executive Branch and new legislation established an Artificial Intelligence Advisory Council. A cross-branch working group is developing an AI framework, including policies and guidelines for deploying AI responsibly. This council is committed to cataloging use cases, developing training, and managing risk and data security. STS plans to engage key vendor partners to understand the appropriate framework for using AI while mitigating risks. The State intends to procure AI tools and offer services to develop generative AI systems for departmental customers. We will implement at least two GenAI use cases prior to July 2025.

Cloud Optimization

Several years ago, the State recognized the need to adopt cloud technology to keep pace with peer service providers and deliver solutions timely. In 2020, STS began the CloudTN journey by establishing cloud environments with several providers to prevent dependency on a single vendor and provide flexibility for our customers. STS has moved approximately 275 of the 460 cloud-suitable applications to the CloudTN environment (60%) and is now focusing on optimizing and enhancing existing applications in the cloud, as well as preparing those remaining for Cloud transition. STS will also develop new applications within our cloud environments for customers or purchase cloud-ready software applications and services from vendor partners. Optimization will include identifying and resolving code or architecture inefficiencies within the applications in order to utilize resources better and potentially reduce costs.

By designing cloud-native architecture, breaking down applications into smaller services or apps, and implementing scalability, STS intends to take advantage of the flexibility and cost-effectiveness that the cloud can provide.

STS Cloud Roadmap



Business Process Automation

In FY22, Tennessee acknowledged the need to automate business processes in order to improve efficiency and reduce manual work.

With an initial investment in core infrastructure, STS has implemented over 145 automations across 25 departments, saving over 114,250 estimated hours and improving processing efficiencies.

Our goal moving forward is to expand business process automation across all Executive Branch Departments, where appropriate.

The State has identified several areas for improvement, including data entry, data reconciliation, and customer outreach. By automating more of these processes, the State aims to reduce mistakes, delays, and employee frustration. To achieve this, STS takes an enterprise approach, focusing on process discovery across departments to identify common processes and then designs reusable automations for increased cost efficacy, better resource utilization, and larger impact.

The goal is to optimize infrastructure by enabling high-density performance optimization and logical horizontal scaling, further reducing the number of servers needed and their associated costs. Success will be measured by the deployment of process automation bots across all Executive Branch Departments (160 for FY25) and by estimated hours saved (goal of 150K for FY25). STS will also develop quantitative and qualitative value profiles for existing bots. By automating business processes, the State aims to improve employee satisfaction and the citizen experience.

Digital Government Services

Tennesseans expect rapid and transparent communication channels, and the State aims to one day deliver this through a single, streamlined location for all state government-related tasks. As the first major step in the State's Digital Government journey, STS has partnered with various departments and stakeholders to envision a Digital Business Gateway that provides a "one-stop-shop" for Tennessee business owners to plan, start, operate, and advance their businesses.

The goal of this digital service transformation is to provide a seamless and effective experience for business owners, by leveraging an enterprise technology platform, cloud communications, and centralized technical tools. In FY25, STS will finalize the robust project plan, procure a vendor to assist with development, and begin the project's implementation. The success of this initiative will be monitored through citizen feedback and enterprise data analysis, with revisions made to deliver a more satisfying set of citizen interactions. The business gateway will set the stage for future digital engagement efforts, with the goal of delivering maximum value and building trust among citizens.

The State aims to be a leader in the public sector for providing digital services by expanding its digital services portfolio and enhancing accessibility to services through multiple channels, including the digital business gateway, enterprise mobile applications such as MyTN, and future technology implementations. The State recognizes the importance of upholding governance mechanisms to navigate the ever-changing landscape driven by regulatory changes, legislative requirements, and evolving public expectations. To this end, STS is undertaking a major project to meet ADA Title II obligations and ensure equal access to government services for individuals with disabilities. All applications with web or mobile content available to internal/external users will comply with Web Content Accessibility Guidelines (WCAG) 2.1 Level AA by April 24, 2026.



Service Delivery Review (SDR)

Tennessee faces challenges in remaining competitive in the rapidly changing technology landscape. To stay ahead, STS must adapt to technological advancements and upskill its teams. However, STS faces challenges in recruiting and retaining talent due to competition with private sector organizations. Additionally, a significant portion of our workforce is eligible for retirement.

To address these challenges, in 2024 STS began conducting a Service Delivery Review (SDR) to identify opportunities for improvement and potential solutions to IT demand and recruitment challenges. The review assesses current services and provides recommendations for service improvement, vendor partnerships, or augmentation. F&A Leadership will consider these recommendations and make final decisions about any implementation.

A phased approach will be used to implement approved changes over two to three years, with work beginning in FY25. The goal of the SDR is to provide excellent service to Tennesseans while meeting the needs of our departmental customers.

Client Action Plan (CAP)

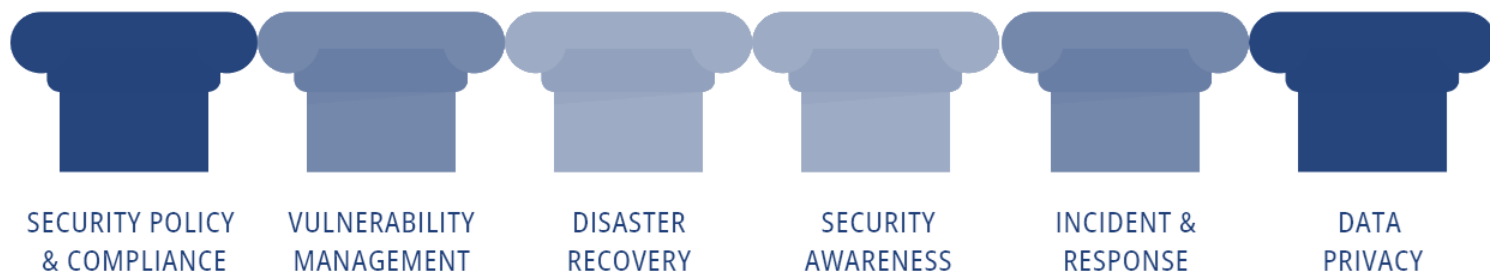
Since 2023, STS has conducted a robust customer service survey and Commissioner-level client conferences to gather feedback from our departmental customers and key stakeholders. Based on customer feedback, annual Client Action Plans (CAP) are then created to address specific IT service improvements. Following the completion of the FY25 Client Conferences, STS will develop the FY25 CAP and begin its implementation with a goal of completing at least 75% of the planned deliverables prior to July 1, 2026.

Infrastructure & Application Modernization

This initiative is a critical component that supports all other strategic initiatives. The goal is to deliver foundational improvements in the enterprise, enabling shared services, reducing costs, improving operations, and enhancing the foundation for a virtual modern workforce. STS will work collaboratively with departments, and focus on rationalizing state business applications, leveraging existing technology and expertise, and modernizing infrastructure to continue cloud migrations. Teams will assess applications, build cloud migration plans, and work with Business Domains and vendor partners to complete business application rationalization plans. Departmental sponsorship and commitment to timeframes are essential to the success of any major application modernization. Expected benefits include:

- Decreased reliance on on-premise servers and data centers
- Continued expansion of the State's cloud footprint
- Greater adoption of vendor-hosted software and applications
- Enhanced data sharing throughout the enterprise and between departments

The State of Tennessee depends upon the internet and/or cyberspace for daily conveniences, critical services, and economic prosperity. The remote work and quick digitization trends across the industry have significantly increased the risks and costs of data breaches today. At STS, we always strive to make our applications and infrastructure as secure and resilient as possible, especially considering the rapid advancement of adversarial cyber technologies and tools. The foundational pillars of STS's cybersecurity program and strategy are:



These six pillars support a statewide risk management approach, providing a framework for executing our cybersecurity responsibilities and leveraging the full range of capabilities to improve security and resiliency for all Tennesseans. Cybersecurity is a constantly moving target; the State invests directly in best-practice cybersecurity capabilities to protect Tennessee from undesirable risks and consequences. Reducing our statewide cybersecurity risk requires an innovative approach that fully leverages our collective capabilities and the entire cybersecurity community. STS continuously strives to better understand our cybersecurity risk posture and engage with key partners to collectively address cyber and privacy education, vulnerabilities, threats, and consequences. The STS Cybersecurity team works with key partners across the Federal, State and Local governments, and private industry to further our cyber posture. Our cybersecurity initiatives are designed to ideally keep ahead of bad actors and further expand Tennessee's risk management capabilities.

Cyber & Privacy Protections

STS will build on current efforts to reduce and manage vulnerabilities of networks and critical infrastructure. The Cybersecurity Risk Management team will upgrade and improve many existing cyber tools and services such as: Managed Detection and Response (MDR), Content Filtering, Identity and Access Management (IAM), Privileged Access Management (PAM), Vulnerability Management, Disaster Recovery Testing for Cloud applications, Governance Risk and Compliance (GRC), etc. The team will also implement new advanced security tools and expand cyber services; examples include a cybersecurity internship program, cybersecurity emergency preparedness and regulations, data privacy impact and threshold assessments, vendor management and governance, new and updated security policies.

Statewide Cyber Services

STS is also engaging the cybersecurity community across the State to strengthen Tennessee's security and resiliency by offering new services to Local governments and municipalities that help detect and identify cyber vulnerabilities and deter malicious cyber actors. These efforts include completing the statewide National Cyber Security Review (NCSR) with over 1500 entities and making more statewide contracts available for Local governments to leverage to address and mitigate cyber gaps identified in their NCSR results. STS will also provide cybersecurity services using American Rescue Plan Act (ARPA) funding for Local governments via existing vendor partnerships such as: online cybersecurity technical training and Managed Detection and Response (MDR).

Cyber Grant Management

The Federal State and Local Cybersecurity Grant Program (SLCGP) is a first-of-its-kind cybersecurity grant program designed specifically for state, local, and territorial (SLT) governments across the country. The Department of Finance & Administration is responsible for the administration of the SLCGP funds made available through the US government's Department of Homeland Security (DHS). Tennessee is expected to receive over \$20M in funding by FY25. The State CIO and Chief Information Security Officer are chairs of Tennessee's Cybersecurity Grant Program Committee, which is responsible for developing a statewide Cybersecurity Plan and capabilities assessment, and for approving individual cybersecurity projects across the State of Tennessee.

Through the above efforts, STS seeks to create a safe and secure cyberspace for Tennessee businesses, citizens, and employees and protect the State's data, remaining interoperable, secure, and resilient.

Conclusion

Navigating the Intersection of Enabling Technology, Service Delivery, and Security

STS diligently listens to the needs of customers and citizens, and actively seeks opportunities to promote technical innovation within the State. We are confident that the strategic initiatives we have established effectively address the call to action from our departmental customers, and we are eager for the opportunity to achieve success over the next fiscal year. By investing in new tools, expanding upon existing resources, increasing stakeholder collaboration, and furthering the skills and expertise of our IT workforce – STS aims to guide our customers through the future of technological advancement. The successful implementation of the three *FY25 STS Strategic Focus Areas* and their supporting initiatives will help Tennessee achieve this aim. In summary, the supporting initiatives will help enhance government operations by leveraging technology and data to improve service delivery, efficiency, and security.



Enabling Technologies

- Leveraging advanced technologies in the artificial intelligence field will drive innovation, automate tasks, and enhance decision-making processes.
- Automating repetitive tasks and workflows with process automations will streamline operations, improve efficiency, and reduce costs statewide.
- Embracing cloud computing technology will allow STS to better optimize infrastructure, increase scalability, and support new development initiatives.



Modern Service Delivery

- Implementing digital platforms and tools will make the digital government service experience more intuitive, accessible, efficient, and responsive to citizen needs.
- By planning and prioritizing the needs of our customers, STS can provide better IT services and user experiences.
- Upgrading and modernizing IT infrastructure to support digital transformation efforts, improve system performance, and meet evolving technological demands is essential for all strategic initiatives to succeed, as well as for departmental missions to be realized.
- Ensuring Digital Accessibility in compliance with WCAG.



Security and Data Privacy

- Ensuring forward-thinking and robust cybersecurity measures are in place will be essential to ensure privacy, protect sensitive data and harden government systems from threats in the ever-changing landscape of cybersecurity.
- Increasing the number of Privacy Threshold (PTA) & Privacy Impact Assessments (PIAs) conducted across the State.
- Partnering with and supporting Tennessee local governments, organizations, and municipalities is essential for holistically improving our state's cyber posture.

We believe that this is an aggressive, yet achievable, set of initiatives. By focusing on the FY25 focus areas and integrating collaboration and coordination across the enterprise, we are confident that we can help our customers achieve greater efficiency, effectiveness, and innovation while propelling Tennessee to the forefront of digital service offerings. Together, IT and business leaders working collaboratively will help ensure our great state cannot only compete but also lead in today's information and technology-based economy.

