

Highlights of [GAO-05-266](#), a report to congressional requesters

Why GAO Did This Study

The Federal Aviation Administration's (FAA) mission is to promote the safe, orderly, and expeditious flow of air traffic in the U.S. airspace system. To this end, FAA is modernizing its air traffic control systems, a multibillion dollar effort that GAO has designated as a high-risk program. GAO's research into the practices of successful public- and private-sector organizations has shown that developing and using an enterprise architecture, or blueprint, to guide and constrain systems investments is crucial to the success of such a modernization effort.

GAO was asked to determine whether FAA has established effective processes for managing the development and implementation of an enterprise architecture.

What GAO Recommends

To support the agency in its efforts to develop and implement an enterprise architecture, GAO is making recommendations to the Secretary of Transportation for establishing an effective enterprise architecture management program, beginning with demonstrating senior management commitment and support for the program.

The Department of Transportation provided technical comments on a draft of this report. GAO has incorporated these, as appropriate, in the report.

www.gao.gov/cgi-bin/getrpt?GAO-05-266.

To view the full product, including the scope and methodology, click on the link above. For more information, contact Randolph C. Hite, 202-512-3439, hiter@gao.gov or David Powner, 202-512-9286, pownerd@gao.gov.

FEDERAL AVIATION ADMINISTRATION

Stronger Architecture Program Needed to Guide Systems Modernization Efforts

What GAO Found

FAA has two architecture projects—one for its National Airspace System (NAS) operations and one for its administrative and mission support activities—that together constitute its enterprise architecture program. However, it has established only a few of the management capabilities for effectively developing, maintaining, and implementing an architecture. For example, the agency reports that it has allocated adequate resources to the projects, and it has established project offices to be responsible for developing the architecture, designated a chief architect for each project, and released Version 5.0 of its NAS architecture. But the agency has yet to establish other key architecture management capabilities—such as designating a committee or group that represents the enterprise to direct, oversee, or approve the architecture, and establishing an architecture policy. FAA agreed that the agency needs an effective enterprise architecture program and stated that it plans to improve its management of both projects. For example, the agency intends to establish a steering committee; develop a policy that will govern the development, maintenance, and implementation of the architecture program; and have an approved architecture project management plan for the non-NAS architecture.

GAO's experience in reviewing other agencies has shown that not having an effective enterprise architecture program can be attributed to, among other things, an absence of senior management understanding and support and cultural resistance to having and using one. It has also shown that attempting major systems modernization programs like FAA's without having and using an enterprise architecture often results in system implementations that are duplicative, are not well integrated, require costly rework to interface, and do not effectively optimize mission performance.

FAA's Mission



Source: Dynamic Graphics.