Why GAO Did This Study

Through the NextGen initiative, FAA plans to transform the current ground-based radar air-traffic control system to a system based on satellite navigation, automated position reporting, and digital communications. The NextGen transition will be a complex, multi-year, incremental process. Decisions affecting how long the transition will take and the number of existing systems that will remain in operation during the transition have implications for FAA’s existing systems, workforce, facilities, and budget.

GAO was asked to continue monitoring the progress and challenges associated with the NextGen transition and implementation. In this report, GAO examined (1) FAA’s progress in addressing key challenges affecting its ability to execute the NextGen transition; (2) the performance and condition of current air traffic control system and facilities; (3) FAA’s efforts to address maintenance requirements of its current systems and facilities; and (4) the extent to which FAA has planned for the financial resources for sustaining existing systems and facilities and the NextGen transition. In doing so, GAO analyzed FAA system performance data and documents and interviewed FAA officials and aviation stakeholders.

What GAO Found

The Federal Aviation Administration (FAA) has made some progress in addressing key challenges as it begins the gradual transition to the Next Generation Air Transportation System (NextGen). It has filled key leadership positions and developed tools to manage interdependent NextGen programs. FAA is working to address other identified challenges, including incentivizing aircraft operators to equip with NextGen technologies, identifying workforce roles under NextGen, and realigning and consolidating facilities. However, FAA has yet to make some decisions needed to move forward with these efforts. For example, FAA is evaluating realignment options to help realize efficiencies but has not yet identified which facilities will be consolidated or realigned.

FAA reports that operational availability of current air traffic control systems at the largest airports has exceeded 99 percent, and underlying data suggest increasing maintenance requirements for current systems and facilities, some of which may have to operate for many more years during the NextGen transition. For example, from fiscal years 2001 through 2012, planned, or scheduled, system outages doubled while unscheduled outages increased 45 percent, an increase due, in part, to the age and deteriorating condition of existing systems. FAA data on facilities and infrastructure condition, although limited, also suggest potentially increasing maintenance requirements. FAA is working to establish a new performance measure to publicly report on system condition and replace the operational availability measure, which was discontinued in 2012.

Recognizing that FAA’s cost estimates for maintaining existing systems and facilities and implementing NextGen exceed anticipated funding levels, the agency is developing a plan to address its system and facilities maintenance issues, which it expects to complete by September 2013. In developing the plan, it recognizes that many unstaffed facilities, such as shelters and communication towers, face deteriorating conditions that can put employees maintaining these facilities at risk of injury. However, the process used to collect condition data does not facilitate an agency-wide priority assessment, as each location established its own priorities. Thus, FAA cannot target its limited resources on those projects in greatest need of repair and most critical to the national airspace system. FAA is also working to retire systems that are no longer needed as NextGen capabilities are deployed but will need to overcome challenges in securing stakeholder buy-in and funding.

What GAO Recommends

To improve FAA’s efforts to manage the transition, GAO recommends that FAA develop a strategy to improve planning of its operations budget and ensure sufficient data are available to support these efforts. DOT did not agree or disagree with this recommendation but provided technical comments.

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