# Performance Measure Profile

## World-wide Fatal Aviation Accident Rate

### FY 2013 Methodology Report

Federal Aviation Administration

| Performance Measure Applicability | |
|---|---|
| ☐ **DOT Strategic Plan**<br>Goal: n/a<br>Outcome: n/a<br>Metric: n/a<br><br>☐ **Agency Priority Goal** | ☒ **Destination 2025**<br>Goal: Advance Global Collaboration<br>Outcome: Reduce aviation accidents and fatalities worldwide.<br>Metric: By 2018, the world-wide fatal aviation accident rate declines 10% compared to 2010. |

**FY 2013 Performance Target**

Limit the world-wide fatal accident rates in Part 121-like operations to no more than 0.65 fatal accidents per million revenue aircraft departures. (This equates to 20 fatal accidents for FY 2013.)

Lead Organization: Aviation Safety (AVS)

| | FY 2009 | FY 2010 | FY 2011 | FY 2012 | FY 2013 |
|---|---|---|---|---|---|
| **Target** | N/A | N/A | 20 | 20 | 20 |
| **Actual** | N/A | 21 | 22 | 10[1] | TBD |

**Definition of Metric**

| | |
|---|---|
| Metric Unit: | Number of world-wide fatal accidents in Part 121-like operation per million revenue aircraft departures. |
| Computation: | Number of world-wide fatal accidents in Part 121-like operation divided by Part 121-like operation departures. |
| Formula: | $\frac{\text{Number of World-Wide Fatal Accidents in Part 121-like Operation}}{\text{Part 121-Like Aircraft Departures per 1,000,000}}$ |
| Scope of Metric: | The metric will address only FAR "Part 121-like" operations. Part 121-like accident captures the following types of flights:<br>- Scheduled passenger flights in aircraft with 10 or more passenger seats.<br>- Non-scheduled passenger flights in aircraft with 30 or more passenger seats.<br>- All cargo flights in aircraft with 7,500 pounds of payload or more. This roughly corresponds to those passenger aircraft that typically have 30 or more seats.<br>Part 121-like EXCLUDES the following types of flights.<br>- Non-scheduled passenger flights in aircraft with 10 to 30 passenger seats. Those flights correspond to on-demand Part 135 flights.<br>- All passenger flights in aircraft with fewer than 10 seats. Those flights correspond to scheduled Part 135.<br>- Cargo flights in aircraft with less than 7,500 pounds payload. Those flights |

[1] Preliminary estimate, final data is expected to be available in March 2014.

| | |
|---|---|
| | correspond to on-demand Part 135 flights.<br>Those operations are synonymous with general public notions of passenger and cargo "airlines" in the United States. This measure excludes fatal accidents involving turbulence and ramp events because they are not reported consistently in much of the world. |
| Method of Setting Target: | The target was set based on past trends. The trend has increased over the past 5 years. The target for 2018 implies a target in 2025 that is 18% below the FY2008 to FY2010 baseline average of 0.68. The 2018 target could prove to be a challenge, as most of the safest nations will experience only modest growth rates, while more rapid growth rates can be expected in other regions of the world. For tracking purposes, a target number estimate is established each year. The number is based on currently estimated annual 3% per year growth for departures. The FY 2013 target rate of 0.65 equates to 20 fatal accidents. |

### Why the FAA and/or DOT Choose this Metric

FAA chose this goal because American citizens travel on airlines throughout the world and a safe international system contributes to global economic growth, including growth in the U.S.

### Public Benefit

The public will benefit from safer travel on foreign air carriers and from the economic contributions of a safe international aviation system.

### Partners

International Civil Aviation Organization, selected national governments, the Commercial Aviation Safety Team (CAST), and regional cooperative organizations.

### External Factors Affecting Performance

The effort could be negatively affected by nonsupport by international efforts within AVS, such as "shadow certification" with airframe manufacturers and AVS outreach.

### Source of the Data

Fatal accidents will be identified from several respected sources of data on international accidents, including the United Nation's ICAO, two commercial sources, and national databases from selected countries whose investigative authorities provide significant assistance to other countries, including the U.S. NTSB, BEA of France, AAIB of the UK, and Australia's ATSB. However, total flight departures for the most current year at any time must rely on an estimate, based largely on industry press because preliminary data will not be available until approximately 6 months into the following fiscal year. In contrast, accident information should be essentially complete shortly after the end of each fiscal year, though minor adjustments to that data may be required as data that is more complete becomes available.

### Statistical Issues

Statistical issues include timely availability of departures for the most recently completed fiscal year.

### Completeness

Accident data is precise and complete, and easily duplicated. The data on revenue aircraft departures is equally universal. Combined, the data yields fatal accident rates, which are the most commonly cited measure of fundamental safety throughout the world.

### Reliability

Political-economic factors that are beyond the direct influence of FAA or of the aviation community could influence results. Severe political or economic upheaval in any of several key aviation markets could negatively affect results, while better than expected positive changes in governance and wealth could strengthen results.