



September 2022

AVIATION SECURITY PROGRAMS

TSA Should Clarify Compliance Program Guidance and Address User Concerns with Its Data Systems

Accessible Version

GAO Highlights

Highlights of [GAO-22-105063](#), a report to congressional requesters

Why GAO Did This Study

Constant threats to passenger aviation require continuous and effective security programs. Since 2020, over 1 billion passengers traveled on flights within the United States. TSA is responsible for securing the nation's aviation transportation system by ensuring air carriers and airport operators comply with security requirements.

GAO was asked to review TSA's efforts to implement security programs. This report examines (1) how TSA inspections are designed to improve aviation security compliance, (2) how TSA addressed known instances of noncompliance from fiscal years 2017 through 2021, and (3) the extent TSA has experienced challenges transitioning to a new data compliance platform and steps taken to address them. GAO reviewed TSA documentation for its inspections and investigations and observed TSA compliance staff in five airport field offices selected based on location and the number of passengers on board aircraft in 2019. GAO also interviewed TSA officials and representatives from those five airport operators as well as the eight largest passenger air carriers.

What GAO Recommends

GAO is recommending that TSA (1) develop guidance for when an action plan may be effective in resolving noncompliance, (2) assess stakeholder concerns about transitioning to a new compliance platform, and (3) develop lessons learned from other systems' transitions. The Department of Homeland Security concurred with all three recommendations.

View [GAO-22-105063](#). For more information, contact Tina Won Sherman at (202) 512-8461 or shermant@gao.gov.

September 2022

AVIATION SECURITY PROGRAMS

TSA Should Clarify Compliance Program Guidance and Address User Concerns with Its Data Systems

What GAO Found

The Department of Homeland Security's Transportation Security Administration (TSA) conducted about 28,000 inspections in 2021 to identify violations and improve security for domestic airports and passenger air carriers. If TSA identifies a violation, it can take enforcement actions ranging from counseling to civil penalties.

TSA allows airports and air carriers to develop an action plan that invests their own resources to address violations in lieu of a civil penalty. The plans partner TSA with airports and air carriers to identify the root cause of a violation. Most of the airport and air carrier officials GAO spoke with like having action plans as an option. However, TSA guidance is not clear as to when the plans are appropriate to use, such as for systemic violations. Developing and sharing additional guidance could help TSA and its partners more efficiently use their resources.

Transportation Security Administration Inspector Conducting Inspection of Airport Equipment



Source: GAO. | GAO-22-105063

In March 2021, TSA transitioned to a new computer platform that inspectors are to use to record information from their compliance work. Inspectors at each of the five field offices GAO visited said challenges using this platform have affected their ability to capture compliance data. For example, some of these inspectors said TSA did not adequately consult with or train users when it began transitioning data to the new platform. As a result, inspectors said they cannot edit required key data fields, such as updating points of contact or adding new regulated entities. TSA is addressing some issues, but has not fully assessed user concerns, such as the need for better communication. Assessing concerns could help TSA maximize its data system.

TSA plans to transition nine more data systems to its new platform, but has not developed a broad set of lessons learned of staff's experiences from other systems' transitions. Developing lessons learned will help TSA better ensure it mitigates past challenges during future transitions.

Contents

GAO Highlights	ii
Why GAO Did This Study	ii
What GAO Recommends	ii
What GAO Found	ii
Letter	1
Background	7
TSA Inspections Assess Compliance with Security Programs to Help Ensure Security	13
TSA Investigations Have Decreased Since 2017 and the Agency Does Not Have Sufficient Guidance for When to Use Action Plans to Resolve Compliance Violations	21
Inspectors Reported Facing Challenges with TSA's New Compliance Data Platform, and the Agency Has Not Identified Lessons Learned for Future Transitions	30
Conclusions	40
Recommendations for Executive Action	41
Agency Comments and Our Evaluation	41
Appendix I: Results from Transportation Security Administration Investigations	44
Appendix II: Comments from the Department of Homeland Security	53
Text of Appendix II: Comments from the Department of Homeland Security	58
Appendix III: GAO Contact and Staff Acknowledgments	62
GAO Contact	62
Staff Acknowledgments	62
Tables	
Table 1: Selected States and Airports for GAO Site Visits	3
Table 2: Types of Inspections the Transportation Security Administration (TSA) Conducts on Domestic Airports and Air Carriers	13
Text of Figure 3: Transportation Security Administration (TSA) Process for Reporting and Addressing Potential Security Issues at Airports and with Air Carriers	16

Data table for Figure 4: Number of Transportation Security Administration (TSA) Airport and Air Carrier Inspections, Fiscal Years 2017-2021	18
Data table for Figure 5: Transportation Security Administration (TSA) Airport and Air Carrier Inspection Findings Closed Through Counseling or Referred for Investigation, Fiscal Years 2017-2021	20
Data table for Figure 6: Number of Transportation Security Administration (TSA) Airport and Air Carrier Investigations, Fiscal Years 2017-2021	22
Text of Figure 7: How the Transportation Security Administration (TSA) Develops and Carries Out an Action Plan with an Airport or Air Carrier	24
Data tables for Figure 9: Characteristics of the Transportation Security Administration (TSA) Action Plan Program, from October 1, 2019, through November 1, 2021	27
Data table for Figure 11: Percentage of Investigation Outcomes of Airports and Air Carriers by the Transportation Security Administration (TSA), Fiscal Years 2017-2021	45
Data table for Figure 12: Number of Administrative Actions by Type Taken by the Transportation Security Administration (TSA) on Airports and Air Carriers, Fiscal Years 2017-2021	47
Text of Figure 14: How the Transportation Security Administration (TSA) Issues Civil Penalties to Airports and Air Carriers	50

Figures

Figure 1: Illustration of Areas that May Pose Security Risks at a Commercial Airport in the United States	9
Figure 2: Examples of Airport Operator and Air Carrier Security Risks	11
Figure 3: Transportation Security Administration (TSA) Process for Reporting and Addressing Potential Security Issues at Airports and with Air Carriers	16
Figure 4: Number of Transportation Security Administration (TSA) Airport and Air Carrier Inspections, Fiscal Years 2017-2021	18
Figure 5: Transportation Security Administration (TSA) Airport and Air Carrier Inspection Findings Closed Through Counseling or Referred for Investigation, Fiscal Years 2017-2021	20

Figure 6: Number of Transportation Security Administration (TSA) Airport and Air Carrier Investigations, Fiscal Years 2017-2021	22
Figure 7: How the Transportation Security Administration (TSA) Develops and Carries Out an Action Plan with an Airport or Air Carrier	24
Figure 8: Example of an Air Carrier Correcting a Security Violation through a Transportation Security Administration Action Plan	26
Figure 9: Characteristics of the Transportation Security Administration (TSA) Action Plan Program, from October 1, 2019, through November 1, 2021	27
Figure 10: A Mobile Boarding Staircase Parked Next to an Airport's Perimeter Fence Representing a Potential Security Vulnerability	32
Figure 11: Percentage of Investigation Outcomes of Airports and Air Carriers by the Transportation Security Administration (TSA), Fiscal Years 2017-2021	45
Figure 12: Number of Administrative Actions by Type Taken by the Transportation Security Administration (TSA) on Airports and Air Carriers, Fiscal Years 2017-2021	46
Figure 13: Number of Enforcement Cases Referred from Transportation Security Administration (TSA) Compliance to Chief Counsel and Number of Civil Penalties Issued to Airports and Air Carriers, Fiscal Years 2017-2021	48
Data table for Figure 13: Number of Enforcement Cases Referred from Transportation Security Administration (TSA) Compliance to Chief Counsel and Number of Civil Penalties Issued to Airports and Air Carriers, Fiscal Years 2017-2021	49
Figure 14: How the Transportation Security Administration (TSA) Issues Civil Penalties to Airports and Air Carriers	50

Abbreviations

CFR	Code of Federal Regulations
DHS	Department of Homeland Security
FAA	Federal Aviation Administration
GRADS	Global Risk Analysis and Decision Support System
IT	information technology
LInKS	Legal Integrated Knowledge System
PARIS	Performance and Results Information System
PMBOK	Project Management Body of Knowledge

TSA

Transportation Security Administration

This is a work of the U.S. government and is not subject to copyright protection in the United States. The published product may be reproduced and distributed in its entirety without further permission from GAO. However, because this work may contain copyrighted images or other material, permission from the copyright holder may be necessary if you wish to reproduce this material separately.



September 27, 2022

The Honorable Bennie G. Thompson
Chairman
Committee on Homeland Security
House of Representatives

The Honorable Carolyn B. Maloney
Chairwoman
Committee on Oversight and Reform
House of Representatives

Threats to the domestic commercial passenger aviation industry have the potential to cause catastrophic harm to the traveling public and the broader economy, and therefore require constant security and effective programs. Since 2020, over 1 billion passengers traveled on flights within the United States, according to the Bureau of Transportation Statistics.¹ The Transportation Security Administration (TSA), a component within the Department of Homeland Security (DHS), is responsible for securing the nation's aviation transportation system, including about 440 TSA-regulated domestic commercial airports and the air carriers (regulated entities) that fly passengers into and out of these airports.² In carrying out this responsibility, TSA develops security requirements and conducts compliance inspections to assess whether regulated entities, including air carriers and airport operators, are properly implementing them.

We previously reported on aviation security threats to domestic airports and air carriers. For example, in 2020 we reported on both insider threats

¹The Bureau of Transportation Statistics is the Department of Transportation's source of statistics on commercial aviation, multimodal freight and passenger movement, and transportation economics.

²TSA classifies the nation's commercial airports into one of five categories ('X', I, II, III, and IV) based on various factors, such as the number of take-offs and landings annually, the extent of passenger screening at the airport, and other security considerations. In general, category 'X' airports have the highest number of passenger enplanements and category IV airports have the fewest. For purposes of this report, the airports we refer to are commercial airports. We previously reported that a commercial airport (also referred to as a TSA-regulated airport) is an airport operating in accordance with a TSA-approved security program pursuant to 49 Code of Federal Regulations (C.F.R.) part 1542. In addition, for purposes of this report, we generally refer to aircraft operators with flights out of one of these airports as "air carriers."

and attacks in public areas of airports.³ In these reports, we recommended that TSA develop plans to better outline strategic goals and roles and responsibilities, among other things. TSA has implemented the recommendations. In March 2022, we reported on security directives TSA has issued to address threats posed by COVID-19 to the U.S. transportation sector and efforts to implement them by operators of transportation systems.⁴

You asked us to review TSA's efforts to ensure that air carriers and airport operators are properly implementing security programs. This report: (1) describes how TSA inspections of airports and air carriers are designed to improve compliance with aviation security programs, (2) assesses the extent to which TSA addressed known instances of noncompliance by airport operators and air carriers from fiscal years 2017 through 2021, and (3) assesses the extent to which TSA has experienced challenges transitioning its compliance system to a new data platform and steps it took to address the challenges.

For all three objectives, we reviewed documents that explain TSA's processes for assessing compliance of airports and air carriers and documenting the results in TSA's data systems.⁵ These documents explain TSA's policies, approaches and instructions on how its staff are to conduct inspections and investigations, as well as TSA's plans for

³Insider threats refer to aviation workers using their access privileges and knowledge of security procedures to exploit vulnerabilities of the civil aviation system and potentially cause harm. See GAO, *Aviation Security: TSA Could Strengthen Its Insider Threat Program by Developing a Strategic Plan and Performance Goals*, [GAO-20-275](#) (Washington, D.C.: Feb. 10, 2020) and GAO, *Aviation Security: TSA and Airport Stakeholders Have Enhanced Airport Public Area Security, but a Plan Is Needed for Future Collaboration*, [GAO-20-278](#) (Washington, D.C.: Feb. 11, 2020).

⁴GAO, *Transportation Security: TSA Efforts to Coordinate with Stakeholders on COVID-19 Security Directives*, [GAO-22-104583](#) (Washington, D.C.: Mar. 14, 2022).

⁵Category 'X' and I airports regularly serve the operations of aircraft operators with scheduled passenger or public charter passenger operations with an aircraft having a passenger seating capacity configuration of 61 or more seats, and operate under complete security programs regulated under 49 C.F.R. part 1542. The air carriers in our review are passenger air carriers that operate from a category 'X' or I airport and carry out security requirements through at least one of the following TSA standard security programs: (1) Aircraft Operator Standard Security Program for domestic-flagged passenger carriers; (2) Model Security Program for foreign-flagged air carriers that are operating out of domestic airports; (3) Twelve-Five Standard Security Program for aircraft weighing more than 12,500 pounds not covered by any other security program; and, (4) Private Charter Standard Security Program.

transitioning its compliance data system to a new platform. For example, we reviewed the Compliance Program Manual, the National Investigations and Enforcement Manual, and the Performance and Results Information System (PARIS) Roadmap Fiscal Year 2022.⁶

We conducted site visits at TSA airport field offices at five of the airports they monitor that were located in four states. During these visits, we observed TSA compliance staff conducting inspections of airports and air carriers and discussed their compliance-related activities. We interviewed field office leadership and inspectors to understand any location-specific compliance activities and general implementation of TSA policies. We also interviewed representatives from each airport operator and one air carrier with a large presence at each airport regarding their experiences implementing TSA security programs. Table 1 lists each state and the airports we visited.

Table 1: Selected States and Airports for GAO Site Visits

State	Airport
Georgia	Hartsfield-Jackson Atlanta International Airport
Maryland	Baltimore/Washington International Thurgood Marshall Airport
Texas	Dallas Fort Worth International Airport
	Dallas Love Field Airport
Virginia	Washington Dulles International Airport

Source: GAO. | GAO-22-105063

We selected category 'X' or I airports that had at least 8 million or more passengers onboard aircraft in 2019, according to data from the Federal Aviation Administration (FAA), and were located in different regions

⁶Other documents we reviewed include the Compliance Implementation Plan for fiscal years 2017 through 2021 and the National Inspection Test Catalog.

across the country.⁷ At each airport, we interviewed representatives from among the largest air carriers that operate at each airport to understand their perspectives on TSA's air carrier security programs.⁸ The information from our site visits is not generalizable to the experiences of all TSA compliance staff and air carriers at all airports across the country, but they provide perspectives about how TSA conducts inspections and investigations.

Additionally, we conducted interviews with TSA and air carrier headquarter representatives. The TSA headquarter officials we interviewed oversee TSA's compliance activities, establish security program policies, and issue civil penalties. These interviews focused on how TSA manages compliance operations nationwide and assesses civil penalties for security program violations. We also interviewed air carrier headquarter representatives in charge of implementing TSA's security programs at the eight largest domestic air carriers using Bureau of Transportation Statistics 2019 passenger data.⁹ We discussed their experiences implementing TSA's security programs and perspectives on TSA's Action Plan Program. Finally, we spoke with leaders of associations that represent the interest of airports and air carriers and are knowledgeable about TSA security regulations.¹⁰

⁷The FAA is the federal agency responsible for the safe and efficient movement of air traffic in the national airspace system. Also, TSA classifies the nation's commercial airports into one of five categories ('X', I, II, III, and IV) based on various factors, such as the number of take-offs and landings annually, the extent of passenger screening at the airport, and other security considerations. In general, category 'X' airports have the highest number of passenger enplanements and category IV airports have the fewest. For purposes of this report, the airports we refer to are commercial airports. We previously reported that a commercial airport (also referred to as a TSA-regulated airport) is an airport operating in accordance with a TSA-approved security program pursuant to 49 C.F.R. part 1542.

⁸We identified the largest air carriers to interview at each airport using Bureau of Transportation Statistics data on domestic boardings, per air carrier, at each airport for 2019. However, at Baltimore/Washington International Thurgood Marshall Airport, we selected the air carrier with the second highest number of domestic passenger boardings because we had already interviewed local air carrier representatives with the most passenger boardings at Dallas Love Field Airport.

⁹These eight air carriers represent about 80 percent of all passenger traffic in 2019.

¹⁰The airport associations we interviewed were the Airports Council International – North America and American Association of Airport Executives. The air carrier associations we interviewed included Airlines for America, National Air Carrier Association and the Regional Airline Association.

For our first objective, we reviewed and analyzed data from PARIS that provided details on the inspections the agency conducted, along with the resulting findings, from fiscal years 2017 through 2021. These data were limited to the domestic category 'X' and I airports and the air carriers that operate out of them which were within the scope of our review. We used these data to identify the number and resolution of TSA's inspections.

For our second objective, we reviewed and analyzed data from PARIS that provided details on the number of investigations TSA conducted on the airports and air carriers in the scope of this review from fiscal years 2017 through 2021. We also analyzed data on the dollar amounts of civil penalties before and after negotiations with the airport or air carrier. To evaluate TSA's Action Plan Program—TSA's collaborative approach to improve regulated entities' security as an alternative to enforcement actions—we reviewed agency documents and interviewed TSA officials on how the plans are developed. To determine airports' and air carriers' understanding of the action plan process, we interviewed representatives from the largest eight air carriers in the United States for scheduled passenger service, the five airport operators from our site visits, and the selected airport associations. We also analyzed PARIS data pertaining to the initiation, status, and number of action plans TSA entered into with airports and air carriers from October 1, 2019, through November 1, 2021.¹¹ Finally, we assessed TSA's use of action plans against multiple TSA documents, including the National Investigations and Enforcement Manual, which explain the action plan process and the agency's regulatory compliance approach.¹²

To assess the reliability of data from both PARIS and the Legal Integrated Knowledge System (LInKS), which is the data system TSA's chief counsel office uses to maintain and track its work, we reviewed documentation on the systems, conducted various tests of the data, and interviewed knowledgeable officials about the systems. We determined that the data from both systems were sufficiently reliable to report summary numbers of compliance and enforcement actions taken by TSA.

¹¹In April 2022, TSA provided us with a status update on eight of the 213 action plans.

¹²TSA, *National Investigations and Enforcement Manual*, (February 18, 2021); TSA, *TSA Action Plan Program* (June 26, 2019), and TSA, *Compliance Program Manual* (September 30, 2020).

For our third objective, we reviewed documents explaining TSA's transition of its compliance system to a new information technology (IT) platform, including training and timeframes.¹³ We assessed how the agency identified user concerns when it transitioned to the new platform using guidance from DHS' systems engineering life cycle guidebook. Further, we compared TSA efforts to collect and document lessons learned to key practices identified in our prior work.¹⁴ We also met with TSA headquarters officials to discuss the status and implementation of the transition and how they have attempted to address user concerns. During our site visits, we spoke with compliance staff to understand how they document results from inspections and their experiences with the data platform. We also observed a demonstration of the PARIS data system that highlighted differences between how the system previously worked before it transitioned to the new platform and how it currently operates on the new platform. We also observed how TSA officials are to document vulnerabilities identified during inspections.

We conducted this performance audit from March 2021 to September 2022 in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

¹³For purposes of this report, we refer to an IT 'system' as a single computer application that TSA staff use, such as PARIS. Also, references to the IT 'platform' are to the new cloud-based enterprise TSA has developed where multiple applications reside.

¹⁴GAO, *Grants Management: OMB Should Collect and Share Lessons Learned from Use of COVID-19-Related Grant Flexibilities*, [GAO-21-318](#) (Washington, D.C.: Mar. 31, 2021).; *DOD Utilities Privatization: Improved Data Collection and Lessons Learned Archive Could Help Reduce Time to Award Contracts*, [GAO-20-104](#) (Washington, D.C.: Apr. 2, 2020); *Project Management: DOE and NNSA Should Improve Their Lessons Learned Process for Capital Asset Projects*, [GAO-19-25](#) (Washington, D.C.: Dec. 21, 2018); and *Federal Real Property Security: Interagency Security Committee Should Implement a Lessons-Learned Process*, [GAO-12-901](#) (Washington, D.C.: Sept. 10, 2012).

Background

Aviation Security Regulations

As the federal agency responsible for civil aviation security within the United States, TSA promulgates security requirements primarily through regulations and conducts inspections to ensure regulatory compliance and to protect travelers.¹⁵ Title 49, Chapter XII of the Code of Federal Regulations (C.F.R.), includes requirements airports and air carriers must follow to remain in compliance with federal regulations.¹⁶ TSA exercises enforcement authority through a delegation of statutory authority from the Secretary of Homeland Security.¹⁷ Through that delegation, TSA administers its authority to enforce security-related regulations and requirements for civil aviation and other modes of transportation. Airport operators and air carriers generally are to carry out security regulations to mitigate or address security risks.

TSA is responsible for ensuring air carriers and airport operators comply with security requirements within security-restricted areas of an airport, as well as security requirements to prevent access to such areas. TSA is also responsible for partnering with air carriers and airport operators to ensure the security of domestic air travel.¹⁸ Figure 1 illustrates some of

¹⁵See Aviation and Transportation Security Act, Pub. L. No. 107-71, §101(a), 115 Stat. 597, 597-604 (2001); 49 U.S.C. § 114(d), (f). See also, e.g., 49 C.F.R. §§ 1542.5 (granting TSA authority over airport inspections), 1544.3 (granting TSA authority over domestic air carrier inspections), and 1546.3 (granting TSA authority over foreign air carrier inspections).

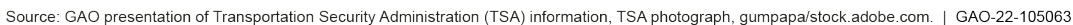
¹⁶The C.F.R. is the official record of all regulations created by the federal government.

¹⁷49 U.S.C. § 114(f)(7) provides that the Administrator shall enforce security-related regulations and requirements.

¹⁸Airport operators are the owners, administrators and managers of an airport with responsibilities to plan, organize, supervise and direct airport operations. 49 C.F.R. § 1540.5 defines an “airport operator” as a person that operates an airport servicing aircraft operators required to have a security program under part 1544 or 1546 of chapter XII of Title 49 of the C.F.R.

the areas of an airport where TSA inspectors may monitor for security risks.¹⁹

¹⁹TSA classifies the nation's commercial airports into one of five categories ('X', I, II, III, and IV) based on various factors, such as the number of take-offs and landings annually, the extent of passenger screening at the airport, and other security considerations. In general, category 'X' airports have the highest number of passenger enplanements and category IV airports have the fewest. Category 'X', I, II, and III airports are required to implement measures to control access and prevent unauthorized entry to security-restricted areas of the airport. Category IV airports are generally not required to identify security-restricted areas within their security programs. For purposes of this report, the airports we refer to are commercial airports. We previously reported that a commercial airport (also referred to as a TSA-regulated airport) is an airport operating in accordance with a TSA-approved security program pursuant to 49 C.F.R. part 1542.



GAO-22-105063 Aviation Security Programs

profound effect on the aviation industry, including with passenger air carriers and at airports where TSA inspectors conduct their compliance work.²⁰ According to Bureau of Transportation Statistics data, U.S. airline passenger traffic decreased about 60 percent system-wide in 2020 compared to 2019. However, in 2022, passenger traffic started to return to pre-pandemic levels. For example, as of April 2022, the number of passenger boardings had increased about 50 percent from April 2021.

TSA Internal Stakeholders

TSA headquarters compliance office and field staff throughout the country are to use computer programs developed by the TSA IT office to document regulatory compliance activity. Key TSA positions that support regulatory compliance include the following:

- **Federal Security Directors.** These senior field officials oversee one or more airport field offices throughout the country and are responsible for ensuring airport operators and air carriers operating at each airport carry out TSA's policies and procedures.
- **Assistant Federal Security Directors for Inspections.** These senior field officials oversee compliance programs and activities of all regulated entities at an airport.
- **Transportation Security Inspectors.** These field staff are responsible for carrying out assigned compliance programs and activities, such as conducting inspections and investigations on the regulated entities they oversee. In addition to domestic commercial airports and the air carriers that fly passengers into and out of these airports, these inspectors oversee cargo and foreign air carriers, flight schools, repair stations, and investigations against passengers for prohibited items violations. They also are to outreach to regulated entities encouraging participation in voluntary compliance programs and activities to enhance transportation security.
- **Principal Security Inspectors.** These headquarters staff serve as the primary TSA point of contact to an air carrier's corporate headquarters officials. They are responsible for answering questions, clarifying TSA security program policies, and suggesting enhancements to improve their security effectiveness.

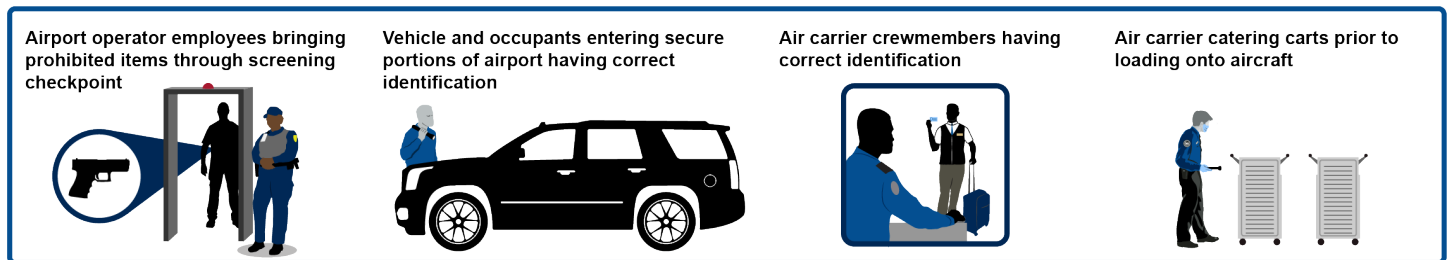
²⁰GAO, *COVID-19 Pandemic: Observations on the Ongoing Recovery of the Aviation Industry*, [GAO-22-104429](#) (Washington, D.C.: Oct. 21, 2021).

Compliance Activities

TSA approaches compliance through risk-based security and progressive enforcement.²¹ Using these approaches, TSA develops programs and activities to fulfill the compliance mission. For example, TSA has identified more than 1,100 security requirements that apply to each type of regulated entity (i.e., airport operators and air carriers), but not all requirements are included in each inspection.

Figure 2 shows examples of activities TSA inspects to help ensure airport operators and air carriers are in compliance with security regulations.

Figure 2: Examples of Airport Operator and Air Carrier Security Risks



Source: GAO analysis of Transportation Security Administration documents. | GAO-22-105063

TSA conducts inspections, and when necessary, investigations, to help ensure airports and air carriers are in compliance with aviation security regulations.

- **Inspections.** TSA conducts compliance inspections to assess whether regulated entities are properly implementing security requirements. Inspections can result in potential security violations and lead to investigations. If an inspection results in a finding that an airport operator or air carrier is noncompliant with a security

²¹In addition, the 2010 Edition of the DHS Risk Lexicon defines risk as the potential for an adverse outcome assessed as a function of threats, vulnerabilities, and consequences and states it is associated with an incident, event, or occurrence. DHS, *DHS Risk Lexicon, 2010 Edition* (September 2010). Also, according to the Compliance Program Manual, TSA bases its progressive enforcement approach on the philosophy that sanctions generally increase with each repeated violation or based upon other aggravating factors, such as a regulated entity's historical compliance record.

requirement, TSA is to take steps to correct the noncompliance.²² These steps include inspectors providing counseling, which occurs when TSA works with the airport operator or air carrier to correct noncompliance that the inspector considers minor or technical and that can be resolved immediately or in a short time period.

- **Investigations.** If an inspection results in a more serious finding of noncompliance that cannot be resolved with counseling, TSA is to perform an investigation to obtain more information on the violation. Some of these investigations may result in TSA initiating a civil penalty action for more egregious violations.²³ The maximum civil penalty allowed for a single violation committed by an airport operator is \$13,910, and \$34,777 for an air carrier.

One component of TSA's progressive enforcement is the Action Plan Program.²⁴ Through this program, TSA works collaboratively and in partnership with regulated entities to identify and address security issues. The program aims to keep industry stakeholders involved throughout the regulatory process by providing them with an alternative method to address certain instances of noncompliance in lieu of issuing civil penalties.

Compliance Data

Thousands of inspectors and other TSA staff are to use TSA's PARIS data system to capture and maintain results from inspections and other compliance activities, such as investigations. Since 2003, TSA has designated PARIS as the agency's single, standardized system of record for all aviation inspector activities, including incidents, inspections, investigations, and outreach.²⁵ TSA's Compliance Program Manual states PARIS should document all violations and is TSA's primary system of record for storing regulatory compliance data. TSA procedures also state

²²TSA defines a "finding" as a failure (or alleged failure) to follow a TSA requirement, including any transportation security regulation, discovered by TSA during an inspection and documented by the inspector.

²³TSA may initiate a civil penalty action by serving a Notice of Proposed Civil Penalty on the person charged with a violation of a TSA requirement. See 49 C.F.R. § 1503.413.

²⁴The Action Plan Program is an example of TSA's outcome-focused compliance, which attempts to achieve and sustain the highest security and compliance outcomes by building proactive, collaborative solutions with stakeholders to transportation security challenges.

²⁵TSA outreach activities can include communication and collaboration by compliance personnel with regulated entities that support enforcement or transportation security.

it is important that PARIS remain current to meet threats across the range of transportation modes the agency oversees.

TSA Inspections Assess Compliance with Security Programs to Help Ensure Security

TSA’s Inspections Assess Airport and Air Carrier Compliance with Security Programs

TSA conducts inspections to help ensure airports and air carriers follow TSA-approved security programs, which describe the policies, procedures, and systems airport operators and air carriers must implement to comply with TSA security requirements. Outcomes from inspections contribute to aviation security by identifying potential security violations. According to TSA’s National Inspection Standards and Procedures, when inspectors find violations, they must work with the regulated entity to bring it into compliance and close the security gap.²⁶ TSA conducts various types of inspections for different purposes and determines the frequency and focus of most of these inspections based on risk and an analysis of the entity’s prior noncompliance with security requirements. Table 2 lists the types of TSA inspections and provides a description of each.

Table 2: Types of Inspections the Transportation Security Administration (TSA) Conducts on Domestic Airports and Air Carriers

Inspection Type	Description
Comprehensive	Inspections of all applicable TSA security requirements
Targeted	Inspections of all high-risk TSA requirements
Supplemental	Inspections of one or more TSA requirements, as determined by the local airport field office based on risk, findings, compliance history, intelligence or other factors
Special Emphasis	Non-routine inspections of compliance activities directed by TSA headquarters that evaluate the security effectiveness and compliance in a specific area
Insider threat	Inspections designed to focus on activities in areas with concentrated aviation worker activity at an airport
Surge	Inspections that concentrate a significant number of resources on a particular location determining compliance with specific regulations for a short time
Joint testing	Inspections that are voluntary when airports and/or air carriers perform testing with TSA to collaboratively determine compliance with TSA requirements and/or effectiveness of security measures

Source: GAO analysis of TSA documents. | GAO-22-105063

²⁶TSA, *National Inspection Standards and Procedures*, (February 22, 2019).

TSA headquarters determines the minimum number and types of inspections field staff should conduct each fiscal year. According to TSA's Compliance Program Manual, the agency bases its plan on the prior year's inspection results, testing, incidents, investigations, outreaches, assessments, and other factors. Officials in each TSA airport field office are to develop local work plans, incorporating the headquarters-driven work plan alongside local risk priorities and projected future aviation security and compliance activities. TSA inspectors generally conduct testing activities during inspections without advance notice.²⁷ For example, as part of the activities conducted under local work plans, TSA inspectors perform unannounced tests that they record as supplemental inspections.

TSA's inspectors assess both airport and air carrier security programs.

- **Airport security programs.** Airports that regularly serve air carriers with scheduled or public charter passenger operations function under "complete" security programs, which contain the most comprehensive security measures.²⁸ TSA conducts comprehensive, supplemental, and targeted inspections based on the airport's risk level.

While each airport security program is unique to a particular airport, common regulatory requirements apply to all. For example, the program must indicate at least one individual to serve as the primary and immediate contact for security-related activities and be available 24 hours a day. In addition, airports operating under complete security programs generally address the same TSA requirements. However, the details of these programs and their implementation can differ based on the

²⁷In addition to testing, inspectors can conduct inspections using surveillance, interviews, and document reviews.

²⁸According to the Department of Transportation, generally, a public charter is when a person or company contracts to operate an aircraft to and from a destination and then sells seats to the public. See *also* 49 C.F.R. § 1540.5 (defining public charter). Airport operators servicing scheduled passenger operations or public charter passenger operations follow prescribed aviation security rules under 49 C.F.R. parts 1544 and 1546. 49 C.F.R. § 1544.1(a)(1); see also 49 C.F.R. § 1542.103(a) (defining the security program content requirements for a "complete program" for airport operators regularly serving operations of an aircraft operator or foreign air carrier described in § 1544.101(a)(1) or § 1546.101(a)). The remaining commercial airports generally adopt and implement "supporting" or "partial" security programs that contain fewer requirements. See 49 C.F.R. § 1542.103(b), (c) (defining security program content requirements for "supporting program" and "partial program" respectively). In this report, all mentions of an airport security program refer specifically to a complete security program unless otherwise indicated.

individual characteristics of the airport. For example, methods that airport operators use to control access into security-restricted areas vary because of differences in the design and layout of individual airports, but all access controls must meet minimum performance standards in accordance with TSA requirements.

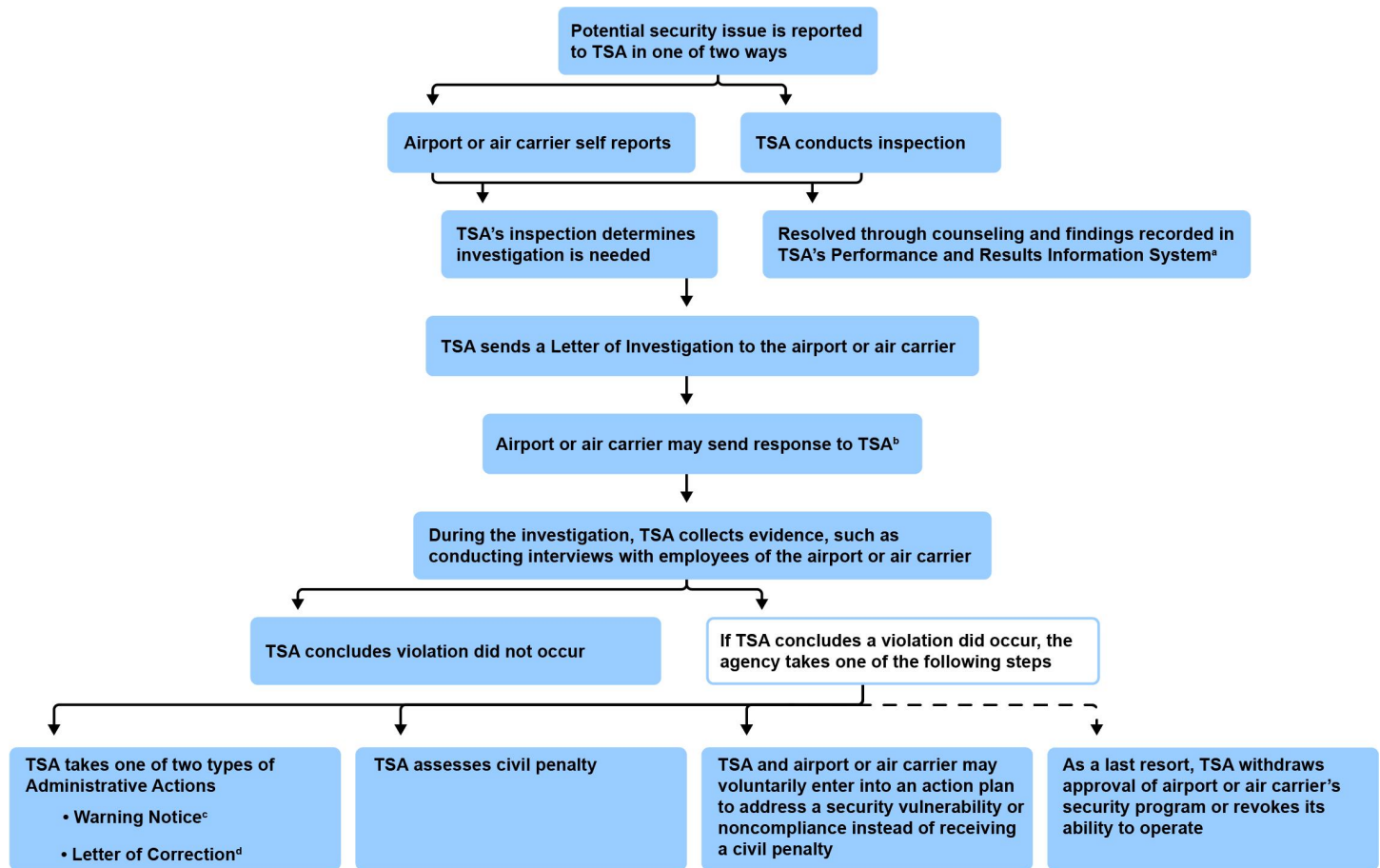
- **Air carrier security programs.** Similar to airports, TSA has developed different types of security programs based on the nature of the air carrier's operations. These programs include requirements for air carriers to adopt and implement a TSA-approved security program for scheduled passenger and public charter operations. For example, requirements in the Aircraft Operator Standard Security Program provide for the security of persons and property traveling on flights against acts of criminal violence and air piracy, and the introduction of explosives, incendiaries, weapons, and other prohibited items on board an aircraft.²⁹ In addition to the Aircraft Operator Standard Security Program, TSA has other security programs designed for different types of aircraft operators, including the Twelve-Five Standard Security Program and the Private Charter Standard Security Program.³⁰

Figure 3 shows TSA's procedures for conducting inspections and taking actions when potential violations of these airport and air carrier security programs occur.

²⁹The Aircraft Operator Standard Security Program is for operators with FAA Part 121 and 125 certificate holders and includes scheduled passenger service operations using aircraft with an FAA certified seating capacity of 61 or more seats, regardless of the number of existing seats. This program applies to all scheduled passenger service for domestic air carriers operating into or out of a TSA controlled sterile area.

³⁰The Twelve-Five Standard Security Program identifies requirements for FAA Part 135 certified carriers offering commercial air transport using aircraft with a maximum certificated takeoff weight between more than 12,500 pounds (5,670 kg) and 100,309.3 pounds (45,500 kg). The Private Charter Standard Security Program is for operators with an FAA Part 121, 125, or 135 certificate using aircraft with a maximum certificated takeoff weight greater than 100,309.3 pounds (45,500 kg) or configured with 61 or more passenger seats or when the passengers are enplaned from or deplaned into a sterile area. This program includes requirements to screen passengers and their accessible property.

Figure 3: Transportation Security Administration (TSA) Process for Reporting and Addressing Potential Security Issues at Airports and with Air Carriers



Source: GAO analysis of TSA documents. | GAO-22-105063

Text of Figure 3: Transportation Security Administration (TSA) Process for Reporting and Addressing Potential Security Issues at Airports and with Air Carriers

- 1) Potential security issue is reported to TSA in one of two ways.
 - a) Airport or air carrier self reports
 - i) TSA's inspection determines investigation is needed
 - ii) TSA sends a Letter of Investigation to the airport or air carrier /b/

-
- iii) During the investigation, TSA collects evidence, such as conducting interviews with employees of the airport or air carrier
 - (1) TSA concludes a violation did not occur.
 - (2) If TSA concludes a violation did occur, it takes one of the following 4 steps
 - (a) TSA takes one of two administrative Actions. A Warning Letter /c/; or a Letter of Correction /d/
 - (b) TSA assesses a civil penalty
 - (c) TSA and airport or air carrier may voluntarily enter into an action plan to address a security vulnerability or noncompliance instead of receiving a civil penalty
 - (d) As a last resort, TSA withdraws approval of airport or air carrier's security program or revokes its ability to operate
 - b) TSA conducts inspection
 - i) Resolved through counseling and findings recorded in TSA's Performance and Results Information System /a/

Source: GAO analysis of TSA documents. | GAO-22-105063

^aThe Performance and Results Information System is where inspectors are to capture and maintain results from inspections and other compliance activities, such as investigations.

^bAirport or air carriers are not required to respond to a letter of investigation.

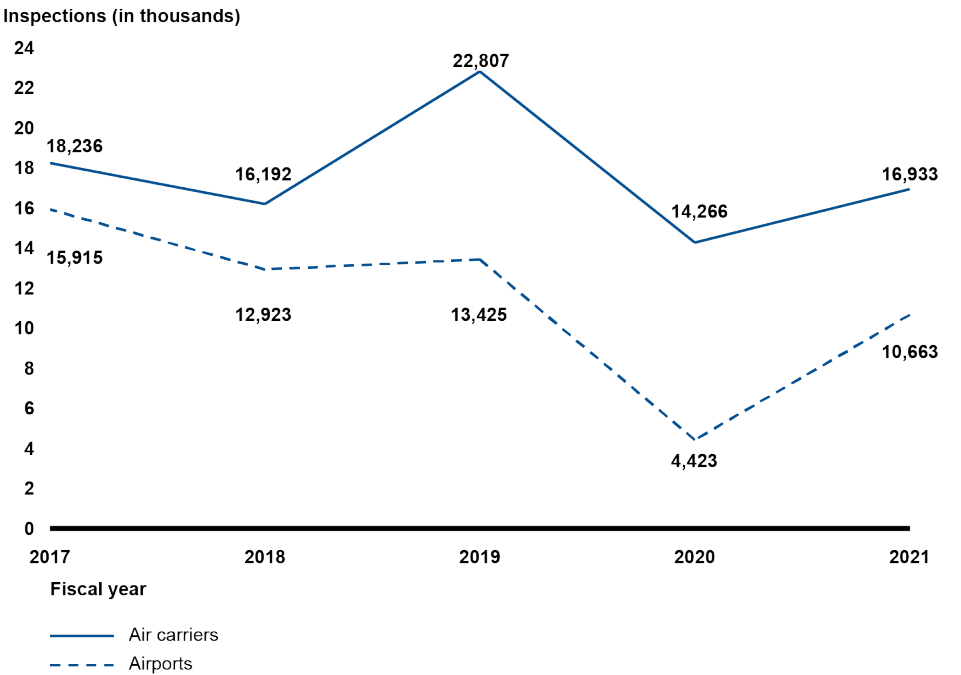
^cTSA sends a Warning Notice when it determines a violation has occurred but does not intend to seek a civil penalty. Warning Notices are not a formal adjudication or a legal finding and cannot be appealed.

^dTSA sends a Letter of Correction to document when an airport or air carrier has successfully completed an action plan. According to a senior TSA official, in August 2019, TSA changed the purpose of the Letter of Correction and began sending it after a regulated entity successfully completed an action plan.

Our analysis of TSA data found that the agency conducted about one-third fewer airport inspections in fiscal year 2021 compared to fiscal year 2017 while the number of air carrier inspections decreased about 7 percent in fiscal year 2021 compared to fiscal year 2017 (see fig. 4). However, the total of both airport and air carrier inspections has increased nearly 50 percent from fiscal year 2020 to 2021. TSA officials attributed the overall decline to the COVID-19 pandemic, which initially limited TSA's ability to conduct inspections, and the more recent increase

in fiscal year 2021 to TSA inspectors adapting their methods to perform safer and more effective inspections during the pandemic. Our analysis of TSA data also found that about 9 percent of airport and air carrier inspections resulted in a finding of at least one security violation from fiscal years 2017 through 2021. TSA took various actions to address these violations ranging from counseling to civil penalties in more serious cases.

Figure 4: Number of Transportation Security Administration (TSA) Airport and Air Carrier Inspections, Fiscal Years 2017-2021



Source: GAO analysis of TSA data. | GAO-22-105063

Data table for Figure 4: Number of Transportation Security Administration (TSA) Airport and Air Carrier Inspections, Fiscal Years 2017-2021

Year	Airport inspections	Air carriers inspections
2017	15.915	18.236
2018	12.923	16.192
2019	13.425	22.807
2020	4.423	14.266
2021	10.663	16.933

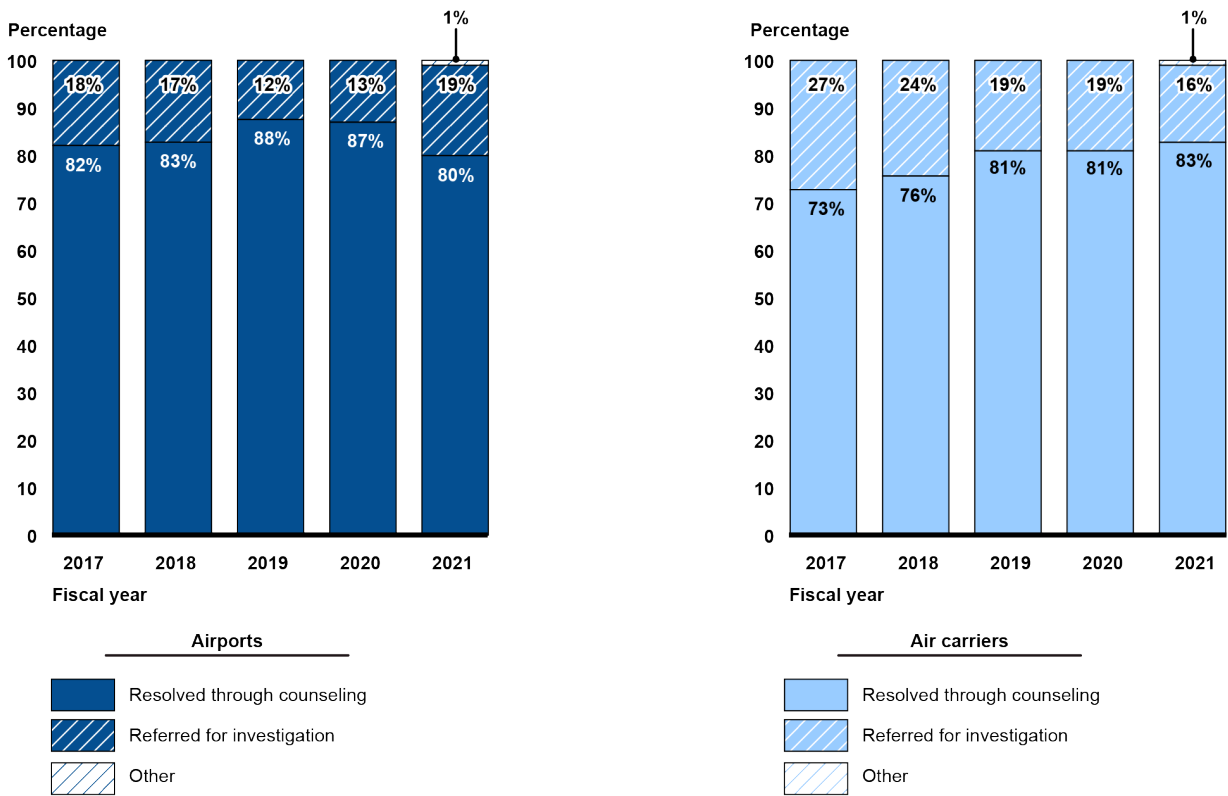
Source: GAO analysis of TSA data. | GAO-22-105063

TSA Closed Most Findings Resulting from Inspections through Counseling

We found that about 80 percent of noncompliance TSA inspectors identified was resolved with counseling during fiscal years 2017 through 2021.³¹ Inspectors are to document instances of noncompliance resolved with counseling in PARIS. These documented instances become part of an airport or air carrier's compliance history and serve as evidence that the alleged violator was aware of the regulation or security requirement, received counseling on the violation, and was advised how to correct it. TSA inspectors are to review an airport or air carrier's compliance history and may take further action if an inspector finds a similar violation in a prior inspection. When compliance staff determine a need for a more thorough examination of the alleged violation, they are to conduct an investigation. Investigations can result in TSA taking an enforcement action. As shown in figure 5, TSA closed most findings from inspections through counseling, but referred at least 12 percent for an investigation.

³¹According to TSA's National Investigations and Enforcement Manual, when resolving noncompliance through counseling, the airport or air carrier corrects the noncompliance either immediately in the presence of the TSA inspector or within 5 days. Noncompliance closed with counseling must be minor or technical in nature.

Figure 5: Transportation Security Administration (TSA) Airport and Air Carrier Inspection Findings Closed Through Counseling or Referred for Investigation, Fiscal Years 2017-2021



Data table for Figure 5: Transportation Security Administration (TSA) Airport and Air Carrier Inspection Findings Closed Through Counseling or Referred for Investigation, Fiscal Years 2017-2021

Airports

Year	Resolved through counseling	Referred for investigation	Other
2017	82.0698	17.9302	0
2018	82.754	17.246	0
2019	87.5086	12.4914	0
2020	86.9565	13.0435	0
2021	79.9304	19.0255	1.04408

Air Carriers

Year	Resolved through counseling	Referred for investigation	Other
2017	72.7645	27.2355	0
2018	75.6117	24.3883	0
2019	80.9371	19.0629	0
2020	80.9165	19.0835	0
2021	82.7225	16.2304	1.04712

Note: The 'other' category represents cases that had not yet been resolved.

Source: GAO analysis of TSA data. | GAO-22-105063

TSA Investigations Have Decreased Since 2017 and the Agency Does Not Have Sufficient Guidance for When to Use Action Plans to Resolve Compliance Violations

TSA Investigations to Resolve Compliance Violations Have Decreased Since 2017

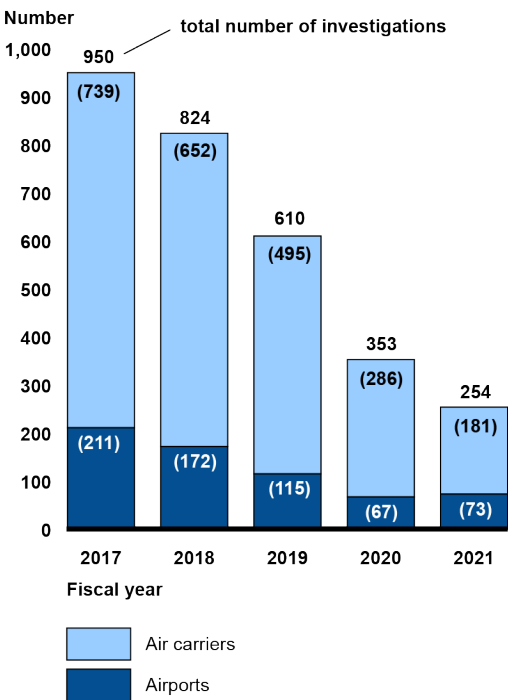
When inspections find more serious violations that cannot be closed with counseling, TSA can conduct investigations to further examine facts and circumstances. While inspections can occur regularly and are routine, TSA officials stated the agency conducts investigations when an inspector identifies an alleged violation that is potentially significant. Investigations gather information used to determine if the violation warrants an enforcement action. TSA typically initiates an investigation by sending a letter of investigation to the airport or air carrier.³² The letter states the agency is investigating an alleged violation and specifies details of the event. TSA allows the airport or air carrier to submit any information about the incident within 20 days and the agency considers such information during its investigation.

Our analysis found that TSA conducted fewer investigations of both airports and air carriers since fiscal year 2017. As shown in figure 6, TSA conducted a total of about one-third fewer airport and air carrier investigations in fiscal year 2019, before the pandemic began, than in

³²TSA guidance on conducting investigations states that a letter of investigation is not mandatory in all cases, including for those violations it closes with counseling, a Warning Notice, or no action.

fiscal year 2017. TSA officials attributed this decrease to the agency’s emphasis on outcome-focused compliance and a focus on resolving cases through counseling when possible. TSA officials told us they conduct more air carrier investigations than those at airports because there are more opportunities to do so given each air carrier operates from multiple airports.

Figure 6: Number of Transportation Security Administration (TSA) Airport and Air Carrier Investigations, Fiscal Years 2017-2021



Source: GAO analysis of TSA data. | GAO-22-105063

Data table for Figure 6: Number of Transportation Security Administration (TSA) Airport and Air Carrier Investigations, Fiscal Years 2017-2021

Year	airport	air carriers
2017	211	739
2018	172	652
2019	115	495
2020	67	286
2021	73	181

Source: GAO analysis of TSA data. | GAO-22-105063

If TSA's investigation determines that an airport or air carrier violated a security regulation, the agency can choose to take a range of enforcement actions. These can be administrative, such as sending Warning Notices or Letters of Correction, or more punitive, such as issuing a civil penalty. More information about TSA's investigations, including when the agency determines to issue a civil penalty and the results of these efforts, are in appendix I.

TSA Uses Action Plans to Resolve Compliance Violations in Lieu of a Civil Penalty, but Lacks Guidance on When to Consider Them

TSA's action plans are part of its outcome-focused compliance philosophy for regulating airports and air carriers, but TSA lacks guidance for when an action plan may be an appropriate method for resolving noncompliance.³³ According to TSA officials, the agency and regulated entities typically participate in action plans for violations that would otherwise require the regulated entity to pay a civil penalty.³⁴ In lieu of paying a civil penalty, an airport or air carrier may have an opportunity to participate in an action plan to address a violation of a specific security requirement or otherwise address a security vulnerability that does not rise to the level of a violation. The purpose of an action plan is to determine the root cause of regulatory violations or security vulnerabilities and implement measures to help ensure these violations or vulnerabilities do not reoccur in the future. Part of the plan is also to verify that the airport or air carrier has successfully implemented those measures.

Participation in an action plan is voluntary and allows TSA and the airport operator or air carrier to discuss and agree upon corrective actions that address the root cause of the violation or security vulnerability. The program provides an opportunity for airports and air carriers to offset potential civil penalties and other enforcement actions by investing in their own security.³⁵ If TSA and an airport or air carrier decline to participate, TSA will pursue its standard enforcement procedures that include

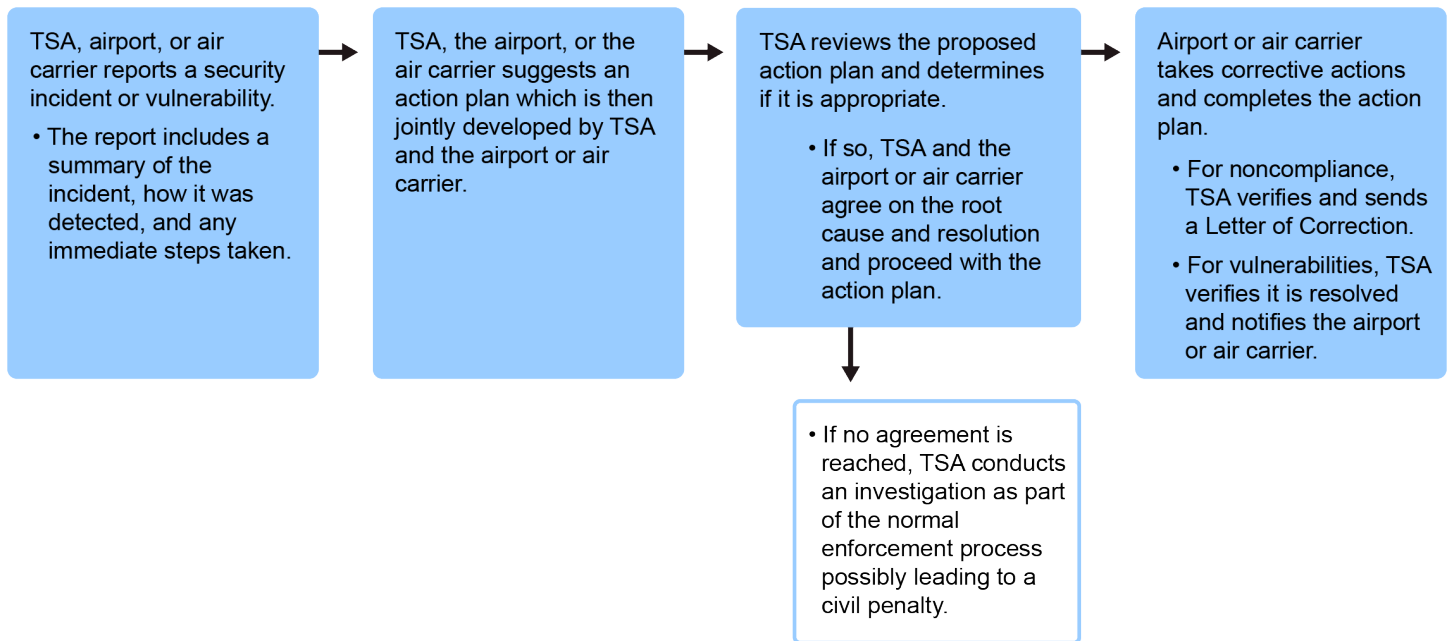
³³TSA's Action Plan Program consolidated three prior programs with similar intents into a single program.

³⁴TSA has guidance governing the use of civil penalties in cases when an action plan is not used.

³⁵According to a TSA chief counsel official, civil penalties paid by airports and air carriers are sent to the Department of the Treasury, not TSA.

conducting an investigation that may lead to a civil penalty. Figure 7 illustrates how TSA carries out the Action Plan Program.

Figure 7: How the Transportation Security Administration (TSA) Develops and Carries Out an Action Plan with an Airport or Air Carrier



Source: GAO analysis of TSA documents. | GAO-22-105063

Text of Figure 7: How the Transportation Security Administration (TSA) Develops and Carries Out an Action Plan with an Airport or Air Carrier

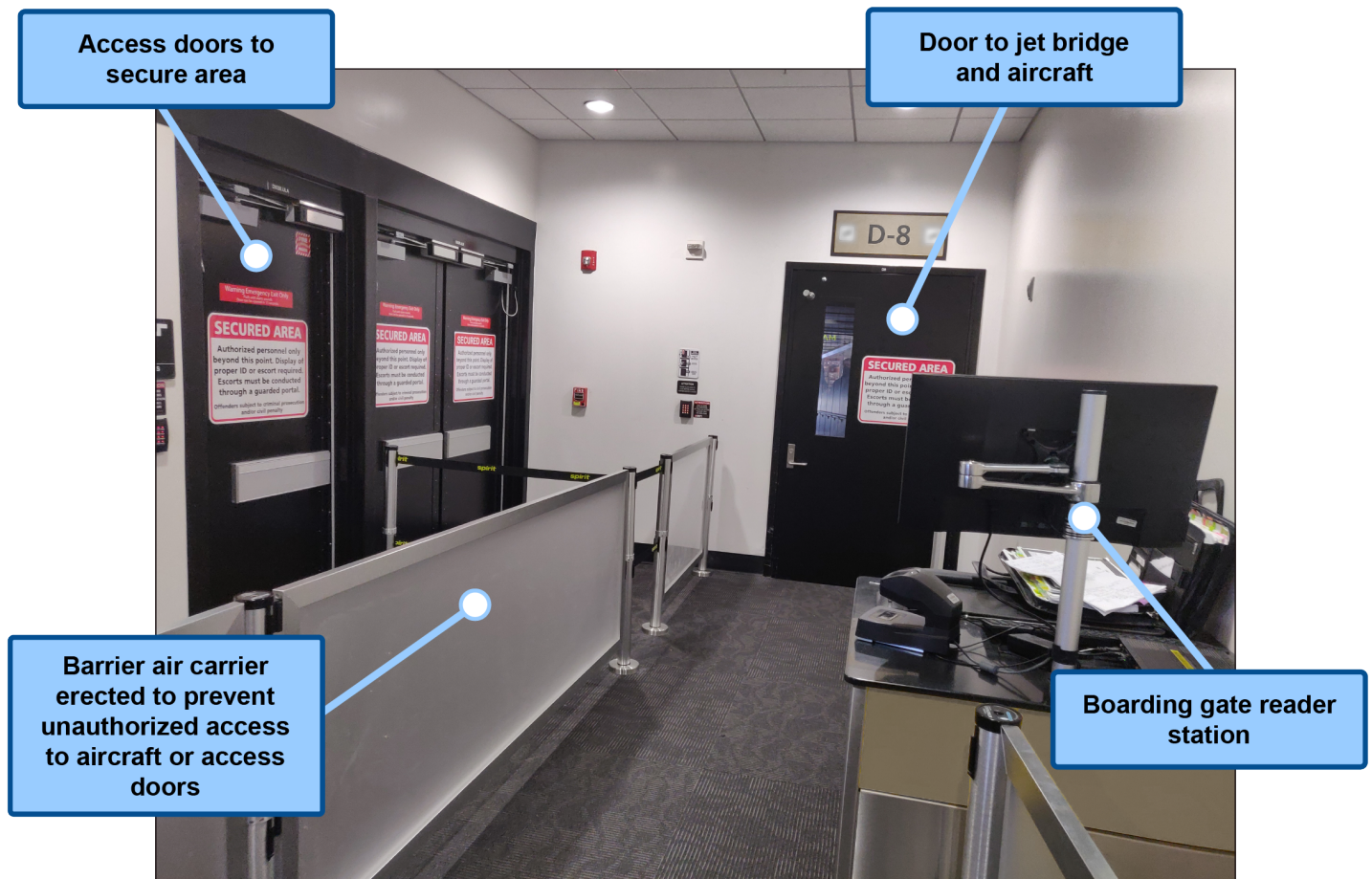
- 1) TSA, airport, or air carrier reports a security incident or vulnerability. The report includes a summary of the incident, how it was detected, and any immediate steps taken.
- 2) TSA, the airport, or the air carrier suggests an action plan which is then jointly developed by TSA and the airport or air carrier.
- 3) TSA reviews the proposed action plan and determines if it is appropriate. If so, TSA and the airport or air carrier agree on the root cause and resolution and proceed with the action plan.
 - a) If no agreement is reached, TSA conducts an investigation as part of the normal enforcement process possibly leading to a civil penalty.

-
- 4) Airport or air carrier takes corrective actions and completes the action plan. For noncompliance, TSA verifies and sends a Letter of Correction. For vulnerabilities, TSA verifies it is resolved and notifies the airport or air carrier.

Source: GAO analysis of TSA data. | GAO-22-105063

Actions plans can address a variety of security risks. For example, TSA inspectors at one airport we visited pointed to a security enhancement that resulted from an action plan. The inspectors said that at one airport, an air carrier received numerous security violations related to unauthorized access to a jet bridge and secure access doors that were in close proximity to each other. TSA and the air carrier agreed to address this violation through an action plan after determining that the root cause of these violations was the lack of any airport infrastructure to prevent the free movement of unauthorized individuals in the gate area where the secure doors and jet bridge were located. The air carrier viewed the action plan as an opportunity to invest in a security measure in lieu of possibly paying a civil penalty that would not improve security and still require it to address the violation. According to the inspector who pointed us to this security enhancement, the air carrier spent approximately \$38,000 to make these improvements under the action plan as opposed to potentially paying a civil penalty. As shown in figure 8, the air carrier installed a barrier intended to prevent unauthorized individuals from accessing the jet bridge either from the gate area or from the access doors to the secure area. The barrier also prevented passengers exiting the jet bridge from accessing the secure area doors.

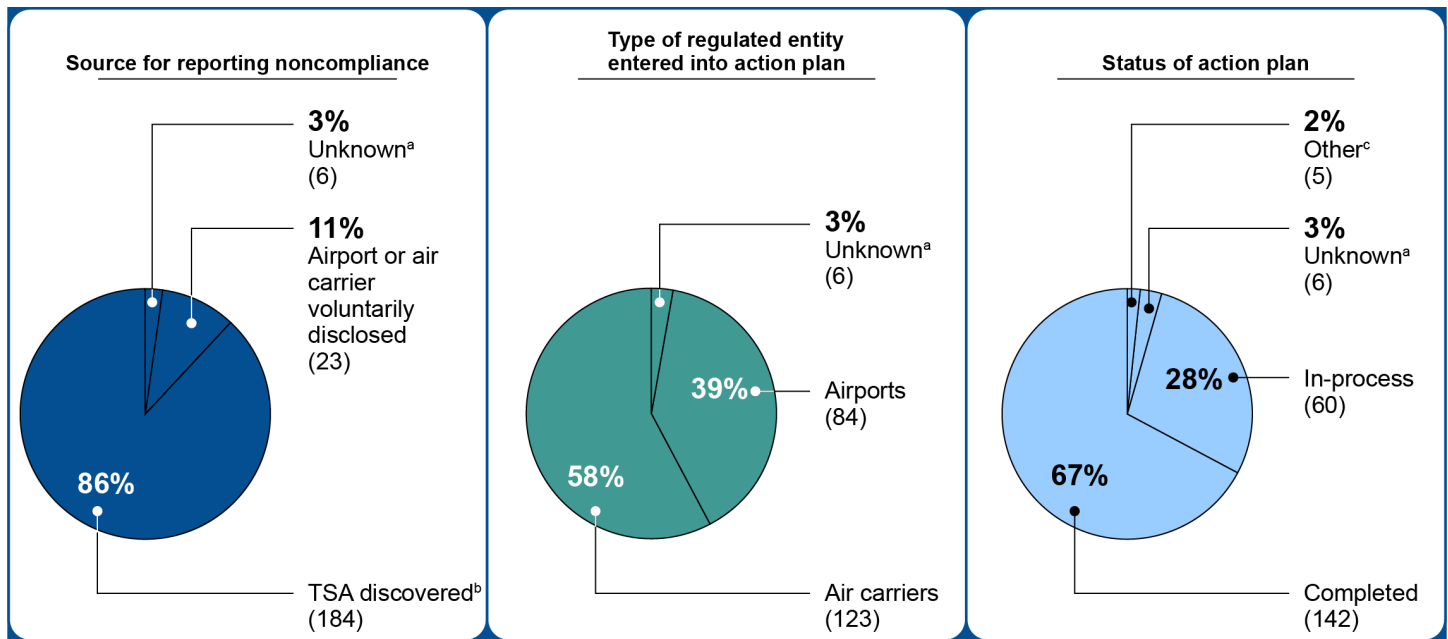
Figure 8: Example of an Air Carrier Correcting a Security Violation through a Transportation Security Administration Action Plan



Source: GAO. | GAO-22-105063

As shown in figure 9, the majority of action plans from October 1, 2019, to November 1, 2021, were the result of TSA-identified noncompliance, were most frequently used by air carriers, and have since been completed.

Figure 9: Characteristics of the Transportation Security Administration (TSA) Action Plan Program, from October 1, 2019, through November 1, 2021



Source: GAO analysis of TSA data. | GAO-22-105063

Data tables for Figure 9: Characteristics of the Transportation Security Administration (TSA) Action Plan Program, from October 1, 2019, through November 1, 2021

Source for reporting noncompliance			Type of regulated entity entered into action plan			Status of action plan		
unknown	airport or air carrier voluntarily disclosed	tsa discovered	unknown	airports	air carriers	other	unknown	inprocess
6	23	184	6	84	123	5	6	60
								142

Notes:

Source: GAO analysis of TSA data. | GAO-22-105063

^aUnknown results indicate cases where the TSA data was incomplete. According to TSA, these cases were likely attributable to various factors including action plans that were still in process or the agency migrating data to a new platform.

^bThis includes 12 incidents where the source for the action plan came from an identified vulnerability.

^c“Other” consists of instances when either an airport or air carrier declined or withdrew from an action plan, TSA rejected a proposed action plan, or TSA discarded the record.

Representatives from seven of the eight regulated air carriers and three of the five airport operators we spoke with told us they generally like using an action plan when they think it is appropriate, in part, because the plans

promote collaboration with TSA and enhance their own security.³⁶ However, airport association and air carrier representatives told us it is not clear to them when TSA thinks an action plan is an appropriate method for correcting a violation. Representatives from five of the largest eight air carriers we interviewed said that, in their opinion, an action plan may be appropriate when a violation is systemic in nature—such as violations that reoccur across multiple locations where an air carrier has operations—as opposed to a single isolated incident.³⁷ However, four of these five air carrier representatives also said TSA has offered action plans for a range of violation types, including when the root cause was systemic and when it was an isolated, one-time mistake made by a single employee.³⁸

Representatives from five of the eight air carriers told us that it would be helpful for them if TSA had guidance indicating when an action plan may be an effective method for resolving a violation, while the remaining three air carriers did not specifically cite the need for better guidance as a challenge. The five air carrier representatives said this type of guidance would help to clarify for them when action plans are appropriate. For instance, representatives from seven of the eight air carriers told us they have declined to participate in an action plan, or otherwise did not think participation was appropriate in some instances, because they felt resolving the violation this way would be more time consuming, burdensome, or provide minimum benefit as opposed to paying the civil penalty. Conversely, representatives from three of the eight air carriers said there have been instances when they would have preferred to pursue an action plan, but TSA did not offer that option. A senior TSA official told us that airports and air carriers can request to participate in an action plan at any time.

TSA officials told us the Action Plan Program can be an effective way to address noncompliance as it provides an opportunity for the entity to invest in its own security without paying a civil penalty. Further, a senior TSA attorney told us that the agency expanded the program in May 2021

³⁶The one remaining air carrier we spoke with stated that action plans can be expensive and often take too long to complete. Of the remaining two airport operators we spoke with, representatives at one airport operator told us that they had not entered into an action plan with TSA so they did not have experience with it. Representatives at the other airport operator described the program as too burdensome.

³⁷About 80 percent of all scheduled passenger service occurred on these eight carriers in 2019 according to the Bureau of Transportation Statistics.

³⁸The one remaining air carrier did not indicate having this experience with TSA.

to include other regulated entities it oversees, such as surface and rail carriers. However, TSA has not developed formal guidance for when it believes an action plan is an effective method for resolving a violation. Specifically, TSA's existing guidance does not indicate the types of violations, or underlying root causes for those violations, that might be most appropriate for addressing through an action plan, such as when the violation is determined to be systemic or reoccurring versus a single, isolated incident. Instead, the guidance focuses on the administrative process for participating and circumstances under which an action plan cannot occur. For example, in a memorandum from TSA that describes the program, the agency states that an action plan does not apply to egregious or intentional noncompliance or in instances of potential criminal activity or fraud.³⁹ As noted previously, air carrier representatives we spoke to identified this as an issue where TSA lacked consistency with respect to situations that were appropriate for an action plan.

When TSA announced the program, it stated that one of its goals is to increase partnerships with industry stakeholders.⁴⁰ Further, TSA's regulatory compliance approach, outlined in its Compliance Program Manual, encourages collaboration with industry stakeholders, including eligible parties under the voluntary Action Plan Program wherever possible.⁴¹

TSA headquarters officials stated the current guidance detailing use of action plans effectively indicates for inspectors when the plans are appropriate. TSA officials also stated that they have continued to engage industry partners to help them better understand the program. At the start of the Action Plan Program in late fiscal year 2019, TSA provided some guidance to industry partners that included when an action plan might be appropriate. For example, TSA said one item to consider in deciding whether to pursue an action plan was whether it was worth the agency's or regulated entity's effort. However, the guidance does not specify how to make this determination. Further, even though airports and air carriers work in partnership with TSA on the Action Plan Program, the guidance does not include appropriate scenarios for when industry might suggest an action plan.

³⁹TSA, *TSA Action Plan Program*.

⁴⁰TSA, *TSA Action Plan Program*.

⁴¹TSA, *Compliance Program Manual*.

TSA officials acknowledged needing to continue engaging with industry partners to reinforce and provide more clarity on these guidelines given that the current guidance lacks important details. According to TSA officials, in June and July 2022, the agency began reaching out to industry partners through a series of briefings to reinforce aspects of the program, such as discussing how action plans can be appropriate for addressing underlying root causes for violations. While this communication has been a positive step in clarifying the Action Plan Program, TSA can do more to ensure that inspectors and regulated entities have a shared understanding and formalized guidance to refer to when deciding whether an action plan is appropriate. These efforts could include additional information on scenarios that are most appropriate for an action plan instead of limiting the guidance to scenarios where action plans do not apply. Developing and sharing such guidance could clarify both inspectors' and regulated entities' understanding of when to apply action plans and lead to more efficient use of resources for both TSA and airports and air carriers.

Inspectors Reported Facing Challenges with TSA's New Compliance Data Platform, and the Agency Has Not Identified Lessons Learned for Future Transitions

Inspectors Described Challenges Collecting and Analyzing Data Using TSA's New Compliance Platform

TSA inspectors at each of the five airport field offices we visited told us they have experienced challenges using PARIS since the agency transitioned it to a new platform in March 2021. From 2003 until March 2021, TSA maintained PARIS on a legacy data center platform, but beginning in late 2019, it began transitioning it to a cloud-based enterprise platform. TSA transitioned to the new platform as part of an agency-wide initiative to move its systems to a cloud-computing environment. TSA IT leadership directed the agency to complete this transition around the spring or summer of 2021. TSA initially expected the data migration to take about 1 year, but as of August 2022, the migration was not complete.

TSA officials noted the legacy system is nearly two decades old and no longer had a sufficient range of capabilities. For example, the legacy

system had limited abilities to customize reports to users' needs. We have previously reported on weaknesses in the legacy PARIS system, such as difficulties analyzing data related to securing an airport's perimeter and access control security.⁴² Compared to the legacy system, TSA intended for this new platform to integrate other systems together. TSA officials believe transitioning PARIS will allow the agency to leverage features built into the new platform while also providing it an opportunity to improve integration with other related TSA systems that are also transitioning to the same platform.

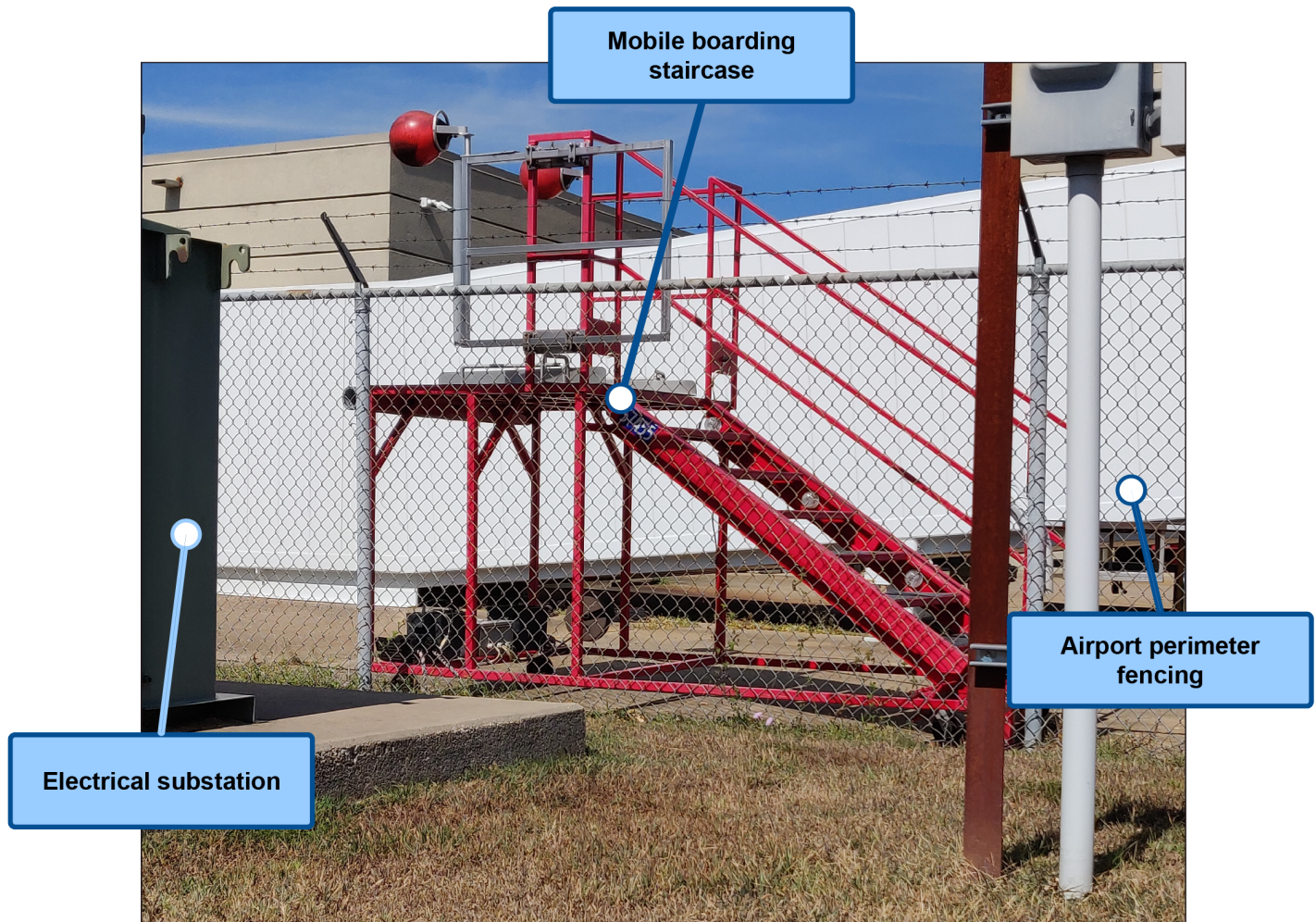
However, during each of our site visits to TSA airport field offices, inspectors told us about challenges they have experienced since they started using the new platform that have affected their ability to ensure compliance with aviation security programs. Inspectors we spoke with at each of the five airport field offices mentioned several of the same challenges they face operating in the new platform. They told us that, in their opinion, when TSA began its transition, the agency did not adequately identify all relevant users, foster appropriate user engagement, and address users' concerns, which would help them ensure compliance with aviation security programs. Inspectors told us about several difficulties they experienced working in the new platform. Specifically:

- **An inability to compile and track vulnerabilities.** Inspectors occasionally identify vulnerabilities to aviation security when conducting inspections.⁴³ While vulnerabilities represent a potential elevated security risk, they are not violations of TSA security programs because they are not in an airport or air carrier's security program. For example, during our observations of airport inspections, an inspector identified a potential vulnerability—a mobile boarding staircase, which is used to provide passenger access to an aircraft, parked next to an airport perimeter fence. (See fig. 10).

⁴²GAO, *Aviation Security: Airport Perimeter and Access Control Security Would Benefit from Risk Assessment and Strategy Updates*, [GAO-16-632](#) (Washington, D.C.: May 31, 2016).

⁴³TSA uses the term "vulnerability" in different ways. TSA commonly refers to vulnerability as a component in assessing risk. However, in this case, TSA inspectors used "vulnerability" to describe a potential hazard or security concern that did not violate TSA regulations.

Figure 10: A Mobile Boarding Staircase Parked Next to an Airport's Perimeter Fence Representing a Potential Security Vulnerability



Source: GAO. | GAO-22-105063

At each of the five TSA airport field offices we visited, inspectors told us that in both the legacy system and new platform they cannot easily indicate if a security vulnerability exists and can only document vulnerabilities by writing notes in a narrative field. Headquarters officials confirmed that inspectors can only retrieve information on vulnerabilities through manual word searches of the system. The inspectors at each of the five airport field offices we visited noted that the inability to quickly enter and retrieve information on vulnerabilities makes conducting follow-up activities difficult, time consuming, or both. As a result, they cannot easily compile and track what vulnerabilities exist, how long they have

been in existence, and what, if anything, the regulated entity is doing to address the risk.

- **An inability to edit key data fields.** TSA requires information about regulated entities to remain up to date and accurate in PARIS and requires inspectors to review it regularly. Inspectors are to make any changes necessary concerning an entity's status or points of contact in a timely manner. However, inspectors at each of the five airport field offices we visited told us that they are unable to edit several key data fields in the new platform about the local airports and air carriers they regulate. They noted that this inability affects the accuracy of information on the regulated entities and can make contacting local officials to discuss security regulations difficult or less timely. For instance, an inspector at one airport field office said inspectors are unable to update information that changes frequently, such as when newly regulated entities begin operating at the airport or when airports or air carriers assign new personnel to oversee security regulations. Inspectors at each of the five airport field offices we visited said they rely on this information to stay up to date on an air carrier's activities and, without it, cannot effectively ensure compliance with TSA security programs.⁴⁴

Inspectors at each airport field office we visited told us they have to submit a request for TSA's IT staff to make a change in the new platform when they find missing or incorrect data. These inspectors said it can take TSA headquarters anywhere from a few days to a few months to make these changes due to limited resources.⁴⁵ One inspector said there were requests going back about a year that needed addressing. TSA headquarters officials acknowledged restrictions inspectors have to edit information and attributed these to technical problems with the new platform that they are working to resolve.

- **A lack of useful capabilities in the new platform.** Inspectors at each of the five airport field offices we visited told us they use at least

⁴⁴In technical comments we received in August 2022, a TSA IT headquarters official leading this effort told us that TSA has since corrected this issue and that relevant training materials are now available to inspectors. We were unable to confirm this information with inspectors or get their perspectives on whether any such changes have either improved their ability to edit information or created additional challenges.

⁴⁵In technical comments we received in August 2022, a TSA IT headquarters official said the agency is still working through making these changes in the new platform, but is making progress in reducing the number of outstanding requests.

one additional program unique to their airport field office to conduct analysis of their compliance work or to manage their workload. Inspectors at two of the five airport field offices we visited specifically noted that entering duplicative information in the new platform, and in their local program, resulted in more time spent entering information and increased the risk of entering incorrect or inconsistent information. Inspectors from each of the five airport field offices we visited said they need local programs because they allow for details or functionality that PARIS does not contain.

At one airport field office we visited, inspectors said they use their local program to identify trends across inspections, such as the number of violations that resulted from searching an aircraft. They indicated that when they get a specific data request from headquarters, such as reporting the number of violations related to individuals accessing an unauthorized section of an airport, inspectors can report that information quicker and more accurately using their local program than in PARIS. TSA headquarters officials said they are aware airport field offices use local programs and anticipate this will not be necessary once the data migration to the new platform is complete. However, a supervisory inspector at another airport field office told us their office would likely continue using their local program unless TSA provides them with something better, such as incorporating features in their local program to PARIS.

- **A lack of adequate training on the new platform.** TSA headquarters officials said they provided training documents and met with field staff prior to the new platform's release to explain how it would perform. Since its release in March 2021, headquarters has developed additional training documents, held webinars with field staff, and occasionally provided office hours during which staff could contact technical staff to ask questions. However, inspectors at each of the five airport field offices we visited told us that training they received on the new platform was not sufficient and too general to meet their needs. Inspectors at four of the five airport field offices specifically noted that the training they received did not focus on how new features in the platform relate to their specific job responsibilities.

For example, after the system was released on the new platform, inspectors at four airport field offices we visited identified features, such as improved search features for prior violations, which they said TSA did not thoroughly present in the training. Inspectors at three of the five airport field offices we visited told us that the training might be more useful if an inspector presented the material rather than the TSA

IT staff or IT contractors who provided the training. Inspectors at four of the five airport field offices we visited also told us that trial and error and asking peers for assistance have been among the most effective methods of learning how to use the new platform. Further, inspectors at two of the five airport field offices we visited noted TSA provided the training through lengthy webinars that presented too much information at once. Inspectors at each of the five airport field offices we visited said the lack of adequate training has caused them to spend extra time learning how the platform operates that they would have otherwise spent doing compliance work.

TSA has not fully developed, implemented, or communicated a plan to address user concerns that its headquarters and inspection staff face related to the PARIS transition. For instance, the IT headquarters official who has led the transition to the new platform said they need more engagement from field staff and that headquarters can only address those issues that come to their attention. Further, TSA has not identified alternative methods for training inspectors, such as using knowledgeable inspectors who use the system in the same way as other inspectors or what role, if any, TSA's professional training staff could play in instructing inspectors.

Additionally, inspectors at four of the five airport field offices we visited told us that TSA IT, compliance, or other headquarters officials have not sufficiently consulted with them and that they had limited opportunities for input when the agency began transitioning to the new platform. At one airport field office we visited, an inspector who had an opportunity to participate in testing the platform while in development told us that the testing did not address some issues that inspectors identified after TSA released the platform. Additionally, after TSA launched the new platform, the inspector noted some of the security standards TSA uses to conduct inspections were inaccurate because they did not correctly transfer from the legacy system. Inspectors also encountered challenges saving information and found there was insufficient space to write narrative information from their work.⁴⁶ The inspector expected that TSA would

⁴⁶In technical comments we received in August 2022, a TSA IT headquarters official said they are aware that some of the security standards TSA uses to conduct inspections were inaccurate and are working to resolve the situation. The official said some data fields were missing after the migration and TSA has made necessary updates and continues to do so as missing data are identified. In addition, this same official said that inspectors now have sufficient space to write narratives. We were unable to confirm this information with inspectors or get their perspectives on whether any such changes have either improved their ability to record information or created additional challenges.

have addressed these types of issues in testing and before the platform was available for all inspectors to use.

TSA IT headquarters officials told us they are aware of some of the challenges inspectors told us about and are working towards a more efficient user experience in the new platform. For instance, TSA IT officials said that later this year they expect to have improved inspectors' ability to edit key data in the new platform. TSA IT officials have also developed the PARIS Roadmap Fiscal Year 2022, which consists of five phases of system enhancements that began in September 2021 and continues to the end of fiscal year 2022. Further, TSA periodically held office hours for IT staff to answer questions and monitors a feature in the new platform that allows inspectors to request changes to data that inspectors are unable to make themselves. Additionally, TSA consults its Compliance Advisory Board about regulatory oversight and compliance operations. TSA established the board in January 2020 to provide ongoing dialogue between field and headquarters staff and develops recommendations to improve how field staff executes TSA regulatory policies, procedures, and operational directives.⁴⁷

However, TSA has not communicated in a timely manner to its users the initiatives it is developing. For instance, inspectors from each of the five airport field offices we visited told us headquarters does not often respond to or give them updates about the requests or corrections they make. An inspector at one field office we visited said that, once they submit a change request in the new platform, they do not hear from headquarters regarding its acceptance or status. The inspector noted the only way they know headquarters received the request is when they see the change made in the system, which can be after several months. A senior compliance official told us that when inspectors began experiencing challenges with the new platform, officials from across TSA quickly came together to identify workarounds to fix the issues until more permanent solutions could be created. However, according to this official, compliance headquarters officials did not document their efforts to work with IT staff or inspectors about the problems they were hearing from the field or steps headquarters officials were taking to address them. As a result, TSA officials cannot be certain they have adequately identified all the concerns users continue to encounter in the new platform.

⁴⁷The Compliance Advisory Board is comprised of six Assistant Federal Security Directors for Inspections, two managers who oversee inspections of air carriers and assessments at foreign airports, and one compliance headquarters official.

In addition, senior IT officials agreed the agency can do more to improve communicating the initiatives it has completed and what it plans to do in the future. For example, while the Compliance Advisory Board raised concerns about PARIS in February 2022, there was no follow-up discussion about them at its next meeting in April 2022. In addition, these challenges are not an ongoing or regular discussion item. Further, Compliance Advisory Board members continue to define their role in communicating these and other issues to field staff. Assessing these efforts—and perhaps others—could help bridge the gap between what field staff say they need and what headquarters officials are actively doing.

While TSA has taken some positive steps, there are opportunities to better identify user concerns about operating in the new platform. For instance, TSA's roadmap does not address all user concerns and is limited to specific IT issues that have risen to the attention of headquarters officials. Further, the agency has not outlined a plan for how it will identify or address certain user concerns beyond those in the PARIS roadmap, such as those identified earlier in this report that inspectors described.

The DHS Systems Engineering Life Cycle Guidebook states that the development of IT systems affects many stakeholders and that understanding their specific interests, and when and how often they engage, is essential to successfully defining a complete set of requirements and providing an acceptable solution.⁴⁸ The guidebook also refers to the importance of engaging stakeholders throughout this effort. Finally, it assumes that when planning activities, stakeholders who impact, or are impacted by, the new capability have been identified, and potential impacts have been communicated.

Because TSA's efforts have focused, up to this point, on a limited suite of IT challenges and has not sufficiently communicated with or obtained sufficient feedback from its users, the agency has not comprehensively identified user concerns that leadership from across the agency need to correct. Assessing user concerns, including those of inspectors, can help officials ensure they are identifying all concerns and that TSA is maximizing the usefulness of PARIS as the data migration continues. Fully developing, implementing, and communicating a plan to address

⁴⁸DHS, *Systems Engineering Life Cycle Guidebook*, DHS Guidebook, 102-01-103-01 (Apr. 18, 2016).

these concerns will help ensure that TSA is effectively prioritizing its response and that users are aware of the efforts.

TSA Has Not Identified Lessons Learned for the Future Transition of Other Data Systems

TSA plans to transition additional data systems to its new platform. However, it has not developed a broad suite of lessons learned that consists of staff's experiences from across the agency based on either the PARIS transition or other data systems that it has already transitioned to the new platform.

TSA has a Center for Excellence, which is a team that transfers data from IT staff into the new platform. TSA senior IT officials said the center ensures systems work correctly before launching them. While TSA officials said the Center of Excellence is to manage information on what has worked well and what needs improvement, it has not developed lessons learned from its migration efforts. In addition, in April 2022, TSA IT staff identified 18 specific narrowly focused IT steps staff should consider for future data migrations based on its ongoing PARIS data migration. For example, TSA recommended analyzing existing data mapping and identifying and documenting legacy data items stored in the new platform that are not visible to users. However, TSA IT officials said these are for an IT audience and not intended to reflect the user experience or represent a complete agency-wide perspective. For instance, they do not include the perspective of staff, such as inspectors, who use the system to analyze compliance data.

TSA's PARIS transition is part of a larger agency initiative to transfer data systems and applications to a singular cloud-based platform. In March 2021, TSA transitioned PARIS to the new platform and that same year transitioned two other compliance systems to the same cloud platform, LInKS—the data system TSA's chief counsel office uses to maintain and track its work—and the Global Risk Analysis and Decision Support (GRADS) system.⁴⁹ TSA completed transitioning LInKS this same month and GRADS in August 2021. However, TSA did not document consolidated lessons learned for PARIS, LInKS and GRADS or other data

⁴⁹TSA developed GRADS to streamline the assessment report writing process and strengthen data analysis capabilities of its foreign airport assessment results.

systems that were either developed in or migrated to the new platform.⁵⁰ Furthermore, TSA has no plans to develop further lessons learned from the PARIS transition beyond the IT steps previously mentioned.

Moving forward, TSA has identified nine additional data systems it plans to transition to the same cloud-based platform where the three legacy systems—PARIS, LInKs, and GRADS—now reside when it has the funding. These nine additional data systems could face similar challenges in their transition as PARIS encountered. For example, one of the systems—the Known Shipper Management System, which TSA uses to identify and approve the known shipper status for qualified shippers to transport cargo on passenger aircraft—also relies on legacy data and frequent changes in regulated entities' information.

According to key practices that we and others have reported on, identifying and applying lessons learned from projects can limit the chance of recurrence of previous failures or difficulties.⁵¹ Furthermore, we found that organizations that identify and apply lessons learned can ensure they factor beneficial information into planning for future efforts and limit the chance of the recurrence of challenges that can be anticipated in advance.⁵² We also found that collecting and sharing lessons learned from previous programs or projects provides organizations with a powerful method for sharing ideas for improving work processes.⁵³

While TSA experienced challenges transitioning PARIS to the new platform, it did not have similar experiences when the other two

⁵⁰TSA already developed 15 systems in the new platform and migrated 10 other data systems to the new platform. TSA also has 10 other systems built to operate in the new platform that, as of July 2022, are awaiting approval.

⁵¹[GAO-19-25](#), *Telecommunications: GSA Needs to Share and Prioritize Lessons Learned to Avoid Future Transition Delays*, [GAO-14-63](#) (Washington, D.C. Dec. 5, 2013), [GAO-12-901](#), and *NASA: Better Mechanisms Needed for Sharing Lessons Learned*, [GAO-02-195](#) (Washington, D.C.: Jan. 30, 2002). We also identified lessons learned practices from both the Project Management Institute and the Center for Army Lessons Learned. Project Management Institute, Inc., *A Guide to the Project Management Body of Knowledge (PMBOK® Guide)*, Sixth Edition (2017); Project Management Institute, Inc., *Implementing Organizational Project Management: A Practice Guide*, First Edition (2014); and Center for Army Lessons Learned, *Establishing a Lessons Learned Program*. PMBOK is a trademark of Project Management Institute, Inc.

⁵²[GAO-21-318](#).

⁵³[GAO-20-104](#).

systems—LInKS and GRADS—moved over. According to an agency IT official, TSA did not identify, document, or share lessons learned from the LInKS transition because the transition did not result in any issues. TSA did not develop lessons learned for GRADS because, according to an agency official, this transition was relatively smooth. However, an official who managed GRADS when it transitioned to the new platform and uses PARIS along with an inspector who uses both systems, told us staff have challenges operating GRADS that could have been mitigated had TSA better prepared for the transition. For example, these officials said it is difficult to create reports in the new platform. They noted that users of other systems scheduled to transition to the new platform should know of these and other challenges and prepare for alternative methods to produce reports. They said it would benefit TSA to develop lessons learned from those legacy systems that have already transitioned to prepare for future transitions.

Had TSA identified a comprehensive set of lessons from the prior two data system transitions that were developed from a broad range of users of the systems—such as IT staff and frequent field and headquarters users of the systems—some of the challenges experienced with the PARIS transition might not have been so significant. In addition, if TSA identified, documented, and shared lessons learned from the two prior transitions alongside the challenges it experienced with the PARIS transition, it would have a range of experiences to reflect back on that can put itself in a better posture for the future transitions. As TSA plans to transition additional data systems to the new platform, developing lessons learned from the PARIS, LInKS, and GRADS data systems will help ensure it is better positioned to effectively and efficiently modernize its remaining data systems by having learned from prior recent experiences.

Conclusions

Overseeing commercial airport and air carrier security programs is critical for the security of domestic air travel. In recent years, TSA has emphasized outcome-focused compliance efforts, such as utilizing an Action Plan Program, as a way to partner with airports and air carriers when security violations and vulnerabilities are identified. Though TSA has guidance indicating when to consider an action plan, airport and air carrier representatives—who generally like the program—said TSA can do more to indicate when an action plan may be appropriate. Developing and sharing guidance that indicates when an action plan can be an effective method for resolving a violation could provide to TSA and

regulated entities that the proposed solution and resources dedicated are the best solution.

In addition, after TSA transitioned its compliance IT system to a new platform in 2021, some inspectors we spoke with told us they have had difficulties working in the new platform. TSA, however, has not fully identified or addressed user concerns. Identifying and considering user concerns could build upon current efforts by helping to ensure that relevant perspectives are incorporated in addressing key concerns and communicating progress to users.

Finally, while TSA has identified nine additional systems it plans to transition in the future to the same platform, it has not identified lessons learned which take into account the user experiences from the three that have already transitioned. Understanding what went well, and what challenges the agency faced from users of those three systems, would better position TSA to identify potential future challenges and help ensure more effective and efficient transitions in the future.

Recommendations for Executive Action

We are making the following three recommendations to TSA:

The TSA Administrator should, in consultation with its inspectors as well as with airports and air carriers, provide further guidance for inspectors and regulated entities indicating when an action plan may be an effective method for resolving a compliance violation. (Recommendation 1)

The TSA Administrator should ensure the Information Technology and Compliance offices conduct an assessment to identify and address user concerns as PARIS transitions to the new platform. (Recommendation 2)

The Administrator of TSA should ensure the Information Technology office identify, document, and share lessons learned from the agency's experiences transitioning the PARIS, LInKS, and GRADS data systems to a new platform in advance of future transitions. (Recommendation 3)

Agency Comments and Our Evaluation

We provided a draft of this report to DHS for review and comment. DHS provided written comments, which are reprinted in appendix II and

summarized below. In its comments, DHS concurred with our three recommendations and provided a number of actions it plans to take to address them. DHS also provided technical comments, which we incorporated as appropriate.

With regards to our first recommendation, that TSA provide further guidance for inspectors and regulated entities indicating when an action plan may be an effective method for resolving a compliance violation, DHS concurred and stated that TSA's Security Operations and Chief Counsel Offices will provide this guidance for inspectors and regulated entities. DHS noted that TSA has already started efforts to communicate this guidance to airports, air carriers, and inspectors through a recent industry feedback session on the Action Plan Program in July 2022 and provided this same information to industry. Further, DHS said that TSA is also working to obtain feedback from inspectors on the Action Plan Program and expects to develop additional written guidance for inspectors. Developing further guidance for inspectors and regulated entities can address this recommendation by more clearly indicating when an action plan can be an effective method for resolving a violation.

With regards to our second recommendation, that TSA's IT and Compliance Offices conduct an assessment to identify and address user concerns as PARIS transitions to the new platform, DHS concurred and described which PARIS users will be included in the assessment. DHS said the assessment will identify and provide a milestone plan to address user concerns regarding challenges collecting, analyzing, and sharing information in the new platform, and will focus on the best practices associated with the new system delivery, including requirements, prioritization, testing, and training. DHS also included the specific methodologies it plans to use for the assessment. Implementing these actions can potentially address this recommendation and improve users' experience with the new platform.

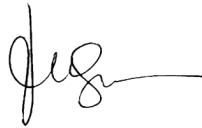
With regards to our third recommendation, that TSA's IT office identify, document, and share lessons learned from its experiences transitioning PARIS, LInKS, and GRADS to a new platform in advance of future transitions, DHS concurred and said staff from TSA's Enterprise Support Office, with support from several other offices, will lead the agency's effort to develop the lessons learned. DHS also said TSA will share these lessons learned to help identify potential challenges and to ensure more effective and efficient transitions for any of the other IT systems that TSA plans to transition to the new platform. Implementing these steps can

potentially address this recommendation and put the agency in a better position to mitigate challenges with future data system transitions.

We are sending copies of this report to the appropriate congressional committees, the Secretary of Homeland Security, the Administrator of TSA, and other interested parties. In addition, this report is available at no charge on the GAO website at <http://www.gao.gov>.

If you or your staff has any questions about this report, please contact me at (202) 512-8461 (shermant@gao.gov). Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page

of this report. GAO staff who made key contributions to this report are listed in appendix III.



Tina Won Sherman
Director
Homeland Security and Justice

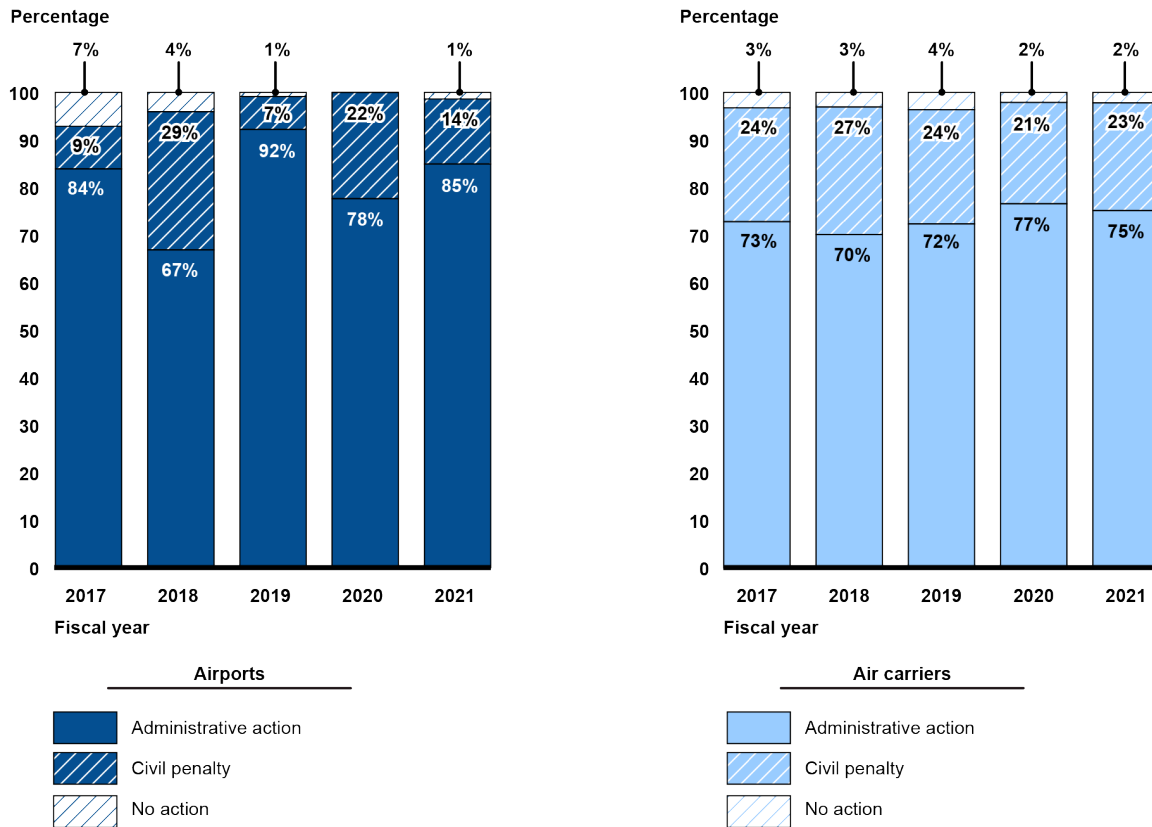
Appendix I: Results from Transportation Security Administration Investigations

Investigations of airports and air carriers by the Transportation Security Administration (TSA) can result in different types of outcomes depending on the severity of what it finds. Our analysis of TSA airport and air carrier investigation data found that most investigations resulted in an administrative action as opposed to a civil penalty from fiscal years 2017 through 2021 (see fig. 11).¹

¹Administrative actions are less severe than a civil penalty. Violations that result in administrative actions include those that are not egregious, serious, systemic, the result of gross negligence, or otherwise unintentional or inadvertent.

Appendix I: Results from Transportation
Security Administration Investigations

Figure 11: Percentage of Investigation Outcomes of Airports and Air Carriers by the Transportation Security Administration (TSA), Fiscal Years 2017-2021



Source: GAO analysis of TSA data. | GAO-22-105063

Data table for Figure 11: Percentage of Investigation Outcomes of Airports and Air Carriers by the Transportation Security Administration (TSA), Fiscal Years 2017-2021

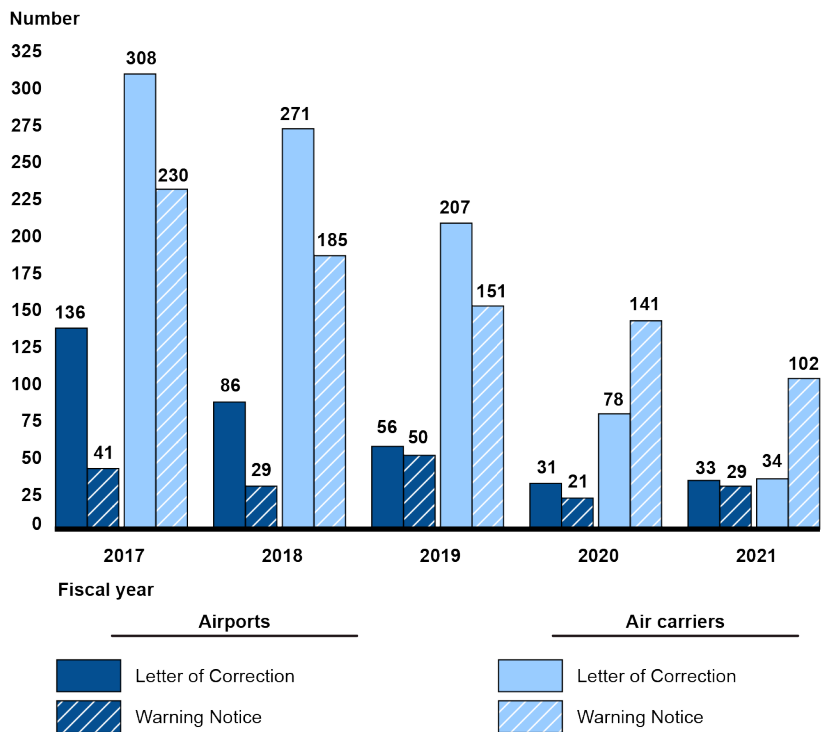
Airports				Air Carriers			
Year	admin action	civil penalty	no action	Year	admin action	civil penalty	no action
2017	83.8863	9.00474	7.109	2017	72.8011	23.9513	3.24763
2018	66.8605	29.0698	4.06977	2018	70.092	26.8405	3.06748
2019	92.1739	6.95652	0.869565	2019	72.3232	24.0404	3.63636
2020	77.6119	22.3881	0	2020	76.5734	21.3287	2.0979
2021	84.9315	13.6986	1.36986	2021	75.1381	22.6519	2.20994

Notes: Percentages may not total 100 percent due to rounding. In some instances, TSA will conduct an investigation and determine no violation occurred, which is recorded as 'no action'.

Source: GAO analysis of TSA data. | GAO-22-105063

When TSA takes an administrative action, it issues a Warning Notice or a Letter of Correction. TSA sends a Warning Notice if an inspector determines a violation was not egregious, serious, systemic, or the result of gross negligence, among other factors. Alternatively, TSA sends a Letter of Correction after an airport or air carrier successfully completes an action plan.² As figure 12 below indicates, TSA has steadily taken fewer administrative actions since 2017.

Figure 12: Number of Administrative Actions by Type Taken by the Transportation Security Administration (TSA) on Airports and Air Carriers, Fiscal Years 2017-2021



Source: GAO analysis of TSA data. | GAO-22-105063

²According to TSA officials, since the start of the Action Plan Program in August 2019, the agency has issued letters of correction exclusively to acknowledge successfully completing an action plan. According to TSA officials, prior to August 2019, the agency issued letters of correction as another form of administrative action acknowledging corrective actions taken by an airport or air carrier.

Data table for Figure 12: Number of Administrative Actions by Type Taken by the Transportation Security Administration (TSA) on Airports and Air Carriers, Fiscal Years 2017-2021

Year	Letter of Correction	Warning Notice	Letter of Correction	Warning Notice
2017	136	41	308	230
2018	86	29	271	185
2019	56	50	207	151
2020	31	21	78	141
2021	33	29	34	102

Note: According to TSA officials, prior to the start of the Action Plan Program in August 2019, the agency issued letters of correction as an administrative action acknowledging corrective actions taken by an airport or air carrier. Since that time, the agency has issued letters of correction exclusively to acknowledge successfully completing an action plan.

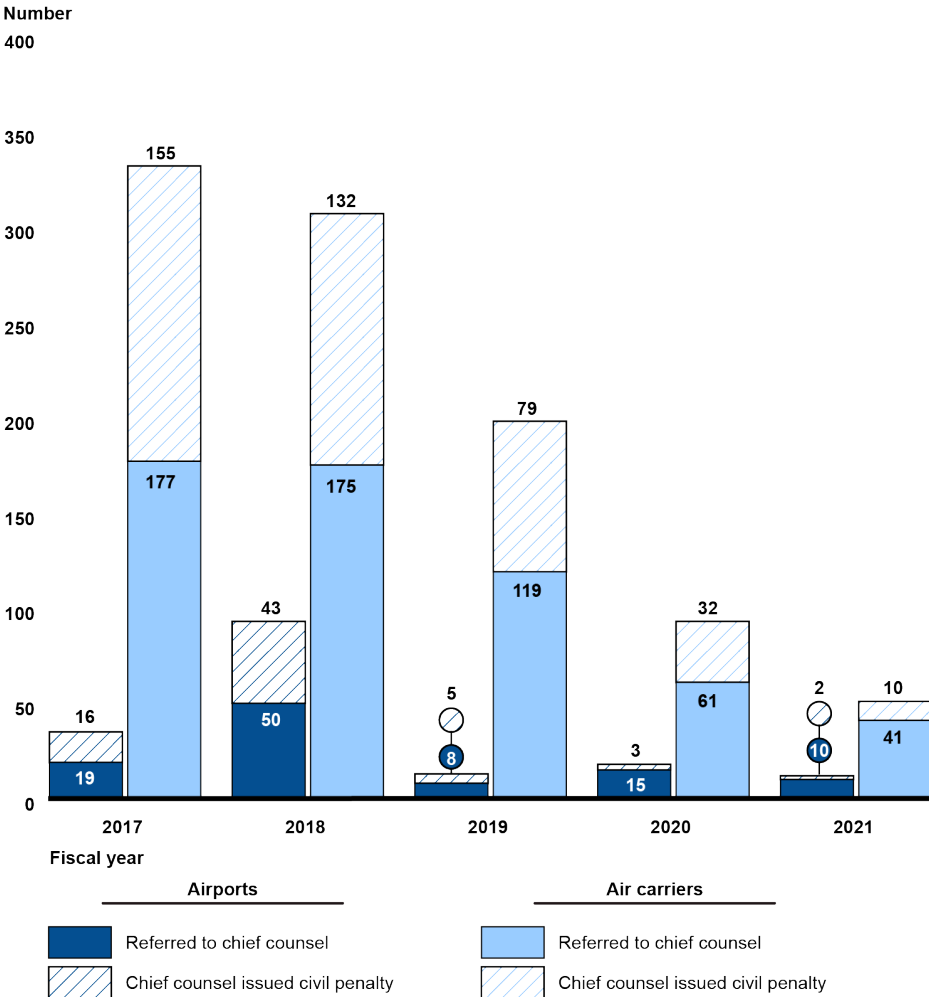
Source: GAO analysis of TSA data. | GAO-22-105063

TSA officials attributed this in part to emphasizing outcome-focused compliance efforts and allowing airports and air carriers more time to correct a violation before opening an investigation.³ In addition, TSA historically sent Letters of Correction to acknowledge when an airport or air carrier successfully resolved an instance of noncompliance. Beginning in August 2019, TSA began sending the letter only when an alternative method for resolving noncompliance, referred to as an action plan and discussed in this report, was completed.

After completing an investigation, TSA compliance staff may conclude a violation warrants a civil penalty as opposed to an administrative action. When compliance staff send a violation with a recommended civil penalty dollar amount to TSA chief counsel, chief counsel decides whether to proceed with issuing a civil penalty. As shown in figure 13, TSA chief counsel does not always issue a civil penalty when compliance recommends one. A TSA chief counsel official told us TSA attorneys conduct an independent review of a case and may determine there is insufficient evidence to pursue a civil penalty for some violations.

³In August 2019, TSA began allowing inspectors the opportunity to grant airports and air carriers up to five business days to correct a violation before opening an investigation. If they corrected the violation during the designated timeframe, the inspector closed the finding with counseling.

Figure 13: Number of Enforcement Cases Referred from Transportation Security Administration (TSA) Compliance to Chief Counsel and Number of Civil Penalties Issued to Airports and Air Carriers, Fiscal Years 2017-2021



Source: GAO analysis of TSA data. | GAO-22-105063

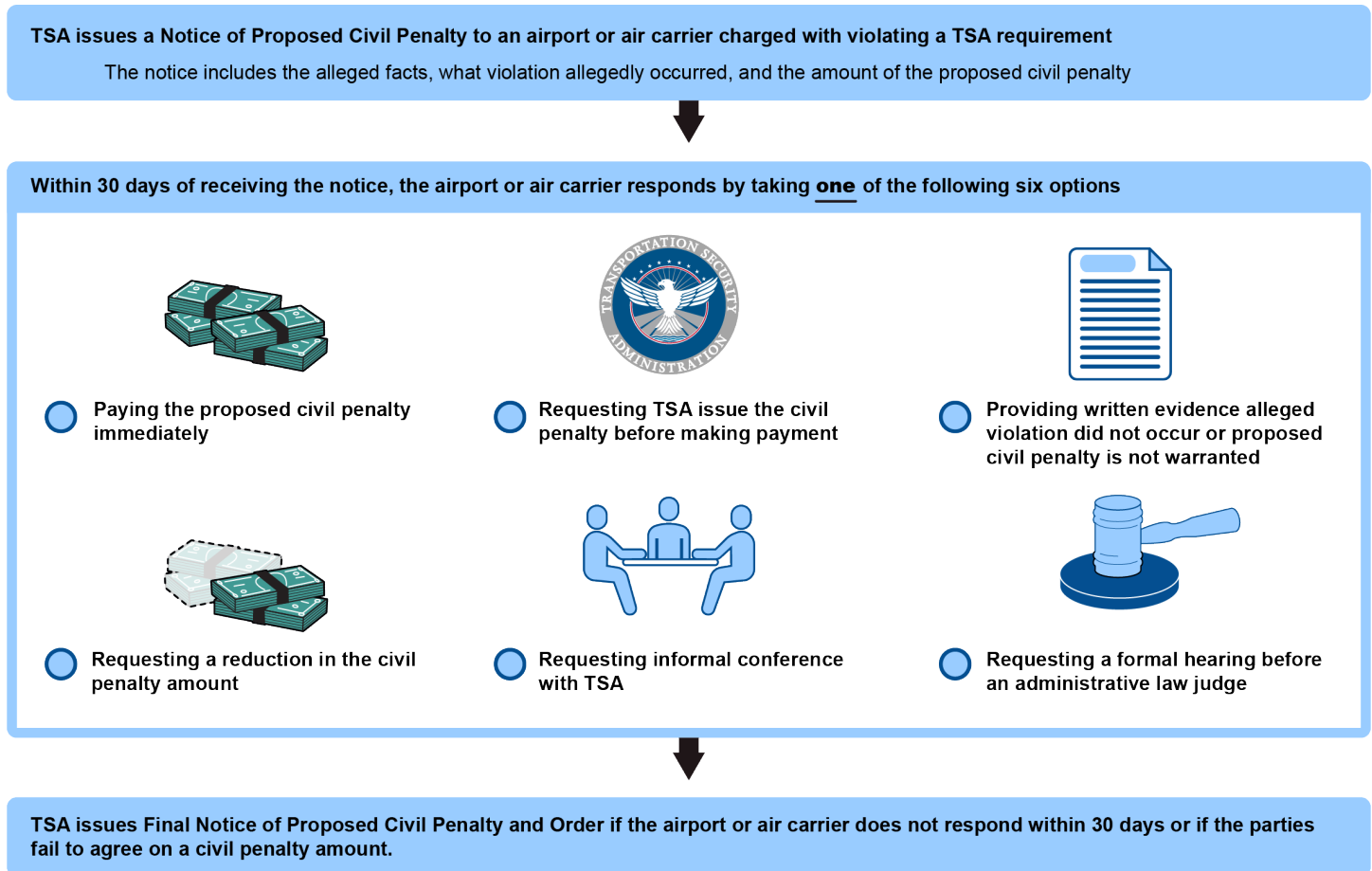
Data table for Figure 13: Number of Enforcement Cases Referred from Transportation Security Administration (TSA) Compliance to Chief Counsel and Number of Civil Penalties Issued to Airports and Air Carriers, Fiscal Years 2017-2021

	Airport		Air Carrier	
	Referred to Chief Counsel	Chief Counsel Issued Civil Penalty	Referred to Chief Counsel	Chief Counsel Issued Civil Penalty
2017	19	16	177	155
2018	50	43	175	132
2019	8	5	119	79
2020	15	3	61	32
2021	10	2	41	10

Source: GAO analysis of TSA data. | GAO-22-105-063

Conversely, when chief counsel receives the case and determines there is sufficient evidence to pursue a civil penalty, the attorney independently determines an amount based on various factors, such as an airport or air carrier's prior compliance history. As shown in figure 14, TSA sends the airport or air carrier a Notice of Proposed Civil Penalty and the airport or air carrier may respond in one of several ways, such as requesting a reduction in the amount or presenting additional information to TSA, that can result in adjusting the amount.

Figure 14: How the Transportation Security Administration (TSA) Issues Civil Penalties to Airports and Air Carriers



Source: GAO analysis of TSA documents. | GAO-22-105063

Text of Figure 14: How the Transportation Security Administration (TSA) Issues Civil Penalties to Airports and Air Carriers

- 1) TSA issues a Notice of Proposed Civil Penalty to an airport or air carrier charged with violating a TSA requirement. The notice includes the alleged facts, what violation allegedly occurred, and the amount of the proposed civil penalty
 - a) Within 30 days of receiving the notice, the airport or air carrier responds by taking one of the following six options
 - i) Paying the proposed civil penalty immediately

- ii) Requesting a reduction in the civil penalty amount.
- iii) Requesting TSA issue the civil penalty before making payment
- iv) Requesting informal conference with TSA
- v) Providing written evidence alleged violation did not occur or proposed civil penalty is not warranted
- vi) Requesting a formal hearing before an administrative law judge

Source: GAO analysis of TSA data. | GAO-22-105063

After considering any additional information provided by the airport or air carrier that could affect whether the civil penalty is issued and the amount, TSA's chief counsel determines if the civil penalty is still warranted, and if so, determines the final amount. The airport or air carrier may then pay the civil penalty or request a hearing before an administrative law judge who reviews the evidence and makes a decision. Either party may appeal the judge's decision to the TSA Deputy Administrator who makes the final decision. The airport or air carrier may also appeal this final decision by TSA to a U.S. Circuit Court of Appeals.

We analyzed the civil penalties that followed this process during fiscal years 2017 through 2021, including the number of civil penalties noted above that compliance recommended in addition to the number proposed and finally issued by the chief counsel. Our analysis of these data found that the compliance office recommended the agency issue 617 civil penalties to airports and air carriers for violating security programs.

An official from TSA's chief counsel told us that, during their independent review of each case, TSA attorneys consider the strength of the evidence for each violation and how the case could be presented should it proceed to court. Our analysis also found that the chief counsel proposed 490 civil penalties totaling approximately \$67 million. After negotiating with the airports and air carriers, chief counsel assessed final civil monetary penalties totaling approximately \$7.7 million, or about 12 percent of the amount chief counsel initially proposed.⁴ A senior TSA attorney said that,

⁴Negotiations include discussions between TSA and airports or air carriers who can present information in the attempt to reduce the amount of a civil penalty.

in determining the final amount, the chief counsel's office considers both the money airports and air carriers have already spent to address the violation and its root cause and what they have agreed to invest to enhance their security program in the future.⁵

⁵The \$7.7 million does not include investments made in transportation security by the airports and air carriers.

Appendix II: Comments from the Department of Homeland Security

U.S. Department of Homeland Security
Washington, DC 20528



**Homeland
Security**

September 12, 2022

Tina Won Sherman
Director, Homeland Security and Justice
U.S. Government Accountability Office
441 G Street, NW
Washington, DC 20548

Re: Management Response to Draft Report GAO-22-105063, "AVIATION
SECURITY PROGRAMS: TSA Should Clarify Compliance Program Guidance
and Address User Concerns with Its Data Systems"

Dear Ms. Won Sherman:

Thank you for the opportunity to comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office's (GAO) work in planning and conducting its review and issuing this report.

DHS leadership is pleased to note GAO's recognition of the Transportation Security Administration's (TSA's) enforcement program and compliance approach through progressive enforcement, risk-based security, and inspections processes through which TSA conducts compliance inspections, and addresses known instances of non-compliance by airport operators and aircraft operators. GAO recognized TSA officials' communication with industry partners to clarify the Action Plan Program, such as reaching out through a series of briefings, to reinforce aspects of the program and discussing how action plans can be appropriate for addressing underlying root causes for violations.

TSA has also taken some positive steps and is actively working to identify internal users' concerns about operating in the new platform, which will help TSA inspectors and other internal users support regulatory compliance. More specifically, TSA began transitioning the Information Technology application used for compliance activity to a new platform in March 2021, and subsequently provided internal users with a series of communications, notifications, and training sessions to address the transition. These trainings included briefings and demonstrations regarding: (1) workflow and function on the new platform; (2) user management; (3) reports; and (4) opportunities for questions and answers.

TSA believes that the overall transition to the new data collection platform went well, but acknowledges opportunities exist to strengthen certain activities. Accordingly, resources from TSA Offices of Information Technology, Security Operations, and Enterprise Support will continue to address challenges arising from transitioning to the new platform, as appropriate.

It is also important to recognize that, while the number of investigations completed has decreased since 2017, the numbers presented in GAO's draft report provide a limited view of the scope of work being conducted by Transportation Security Inspectors (TSIs). Specifically:

- The investigations analyzed by GAO were only for airport and aircraft operator investigations, and reflect the number of times an inspection resulted in the discovery of a violation of a TSA security requirement sufficient to warrant the opening of an investigation.
- In addition to airport and aircraft operator investigations, TSIs also investigate violations of cargo security programs, foreign air carrier programs, flight schools, repair stations, and investigations against passengers for prohibited items violations. TSIs also investigate violations of any Security Directives (SD) and Emergency Amendments issued by TSA in response to emerging threats to transportation security, such as TSA's SDs requiring the use of masks during the height of the COVID-19 pandemic and substantial efforts to enhance cybersecurity in the wake of the cyber-attack against Colonial Pipeline in May 2021.
- TSIs manage entity profiles and perform numerous inspections, respond to security incidents, and conduct frequent outreach with regulated entities.
- TSA expects compliance work to increase as requirements evolve for third-party canine, cybersecurity, and secure packing facilities.

As evidenced by the extent to which TSIs provide monitoring of aviation operations, TSA remains committed to ensuring that aircraft operators and airport operators are properly implementing security programs and complying with security requirements.

The draft report contained three recommendations with which the Department concurs. Enclosed find our detailed response to each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for GAO's consideration.

**Appendix II: Comments from the Department
of Homeland Security**

Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

JIM H CRUMPACKER  Digitally signed by JIM H
CRUMPACKER
Date: 2022.09.12 14:34:17 -04'00'

JIM H. CRUMPACKER, CIA, CFE
Director
Departmental GAO-OIG Liaison Office

Enclosure

**Enclosure: Management Response to Recommendations
Contained in GAO-22-105063**

GAO recommended the TSA Acting Administrator:

Recommendation 1: In consultation with its inspectors as well as with airports and air carriers, provide further guidance for inspectors and regulated entities indicating when an action plan may be an effective method for resolving a compliance violation.

Response: Concur. TSA's Security Operations and Chief Counsel Offices will provide further guidance for inspectors and regulated entities that addresses when an action plan may be an effective method for resolving a compliance violation, and has already started efforts to communicate this guidance to airports, air carriers, and inspectors. On July 22, 2022, for example, TSA's Compliance Office facilitated an industry feedback session on the Action Plan Program, and shared examples and scenarios for those situations in which an action plan may be an effective method for resolving a compliance violation. At that same time, TSA also provided this information in writing to industry users via the Homeland Security Information Network portals. TSA Compliance is also working to seek TSI feedback on the Action Plan Program and will develop written internal guidance to inspectors. Estimated Completion Date (ECD): January 31, 2023.

Recommendation 2: Ensure the Information Technology and Compliance offices conduct an assessment to identify and address user concerns as PARIS [Performance and Results Information System] transitions to the new platform.

Response: Concur. TSA's Security Operations and Information Technology Offices will collaborate to conduct an assessment to identify and address user concerns regarding the PARIS transition to the new platform, which will include the following system users: TSIs, Principal Security Inspectors, and International Industry Representatives. The assessment will identify and provide a milestone plan to address user concerns regarding challenges collecting, analyzing, and sharing information in the new platform, and will also focus on the best practices associated with the new system delivery, including requirements, prioritization, testing, and training.

The following methodologies will be used for the assessment:

- Project Management Body of Knowledge: Stakeholder Management
- Agile Methodology for Stakeholder Engagement
- Best Practices for Information Technology System Surveys

ECD: October 31, 2023.

Recommendation 3: Ensure the Information Technology office identify, document, and share lessons learned from the agency's experiences transitioning the PARIS, LInKS [Legal Integrated Knowledge System], and GRADS [Global Risk Analysis and Decision Support System] data systems to a new platform in advance of future transitions.

Response: Concur. TSA's Enterprise Support Office, with support from various Offices, including Information Technology; Compliance; International Operations; Operations Management; Policy, Plans and Engagement; and Chief Counsel, will lead TSA's effort to develop lessons learned from the transition of the PARIS, LInKS, and GRADS data systems to the new platform. TSA will share lessons learned to help identify potential challenges and to ensure more effective and efficient transitions to any of the other information systems as they plan to transition to the new platform. ECD: June 30, 2023.

Text of Appendix II: Comments from the Department of Homeland Security

September 12, 2022

Tina Won Sherman

Director, Homeland Security and Justice

U.S. Government Accountability Office 441 G Street, NW

Washington, DC 20548

Re: Management Response to Draft Report GAO-22-105063, “AVIATION
SECURITY PROGRAMS: TSA Should Clarify Compliance Program Guidance and
Address User Concerns with Its Data Systems”

Dear Ms. Won Sherman:

Thank you for the opportunity to comment on this draft report. The U.S. Department of Homeland Security (DHS) appreciates the U.S. Government Accountability Office’s (GAO) work in planning and conducting its review and issuing this report.

DHS leadership is pleased to note GAO’s recognition of the Transportation Security Administration’s (TSA’s) enforcement program and compliance approach through progressive enforcement, risk-based security, and inspections processes through which TSA conducts compliance inspections, and addresses known instances of non-compliance by airport operators and aircraft operators. GAO recognized TSA officials’ communication with industry partners to clarify the Action Plan Program, such as reaching out through a series of briefings, to reinforce aspects of the program and discussing how action plans can be appropriate for addressing underlying root causes for violations.

TSA has also taken some positive steps and is actively working to identify internal users’ concerns about operating in the new platform, which will help TSA inspectors and other internal users support regulatory compliance. More specifically, TSA began transitioning the Information Technology application used for compliance activity to a new platform in March 2021, and subsequently provided internal users with a series of communications, notifications, and training sessions to address the transition. These trainings included briefings and demonstrations regarding: (1) workflow and function on the new platform;

(2) user management; (3) reports; and (4) opportunities for questions and answers.

TSA believes that the overall transition to the new data collection platform went well, but acknowledges opportunities exist to strengthen certain activities. Accordingly, resources from TSA Offices of Information Technology, Security Operations, and Enterprise Support will continue to address challenges arising from transitioning to the new platform, as appropriate.

It is also important to recognize that, while the number of investigations completed has decreased since 2017, the numbers presented in GAO's draft report provide a limited view of the scope of work being conducted by Transportation Security Inspectors (TSIs). Specifically:

- The investigations analyzed by GAO were only for airport and aircraft operator investigations, and reflect the number of times an inspection resulted in the discovery of a violation of a TSA security requirement sufficient to warrant the opening of an investigation.
- In addition to airport and aircraft operator investigations, TSIs also investigate violations of cargo security programs, foreign air carrier programs, flight schools, repair stations, and investigations against passengers for prohibited items violations. TSIs also investigate violations of any Security Directives (SD) and Emergency Amendments issued by TSA in response to emerging threats to transportation security, such as TSA's SDs requiring the use of masks during the height of the COVID-19 pandemic and substantial efforts to enhance cybersecurity in the wake of the cyber-attack against Colonial Pipeline in May 2021.
- TSIs manage entity profiles and perform numerous inspections, respond to security incidents, and conduct frequent outreach with regulated entities.
- TSA expects compliance work to increase as requirements evolve for third-party canine, cybersecurity, and secure packing facilities.

As evidenced by the extent to which TSIs provide monitoring of aviation operations, TSA remains committed to ensuring that aircraft operators and airport operators are properly implementing security programs and complying with security requirements.

The draft report contained three recommendations with which the Department concurs. Enclosed find our detailed response to each recommendation. DHS previously submitted technical comments addressing several accuracy, contextual, and other issues under a separate cover for GAO's consideration.

Again, thank you for the opportunity to review and comment on this draft report. Please feel free to contact me if you have any questions. We look forward to working with you again in the future.

Sincerely,

JIM H. CRUMPACKER, CIA, CFE

Director

Departmental GAO-OIG Liaison Office

Enclosure

Enclosure: Management Response to Recommendations
Contained in GAO-22-105063

GAO recommended the TSA Acting Administrator:

Recommendation 1: In consultation with its inspectors as well as with airports and air carriers, provide further guidance for inspectors and regulated entities indicating when an action plan may be an effective method for resolving a compliance violation.

Response: Concur. TSA's Security Operations and Chief Counsel Offices will provide further guidance for inspectors and regulated entities that addresses when an action plan may be an effective method for resolving a compliance violation, and has already started efforts to communicate this guidance to airports, air carriers, and inspectors. On July 22, 2022, for example, TSA's Compliance Office facilitated an industry feedback session on the Action Plan Program, and shared examples and scenarios for those situations in which an action plan may be an effective method for resolving a compliance violation. At that same time, TSA also provided this information in writing to industry users via the Homeland Security Information Network portals. TSA Compliance is also working to seek TSI feedback on the Action Plan Program and will develop written internal guidance to inspectors. Estimated Completion Date (ECD): January 31, 2023.

Recommendation 2: Ensure the Information Technology and Compliance offices conduct an assessment to identify and address user concerns as

PARIS [Performance and Results Information System] transitions to the new platform.

Response: Concur. TSA's Security Operations and Information Technology Offices will collaborate to conduct an assessment to identify and address user concerns regarding the PARIS transition to the new platform, which will include the following system users: TSIs, Principal Security Inspectors, and International Industry Representatives. The assessment will identify and provide a milestone plan to address user concerns regarding challenges collecting, analyzing, and sharing information in the new platform, and will also focus on the best practices associated with the new system delivery, including requirements, prioritization, testing, and training.

The following methodologies will be used for the assessment:

- Project Management Body of Knowledge: Stakeholder Management
- Agile Methodology for Stakeholder Engagement
- Best Practices for Information Technology System Surveys ECD: October 31, 2023.

Recommendation 3: Ensure the Information Technology office identify, document, and share lessons learned from the agency's experiences transitioning the PARIS, LInKS [Legal Integrated Knowledge System], and GRADS [Global Risk Analysis and Decision Support System] data systems to a new platform in advance of future transitions.

Response: Concur. TSA's Enterprise Support Office, with support from various Offices, including Information Technology; Compliance; International Operations; Operations Management; Policy, Plans and Engagement; and Chief Counsel, will lead TSA's effort to develop lessons learned from the transition of the PARIS, LInKS, and GRADS data systems to the new platform. TSA will share lessons learned to help identify potential challenges and to ensure more effective and efficient transitions to any of the other information systems as they plan to transition to the new platform. ECD: June 30, 2023.

Appendix III: GAO Contact and Staff Acknowledgments

GAO Contact

Tina Won Sherman at (202) 512-8461, shermant@gao.gov

Staff Acknowledgments

In addition to the contact named above, Kevin Heinz (Assistant Director), James Cook (Analyst in Charge), Benjamin Crossley, Michael Harmond, Amanda Miller, Jan Montgomery, Shannin O'Neil, Kevin Reeves, Minette Richardson, and Mary Turgeon made key contributions to this report.

GAO's Mission

The Government Accountability Office, the audit, evaluation, and investigative arm of Congress, exists to support Congress in meeting its constitutional responsibilities and to help improve the performance and accountability of the federal government for the American people. GAO examines the use of public funds; evaluates federal programs and policies; and provides analyses, recommendations, and other assistance to help Congress make informed oversight, policy, and funding decisions. GAO's commitment to good government is reflected in its core values of accountability, integrity, and reliability.

Obtaining Copies of GAO Reports and Testimony

The fastest and easiest way to obtain copies of GAO documents at no cost is through our website. Each weekday afternoon, GAO posts on its [website](#) newly released reports, testimony, and correspondence. You can also [subscribe](#) to GAO's email updates to receive notification of newly posted products.

Order by Phone

The price of each GAO publication reflects GAO's actual cost of production and distribution and depends on the number of pages in the publication and whether the publication is printed in color or black and white. Pricing and ordering information is posted on GAO's website, <https://www.gao.gov/ordering.htm>.

Place orders by calling (202) 512-6000, toll free (866) 801-7077, or TDD (202) 512-2537.

Orders may be paid for using American Express, Discover Card, MasterCard, Visa, check, or money order. Call for additional information.

Connect with GAO

Connect with GAO on [Facebook](#), [Flickr](#), [Twitter](#), and [YouTube](#).
Subscribe to our [RSS Feeds](#) or [Email Updates](#). Listen to our [Podcasts](#).
Visit GAO on the web at <https://www.gao.gov>.

To Report Fraud, Waste, and Abuse in Federal Programs

Contact FraudNet:

Website: <https://www.gao.gov/about/what-gao-does/fraudnet>

Automated answering system: (800) 424-5454 or (202) 512-7700

Congressional Relations

A. Nicole Clowers, Managing Director, ClowersA@gao.gov, (202) 512-4400, U.S. Government Accountability Office, 441 G Street NW, Room 7125, Washington, DC 20548

Public Affairs

Chuck Young, Managing Director, youngc1@gao.gov, (202) 512-4800
U.S. Government Accountability Office, 441 G Street NW, Room 7149
Washington, DC 20548

Strategic Planning and External Liaison

Stephen J. Sanford, Managing Director, spel@gao.gov, (202) 512-4707
U.S. Government Accountability Office, 441 G Street NW, Room 7814,
Washington, DC 20548



Please Print on Recycled Paper.