

## SAFETY

### Total Runway Incursions



Federal Aviation  
Administration

#### FY 2009 Performance Target

*“One percent reduction in total number of runway incursions from the FY 2008 baseline of 1009 runway incursions.”*

#### Flight Plan Objective and Performance Target

Objective 3: Reduce the risk of runway incursions.

Performance Target: By the end of FY 2013, reduce total runway incursions by 10 percent from the FY 2008 baseline.

	FY 2005	FY 2006	FY 2007	FY 2008	FY 2009 <sup>1</sup>
<b>Target</b>	N/A	N/A	N/A	N/A	- 1%
<b>Actual</b>	N/A	N/A	N/A	N/A	

<sup>1</sup> This is a new measure for FY 2009. No data are available for prior years.

#### Definition of Measure

**Unit of Measure:** Difference between the total number of runway incursions and the FY 2008 baseline, expressed as a percentage. FY 2008 baseline is 1009 – the FY 2009 target is at least a one percent reduction from this baseline.

**Computation:** The difference between the number of incursions and the baseline is divided by the baseline, and the result is converted to a percentage by multiplying it by 100.

**Formula:** 
$$\frac{\text{Total Number of Runway Incursions} - \text{FY 2008 Baseline}}{\text{FY 2008 Baseline}} \times 100$$

**Scope of Measure:** A runway incursion is any occurrence at an aerodrome involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and takeoff of aircraft. They are grouped in three general categories: operational errors, pilot deviations, and vehicle/pedestrian deviations. Runway incursions are reported and tracked at airports that have an operational air traffic control tower. Operations are defined as total takeoffs and landings.

The FAA tracks four categories of runway incursions - A, B, C, D.

- Category A: Separation decreases to the point that participants take extreme action to narrowly avoid a collision.
- Category B: Separation decreases, and there is a significant potential for a collision.
- Category C: Separation decreases, but there is ample time and distance to avoid a collision.
- Category D: There is little or no chance of collision, but the definition of a runway incursion is met.

#### Why the FAA Chooses this Measure

Runway incursions create dangerous situations that can lead to serious accidents. Reducing the number of runway incursions lessens the probability of accidents that potentially involve fatalities, injuries, and significant property damage.

#### Source of the Data

Air traffic controllers and pilots are the primary source of runway incursion reports. The data are recorded in the FAA National Incident Monitoring System (NAIMS). Preliminary incident reports are evaluated when received and evaluation can take up to 90 days.

### **Statistical Issues**

None.

### **Completeness**

The data are typically not finalized for 90 days following the close of the fiscal year. Surface operational error/deviation, surface pilot deviation, and vehicle/pedestrian deviation reports are reviewed on a daily basis to determine if the incident meets the definition of a runway incursion. Runway incursions are a subset of the incident data collected and the completeness of the data is based on the reporting requirements and completeness for each of the incident types.

### **Reliability**

FAA uses performance data extensively for program management, personnel evaluation, and accountability in prioritizing its facility evaluations and audits. The data is also used on a daily basis to track progress of achieving performance goals. Annual runway incursion incident data are used to provide a statistical basis for research and analysis and outreach initiatives. The FAA verifies and validates the accuracy of the data through reviews or preliminary and final reports. Reconciliation of the databases is conducted monthly and anomalies are explored and resolved. In cases where major problems are identified, a request to re-submit is issued. The FAA conducts annual reviews of reported data and compares the data with data reported from previous years.