

Highlights of GAO-09-761, a report to the Chairman, Committee on Science and Technology, House of Representatives

Why GAO Did This Study

The National Weather Service's (NWS) weather products are a vital component of the Federal Aviation Administration's (FAA) air traffic control system. In addition to providing aviation weather products developed at its own facilities, NWS also provides onsite staff at each of FAA's en route centers—the facilities that control high-altitude flight outside the airport tower and terminal areas. Over the last few years, FAA and NWS have been exploring options for enhancing the efficiency of the aviation weather services provided at en route centers.

GAO agreed to (1) determine the status and plans of efforts to restructure the center weather service units, (2) evaluate efforts to establish a baseline of the current performance provided by these units, and (3) evaluate challenges to restructuring them. To do so, GAO evaluated agency plans for the restructuring and for establishing performance measures. GAO also compared agency efforts to leading practices and interviewed agency officials.

What GAO Recommends

GAO is recommending that the Departments of Commerce and Transportation document baseline performance for several measures, and take steps to address challenges. In commenting on a draft of this report, Commerce officials agreed with the recommendations and identified steps to address them; Transportation officials agreed to consider the recommendations.

View GAO-09-761 or key components. For more information, contact David A. Powner at (202) 512-9286 or at pownerd@gao.gov.

AVIATION WEATHER

FAA and the National Weather Service Are Considering Plans to Consolidate Weather Service Offices, but Face Significant Challenges

What GAO Found

NWS and FAA are considering plans to restructure the way aviation weather services are provided at en route centers, but it is not yet clear whether and how these changes will be implemented. In 2005, FAA requested that NWS restructure its services by consolidating operations to a smaller number of sites, reducing personnel costs, and providing services 24 hours a day, 7 days a week. NWS developed two successive proposals, both of which were rejected by FAA—most recently because the costs were too high. FAA subsequently requested that NWS develop another proposal by late December 2008. In response, NWS developed a third proposal that involves consolidating 20 of 21 existing center weather service units into two locations. NWS sent this proposal to FAA in early June 2009. FAA responded to NWS in August 2009 by requesting more information regarding NWS's proposal.

In response to GAO's prior concerns that NWS and FAA lacked performance measures and a baseline of current performance, the agencies have agreed on five measures and NWS has proposed eight others. In addition, the agencies initiated efforts to establish a performance baseline for 4 of 13 potential performance measures. However, the agencies have not established baseline performance for the other 9 measures. NWS officials stated they are not collecting baseline information on the 9 measures for a variety of reasons, including that some of the measures have not yet been approved by FAA, and that selected measures involve products that have not vet been developed. While 4 of the 9 measures are tied to new products or services that are to be developed if NWS's latest restructuring proposal is accepted, the other 5 could be measured in the current operational environment. For example, both accuracy and customer satisfaction measures are applicable to current operations. It is important to obtain an understanding of the current level of performance in these measures before beginning any efforts to restructure aviation weather services. Without an understanding of the current level of performance, NWS and FAA may not be able to measure the success or failure of changes they make to the center weather service unit operations. As a result, changes to the current structure could degrade aviation operations and safety—and the agencies may not know it.

NWS and FAA face challenges in their efforts to improve the current aviation weather structure. These include challenges associated with (1) interagency collaboration, (2) defining FAA's requirements, and (3) aligning any changes with the Next Generation Air Transportation System—a long-term initiative to increase the efficiency of the national airspace system. If the restructuring proposal is accepted, the agencies face three additional challenges in implementing it: (1) developing a feasible schedule that includes adequate time for stakeholder involvement, (2) undertaking a comprehensive demonstration to ensure no services are degraded, and (3) effectively reconfiguring the infrastructure and technologies. Unless and until these challenges are addressed, the proposed restructuring of aviation weather services at en route centers poses new risks and has little chance of success.