

Highlights of [GAO-12-644T](#), a testimony before the Committees on Oversight and Government Reform and Transportation and Infrastructure, House of Representatives.

Why GAO Did This Study

Within DHS, TSA is responsible for developing and acquiring new technologies to address transportation-related homeland security needs. TSA's acquisition programs represent billions of dollars in life-cycle costs and support a wide range of aviation security missions and investments, including technologies used to screen passengers and checked baggage such as AIT and EDS, among others. GAO's testimony addresses three key DHS and TSA challenges identified in past work: (1) developing and meeting technology program requirements, (2) overseeing and conducting testing of new screening technologies, and (3) identifying acquisition program baselines (or starting points), program schedules, and costs. This statement will also discuss recent DHS and TSA efforts to strengthen TSA's investment and acquisition processes. This statement is based on reports and testimonies GAO issued from October 2009 through April 2012 related to TSA's efforts to manage, test, and deploy various technology programs.

What GAO Recommends

GAO is not making any new recommendations. In prior work, GAO made recommendations to address challenges related to deploying AIT, EDS, and other screening technology to meet requirements; overseeing and conducting testing of AIT and EDS technologies; and incorporating information on costs and schedules, among other things, in making technology acquisition decisions. DHS and TSA concurred and have actions underway to address these recommendations.

View [GAO-12-644T](#). For more information, contact Steve Lord at (202) 512-4379 or lords@gao.gov.

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HOMELAND SECURITY

DHS and TSA Face Challenges Overseeing Acquisition of Screening Technologies

What GAO Found

GAO's past work has found that the Department of Homeland Security (DHS) and the Transportation Security Administration (TSA) have faced challenges in developing and meeting program requirements when acquiring screening technologies. GAO's past work has demonstrated that program performance cannot be accurately assessed without valid baseline requirements established at the program start. In June 2010, GAO reported that more than half of the 15 DHS programs GAO reviewed awarded contracts to initiate acquisition activities without component or department approval of documents essential to planning acquisitions, setting operational requirements, or establishing acquisition program baselines. At the program level, in January 2012, GAO reported that TSA did not fully follow DHS acquisition policies when acquiring advanced imaging technology (AIT)—commonly referred to as a full body scanner that identifies objects or anomalies on the outside of the body—which resulted in DHS approving full AIT deployment without full knowledge of TSA's revised specifications. In July 2011, GAO reported that in 2010 TSA revised its explosive detection systems (EDS) requirements to better address current threats and planned to implement these requirements in a phased approach; however, GAO reported that some number of the EDSs in TSA's fleet were configured to detect explosives at the levels established in 2005 while the remaining ones were configured to detect explosives at 1998 levels and TSA did not have a plan with time frames needed to deploy EDSs to meet the current requirements.

GAO also reported DHS and TSA challenges in overseeing and testing new technologies. For example, in January 2012, GAO reported that TSA began deploying AIT before it received approval for how it would test AIT. Contrary to DHS's acquisition guidance, TSA approved AIT for deployment prior to DHS's approval of the AIT testing and evaluation plan. In July 2011, GAO also reported that TSA experienced challenges collecting data on the properties of certain explosives needed by vendors to develop EDS detection software and needed by TSA before testing EDS prior to procurement and deployment to airports. TSA and the DHS Science and Technology Directorate experienced these challenges because of problems safely handling and consistently formulating some explosives. The challenges related to data collection for certain explosives resulted in problems carrying out the EDS procurement as planned.

DHS and TSA have experienced challenges identifying acquisition program baselines, program schedules, and costs. GAO's prior work has found that realistic acquisition program baselines with stable requirements for cost, schedule, and performance are among the factors that are important to successful acquisitions delivering capabilities within cost and schedule. GAO also found that program performance metrics for cost and schedule can provide useful indicators of the health of acquisition programs. In April 2012 GAO reported that TSA's methods for developing life-cycle cost estimates for the Electronic Baggage Screening Program did not fully adhere to best practices for developing these estimates.

DHS has efforts underway to strengthen oversight of technology acquisitions. In part due to the problems GAO highlighted in DHS's acquisition process, the implementation and transformation of DHS remains on GAO's high-risk list.