

Highlights of [GAO-12-898](#), a report to congressional committees.

Why GAO Did This Study

The nation's aviation system is one of the safest in the world, but with air travel projected to increase over the next 20 years, efforts to ensure the continued safety of aviation are increasingly important. The FAA is seeking to further enhance safety by shifting to a data-driven, risk-based safety oversight approach—referred to as SMS. SMS implementation is required for FAA and several of its business lines and the agency is taking steps to require industry implementation.

As requested, this report addresses (1) the status of FAA's implementation of SMS, (2) the extent to which FAA's SMS efforts have been consistent with key practices for successful planning and implementation of a new program, and (3) challenges FAA faces in implementing SMS. To address these issues, GAO reviewed FAA SMS documents, compared FAA efforts to key practices, and interviewed agency and industry officials.

What GAO Recommends

GAO recommends that FAA develop systems to: track SMS implementation, evaluate employee performance as it relates to SMS, and assess whether SMS meets its goals and objectives; conduct a workforce analysis for SMS; and consider strategies to address airports' data concerns. The Department of Transportation agreed to consider the recommendations and provided clarifying information about SMS, which GAO incorporated.

View [GAO-12-898](#). For more information, contact Gerald L. Dillingham, Ph.D., at (202) 512-2834 or dillingham@gao.gov.

AVIATION SAFETY

Additional FAA Efforts Could Enhance Safety Risk Management

What GAO Found

The Federal Aviation Administration (FAA) and its business lines and offices are in different stages of their implementation of Safety Management Systems (SMS). FAA finalized its agency-wide implementation plan in April 2012, and the Air Traffic Organization (ATO) has completed its SMS implementation, but other FAA SMS efforts are in the early stages. FAA business lines, such as the Aviation Safety Organization (AVS) and the Office of Airports (ARP), have SMS guidance and plans largely in place and have begun to integrate related practices into their operations, but many implementation tasks remain incomplete, and officials and experts project that full SMS implementation could take many years.

There are a number of key practices that can help agencies plan for and efficiently implement new projects, including large scale transformations such as FAA's SMS implementation, and FAA has many in place. For example, FAA has support from top leadership and a clear project mission. However, FAA has only partially addressed other key practices such as developing a project plan to track SMS implementation, and FAA has not addressed performance-related practices such as establishing SMS performance measures or links between employees' performance standards and SMS.

Alignment of FAA's SMS Implementation with Key Practices

Practice	Addressed
Establishing top leadership support	●
Setting a clear project mission	●
Dedicating an implementation team	●
Identifying and adopting leading practices	●
Troubleshooting	●
Developing a project plan	◐
Consulting with employees	◐
Providing needed expertise	◐
Integrating project-related tasks into the employee performance management system	○
Measuring performance	○

● Addressed – FAA has instituted the practice
 ◐ Partially addressed – FAA has shown some progress toward instituting or started but not completed the practice
 ○ Not addressed – FAA has made minimal or no progress toward instituting the practice

Source: GAO analysis.

Several challenges remain that may affect FAA's ability to effectively implement SMS. FAA is taking steps to address some challenges and stakeholder concerns, but challenges related to data sharing and data quality; capacity to conduct SMS-based analyses and oversight; and standardization of policies and procedures could negatively affect FAA's efforts to implement SMS in a timely and efficient manner. Further, FAA officials stated that SMS implementation will require some skills that agency employees do not have, but FAA has not yet assessed the skills of its workforce to identify specific gaps in employee expertise. In addition, while existing federal law protects any data collected for SMS, any data airports collect could be subject to state-specific Freedom of Information Act laws, a gap that could create a disincentive for airports to fully participate in SMS implementation.