Protecting the Nation's Transportation Systems to Ensure Freedom of Movement for People & Commerce

Transportation Security Administration
Information Technology (IT) Strategic Plan
FY24-28

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MESSAGE FROM THE CHIEF INFORMATION OFFICER

The Transportation Security Administration (TSA) Information Technology (IT) systems and solutions interact with the traveling public on a daily basis. The IT Strategic Plan will enable TSA to safeguard the nation's transportation systems and position IT to support an expanding role within the agency. To meet this challenge, IT will be the catalyst for innovation to reduce risk, increase collaboration, and defend against adversaries that threaten the safety of travel.

As we lean into the future, our legacy will be marked by the agency's investment in the ability to increase automation to enable staff to do more with fewer resources. We must also expand our capabilities to analyze and share data in various formats to make rapid, informed decisions. Moreover, we must continue to lead by developing security directives that focus on outcomes and change critical behaviors **to continue safeguarding all transportation modes**. This plan outlines how IT will meet future challenges and be successful in its new mission and vision by providing the framework and guidance to meet the following objectives:

- Automate, innovate, and streamline processes to ensure **speed to impact.**
- Focus on the customer journey, improve customer feedback channels, and improve on ways to amplify customer voices to ensure we deliver **customer experience-driven solutions**.
- The power of connectivity should not be overshadowed by the threat of compromise. IT will ensure all operations and delivery adhere to policy and governance. We will invest in monitoring, detection, and defense and periodically evaluate our capabilities at every point in the process to ensure cybersecurity is embedded in everything we do. We will not only focus on cyber first, but we will also continue to enhance **cyber forward.**
- **TSA's most important asset is its workforce.** We will provide our dedicated professionals with the right information to build policy, strategy, and direction. IT is committed to empowering staff to make accurate and advanced insights that will enable us to produce analytics and predictive information for **data empowered decision-making.**
- We will establish and maintain a continuous learning environment to attract top talent and provide the opportunity to learn, grow, and engage with an innovative IT office. As we grow and learn we will become examples of highly skilled talent in the industry and showcase TSA as the **destination of choice for top technical talent.**
- We will facilitate and accomplish TSA's vital security mission by:

  o Enhancing mobile capabilities across TSA for checkpoint communication, timing and attendance, inventory management, and **optimizing operations**.

  o Enabling shared business intelligence by establishing and making available powerful self-service dashboards.

  o Implementing various forms of intelligent automation to enhance services in Human Capital, Facilities, Finance, and Request management.

  o Investing in a connected checkpoint that enables TSA's workforce to dynamically adapt to changes in mission requirements while still having access to effective technologies to support the mission.

- o Implementing cybersecurity strategies that promote strong cyber hygiene for staff and ensure access to the most efficient tools to protect the TSA enterprise and enable sector inspection and compliance.
- o Improving data and system integration to enhance vetting and identity management.
- o Optimizing the ability of Law Enforcement/Federal Air Marshall Service to support the mission and react to dynamic environments.
- o Establishing patterns and platforms to foster and support an innovative technology culture while engaging industry to influence investments in secure products focused on the TSA mission.

IT's new Strategic Plan differs from the plans of the past as it will also serve as our Action Plan - our call to action to work together to build a strong IT future at TSA. Thank you for being a part of the transformation!

In service,

Opeyemi "Yemi" Oshinnaiye
Chief Information Officer
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Introduction

TSA Mission and Core Values

TSA has a vital mission to protect the nation's transportation systems to ensure freedom of movement for people and commerce. This responsibility is carried out by approximately 60,000 dedicated TSA employees, and IT is committed to supporting this mission and workforce by ensuring responsible employment of emerging technologies and maintaining a highly skilled workforce to provide capabilities needed at TSA. IT will work with DHS to implement best practices and solutions to adapt technological advancements and foster cohesion across the Department.

> **IT's Mission Statement:** With honor and integrity, IT will provide transformative technology solutions to secure and safeguard the nation's transportation systems with unparalleled customer service and commitment to being a center of operational excellence.

> **IT's Vision Statement:** An innovative agile leader, exemplified by a collaborative workforce, which delivers secure technology solutions to protect the nation's transportation systems.

> **IT's Core Values:** Mission. Integrity. Team. Excellence.

TSA IT Strategic Plan FY 2024-2028

This plan is intended to guide IT goals and objectives for the TSA workforce and support delivery of modern, innovative, and efficient services and solutions that will protect the nation's transportation systems.

TSA IT will be the beacon of innovation and deliver solutions over the next five years that will continue TSA's growth to become the top agency for IT talent by achieving the following goals.

- Procuring the best tools and technology for TSA's workforce to perform the agency's mission and drives outcomes.
- Having a state-of-the-art ability to analyze and deliver data and provide predictive modeling where necessary.
- Leading the way in cybersecurity innovation and building an agency culture around cybersecurity awareness.
- Delivering rapid and secure IT solutions while enabling the workforce to deploy their own IT solutions.
- Establishing Communities of Practice to inform industry and government of the best way to drive customer satisfaction through design thinking and experience-driven solutions.

Additionally, the TSA IT's Strategic Plan aligns with both the DHS Office of the Chief Information Officer Strategic Plan and the Administrator's Intent 3.0.

This plan's goals will be met when the TSA IT workforce continues to modernize in an evolving IT landscape. TSA IT will provide data driven insights about transportation to our skilled workforce with verified information to build policy, strategy, and provide direction. IT will be dedicated to empowering staff by making accurate and advanced data available to enable staff to produce analytics and supply predictive information to make data empowered decision-making.

TSA IT Strategic Goals and Descriptions

Goal 1: Increase Speed to Impact

TSA IT will build a culture of innovation that can anticipate the ever-changing IT landscape and facilitate speed to decision. We are committed to providing simplified ways to engage with our customers and leverage automation to reduce workload for our partners and stakeholders across the organization.

Objectives

1.1 | Expand IT demand visibility: IT will provide TSA with clear visibility into the data and infrastructure supporting the TSA mission. This visibility into every technology asset will allow TSA to effectively manage all IT complexities with complete, accurate oversight. TSA IT will develop best practices to collect, analyze, and predict upcoming technology demands from the TSA workforce. IT will collaborate with our internal stakeholders and partners to understand new projects and new and existing technological enhancements, while having quick access to historical trends and predicting future demand to increase speed to decision-making.

1.2 | Strengthen IT supply management- IT services, enterprises architecture, people, and sourcing: We cannot carry out this mission without our vital resources. Our infrastructure and people are critical to ensure the strength of our agency. IT will continue to enhance and update our infrastructure, invest in our people and their skillsets, and work closely with industry to bring in secure and scalable solutions. Our open architecture approach will develop common and accessible technical standards, capabilities, and processes, as well as accelerate both IT and policy to ensure federated, secure, and scalable solutions are available

1.3 | Develop enabling artificial intelligence (AI) infrastructure: IT will align with DHS to explore and develop common infrastructure to support rapid and effective AI implementations across different use cases, including shared deployments of foundation models or common services to connect to external models, along with building operations pipelines to prepare, test, and deploy data for use in machine learning. IT will also align with the updated DHS policies to facilitate responsible AI adoption and explore common procurement actions to give all parts of the Department access to modern AI technologies. IT will ensure AI implementations are interoperable and secure across TSA.

1.4 | Streamlining IT solutions/service delivery by building an AI-ready workforce: IT will build skills in data science and AI across its workforce and focus on hiring experts in these critical fields. More importantly, IT will ensure all IT employees build AI literacy. Just as every TSA employee must know basic cybersecurity best practices, they will also need to understand the capabilities and weaknesses of AI to effectively harness AI systems to support their work and defend against AI threats.

Goal 2: Deliver Customer Experience (CX)-Driven Solutions

In July 2023, TSA released the [Administrator's Intent 3.0](#) with a focus on CX. IT will support this effort by developing an integrated plan to organize, align, and communicate activities that positively influence IT's CX with the TSA workforce.

Objectives

2.1 | Engage customers on mission enablement: IT will enhance communications with the TSA workforce with an emphasis on customer engagement and CX, increasing overall awareness of key issues, decisions, priorities and initiatives, and inspire positive advocacy for IT solutions across the organization. IT will

effectively communicate across multiple platforms in a timely manner to increase knowledge of key issues and initiatives, and to build employee proficiency in enterprise IT operations and solutions.

2.2 | Explore customer requirements fully: IT will continue to mature and measure CX organizations and practices and align with DHS to build and expand centralized CX functions across the Department. IT will support the development of a CX maturity model based on best practices from across government and the private sector and use it to measure our progress. We will track and publish metrics on CX across the organization. IT will focus on business-driven outcomes when providing solutions to meeting their challenges.

2.3 | Design human-centered solutions: IT will build and strengthen a human-centered decision-making culture within TSA. IT will establish CX literacy and fluency across agency through experiential training, coaching, and building modern tools. IT will promote and support human-centered methods, such as user research and usability testing. TSA IT teams will build skills in human-centered design methods and service delivery best practices. IT will establish, deliver, and promote plain language guidance and training within its workforce. The human-centered approach emphasizes both the perspective and participation of the people IT serves at every step, resulting in more inclusive, tailored, and empowering solutions.

Goal 3: Integrate and Embed Cybersecurity

IT will continue to enhance cybersecurity and resiliency by investing in and building an enterprise cybersecurity program that applies Zero Trust principles, strategies, and solutions. Cybersecurity is a shared responsibility across the IT community, and everyone involved in designing, building, and using our systems has a role to play.

Objectives

3.1 | Automate cybersecurity operations: IT will continue to integrate automation in its cybersecurity activities to identify, protect, and detect threats and anomalies within the enterprise. Automation will be a key factor for threat detection and response. IT will continue to explore new tools to assist in proactively eliminating threats to TSA systems and data. Through automation, various IT teams will drastically reduce the number of manual review processes associated with security assessments and vulnerability activities

3.2 | Increase visibility into cyber data: IT will continue to improve governance practices to ensure the enterprise data management lifecycle promotes accurate, accessible, understandable, and secure data. In doing so, the team will leverage experiences from successful domain-specific governance programs as well as DHS's data governance approach that is grounded in twelve different data domains.

3.3 | Enhance TSA staff/partner cyber competency: IT will continue to leverage key partnerships to increase cybersecurity resilience. TSA cannot secure its systems and data alone – the agency relies on industry best practices, proven practices across DHS Components, and other federal agencies to support the development of a robust cybersecurity program. IT will continue to advocate for bug bounty programs and vulnerability disclosure policy to benefit from private security researchers and hackers finding vulnerabilities in TSA's systems before our adversaries can exploit them. IT will strengthen its partnerships with contributions to the open-source software community to improve collective security. Finally, IT will increase transparency with our industry partners to learn and strengthen security practices together.

3.4 | Deliver secure IT solutions/services: IT will unify TSA with a "one IT" mentality for cybersecurity through integrated functions, capabilities, and education. IT will streamline its existing operations to supply agile new technologies that will enable CX and provide secure services and timely responses to security inquiries. IT will improve the effectiveness of workload management to increase the successful delivery of innovative solutions. Through enhanced governance, management, and prioritization, IT will breakdown internal silos, grow the value of its services, and increase stakeholder satisfaction.

Goal 4: Empower Decision-Makers with Data

TSA must strengthen how the agency internally shares data among the organization and with external partners across the public and private sectors to improve TSA operations and better identify and respond to constantly evolving threats. Improving TSA's enterprise data management practices is also critical to making TSA data AI-ready, increasing business intelligence and advanced analytics capabilities, and improving TSA's cybersecurity posture. Where appropriate, IT will increase transparency in our data to build greater trust and increase the speed to decision for partners and stakeholders.

Objectives

4.1 | Establish a powerful data platform: IT will modernize and safeguard IT systems and solutions, improve data quality, increase interoperability and access, and promote reuse through transparent governance, enhance the experience of those served, and advance enterprise business intelligence, data analytics, and AI.

4.2 | Employ advanced data analytics tools: To increase the accuracy, consistency, and availability of data shared across the organization, IT will lead partners and stakeholders to develop and effectively implement enterprise data standards, an enterprise lexicon, and an enterprise data catalog.

4.3 | Information sharing and data facilitation: Where appropriate, IT will facilitate access and sharing of data, promote efficient and proper information and data use, build a culture that values information and data and treats it like a strategic asset, and provide education for data-driven decision-making.

Goal 5: Attract Top Technical Talent

TSA IT believes in harnessing the full potential of our workforce; our greatest asset. Our talent management approach goes beyond recruitment, focusing on nurturing, developing, and retaining top talent. IT will attract, hire, develop and retain diverse technology talent to ensure we have a high-preforming workforce. Together, we will build a culture that fosters innovation, growth, and long-term success.

Objectives

5.1 | Build a diverse, equitable, and inclusive workplace: TSA IT strives to attract individuals across all levels of the TSA IT workforce, including senior leadership positions, which represent the diversity of the populations IT serves. IT will expand partnerships with academic institutions, professional organizations, and communities and strengthen internship, rotation, and developmental programs that promote equitable access to career advancement for all employees. IT will also expand our distributed and remote hiring to reach more diverse qualified candidates across the country.

5.2 | Investing in the TSA IT workforce: TSA IT will build upon award-winning cybersecurity training and awareness program. TSA IT is designing, implementing, and continuously improving training programs for the IT community. IT will establish the TSA IT Center of Excellence, which will create standard technical

orientations for all TSA IT employees, develop a rigorous training and rotation program for entry-level hires, and offer upskilling opportunities for employees to learn new and emerging skills in areas including data science, AI, and human-centered design. This approach fosters collaboration and enhances the exchange of knowledge and best practices, creating a learning community extending beyond formal training sessions. Finally, TSA IT is integrating these training programs into the TSA IT workforce development plans to reinforce long-term succession planning and individual career growth.

5.3 | Recruitment and Hiring Top Technical Talent: TSA IT will improve recruitment and hiring processes by implementing strategies to assess national and regional job markets, forecast workforce requirements, and decrease time-to-hire, thereby mitigating a significant enterprise risk. IT will support TSA's vision to sustain a high-performing workforce. IT is committed to fully adopting the Cybersecurity Talent Management System to leverage modern hiring practices that will aid in filling critical skill gaps in IT.