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ARIZONA BORDER SURVEILLANCE TECHNOLOGY PLAN

Additional Actions Needed to Strengthen Management and Assess Effectiveness

Why GAO Did This Study

In recent years, nearly half of all annual apprehensions of illegal entrants along the southwest border have occurred along the Arizona border. Under the Secure Border Initiative Network (SBI^{net}), CBP deployed surveillance systems along 53 of the 387 miles of the Arizona border with Mexico. After DHS canceled further SBI^{net} procurements, CBP developed the Plan, which includes a mix of radars, sensors, and cameras to help provide security for the remainder of Arizona's border. GAO was asked to review the status of DHS's efforts to implement the Plan. This report addresses the extent to which CBP (1) developed schedules and Life-cycle Cost Estimates for the Plan in accordance with best practices, (2) followed aspects of DHS's acquisition management guidance in managing the Plan's programs, and (3) identified mission benefits and developed performance metrics for surveillance technologies to be deployed under the Plan. GAO reviewed schedule, cost, and acquisition documents and analyzed fiscal year 2010 through June 2013 data on apprehensions and seizures.

What GAO Recommends

GAO recommends that CBP, among other things, apply scheduling best practices, develop an integrated schedule, verify Life-cycle Cost Estimates, revise the IFT test plan, and require tracking of asset assist data. DHS concurred with four of six GAO recommendations. It did not concur with the need for an integrated schedule or a revised IFT test plan. As discussed in this report, GAO continues to believe in the need for a schedule and a revised test plan.

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What GAO Found

The Department of Homeland Security's (DHS) U.S. Customs and Border Protection's (CBP) schedules and Life-cycle Cost Estimates for the Arizona Border Surveillance Technology Plan (the Plan) reflect some, but not all, best practices. Scheduling best practices are summarized into four characteristics of reliable schedules—comprehensive, well constructed, credible, and controlled (i.e., schedules are periodically updated and progress is monitored). GAO assessed CBP's schedules as of March 2013 for the three highest-cost programs that represent 97 percent of the Plan's estimated cost. GAO found that schedules for two of the programs at least partially met each characteristic (i.e., satisfied about half of the criterion), and the schedule for the other program at least minimally met each characteristic (i.e., satisfied a small portion of the criterion), as shown in the table below. For example, the schedule for one of the Plan's programs partially met the characteristic of being credible in that CBP had performed a schedule risk analysis for the program, but the risk analysis was not based on any connection between risks and specific activities. For another program, the schedule minimally met the characteristic of being controlled in that it did not have valid baseline dates for activities or milestones by which CBP could track progress.

Summary of GAO's Schedule Assessments for the Three Highest-Cost Programs under the Arizona Border Surveillance Technology Plan

Schedule characteristic	Program 1	Program 2	Program 3
Comprehensive	Partially met	Partially met	Partially met
Well constructed	Substantially met	Partially met	Partially met
Credible	Partially met	Partially met	Minimally met
Controlled	Partially met	Partially met	Minimally met

Source: GAO analysis of CBP data.

Note: Not met—CBP provided no evidence that satisfies any of the criterion. Minimally met—CBP provided evidence that satisfies a small portion of the criterion. Partially met—CBP provided evidence that satisfies about half of the criterion. Substantially met—CBP provided evidence that satisfies a large portion of the criterion. Met—CBP provided complete evidence that satisfies the entire criterion.

Further, CBP has not developed an Integrated Master Schedule for the Plan in accordance with best practices. Rather, CBP has used the separate schedules for each program to manage implementation of the Plan, as CBP officials stated that the Plan contains individual acquisition programs rather than integrated programs. However, collectively these programs are intended to provide CBP with a combination of surveillance capabilities to be used along the Arizona border with Mexico, and resources are shared among the programs. According to scheduling best practices, an Integrated Master Schedule is a critical management tool for complex systems that involve a number of different projects, such as the Plan, to allow managers to monitor all work activities, how long activities will take, and how the activities are related to one another. Developing and maintaining an Integrated Master Schedule for the Plan could help provide CBP a comprehensive view of the Plan and help CBP better understand how schedule changes in each individual program could affect

implementation of the overall Plan.

Moreover, cost-estimating best practices are summarized into four characteristics—well documented, comprehensive, accurate, and credible. GAO's analysis of CBP's estimate for the Plan and estimates completed at the time of GAO's review for the two highest-cost programs showed that these estimates at least partially met three of these characteristics: well documented, comprehensive, and accurate. In terms of being credible, these estimates had not been verified with independent cost estimates in accordance with best practices. Ensuring that scheduling best practices are applied to the three programs' schedules and verifying Life-cycle Cost Estimates with independent estimates could help better ensure the reliability of the schedules and estimates.

CBP did not fully follow key aspects of DHS's acquisition management guidance for the Plan's three highest-cost programs. For example, CBP plans to conduct limited testing of the highest-cost program—the Integrated Fixed Tower (IFT: towers with cameras and radars)—to determine its mission contributions, but not its effectiveness and suitability for the various environmental conditions, such as weather, in which it will be deployed. This testing, as outlined in CBP's test plan, is not consistent with DHS's guidance, which states that testing should occur to determine effectiveness and suitability in the environmental conditions in which a system will be used. Revising the test plan to more fully test the program in the conditions in which it will be used could help provide CBP with more complete information on how the towers will operate once they are fully deployed.

CBP has identified mission benefits for technologies under the Plan, but has not yet developed performance metrics. CBP has identified such mission benefits as improved situational awareness and agent safety. Further, a DHS database enables CBP to collect data on asset assists, defined as instances in which a technology, such as a camera, or other asset, such as a canine team, contributed to an apprehension or seizure, that in combination with other relevant performance metrics or indicators, could be used to better determine the contributions of CBP's surveillance technologies and inform resource allocation decisions. However, CBP is not capturing complete data on asset assists, as Border Patrol agents are not required to record and track such data. For example, from fiscal year 2010 through June 2013, Border Patrol did not record whether an asset assist contributed to an apprehension event for 69 percent of such events in the Tucson sector. Requiring the reporting and tracking of asset assist data could help CBP determine the extent to which its surveillance technologies are contributing to CBP's border security efforts.

This is a public version of a For Official Use Only—Law Enforcement Sensitive report that GAO issued in February 2014. Information DHS deemed as For Official Use Only—Law Enforcement Sensitive has been redacted.