While the Federal Aviation Administration (FAA) has made significant progress over the past decade in mitigating the most serious runway incursions (i.e., incidents when a collision nearly occurred between aircraft or vehicles on a runway), this trend is reversing. The Agency has reported 17 severe runway incursions this past fiscal year (FY), compared to only 7 for FY 2011. Prevention of runway incursions and ground collisions has been on the National Transportation Safety Board’s (NTSB) “Most Wanted Transportation Safety Improvements List” since 1990.

In FY 2011, FAA completed the deployment of its Airport Surface Detection Equipment-Model X (ASDE-X) system at 35 major airports. ASDE-X enhances runway safety by providing detailed information to air traffic controllers regarding aircraft operations on runways and taxiways. However, while ASDE-X is a step in the right direction, it does not provide alerts directly to pilots, which has been a longstanding NTSB recommendation. To address this shortcoming, FAA is planning to integrate the use of ASDE-X with two other systems—Runway Status Lights (RWSL) and Automatic Dependent Surveillance-Broadcast (ADS-B)—to enable simultaneous alerts for controllers and pilots of potential ground collisions.

Progress in achieving these enhancements will be impacted by a number of issues, such as establishing requirements for technical upgrades, testing to verify system integrity, and determining whether the ASDE-X capabilities will meet FAA’s goals for increasing safety and capacity. Accordingly, our audit objective is to assess FAA’s progress in integrating ASDE-X with other technologies such as RWSL and ADS-B to improve runway safety.
We plan to begin the audit the week of October 29, 2012, and will contact your audit liaison to schedule an entrance conference. If you have any questions, please contact me at (202) 366-0500, or Kevin Dorsey, Program Director, at (202) 366-1518.

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cc: FAA Audit Liaison, AAE-100
    DOT Audit Liaison, M-1