



Highlights of GAO-07-636T, a testimony before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

March 22, 2007

## FEDERAL AVIATION ADMINISTRATION

# Key Issues in Ensuring the Efficient Development and Safe Operation of the Next Generation Air Transportation System

### Why GAO Did This Study

The Federal Aviation Administration (FAA) operates one of the safest air transportation systems in the world. It is, however, a system under strain. The skies are becoming more crowded every day, with an estimated 1 billion passengers per year expected by 2015. The current aviation system cannot be expanded to meet this growth. The reauthorization of FAA is an opportunity to examine how the agency is managing the operation and safety of the air transportation system as it leads the transition to the Next Generation Air Transportation System (NextGen)—a major redesign of the current system. GAO's testimony focuses on key issues related to FAA's reauthorization, including (1) FAA's progress in implementing initiatives that could provide a solid foundation for NextGen, (2) issues that need to be addressed to help ensure a successful transition to NextGen, and (3) safety areas that are important for the continued safe operation of the current and future system. This statement is based on recent GAO reports and ongoing work on some management and safety initiatives.

### What GAO Recommends

This testimony does not contain recommendations. However, GAO reports containing relevant recommendations are listed among the Related GAO Products, some of which FAA is in the process of responding to.

[www.gao.gov/cgi-bin/getrpt?GAO-07-636T](http://www.gao.gov/cgi-bin/getrpt?GAO-07-636T).

To view the full product, including the scope and methodology, click on the link above. For more information, contact Gerald L. Dillingham, Ph.D., at (202) 512-2834 or [dillingham@gao.gov](mailto:dillingham@gao.gov).

### What GAO Found

FAA has made significant progress in moving to more businesslike and cost-effective operations and modernizing the air traffic control system. This progress should better position the agency for the complex implementation of NextGen. However, further work remains to fully address past problems in the modernization effort while at the same time finding new leadership—due to losses of key leaders at FAA and its Air Traffic Organization—that can continue an agencywide commitment to transformation. While FAA has improved its financial management capability, including implementing a new cost accounting system and developing a cost allocation methodology, it is not yet clear if that methodology provides a sound basis from which to derive the administration's proposed new cost-based funding structure for FAA. In addition, improved acquisition processes, such as establishing guidance on using Earned Value Management, are positive steps, but they need to be fully implemented across all critical acquisitions. As FAA works toward acquiring and deploying NextGen technology, it will also be important to phase out existing air traffic control equipment using a risk-based approach and continue to maintain existing systems.

Key issues that FAA needs to address as it begins implementing NextGen include continued focus on coordination with the Joint Planning and Development Office (JPDO). FAA, in coordination with JPDO, is developing an implementation plan for NextGen that is expected to include details of the required technologies, procedures, and resources. This is a step in the right direction. While FAA estimates that its cost for NextGen programs may range between \$15 billion and \$22 billion, it will be important to determine which entities will fund and conduct the necessary developmental research. Also, GAO has recommended that FAA assess its capacity to handle the technical and contract management expertise to determine if it has the capabilities required to oversee the implementation of NextGen. FAA is considering action that would respond to this recommendation.

To deal with current safety issues and the transition to NextGen, it will be important for FAA to address safety in the airport environment, where forecasted traffic growth could lead to increased ground congestion and safety hazards. FAA also needs to establish the appropriate regulatory approach for certain current airspace users, such as air ambulances, and new users, such as the emerging space tourism industry. In addition, to maintain and expand the margin of safety, especially if substantial growth in air traffic materializes, FAA will need to rely more on data than on labor-intensive inspections. GAO has recommended that FAA improve its safety data. FAA has taken some action to improve its data, but more work remains. FAA's ability to ensure a safe system will also be affected by its ability to hire, train, and deploy its workforce of air traffic controllers, inspectors, and technicians.