



Highlights of [GAO-10-188T](#), a testimony before the Subcommittee on Aviation, Committee on Transportation and Infrastructure, House of Representatives

Why GAO Did This Study

On September 9, 2009, the Next Generation Air Transportation System (NextGen) Midterm Implementation Task Force (Task Force) issued its final report and recommendations. The Task Force was to reach a consensus on the operational improvements to the air transportation system that should be implemented between now and 2018. Its recommendations call for the Federal Aviation Administration (FAA) to develop improvements that allow operators to take advantage of equipment that has been widely deployed or is available for installation in existing aircraft. FAA is now considering how to modify its existing plans and programs in response to the Task Force's recommendations and must do so in a way that retains safety as the highest priority.

This testimony highlights the NextGen challenges previously identified by GAO and others that affect FAA's response to the Task Force's recommendations. GAO groups these challenges into three areas: (1) directing resources and addressing environmental issues, (2) adjusting its culture and business practices, and (3) developing and implementing options to encourage airlines and general aviation to equip aircraft with new technologies. GAO's testimony updates prior GAO work with interviews with agency officials and industry stakeholders and includes an analysis of the Task Force report.

To view the full product, click on [GAO-10-188T](#). For more information, contact Gerald L. Dillingham at (202) 512-2834 or dillinghamg@gao.gov.

NEXT GENERATION AIR TRANSPORTATION SYSTEM

FAA Faces Challenges in Responding to Task Force Recommendations

What GAO Found

Directing resources and addressing environmental issues. Allocating resources for advanced navigational procedures and airspace redesign requires FAA to balance benefits to operators against resource limits and other challenges to the timely implementation of NextGen. Procedures that allow more direct flights—versus those that overlay existing routes—and redesigned airspace in congested metropolitan areas can save operators time, fuel, and costs, and reduce congestion, delays, and emissions. However, FAA does not have the capacity to expedite progress towards its current procedure development targets. While FAA has begun to explore the use of the private sector to help develop procedures, issues related to public use of these procedures and oversight of developers remain. In addition, required environmental reviews can be lengthy, especially when planned changes in noise patterns create community concerns during reviews. Challenges to FAA include deciding whether to start in more or less complex metropolitan areas, and finding ways to expedite the environmental review process and proactively ameliorate community concerns.

Changing FAA's culture and business practices. According to stakeholders and Task Force members, and as GAO has previously reported, FAA faces cultural and organizational challenges in implementing NextGen capabilities. Whereas FAA's culture and organization formerly supported the acquisition of individual air traffic control systems, FAA will now have to integrate and coordinate activities across multiple lines of business, as well as reprioritize some of its plans and programs, to implement near-term and midterm capabilities. FAA is currently analyzing what changes may be required to respond to the recommendations. Streamlining FAA's certification, operational approval, and procedure design processes, as a prior task force recommended, will also be essential for timely implementation. And sustaining a high level of involvement and collaboration with stakeholders—including operators, air traffic controllers, and others—will also be necessary to ensure progress.

Developing and implementing options to encourage equipage. The Task Force focused on making better use of equipment that has already been widely deployed in aircraft, but as NextGen progresses, new equipment will have to be installed to implement future capabilities and FAA may have to offer incentives for operators to accelerate their installation of equipment that may not yield an immediate return on investment. While FAA could mandate equipage, mandates take time to implement and can impose costs, risks, and other disincentives on operators that discourage early investment in equipment. The Task Force identified several options to encourage equipage, including offering operational or financial benefits to early equippers. Challenges to implementing these options include defining how operational incentives would work in practice, designing financial incentives so as not to displace private investment that would otherwise occur, and targeting incentives where benefits are greatest.