

GAO Highlights

Highlights of [GAO-20-56](#), a report to congressional addressees

Why GAO Did This Study

TSA is responsible for overseeing security operations at roughly 440 TSA-regulated airports as part of its mission to protect the nation's civil aviation system. TSA uses technologies to screen passengers and their bags for prohibited items.

The TSA Modernization Act includes a provision for GAO to review TSA's deployment of screening technologies, and GAO was asked to review the detection standards of these screening technologies. This report addresses, among other things, (1) how TSA operationalizes detection standards, (2) the extent to which TSA considered risk when making deployment decisions, and (3) the extent to which TSA ensures technologies continue to meet detection requirements after deployment.

GAO reviewed DHS and TSA procedures and documents, including detection standards; visited DHS and TSA testing facilities; observed the use of screening technologies at seven airports, selected for varying geographic locations and other factors; and interviewed DHS and TSA headquarters and field officials.

What GAO Recommends

GAO is making five recommendations, including that TSA document analysis of risk in deploying technologies, and implement a process to ensure technologies continue to meet detection requirements after deployment. DHS agreed with all five recommendations and said TSA either has taken or will take actions to address them.

View [GAO-20-56](#). For more information, contact William Russell at (202) 512-8777 or russellw@gao.gov.

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AVIATION SECURITY

TSA Should Ensure Screening Technologies Continue to Meet Detection Requirements after Deployment

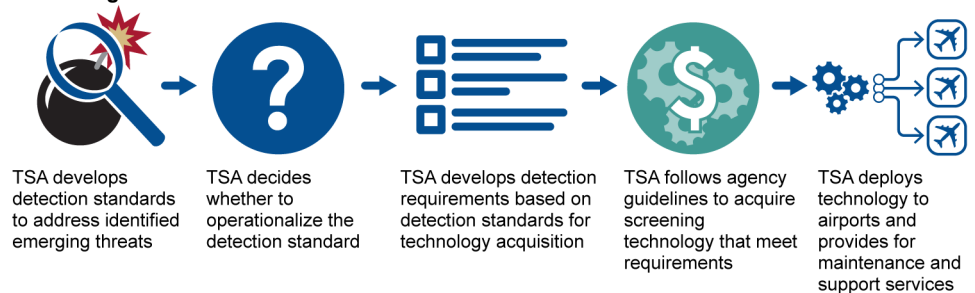
What GAO Found

The Department of Homeland Security's (DHS) Transportation Security Administration (TSA) operationalizes, or puts into effect, detection standards for its screening technologies by acquiring and deploying new technologies, which can take years. Detection standards specify the prohibited items (e.g., guns, explosives) that technologies are to detect, the minimum rate of detection, and the maximum rate at which technologies incorrectly flag an item. TSA operationalizes standards by adapting them as detection requirements, working with manufacturers to develop and test new technologies (software or hardware), and acquiring and deploying technologies to airports. For the standards GAO reviewed, this process took 2 to 7 years, based on manufacturers' technical abilities and other factors.

TSA's deployment decisions are generally based on logistical factors and it is unclear how risk is considered when determining where and in what order technologies are deployed because TSA did not document its decisions. TSA considers risks across the civil aviation system when making acquisition decisions. However, TSA did not document the extent risk played a role in deployment, and could not fully explain how risk analyses contributed to those decisions. Moving forward, increased transparency about TSA's decisions would better ensure that deployment of technologies matches potential risks.

Technology performance can degrade over time; however, TSA does not ensure that technologies continue to meet detection requirements after deployment to airports. TSA certifies technologies to ensure they meet requirements before deployment, and screeners are to regularly calibrate deployed technologies to demonstrate they are minimally operational. However, neither process ensures that technologies continue to meet requirements after deployment. In 2015 and 2016, DHS tested a sample of deployed explosives trace detection and bottled liquid scanner units and found that some no longer met detection requirements. Developing and implementing a process to ensure technologies continue to meet detection requirements after deployment would help ensure that TSA screening procedures are effective and enable TSA to take corrective action if needed.

Transportation Security Administration's (TSA) Process for Acquiring Screening Technologies to Meet Detection Standards



Source: GAO analysis of TSA information. | [GAO-20-56](#)