

PORTFOLIO OF GOALS FY 2008

(Updated May 2008)

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Commercial Air Carrier Fatality Rate



FY 2008 Performance Target

"In FY 2008, the commercial air carrier fatality rate will not exceed 8.88 fatalities per 100 million people on board."

Flight Plan Objective and Performance Target

Objective 1: Reduce Commercial Air Carrier Fatalities

Performance Target: Cut the rate of fatalities per 100 million persons on board in half by 2025.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 ¹
Target	N/A	N/A	N/A	N/A	8.88
Actual	N/A	N/A	N/A	N/A	

¹ This is a new measure for FY 2008, replacing the Commercial Air Carrier Fatal Accident Rate. No data are available for prior years.

Definition of Measure

Unit of Measure: Number of fatalities per 100 million persons on board.

Computation: Number of fatalities, including ramp accidents and other fatalities as a result of the

accident, divided by number of passengers and crew on board flights.

Formula: Number of commercial air carrier fatalities (Number of parents are board/100,000,000)

(Number of persons on board/100,000,000)

Scope of Measure: This measure includes both scheduled and nonscheduled flights of U.S. passenger

and cargo air carriers (14 CFR Part 121) and scheduled flights of regional operators (14 CFR Part 135). It excludes on-demand (i.e., air taxi) service and general aviation. Accidents involving passengers, crew, ground personnel, and the

uninvolved public are all included.

Why the FAA Chooses this Measure

We chose this measure because it is easy to understand and measures the individual risk to the flying public. As fatal air carrier accidents have declined in terms of average fatalities per accident, this measure will sharpen FAA's focus on helping air travel become even safer.

Source of the Data

The data on commercial fatalities come from the National Transportation Safety Board's (NTSB's) Aviation Accident Database. Aviation accident investigators under the auspices of the NTSB develop the data. Air carriers submit data for all passengers on board to the Office of Airline Information (OAI) within the Bureau of Transportation Statistics. FAA will estimate crew on board based on the distribution of aircraft departures by make and model, plus an average of 3.5 persons on board per Part 121 cargo flight.

Statistical Issues

Both accidents and passengers on board are censuses, having no sampling error. However, crew on board will be an estimate, but crew staffing in fact varies only within a very small range for any given make-model. Departure data and enplanements for Part 121 are from the Bureau of Transportation Statistics (BTS). The crew estimate is based on fleet makeup and crew requirements per number of seats. For the current fleet, the number of crew is equal to about seven percent of all Part 121 enplanements. The average number of cargo crew on board is 3.5 per departure, based on data from subscription services such as Air Claims, a proprietary database used by insurers to obtain information such as fleet mix, accidents and claims. Cargo crews typically include two flight crew members, and occasionally another pilot or company rep, or two deadheading passengers. Part 135 data also comes from BTS and Air Claims databases, but is not as complete. AEP calls the operators where BTS data have gaps. Based on previous accident and incident

reports, the average Part 135 enplanement is five per departure. Crew estimates for Part 135 are based on previous accident and incident data. Any error that might be introduced by estimating crew will be very small and will be overwhelmed by the passenger census. Also note that the fatality rate is small and could significantly fluctuate from year to year due to a single accident.

Completeness

The FAA does comparison checking of the departure data collected by BTS. This data is needed for crew estimates. However, FAA has no independent data sources against which to validate the numbers submitted to BTS. FAA compares its list of carriers to the DOT list to validate completeness and places the carriers in the appropriate category (i.e., Part 121 or Part 135). The number of actual persons on board data for any given period of time is considered preliminary for up to 18 months after the close of the reporting period. This is due to amended reports subsequently filed by the air carriers. Preliminary estimates are based on projections of the growth in departures developed by the Office of Policy, Planning and Environment. However, changes to the number of persons on board should rarely have an effect on the annual fatality rate. NTSB and FAA's Office of Accident Investigation meet regularly to validate the accident and fatality count.

To overcome reporting delays of 60 to 90 days, FAA must rely on historical data, partial internal data sources, and Official Airline Guide (OAG) scheduling information to project at least part of the fiscal year activity data. FAA uses OAG data until official BTS data are available. The air carrier fatal accident rate is not considered reliable until BTS provides preliminary numbers. Due to reporting procedures in place, it is unlikely that calculation of future fiscal year departure data will be markedly improved. Lacking complete historical data on a monthly basis and independent sources of verification increases the risk of error in the activity data.

Reliability

Results are considered preliminary based on projected activity data. FAA uses performance data extensively for program management, personnel evaluation, and accountability. Most accident investigations are a joint undertaking. NTSB has the statutory responsibility to determine probable cause, while FAA has separate statutory authority to investigate accidents and incidents in order to ensure that FAA meets its broader responsibilities. FAA's own accident investigators and other FAA employees participate in all accident investigations led by NTSB investigators.

General Aviation Fatal Accidents



FY 2008 Performance Target

"Reduce the number of general aviation and nonscheduled Part 135 fatal accidents to 325."

Flight Plan Objective and Performance Target

Objective 2: Reduce the number of fatal accidents in general aviation.

Performance Target: By FY 2009, reduce the number of general aviation and nonscheduled Part 135 fatal

accidents from the 1996-1998 average of 385 per year to no more than 319 accidents per year. This measure will be converted from a number to a rate in FY $\,$

2009. The targets for FY 2009-2012 are under development.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	349	343	337	331	325
Actual	340	354	301 ¹	313 ²	

¹ Final result revised in FY 2008 from original preliminary estimate of 297.

Definition of Measure

Unit of Measure: Total number of fatal general aviation accidents.

Computation: A count of the number of general aviation fatal accidents during the fiscal year. The

first baseline of 379, against which future targets were set, was established based on data from the years 1996 to 1998. However, due to a switch in NTSB reporting from calendar to fiscal year and the addition of previously unrecorded fatal

accidents, the baseline has been revised to 385.

Formula: N/A

Scope of Measure: This measure includes on-demand (non-scheduled FAR Part 135) and general

aviation flights. General aviation comprises a diverse range of aviation activities, from single-seat homebuilt aircraft, helicopters, balloons, single and multiple engine

land and seaplanes, to highly sophisticated extended range turbojets.

Why the FAA Chooses this Measure

The FAA and general aviation community developed the general aviation fatal accident goal as an overall measure of the impact of improved safety. Since it does not use a measure of activity to take into account changes in activity levels from year to year, the goal reflects a target based on projected growth in activity as reported in FAA's annual general aviation forecasts.

Source of the Data

The data on general aviation fatalities come from the National Transportation Safety Board's <u>Aviation Accident Database</u>. Aviation accident investigators under the auspices of the National Transportation Safety Board (NTSB) develop the data.

Statistical Issues

There is no major error in the accident counts. Random variation in air crashes results in a significant variation in the number of fatal accidents over time.

In FY 2009 FAA will use a fatal accident rate rather than the number of fatal accidents as the performance measure because the use of a rate measure will take into account variation in activity levels from year to year. Unlike commercial aviation activity that is reported regularly to the Bureau of Transportation Statistics by the carriers, general aviation flight hours are based on an annual voluntary survey conducted by the FAA.

The general aviation community and the General Aviation Joint Steering Committee of the Safer Skies initiative recommended development of a data collection program that will yield more accurate and relevant

² Preliminary estimate revised in FY 2008 from original estimate of 314.

data on general aviation demographics and utilization. Improved survey and data collection methodologies have been developed.

As a result of these efforts, the FAA, working with the General Aviation Manufacturers Association, has made several improvements to the survey. First, the sample size has been significantly increased. Second, a reporting sheet has been created to make it much easier for organizations with large fleets to report. Third, the agency worked with the Aircraft Registry to improve the accuracy of contact information. As a result, a survey was completed in FY 2004 that, for the first time, creates a statistically valid report of general aviation activity that the GA community agrees on. Each year since 2004, significant improvements have been made which in turn, substantially improved the accuracy of the data.

Completeness

NTSB and FAA's Office of Accident Investigation meet regularly to validate information on the number of accidents. Initial results are considered preliminary. Accident data are considered preliminary. NTSB usually completes investigations and issues reports on accidents that occur during any fiscal year by the end of the next fiscal year. Results are considered final when all those accidents have been reported in the NTSB press release published by May. FY 2007 results will therefore be final after the 2009 press release. In general, however, accident numbers are not likely to change significantly between the end of the fiscal year and the date they are finalized.

Reliability

FAA uses performance data extensively for program management and personnel evaluation and accountability. Most accident investigations are a joint undertaking between FAA and NTSB. NTSB has the statutory responsibility, but, in fact, most of the accident investigations related to general aviation are conducted by FAA Aviation Safety Inspectors without NTSB direct involvement. FAA's own accident investigators and other FAA employees participate in all accident investigations led by NTSB investigators.

Alaska Accidents



FY 2008 Performance Target

"Reduce accidents in Alaska for general aviation and all part 135 operations to no more than 104 per year."

Flight Plan Objective and Performance Target

Objective 2: Reduce the number of fatal accidents in general aviation.

Performance Target: By FY 2009, reduce accidents in Alaska for general aviation and all Part 135

operations from the 2000-2002 average of 130 accidents per year to no more than 99 accidents per year. This measure will be converted from a number to a rate after

FY 2009. The targets for FY 2010-2012 are under development.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	125	120	115	110	104
Actual	98 ¹	128	101 ²	92	

¹ Final result revised from preliminary estimate of 99. Original preliminary estimate was 100, reduced to 99 in Summer 2005.

Definition of Measure

Unit of Measure: The total number of Part 135 and general aviation accidents in Alaska.

Computation: A count of the number of general aviation and Part 135 accidents in Alaska during

the fiscal year.

Formula: N/A

Scope of Measure: This measure includes scheduled and non-scheduled FAR Part 135, as well as

general aviation flights, and includes both fatal and non-fatal accidents. This is not a sub-measure of the General Aviation Fatal Accidents performance target. Flight operations in Alaska are diverse and they are responsive to the state's challenging aviation environment and its unique air transportation requirements. Part 135 operations in Alaska are dominated by single-engine airplanes powered by a reciprocating engine, operated under visual flight rules (VFR), and crewed by one pilot. Operating in rough terrain, adverse weather, and in areas of extreme isolation increases the risks to safe flight operations. General aviation operators often use the same types of single-engine airplanes and cope with the same environmental

factors as Part 135 operators.

Why the FAA Chooses this Measure

Alaska relies heavily on air transportation in a difficult operating environment. This has led to an unacceptably high accident rate. Reducing accidents in Alaska will have an outsized effect on reducing Part 135 and general aviation accidents system-wide.

Source of the Data

The data on Part 135 and general aviation accidents come from the National Transportation Safety Board's (NTSB's) Aviation Accident Database. Aviation accident investigators under the auspices of the NTSB develop the data.

² Final result revised from preliminary estimate of 102 in FY 2008.

³ Preliminary estimate until May 2009.

Statistical Issues

There is no major error in the accident counts. Random variation in air crashes results in a significant variation in the number of fatal accidents over time. The FAA plans to use a fatal accident rate in FY 2010 rather than the number of fatal accidents as the performance measure because the use of a rate measure will take into account variation in activity levels from year to year.

Also, unlike commercial aviation activity that is reported regularly to the Bureau of Transportation Statistics by the carriers, general aviation flight hours are based on an annual survey conducted by the FAA and response to the survey is voluntary. The general aviation community and the General Aviation Joint Steering Committee of the Safer Skies initiative recommended development of a data collection program that will yield more accurate and relevant data on general aviation demographics and utilization. Improved survey and data collection methodologies have been developed.

As a result of these efforts, FAA, working with the General Aviation Manufacturers Association, has made several improvements to the general aviation survey. First, the sample size has been significantly increased. Second, a reporting sheet has been created to make it much easier for organizations with large fleets to report. Third, the agency worked with the Aircraft Registry to improve the accuracy of contact information. As a result, a survey was completed in FY 2004 that, for the first time, creates a statistically valid report of general aviation activity that the general aviation community agrees on. Each year since 2004, significant improvements have been made which in turn substantially improved the accuracy of the data.

Completeness

NTSB and FAA's Office of Accident Investigation meet regularly to validate information on the number of accidents. Accident data are considered preliminary. NTSB usually completes investigations and issues reports on accidents that occur during any fiscal year by the end of the next fiscal year. Results are considered final when all those accidents have been reported in the NTSB press release published by May. FY 2007 results will therefore be final after the 2009 press release. In general, however, accident numbers are not likely to change significantly between the end of the fiscal year and the date they are finalized.

Reliability

FAA uses performance data extensively for program management and personnel evaluation and accountability. Most accident investigations are a joint undertaking between FAA and NTSB. NTSB has the statutory responsibility, but, in fact, most of the accident investigations related to general aviation are conducted by FAA Aviation Safety Inspectors without NTSB direct involvement. FAA's own accident investigators and other FAA employees participate in all accident investigations led by NTSB investigators.

Runway Incursions



FY 2008 Performance Target

"Limit Category A and B (most serious) runway incursions to a rate of no more than 0.509 per million operations."

Flight Plan Objective and Performance Target

Objective 3: Reduce the risk of runway incursions.

Performance Target: By 2010, limit Category A and B (most serious) runway incursions to a rate of no more than 0.450 per million operations, and maintain or improve through FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	40	36/0.557	0.551	0.530	0.509
Actual	28/0.444	29/0.460	0.507 ²	0.392 ³	

¹ For FY 2004, the target was the number of incursions. The target for FY 2005 was a number, but a projected rate was also reported. In FY 2006, the target became a rate only, and prior year results were converted to rates.

Definition of Measure

Unit of Measure: Rate of Category A & B (most serious) runway incursions per million operations.

Computation: The total number of Category A and B runway incursions is divided by the sum of

the number operations divided by 1 million.

Formula: Number of A & B Incursions (Operations Count/1,000,000)

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 - but includes only those with the highest risk of collision, Category A and B incursions, in the measure.

- 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.

In FY2002 FAA changed the focus of measurement for runway incursions from all incursions to those incursions with measurable risk of collision, Categories A and B. Since Category C and D incursions were not likely to lead to an accident or a significant risk of an accident, their inclusion in the previous total tended to mask true safety risk. The new measure reflects the focus of FAA's runway safety effort to reduce the rate of the incursions with demonstrable risk.

² Final result revised from preliminary estimate of 0.458 in FY 2007.

³ Preliminary estimate revised from original estimate of 0.393 in November 2007. Final data will be available in FY 2008.

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

N/A

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.

Commercial Space Launch Accidents



FY 2008 Performance Target

"No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities."

Flight Plan Objective and Performance Target

Objective 4: Ensure the safety of commercial space launches.

Performance Target: No fatalities, serious injuries, or significant property damage to the uninvolved public

during licensed or permitted space launch and reentry activities.

	FY 2004	FY 2005	FY 2006	FY 2007 ¹	FY 2008
Target	0	0	0	0	0
Actual	0	0	0	0	

¹ This measure was redefined in FY 2007 to include permitted experimental launches as well as licensed commercial launches. The targets and results for prior years are for the original measure.

Definition of Measure

Unit of Measure: Number of accidents resulting in fatalities, injuries, or significant property damage.

Computation: A numerical count of the number of accident occurrences.

Formula: N/A

Scope of Measure: This measure focuses only on commercial space launch or reentry activities licensed

or permitted and monitored by the FAA. "Significant" property damage is defined as \$25,000 or greater. On board crew members and space flight participants are NOT

considered "uninvolved" members of the public.

Why the FAA Chooses this Measure

Protecting the uninvolved public during launch operations is a FAA safety mission objective. Commercial space transportation is the means by which payloads such as satellites and remote sensing devices are carried to orbit; these payloads have tremendous benefit to our society. Commercial space launch or reentry accidents can potentially have major catastrophic consequences, involving large losses of life and property. The uninvolved public expects to be protected from the potential dangers and hazards associated with commercial space launch and reentry activities. There has not been a single commercial space launch accident since the first DOT licensed launch took place in 1989, and DOT is working to keep this safety record perfect.

Source of the Data

The source of the data is the Office of the Associate Administrator for Commercial Space Transportation (AST). Specifically, AST monitors all licensed launch operations and maintains documented reports of each licensed event. These reports are generated by AST's assigned field inspectors and duty officers for each launch event. They include all relevant details pertaining to the outcome of the licensed launch or reentry operation, including the occurrence of any public fatalities, injuries, or property damage. AST will utilize other sources of data such as the launch vehicle operator, and federal, local and State government officials.

Statistical Issues

N/A

Completeness

AST's Licensing and Safety Division maintains and verifies reports that an accident resulting from a licensed or permitted launch operation has occurred. The Division supports coordination with other federal agencies,

including the National Transportation Safety Board (NTSB) and the military, on any subsequent investigations.

Reliability

If an accident occurs, the FAA and the NTSB will complete official reports fully documenting circumstances associated with the event.

Operational Errors



FY 2008 Performance Target

"Limit Category A and B (most serious) operational errors to a rate of no more than 2.15 per million activities."

Flight Plan Objective and Performance Target

Objective 5: Enhance the safety of FAA's air traffic systems.

Performance Target: Limit Category A and B (most serious) operational errors to a rate of no more than 1.95

per million activities by FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 ¹
Target	N/A	N/A	N/A	N/A	2.15
Actual	N/A	N/A	N/A	N/A	

¹ This measure was redefined for FY 2008 – the criteria for rating the seriousness of operational errors were revised. New targets were also set. No data are available for prior years.

Definition of Measure

Unit of Measure: Rate of category A & B (most serious) operational errors per million operations.

Computation: The total number of Category A & B operational errors is divided by the sum of the

number of activities divided by 1,000,000.

Formula: $\frac{\text{Number of A \& B Errors}}{\text{(Operations Count } / 1,000,000)}$

Scope of Measure:

An operational error is a violation of separation standards that define minimum safe distances between aircraft, between aircraft and other physical structures, and between aircraft and otherwise restricted airspace.

The closest proximity is defined as the point at which the combined lateral and vertical separation results in the lowest slant range, regardless of geometry, as determined by the separation conformance calculator.

The separation conformance of an operational error is determined by the closest proximity of the aircraft at the time of the event and given a rating.

- Category A: A loss of airborne separation where the separation conformance percentage is less than 34. In events with wake turbulence where the lateral separation retained is less than 70 percent.
- Category B: A loss of airborne separation where the separation conformance percentage is 34 or more, but less than 75. In events with wake turbulence where the lateral separation retained is equal to or greater than 70 or more percent, but not including 85 percent.
- Category C: A loss of airborne separation where the separation conformance percentage is 75 or more, but the horizontal and vertical separation retained is less than 90 percent of the required separation. In events with wake turbulence where the lateral separation retained is equal to or greater than 85 percent, but less than 100 percent.

Why the FAA Chooses this Measure

Separation is one of the fundamental principles of aviation safety – the need to maintain a safe distance from other aircraft, terrain, obstructions, and certain airspace not designated for routine air travel. The Separation Conformance measure creates a reliable, rate-based measure of safety that complements the rate-based measures of capacity. Such objective measures will help us better understand the level of risk in the National

Airspace System (NAS) and will allow us to critically assess the effects of changes to the NAS.

Source of the Data

The FAA's air traffic facilities have a software program called Operational Error Detection Patch (OEDP) that detects possible operational errors and sends alert messages to supervisory personnel. In addition, controllers are required to report operational errors. Facility management reviews OEDP alerts and data provided from the National Track Analysis Program (NTAP) to determine if an operational error has occurred. The information is summarized in the FAA Air Traffic Operational Error and Deviation Database.

Statistical Issues

N/A

Completeness

The data are typically not finalized for 90 days following the close of the fiscal year. The FAA's Air Traffic Order 7210.56 requires all facilities to submit operational error reports within 3 hours of the event. The FAA has implemented procedures that require facilities to conduct random audits of radar data to identify potential unreported operational errors. The FAA Headquarters also conducts random audits of selected facilities based on the identification of unreported events. Facility management and personnel are subject to punitive action for non-compliance in reporting operational errors.

Reliability

FAA uses performance data extensively for program management, personnel evaluation, and accountability in prioritizing its facility evaluations and audits. The data are also used on a daily basis to track progress of achieving performance goals. Annual operational error incident data are used to provide a statistical basis for research and analysis. 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.

Safety Management System



FY 2008 Performance Target

"Apply safety risk management (SRM) to at least 6 significant changes in the National Airspace System (NAS)."

Flight Plan Objective and Performance Target

Objective 6: Implement a Safety Management System (SMS) for the FAA.

Performance Target: By FY 2010, implement SMS in the Air Traffic Organization, Office of Aviation Safety,

and Office of Airports. By 2012, implement Safety Management System (SMS) policy

in all appropriate FAA organizations.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 ¹
Target	N/A	3	3	3	6
Actual	N/A	3	4	3	

¹ In FY 2008, the original Safety Risk Management measure was modified, and the name was changed to Safety Management System. For FY 2008 and FY 2009, the measure will remain the number of significant changes in the NAS SRM is applied to. Beginning in FY 2010, the measure will be redefined as the organizations targeted for the implementation of SMS.

Definition of Measure

Unit of Measure: The number of significant changes to the NAS in which the SRM process has been

applied. (The unit of measure will be redefined in FY 2010 – see note above.)

Computation: As a metric, the FAA will count the number of Safety Risk Management Documents

(SRMDs), or safety cases, approved.

Formula: N/A

Scope of Measure: In FY 2004, the FAA developed the FAA SMS Manual. This manual describes the

requirements for the various components/functions of the SMS, including SRM. The

application of SRM will be measured against these requirements.

Since these are new requirements, training is necessary to allow the operational service units in the Air Traffic Organization (ATO) to meet them. The ATO will track who attends SMS and SRM training. In addition, the ATO Safety Service will

measure and track the application of SRM.

Why the FAA Chooses this Measure

SRM is a systematic, explicit, and comprehensive approach for managing safety risk at all levels and throughout the entire scope of an operation and lifecycle of a system. It requires the disciplined assessment and management of safety risk. The SRM process ensures that safety-related changes are documented; risk is assessed and analyzed; unacceptable risk is mitigated; hazards are identified and tracked to resolution; the effectiveness of the risk mitigation strategies is assessed; and the performance of the change is monitored throughout its lifecycle. Applying SRM prior to implementing changes to the NAS will ensure that unacceptable risk is not introduced. It will also improve the documentation of the processes used to ensure the safety of the NAS.

The ATO will also track who attends SMS and SRM training. While this measure is not part of the Flight Plan Safeety Management System performance target, the number of employees trained has a direct impact on the application of SRM to safety-significant changes. Personnel must be trained in SRM before they can be expected to complete the safety analysis required. The ATO Safety Service is working with the ATO Workforce Planning Directorate to track attendance for both the SMS Overview course and the SRM training. In addition, the Safety Service will measure and track the application of SRM by reviewing data on changes to the NAS, identifying which are safety-significant, and auditing those changes.

The original Safety Risk Management performance target was a new requirement in FY 2005. While FAA organizations regularly apply processes to assure the safety of the NAS, these processes are not specifically included in SRM as described in the FAA SMS Manual. Given the FAA's decades long safety record, which has ensured that the NAS is among the safest airspace system in the world, SRM will build upon these existing processes. The performance targets were developed based on lessons learned from international service providers, as well as from similar organization-wide implementations in the FAA

Source of the Data

The ATO Safety Service is working with ATO operational service units to compile a repository of hazards associated with changes to the NAS in a database known as the FAA Hazard Tracking System. In addition, WebCM, a configuration management tool, is being updated to require SRM on all NAS Change Proposals. These data will then be used to audit the application of SRM.

Statistical Issues

N/A

Completeness

Each ATO Service Unit is responsible for ensuring that safety analyses are documented, complete and accurate.

Reliability

ATO-S will approve certain SRMDs and will check for Service Unit compliance with SRM via the Safety Risk Management Compliance audit process created in FY 2007.

Average Daily Airport Capacity (35 OEP Airports)



FY 2008 Performance Target

"Achieve an average daily airport capacity for the 35 Operational Evolution Partnership (OEP) airports of 101,868 arrivals and departures per day."

Flight Plan Objective and Performance Target

Objective 1: Increase capacity to meet projected demand and reduce congestion.

Performance Target: Achieve an average daily airport capacity for the 35 OEP airports of 104,338 arrivals

and departures per day by FY 2011 and maintain through FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	N/A	99,892	101,191	101,562 ¹	101,868
Actual	100,041	101,463	101,932	102,545 ²	

¹ In FY 2007, this target was revised from 102,595.

Definition of Measure

Formula:

Unit of Measure: Average of daily arrival and departure rates.

Computation: Average Daily Airport Capacity is the sum of the daily hourly-called arrival and

departure rates at the relevant airports per month, divided by the number of days in the month. The annual capacity level is the weighted sum of the monthly capacity

levels.

Daily Hourly Called Arrival & Departure Rates

Number of Days in the Month

Scope of Measure: Only the 35 airports in the OEP are included in this measure. Each airport facility

determines the number of arrivals and departures it can handle for each hour of each day, depending on conditions, including weather. These numbers are the called arrival and departure rates of the airport for that hour. Data are summed for

daily, monthly, and annual totals.

Why the FAA Chooses this Measure

Growth in air travel has generally been accomplished by increasing the number of flights. Measuring the growth of airport capacity indicates the limit at which increased service can be accommodated without affecting delay.

Source of the Data

The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, provides the data for this metric. By agreement with the FAA, ASPM flight data are filed by certain major air carriers for all flights to and from most large and medium hubs. These data are supplemented by flight records contained in the Enhanced Traffic Management System (ETMS) and flight movement times provided by Aeronautical Radio, Inc. (ARINC). Also included within ASPM are arrival and departure rates provided by the individual facilities.

Statistical Issues

N/A

Completeness

Fiscal year data are finalized approximately 90 days after the close of the fiscal year.

² Revised preliminary estimate finalized in January 2008. Original estimate was 102,539, revised to 102,545 in November 2007.

Reliability

The reliability of ASPM is verified on a daily basis by the execution of a number of audit checks, comparison to other published data metrics, and through the use of ASPM by over 1500 registered users.

Annual Service Volume



FY 2008 Performance Target

"Increase the Annual Service Volume (ASV) of the 35 Operational Evolution Partnership (OEP) airports by at least 1%.

Flight Plan Objective and Performance Target

Objective 1: Increase capacity to meet projected demand and reduce congestion.

Performance Target: Commission nine runway/taxiway projects, increasing the annual service volume of

the 35 OEP airports by at least 1 percent annually, measured as a five-year moving

average, through FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	1.00% 2 runways	1.00% 0 runways	1.00% 4 runways	1.00% 2 runway projects ¹	1.00% 1 taxiway project
Actual	1.07% 2 runways	1.01% 0 runways	1.67% 4 runways	1.57% 2 runway projects	·

¹This target was revised from 1 runway in FY 2007.

Definition of Measure

Unit of Measure: Number of additional annual aircraft operations that can be accommodated. Total of

runway projects commissioned during the current fiscal year.

Computation: This measure is a 5-year moving average. The 1998 ASV is the base year. ASV is

calculated using the Runway Delay Simulation Model (RDSIM). Delay curves are developed for each of the 35 OEP airports for the existing airport layout and with new runways where proposed. A consistent calculation technique to estimate capacity was used for all airports, based on demand schedules and fleet mixes, supplemented with flight counts and standard air traffic control procedures for each airport. For those airports where new runways are to be commissioned, the ASV can

be estimated any time in the year that the runway will be opened.

Formula: N/A

Scope of Measure: This measure estimates the benefit, in terms of additional aircraft operations, from

runway construction projects. A runway construction project includes new runways, runway extensions, and airfield reconfigurations. Aircraft operations include air carrier, commuter, air taxi, general aviation, and military aircraft. Only the 35 OEP

airports are included in this measure.

Why the FAA Chooses this Measure

The ASV measure is intended to estimate and track the increase in airport capacity at airports. This measure is calculated as a five year moving average. It is calculated in this way to smooth out peaks and valleys associated with yearly variability in new runway openings. The 1998 ASV is the base year. There were no new runways opened in FY 1999, and one new runway in each of the fiscal years 2000, 2001, and 2002, which added 0.78% to the overall capacity total of those years. The FAA did not begin reporting on the increase until FY 2004. The moving average from FY 1998 through FY 2002 was an increase of 0.28%. In 2003, three new runways opened adding 2.51% more capacity resulting in a five year moving average of 0.67%. Two additional runways opened in FY 2004, adding an additional 1.91% to the Nation's total and resulting in a five year moving average of 1.07%. Four runways opened in FY 2006, adding 3.27% more capacity and resulting in a 5-year moving average of 1.67%. In FY 2007, one new runway opened and one relocated runway opened resulting in a 5-year moving average of 1.57%.

Source of the Data

Demand schedules and fleet mixes are developed from recent Official Airline Guide (OAG) information Flight counts are obtained from airport traffic control tower logs. In addition, standard air traffic control procedures are used for each airport.

Statistical Issues

This measure is derived from model estimates that are subject to errors in model specification.

Completeness

The Capacity Analysis Group (AJP-27) continues to provide technical support to develop a consistent method of calculating the individual airport ASV through the Operations Planning Service at the FAA Technical Center, Atlantic City, NJ.

Reliability

Recalculations of the original ASV studies have not been necessary. Once developed, the delay curves remain accurate unless a major change in fleet mix or operational characteristics occurs at an airport.

Adjusted Operational Availability



FY 2008 Performance Target

"Sustain adjusted operational availability at 99.70% for the reportable facilities that support the 35 Operational Evolution Partnership (OEP) airports."

Flight Plan Objective and Performance Target

Objective 1: Increase capacity to meet projected demand and reduce congestion.

Performance Target: Sustain adjusted operational availability at 99.70 percent for the reportable facilities

that support the 35 OEP airports through FY 2012.

	FY 2004	FY 2005 ¹	FY 2006	FY 2007	FY 2008
Target	99.00%	99.00%	99.50%	99.70%	99.70%
Actual	99.72%	99.76%	99.79% ²	99.83% ³	

¹ This measure was redefined in FY 2005 to exclude outages due to scheduled improvements. The result for FY 2004 has been recalculated.

Definition of Measure

Formula:

Unit of Measure: Ratio of total available hours minus outage time to total available hours.

Computation: Adjusted Operational Availability is calculated by dividing the maximum

facility/service hours minus all outage time except for improvements (cause code 62 outages) by the total maximum facility/service hours, and multiplying by 100 to

express the ratio as a percentage.

Total Available Hours - (Total Outage Time - Code 62 Outage Time)

Total Available Hours

Scope of Measure: The National Airspace Performance Reporting System (NAPRS) facilities necessary to

maintain the provision of service in the NAS overall have been determined and are monitored. For this measure, those NAPRS reportable facilities necessary for the provision of service at the 35 OEP airports have been separately measured. Time out of service is adjusted to exclude hours when equipment is unavailable due to

scheduled improvement (cause code 62) down time.

Why the FAA Chooses this Measure

The availability of the equipment necessary to provide service directly affects the performance of the NAS. Loss of radar or communications equipment will affect the speed and number of aircraft that can be handled where that loss occurs. The ability of the NAS to continually provide guidance is crucial, and affects both safety and capacity. The adoption of this metric has the additional advantage of linking three capacity measures. NAS On-Time Arrivals are affected by the airport and en-route capacity, which are directly impacted by the availability of the equipment and facilities supporting that capacity.

Source of the Data

The National Airspace System Performance Analysis System (NASPAS). NASPAS was developed to analyze outages of the Air Traffic Control Facilities in the NAS maintained by the FAA. NASPAS receives monthly updates of outage data from the National Outage Database (NODB). The Maintenance Management System (MMS) contains individual equipment outage data as recorded by the system specialist.

Statistical Issues

N/A

² Final result revised from preliminary estimate of 99.78% in FY 2007.

³ Final result revised from preliminary estimate of 99.82% in FY 2008.

Completeness

The FAA's Quality Assurance and Performance Team, under ATO-W, conducts a monthly review of all Log Interrupt Reports (LIRs) that are entered into the MMS to ensure the data, which resides in the NODB, are as complete and accurate as possible.

Reliability

The National Airspace System Performance Analysis System is the official source of equipment and service performance data for the Federal Aviation Administration.

Average Daily Airport Capacity (7 Metro Areas)



FY 2008 Performance Target

"Achieve an average daily airport capacity for the seven major metropolitan areas of 33,676 arrivals and departures per day."

Flight Plan Objective and Performance Target

Objective 1: Increase capacity to meet projected demand and reduce congestion.

Performance Target: Achieve an average daily airport capacity for the seven major metropolitan areas of 39,484 arrivals and departures per day by FY 2009, and maintain through FY 2012.

	FY 2004	FY 2005 ¹	FY 2006 ²	FY 2007 ³	FY 2008 ⁴
Target	21,290	43,080	68,750	63,080	33,676
Actual	21,233	44,324	69,630	62,351	

¹This measure was redefined in FY05 to include departures as well as arrivals. The target and result for FY 2004 is for the original measure.

Definition of Measure

Unit of Measure: Average of daily arrival and departure rates.

Average Daily Airport Capacity is the sum of the daily hourly-called arrival and Computation:

departure rates at the relevant airports per month, divided by the number of days in the month. The annual capacity level is the weighted sum of the monthly capacity

levels.

Daily Hourly Called Arrival & Departure Rates Formula:

Number of Days in the Month

Scope of Measure: For FY 2008, selected airports in these seven areas are included in this measure:

> New York, Philadelphia, Charlotte, Chicago, Las Vegas, the Los Angeles Basin, and the San Francisco Bay Area. Each airport facility determines the number of arrivals and departures it can handle for each hour of each day, depending on conditions, including weather. These numbers are the called arrival and departure rates of the

airport for that hour. Data are summed for daily, monthly, and annual totals.

Why the FAA Chooses this Measure

Growth in air travel has generally been accomplished by increasing the number of flights. Measuring the growth of airport capacity indicates the limit at which increased service can be accommodated without affecting delay. The selected seven metropolitan areas contain both the most congested airspace and the airports with the greatest constraints on airport expansion. Airport improvements, measured by increases in capacity at these airports, are likely to contribute the most to reduce the causes of system delay.

Source of the Data

The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, provides the data for this metric. By agreement with the FAA, ASPM flight data are filed by certain major air carriers for all flights to and from most large and medium hubs, and is supplemented by flight records contained in the Enhanced Traffic Management System (ETMS) and flight movement times provided by Aeronautical Radio, Inc. (ARINC). Also included within ASPM are arrival and departure rates provided by the individual facilities.

² In FY 2006, the measure was redefined – Boston was replaced by South Central Florida. The target was revised.

³ In FY 2007, the measure was redefined and the target revised again to remove the Atlanta area.

⁴ In FY 2008, the measure was redefined to remove Washington/Baltimore and South Central Florida and to add Las Vegas and Charlotte. The target was also revised.

Statistical Issues

N/A

Completeness

Fiscal year data is finalized approximately 90 days after the close of the fiscal year.

Reliability

The reliability of ASPM is verified on a daily basis by the execution of a number of audit checks, comparison to other published data metrics, and through the use of ASPM by over 1500 registered users.

NAS On-Time Arrivals



FY 2008 Performance Target

"Achieve a NAS On-Time Arrival rate of 88.00 percent at the 35 Operational Evolution Partnership (OEP) airports."

Flight Plan Objective and Performance Target

Objective 2: Increase reliability and on-time performance of scheduled carriers

Performance Target: Achieve a NAS on-time arrival rate of 88.76 percent at the 35 OEP airports by FY

2011 and maintain through FY 2012.

	FY 2004	FY 2005 ¹	FY 2006	FY 2007	FY 2008
Target	82.10%	87.40%	87.40%	87.67%	88.00%
Actual	79.07%	88.44%	88.36%	86.96% ²	

¹ This measure was redefined in FY 2005 to exclude delays not related to the operation of the NAS – see Computation section below. The target and result for FY 2004 are for the original measure. ² Final result revised from preliminary estimate of 86.71% in FY 2008. Estimate revised from original

Definition of Measure

Unit of Measure: Percentage of flights arriving no more than 15 minutes late.

Computation: NAS On-Time Arrival is the percentage of all flights arriving at the 35 OEP airports

equal to or less than 15 minutes late, based on the carrier flight plan filed with the FAA, and excluding minutes of delay attributed by air carriers to weather, carrier action, security delay, and prorated minutes for late arriving flights at the departure airport. The number of flights arriving on or before 15 minutes of flight plan arrival

time is divided by the total number of completed flights.

Formula: $\frac{\text{NAS On - Time Flights}}{\text{Total Flights}}$

Scope of Measure: A flight is considered on time if it arrives no later than 15 minutes after its published,

scheduled arrival time. This definition is used in both the DOT Airline Service Quality Performance (ASQP), and Aviation System Performance Metrics (ASPM) reporting systems. Air carriers, however, also file up-to-date flight plans for their services with the FAA that may differ from their published flight schedules. This metric measures on-time performance against the carriers filed flight plan, rather than what may be a

dated published schedule.

The time of arrival of completed passenger flights to and from the 35 OEP airports is compared to their flight plan scheduled time of arrival. For delayed flights, delay minutes attributable to extreme weather, carrier caused delay, security delay, and a prorated share of delay minutes due to a late arriving flight at the departure airport are subtracted from the total minutes of delay. If the flight is still late, it is counted as a delayed flight attributed to the National Aviation System (NAS) and the FAA.

Why the FAA Chooses this Measure

On-Time performance is a measure of the ability of the FAA to deliver services. A major weakness of using air carrier scheduled on-time performance as a metric is that it contains flight delays caused by incidents outside the FAA's control. However, the air carriers have supplied the causation of flight delay, by flight, since June 2003 under revised Part 234 instructions. Removal of delays not attributable to the FAA provides a more accurate and equitable method of measuring the FAA's performance.

estimate of 86.32% in November 2007.

Source of the Data

The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Aviation Policy and Plans, supplemented by DOT's Airline Service Quality Performance (ASQP) causation database, provides the data for this metric. By agreement with the FAA, ASPM flight data are filed by certain major air carriers for all flights to and from most large and medium hubs, and is supplemented by flight records contained in the Enhanced Traffic Management System (ETMS) and flight movement times provided by Aeronautical Radio, Inc. (ARINC).

Statistical Issues

Data are not reported for all carriers, only the 19 carriers reporting monthly into the ASQP reporting system.

Completeness

Fiscal year data are finalized approximately 90 days after the close of the fiscal year.

Reliability

The reliability of ASPM is verified on a daily basis by the execution of a number of audit checks, comparison to other published data metrics, and through the use of ASPM by over 1500 registered users. ASQP data is filed monthly with DOT under 14 CFR Part 234, Airline Service Quality Performance Reports, which separately requires reporting by major air carriers on flights to and from all large hubs.

Noise Exposure



FY 2008 Performance Target

"Reduce the number of people exposed to significant noise, as measured by a three-year moving average, to 12% below the three-year average for calendar years 2000-2002."

Flight Plan Objective and Performance Target

Objective 3: Address environmental issues associated with capacity enhancements.

Performance Target: Reduce the number of people exposed to significant noise by 4 percent each year through FY 2012, as measured by a three-year moving average, from the three-year

average for calendar years 2000-2002.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	- 2.00%	- 3.00%	-4.00%	-8.00% ⁴	-12.00%
Actual	- 28.00% ¹	- 29.00% ²	-28.00% ³	-27.00% ⁵	

¹Revised from original result of -23.00% in FY 2005 due to improvement in noise exposure model.

Definition of Measure

Unit of Measure:

Percent reduction in the number of people in the U.S. exposed to significant aircraft noise levels as measured by a three-year moving average from the base year average of 2000 to 2002. In FY 2007, the noise exposure target was revised from a 1% to a 4% cumulative reduction per year in the number of people exposed to significant aircraft noise.

Computation:

The estimates of the number of people exposed to significant noise are calculated from the Model for Assessing Global Exposure to the Noise of Transport Aircraft (MAGENTA). The computational core of MAGENTA is FAA's Integrated Noise Model (INM), the most widely used computer program for the calculation of aircraft noise around airports. Major assumptions on local traffic utilization come from obtaining INM datasets that were developed for an airport.

The MAGENTA model calculates individual DNL contours for the top 96 US airports using INM. The contours are superimposed on census data to calculate the number of people within the DNL 65 dB contour at each airport. For smaller airports, a procedure is used where contour area is calculated from airport operations data using a statistical relationship. The contours areas are then used to calculate people exposed using census population densities. The individual airport exposure data is then summed to the national level. Finally, the number of people relocated through the Airport Improvement Program is subtracted from the total number of people

exposed.

Formula:

The number of people exposed to significant aircraft noise is calculated as follows:

$$\sum_{i=1}^{261} POP65_{i} - \sum_{j=1}^{9} POPREL_{j}$$

Where, POP65_i is the number of people residing in the DNL 65 dB contour at the l^h MAGENTA airport as of the 2000 Census. POPRELi is the number of people relocated from the DNL 65 dB contour in the jth FAA region since the year 2000.

Scope of Measure:

The measure tracks the residential population exposed to significant aircraft noise around U.S. airports. Significant aircraft noise is defined as aircraft noise above a

² Revised from projection of -27.00% in FY 2006.

³ Revised from projection of -27.00% in FY 2007.

⁴ The target was revised in FY 2007 from a 1% annual decrease from the baseline to a 4% decrease, lowering the cumulative target for FY 2007 from 5% to 8.00%.

⁵ Projection from trends, to be revised in May 2008.

Day-Night Sound Level (DNL) of 65 decibels. Exposure in a given year is reported as a three-year historical average. For example, exposure in 2003 is reported as the three-year average of 2001 to 2003. In 1981, the FAA issued 14 CFR Part 150, Airport Noise Compatibility Planning, and as part of that regulation, formally adopted Day Night Sound Level. Day Night Sound level, abbreviated as DNL and symbolized as Ldn, is the 24-hour average sound level, in decibels (dB), obtained from the accumulation of all events with the addition of 10 decibels to sound levels in the night from 10 PM to 7 AM. The weighting of the nighttime events accounts for the increased interfering effects of noise during the night when ambient levels are lower and people are trying to sleep. In the promulgation of 14 CFR Part 150, the FAA also published a table of land uses that are compatible or incompatible with various levels of airport noise exposure in DNL. This table established that levels below DNL 65 dB are considered compatible for all indicated land uses and related structures without restriction.

Why the FAA Chooses this Measure

Mitigating noise directly impacts our ability to increase capacity. Although building new runways is the best way to increase capacity, communities and local government are reluctant to build them if they impose increased aircraft noise exposure. By mitigating and reducing exposure to excessive noise, FAA can help communities accept more runways in their areas.

The number of people exposed to significant noise levels was reduced by about 90 percent between 1975 and 2000. This is due primarily to the legislatively mandated transition of airplane fleets to newer generation aircraft that produce less noise. Most of the gains from quieter aircraft were achieved by FY 2000. The remaining problem must be addressed primarily through airport-specific noise compatibility programs. The FAA pursues a program of aircraft noise control in cooperation with the aviation community. Noise control measures include noise reduction at the source, i.e., development and adoption of quieter aircraft, soundproofing and buyouts of buildings near airports, operational flight control measures, and land use planning strategies. The FAA is authorized to provide funds for soundproofing and residential relocation, but each project must be locally sponsored and be part of a noise compatibility program prepared by the airport sponsor and approved by the FAA.

The FAA increased the noise exposure target in 2007 to a 4% cumulative reduction per year. The target is still calculated using a three year moving average from the 2000 to 2002 base average years. The FAA increased the noise exposure target after reviewing historical reductions and taking into account recent trends that remain well below the previous noise target. The significant reduction in noise exposure since the 2000 to 2002 base year average has been driven by air carrier fleet and operational changes that took place in the aftermath of September 11, 2001. It was expected that a return to more typical fleet compositions and a return to air traffic growth would narrow the "positive gap". However, the return of fleet composition and air traffic to pre 9/11 levels has not occurred at the pace expected. In addition to noise trends, the new noise target reflects the relocation of people away from areas of significant noise exposure through grant funding. The target is also influenced by market forces that drive changes in commercial aircraft fleets and operations.

Environmental trends based on expansion of the U.S. air transportation system show that noise exposure is likely to move upwards as traffic growth continues – even taking into account forecasted fleet changes and implementation of beneficial new air traffic procedures. The agency's ability to develop next generation technologies and have the broadest possible array of available noise mitigation approaches at its disposal will affect FAA's ability to continue making significant improvements in aviation noise exposure. The FAA has proposed to Congress in its reauthorization legislation, provisions to create a research consortium whose purpose would be to accelerate the development of lower noise and emissions technologies for airframes and aircraft engines and to provide additional support for noise abatement flight procedures and land use planning and projects. It will be important for state and local land use planning to include appropriate consideration of noise-compatible land uses near airports.

Source of the Data

In 1997, the FAA initiated a project to collect airport noise analysis databases for a large number of the world's airports. This sample database of airports would be the basis for assessing worldwide trends that would occur as the result of stringency, different land-use planning initiatives and operational procedures. The objective was to develop a tool that could be used by the Committee on Aviation Environmental Protection (CAEP) under the International Civil Aviation Organization (ICAO). Previous attempts by CAEP to globally assess aircraft noise exposure had limited success. The proposed FAA methodology had much more promise, as the number of sample databases was large and has since grown to around 200. Furthermore, a generalized methodology was included to account for airports for which noise databases did not exist. Based on the initial success of the FAA activity, the fourth meeting of CAEP (CAEP4) recommended that a task group be formed to complete the development of this tool for CAEP analysis.

This group and subsequently the model became known as MAGENTA (Model for Assessing Global Exposure form Noise of Transport Airplanes). The MAGENTA population exposure methodology has been thoroughly reviewed by this ICAO task group and was validated for several airport specific cases. MAGENTA played an important role in the setting of new international aircraft noise standards by CAEP in 2001. CAEP used MAGENTA to assess the benefits (reduction in number of people exposed to aircraft noise) of several noise stringency proposals. FY 2000 was the first year MAGENTA was used to track the aircraft noise exposure goal in the DOT Performance Plan.

A U.S. version of the global MAGENTA model, which used input data to determine the noise exposure in the U.S. on aircraft and operations specific to U.S. airports, was developed in 2002. This version of the MAGENTA model uses updated population data from the 2000 Census. It has evolved over time as more comprehensive databases were incorporated to improve the accuracy of the model. The data source for airport traffic changed from the Official Airline Guide (OAG) to the FAA Enhanced Traffic Management System (ETMS). Unlike OAG, the ETMS database includes unscheduled air traffic, which allows for more accurate modeling of freight, general aviation, and military operations. The ETMS also provides more details on aircraft type for a more accurate distribution of aircraft fleet mix. Under the old model, unscheduled traffic was estimated and adjustments in the number of people exposed were made at the national level.

The general, regional FESG forecast used in the CAEP version of MAGENTA was also replaced in the new version by the FAA Terminal Area Forecast (TAF), which provides current and accurate information on how operations will increase on an airport specific basis. Since ETMS does not provide current data, FAA uses TAF to project flight operations. Therefore, the current year's result is classified as preliminary until the following year when projected data is finalized.

Data on the number of people relocated through the Airport Improvement Program are collected from FAA regional offices. Local traffic utilization data are collected from individual airports and updated periodically.

Statistical Issues

This measure is derived from model estimates that are subject to errors in model specification. The FAA has replaced the actual number of people exposed to significant noise with the percent decrease in the number of people exposed, measured from the three-year average for calendar year 2000-2002. Moving to the 3-year average stabilizes noise trends, which can fluctuate from year to year and are affected by unusual events such as the 9/11 attacks and the subsequent economic downturn. The 2000–2002 base time periods includes these events and is the same 3-year period used for the emissions goal.

The move from actual numbers to percent helps avoid confusion over U.S. noise exposure trends caused by annual improvements to the noise exposure model. A major change to MAGENTA (Model for Assessing the Global Exposure of Noise because of Transport Airplanes) resulted in a significant improvement in the estimate of the number of people exposed to significant noise levels around US airports. Until now, the scope of the measure included scheduled commercial jet transport airplane traffic at major U.S. airports. With access to better operational data sources, the scope of the MAGENTA calculation has expanded to include unscheduled freight, general aviation, and military traffic. The expanded scope of operations results in an increase in the estimate of the number of people exposed to significant noise.

The growth in the number of people exposed to significant noise results from improvements in measurement, not a worsening in aviation noise trends. Planned improvements to MAGENTA will continue to increase the estimate of the number of people exposed to aircraft noise, giving the false impression that aircraft noise exposure is increasing. Changing the noise performance goal to an annual percent change in aircraft noise exposure will better show the trend in aircraft noise exposure. The change will also make the

Government Performance Review Act (GPRA) goal consistent with FAA's Flight Plan goal.

Completeness

No actual count is made of the number of people exposed to aircraft noise. Aircraft type and event level are current. However, some of the databases used to establish route and runway utilization were developed from 1990 to 1997, with many of them now over seven years old. Changes in airport layout including expansions may not be reflected. The FAA continues to update these databases as they become available. The benefits of federally funded mitigation, such as buyout, are accounted for.

The noise studies obtained from U.S. airports have gone through a thorough public review process; either under the National Environmental Policy Act (NEPA) requirements or as part of a land use compatibility program.

Performance measure data for the current year (forecasted data) are calculated and reported during the period of July and August, and the data are finalized by May of the following reporting year.

Reliability

The Integrated Noise Model (the core of the MAGENTA model) has been validated with actual acoustic measurements at both airports and other environments such as areas under aircraft at altitude. External forecast data are from primary sources. The MAGENTA population exposure methodology has been thoroughly reviewed by an ICAO task group and was most recently validated for a sample of airport-specific cases.

Aviation Fuel Efficiency



FY 2008 Performance Target

"Improve aviation fuel efficiency per revenue plane-mile by 6 percent, as measured by a three-year moving average, from the three-year average for calendar years 2000-2002."

Flight Plan Objective and Performance Target

Objective 3: Address environmental issues associated with capacity enhancements.

Performance Target:

Improve aviation fuel efficiency by another 1 percent over the FY 2007 level (for a total of 6 percent) through FY 2008, and 1 percent each subsequent year through FY 2012 to 10 percent, as measured by a three-year moving average of the fuel burned per revenue mile flown, from the three-year average for calendar years 2000-2002.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	- 1.00%	- 2.00%	-5.00%	-5.00%	-6.00%
Actual	- 3.46% ¹	- 5.84%	-8.23%	-10.82%	

¹ This result was revised in FY 2005, due to improvement in the model used to calculate fuel efficiency. The original result was -4.51%.

Definition of Measure

Unit of Measure:

Percentage reduction in grams of fuel burned per kilometers flown.

Computation:

Measuring and tracking fuel efficiency from commercial aircraft operations allows FAA to monitor improvements in aircraft/engine technology and operational procedures, as well as enhancements in the airspace transportation system. The FAA measures performance against this target using the Aviation Environmental Design Tool (AEDT)/System for assessing Aviation Global Emissions (SAGE). AEDT/SAGE is a FAA-developed computer model that estimates aircraft fuel burn and emissions for variable year emissions inventories and for operational, policy, and technology-related scenarios. For this target, AEDT/SAGE is used to generate annual fuel burn and total distance flown data for all U.S. commercial operations.

FY 2007 performance was calculated based upon full year operational data for the three calendar year period of 2004, 2005, and 2006, dividing average fuel burn by average total distance to determine the three year efficiency average of $(69.91Tg/16.95Bk = 4.12\ Tg/Bk)$. This efficiency average was compared against the baseline efficiency (from 2000, 2001, 2002) of 4.62 Tg/Bk. With the baseline considered to be 100%, the three-year efficiency average for each performance period is compared to determine the percentage improvement of aviation fuel efficiency.

Average Fuel Burn (Tg)

Average Distance (billions of kilometers)

Formula:

(Fuel Burn values in Tq where 1 Tq = 10^{12} q)

Scope of Measure: This measure focuses on all U.S. commercial operations.

Why the FAA Chooses this Measure

Although today's aircraft are up to 70% more efficient than early commercial jet aircraft, there is growing attention being given to aviation's impact on the environment. Aviation is currently viewed as a small contributor to those greenhouse gas emissions that have the potential to influence global climate. However the science involved with these emissions in the upper atmosphere is still evolving and many uncertainties still exist. Carbon dioxide (CO₂) emissions are a primary greenhouse gas and are directly related to the fuel

burned during the aircraft's operation.

Measuring and tracking fuel efficiency from aircraft operations allows FAA to monitor improvements in aircraft/engine technology and operational procedures and enhancements in the airspace transportation system. This information provides an assessment of their influence on reducing aviation's emissions contribution.

Source of the Data

The AEDT/SAGE system uses radar-based data from the Enhanced Traffic Management System (ETMS) and Official Airline Guide (OAG) schedule information to generate annual inventories of fuel burn and total distance flown data for all U.S. commercial operations.

Statistical Issues

Potential seasonal variability and variability from year to year can be expected when analyzing air traffic data and commercial operations. Use of the statistical measure of a three-year moving average based upon analysis of annual operations should address this variability.

The extent to which enhancements are incorporated to improve model accuracy, via more robust aerodynamic performance modeling algorithms and database of aircraft/engine fuel burn information, will impact the overall results and thus the performance target. This could create some statistical variability from year to year if not properly taken into account. In cases where such enhancements have the potential to create a significant shift in baseline, annual inventories may need to be re-processed and/or adjusted to ensure consistency and accuracy of results.

The extent to which aircraft fleet improvements cannot be sufficiently modeled because of a lack of manufacturer proprietary data may also influence the performance target results. In this case, attempts will be made to characterize such aircraft with the best publicly available information, recognizing that newer aircraft types in the fleet will likely exist in significantly lesser numbers, thus minimizing the influence upon the results.

Completeness

Data used to measure performance against the target is assessed for quality control purposes. Input data for the AEDT/SAGE model are validated before proceeding with model runs. Radar data from the ETMS are assessed to remove any anomalies, check for completeness, and pre-processed for input to the AEDT/SAGE model. ETMS data are verified against the OAG information in order to avoid any duplication of flights in the annual inventory.

In some cases ETMS data lack appropriate fields to conduct quality control and in these cases the data is removed. Data from the AEDT/SAGE model is verified by comparing output from previous years and analyzing trends to ensure that they are consistent with expectations. In other cases monthly inventories may be analyzed to validate the results. Model output is subsequently post-processed through excel worksheets to perform the calculations for the performance target. Formulae and calculations are checked in order to ensure accuracy.

Full documentation of this target is determined when the annual inventories have been accomplished and the post-processing calculations have been completed, resulting in a percentage reduction in fuel efficiency relative to the baseline. The standard for this documentation is set by the FAA Office of Environment and Energy, which is separate from the organization (DOT Volpe National Transportation Systems Center) responsible for input and output associated with the AEDT/SAGE model runs and annual inventories.

Reliability

The measuring procedure used for this performance target is highly reliable. That is to say that the processing of data through the AEDT/SAGE model including the performance of algorithms is not subject to random factors that could influence the results. However, this performance target is potentially influenced by factors outside the control of the FAA. For example a major sustained disruption or enhancement in air traffic and/or a significant shift in commercial operations amongst airlines, including changes in fleet composition and missions could have a profound impact upon the performance target.

The FY 2007 performance results illustrate how actual performance can be influenced by factors outside the control of FAA and should not be used as an indicator of future performance. Even though the number of flights increased, the FY 2007 performance above target reflects continued improvement based upon a decrease in fuel burned and an increase in distance traveled during calendar year 2006 relative to calendar

year 2005. This outcome is better than what we anticipated. Our expectation for maintaining a 5 percent improvement during FY 2007 was based upon an equitable distribution of growth in operations across the whole range of flight distances along with the general understanding that there would not be a major influx of new, more fuel efficient aircraft technology into the commercial fleet. In fact, we even anticipated some regression in fleet whereby the increased operations would have been satisfied by airlines using aircraft-some of which would be less fuel efficient--that were previously placed in storage in the aftermath of 9/11. Contrary to our expectations, the FY 2007 result is particularly influenced by a relatively significant growth in the number of flights of aircraft over shorter distances. These are the aircraft that tend to be more efficient on a fuel burned per distance basis.

We do not expect increases in fuel burn and/or decreases in distance traveled to significantly degrade the fuel efficiency of the fleet such that the FY 2008 target would not be met. However, we do expect that in the coming years aircraft/engine technology improvements and/or air traffic management enhancements may not be sufficient to offset traffic growth and congestion/delays. There is also some concern that the present metric for measuring and tracking fuel efficiency may not adequately capture system performance. Thus, we are reviewing the impact of air traffic management enhancements and changes in operational trends to assess whether a revised performance metric should be used for future targets.

INTERNATIONAL LEADERSHIP

Aviation Safety Leadership



FY 2008 Performance Target

"Assist China in implementing at least five of the mutually agreed upon safety enhancements (SE) to China's aviation system."

Flight Plan Objective and Performance Target

Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral,

regional, and multilateral aviation partners.

Performance Target: Work with the Chinese aviation authorities and industry to adopt 27 proven

Commercial Aviation Safety Team (CAST) safety enhancements by FY 2011. This supports China's efforts to reduce commercial fatal accidents to a rate of 0.030 fatal

accidents per 100,000 departures by FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007 ¹	FY 2008
Target	N/A	N/A	N/A	7 CAST SEs	5 CAST SEs
Actual	N/A	N/A	N/A	10 CAST SEs ²	

¹ In FY 2007, this measure replaced the Aviation Safety Leadership measure for FY 2006, the commercial air carrier fatal accident rate in China. No prior year data are available for the new measure.

Definition of Measure

Unit of Measure: Number of CAST SEs implemented by China.

Computation: The completion of each separate CAST SE. A total of 27 SEs have been selected for

China through the end of FY11.¹ When this measure was added to the Flight Plan in FY 2007, a yearly estimate was developed only to assist in the measuring of success; there is no agreement with China that a specific number be completed on an annual

basis. The initial estimates were as follows:

FY 2007: 7, FY 2008: 7, FY 2009: 5, FY 2010: 4, FY 2011: 4.

These estimates will be adjusted annually to ensure that by the end of FY 2011, the agreed on 27 SEs will be completed, per agreement with China. Based on the completion of 9 of the 27 completed by the end of FY07, the updated annual estimate is:

FY 2008: 5, FY 2009: 5, FY 2010: 4, FY 2011: 4.

Formula: A count of the number of CAST SEs implemented by China during the fiscal year.

Scope of Measure: The 27 CAST safety measures that have been selected for China. CAST has many

more to choose from, but China agreed to start by implementing these 27 by the

end of FY 2007.

Why the FAA Chooses this Measure

Initially, FAA used a commercial fatal accident rate in China to measure this objective. This was a five-year rolling average. There were several problems with this measure. First, there was very little the United States and the FAA could do to influence this rate. The rate was so low, with relatively little traffic, that any accident at all would cause the FAA to fail. Second, the FAA felt it was a mistake to impose accident rate targets onto other sovereign nations. Finally, with a rate target, there was little the FAA could measure that was in its control.

Therefore, after much research, we believe that the selection of CAST SEs is a better choice. CAST identifies precursors and contributing factors to ensure that resources address the most prevalent categories of

² Nine of the 10 CAST SEs completed in FY 2007 were from the original list of 27; the 10th CAST SE (SE-164) was not.

accidents. These SEs have contributed significantly to the safety improvement of the United States commercial aviation system. Therefore, we believe that China's adoption of these standards will enhance safety over time. Second, this is easily measurable. There is a universe of 27 enhancements that China has selected.

Source of the Data

Proof of implementation will come from a variety of sources, including, but not limited to: email from US officials who have attended meetings with Chinese aviation officials, minutes of meetings with the Chinese Aviation Administration (CAA), and pronouncements by senior Chinese officials.

Statistical Issues

Because China is a sovereign nation, we do not have the means to independently verify implementation of these initiatives throughout China. However, the Chinese in the past have been very conscientious about commercial aviation safety. As the fastest growing commercial fleet in the world, China has maintained an impressive accident rate.

Completeness

There are no completeness data issues associated with this measure since it is a simple count of the projects completed.

Reliability

Again, we are relying on the words and deeds of Chinese officials. Over time, verification will come when the accidents that the Chinese do have do not display the precursors that the CAST SEs are designed to prevent.

¹ The 27 CAST SEs are:

- 1. SE-1, TAWS (Implementation completed in FY 2007)
- 2. SE-2, SOP's (Implementation completed in FY 2007)
- 3. SE-3, Precision-like approach
- 4. SE-11, CRM (Implementation completed in FY 2007)
- SE-12, CFIT training (Implementation completed in FY 2007)
- 6. SE-14 Safety Culture
- 7. SE-15, Safety Culture
- 8. SE-16, Safety Culture
- 9. SE-23, Approach and Landing training (Implementation completed in FY 2007)
- 10. SE-26, Loss of Control SOP's (Implementation completed in FY 2007)
- 11. SE- 27, Risk Assessment
- 12. SE-28, Safety Information
- 13. SE-30, Human Factors (awaiting development of material by CAST)
- 14. SE-31, Airplane Upset Recovery training
- 15. SE-10, Proactive Safety Programs
- 16. SE-29, Safety Information (Implementation completed in FY 2007)
- 17. SE-9, MSAW (Implementation completed in FY 2007)
- 18. SE-13, ATC training CFIT prevention
- 19. SE-46, Runway Incursion ATC
- 20. SE-47, Runway Incursion ATC
- 21. SE-49, Runway Incursion SOP template
- 22. SE-50, Runway Incursion SOP GA operations (low priority in NARAST)
- 23. SE-51, Runway Incursion SOP 'best practices'
- 24. SE-52, Runway Incursion SOP vehicle operations
- 25. SE-55, Runway Incursion ATC situational Awareness
- 26. SE-59, Runway Incursion ATC 'read-back' (Implementation completed in FY 2007)
- 27. SE-60, Runway Incursion Pilot Training

INTERNATIONAL LEADERSHIP

Bilateral Safety Agreements



FY 2008 Performance Target

"Conclude at least two (new or expanded) bilateral safety agreements that will facilitate an increase in the ability to exchange aviation products and services."

Flight Plan Objective and Performance Target

Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral,

regional, and multilateral aviation partners.

Performance Target: Conclude at least eight (new or expanded) bilateral safety agreements that will

facilitate an increase in the ability to exchange aviation products and services by FY

2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	2	2	2	3	2
Actual	3	2	4	3	

Definition of Measure

Unit of Measure: Number of executive agreements signed and/or implementation procedures

agreements concluded.

Computation: Evidence of a signed executive agreement and/or evidence of the conclusion of an

implementation procedure.

Formula: N/A

Scope of Measure: U.S. Bilateral Agreements related to aviation safety have two components: executive

agreements and implementation procedures. The executive agreement is signed by the Department of State and the target country's Ministry of Foreign Affairs. It lays the essential groundwork for cooperation between the two governments and their respective aviation authorities. The implementation procedures, the second component, provide detailed operational safety and certification arrangements between the FAA and the target country's civil aviation authority. The implementation procedure is the operational portion of the bilateral agreement that allows for acceptance of aviation goods and services between the two countries.

The target is achieved when either a new executive agreement is signed or a new or expanded implementation procedure is signed, or all substantive issues relating to the content of the agreement are completed with the target country or regional authority. (Interim measures related to the progress of negotiations may also be

tracked for internal purposes during a specific fiscal year.)

Why the FAA Chooses this Measure

The purpose of a Bilateral Aviation Safety Agreement (BASA) is to promote aviation safety and environmental quality and to enhance cooperation and increase efficiency in matters related to civil aviation worldwide. Increasing globalization of aircraft manufacturing and airline operations and the interdependency between the United States and the foreign aviation sector is outpacing the FAA's ability to conduct oversight throughout the globe. By building a global network of competent civil aviation authorities and concluding agreements with additional countries and/or regional authorities, the FAA can have a significant impact on improved global understanding of U.S. safety regulations leading to more consistent international oversight.

BASAs are based on the recognition of comparability of the U.S. and foreign systems. They allow the FAA to rely upon the safety oversight capabilities and technical expertise of foreign civil aviation authorities, thereby minimizing duplication of efforts and opening new lines of communication. The FAA can then better focus on U.S. safety priorities while relying on competent foreign civil aviation authorities for those activities taking

place overseas.

Source of the Data

The executive agreements are negotiated and maintained by the Department of State. The implementation procedures are negotiated and concluded by FAA. The official, signed implementation procedure is maintained at FAA Headquarters.

Statistical Issues

N/A

Completeness

There are no completeness data issues associated with this measure since it is a simple count of the final signed new executive agreement or implementation procedures agreement.

This performance target is monitored monthly by tracking interim negotiation steps leading to completion of a BASA and tracking FAA internal coordination of the negotiated draft text.

The final signing of executive agreements is generally out of the control of the FAA. Many sovereign nations view these agreements as treaties that require legislative approval. The FAA and U.S. Government cannot control the timing of legislatures in other countries. Therefore, FAA counts executive agreements only when signed. The negotiation of implementation procedures is more within FAA's control.

The signed document of the executive agreement constitutes evidence of completion. For implementation procedures, evidence will be either a signed procedure or some form of agreement between both parties that material negotiations are concluded, but a formal signing ceremony is pending. This can take the form of an e-mail, meeting minutes, or other mutual agreement between the two parties that the implementation procedures activity has been concluded.

Reliability

N/A

INTERNATIONAL LEADERSHIP

External Funding



FY 2008 Performance Target

"Secure \$15 million in international aviation development funding to strengthen the global aviation infrastructure."

Flight Plan Objective and Performance Target

Objective 1: Promote improved safety and regulatory oversight in cooperation with bilateral,

regional, and multilateral aviation partners.

Performance Target: Secure a yearly increase in international aviation development funding to strengthen

the global aviation infrastructure. Increase the FY 2007 external funding baseline target of \$12 million in \$3 million annual increments for an FY 2012 target of \$27

million.

	FY 2004	FY 2005	FY 2006	FY 2007 ²	FY 2008
Target	\$6.00M	\$14.36M	\$23.41M	\$12.00M	\$15.00M
Actual	\$11.97M ¹	\$19.51M	\$33.04M	\$13.36M	

¹ Revised in FY 2005 from preliminary result of \$13.83 million.

Definition of Measure

Unit of Measure: Funding level in dollars.

Computation: Sum of total funding level is calculated.

Formula: N/A

Scope of Measure: The success of this effort is measured in terms of the amount of new funding which

the agency secures for international aviation infrastructure and capacity-building projects. The important metric is the amount of external funding that the FAA identifies and directs toward critical aviation projects. For example, in FY 2007, the FAA secured \$3.2 million from the Department of State for the Safe Skies for Africa program, \$1.8 million from the U.S. Trade and Development Agency for the US/China Aviation Cooperation Program and \$6 million from the World Bank, the Asian Development Bank and the Swedish International Development Cooperation

Agency to revitalize Afghanistan's aviation system.

Why the FAA Chooses this Measure

Often countries that could benefit the most from FAA technical assistance are the least able to afford it. This Flight Plan initiative seeks to leverage the limited resources that FAA is able to contribute and provides program management of additional support from third party providers.

Source of the Data

The Office of International Aviation (API) develops the funding proposals, puts forward recommendations to funding organizations, and works closely with these sources to finalize the funding for each project.

Statistical Issues

N/A

² In FY 2007, this target was revised from a 20% annual increase to a specific dollar target, with subsequent annual increases from that baseline. The FY 2007 target was set below the previous year's result to adjust for the unusually high FY 2006 result, which was due to a one-time grant of \$25M for Afghanistan. The targets and results for prior years have been converted from percentage increases to actual dollars secured.

Completeness

API tracks the progress of all funding proposals that FAA develops and supports. The funding secured from these proposals are the items used to measure success.

Reliability

Public documents (press releases, letters, contracts, memorandums of agreement, etc.) are used to verify the figures for this Flight Plan initiative.

INTERNATIONAL LEADERSHIP

NextGen Technologies



FY 2008 Performance Target

"Expand the use of Next Generation Air Transportation System (NextGen) performance-based systems to one priority country."

Flight Plan Objective and Performance Target

Objective 2: Promote seamless operations around the globe in cooperation with bilateral,

regional, and multilateral aviation partners.

Performance Target: By FY 2012, expand the use of Next Generation Air Transportation System

(NextGen) performance-based systems and concepts to five priority countries.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target ¹	N/A	1	1	1	1
Actual	N/A	1	1	1	

¹ The focus of this measure changed from U.S. NAS technologies to GPS-based technologies and procedures in FY06, and then to NextGen technologies in FY 2007. The targets and results for FY 2005 and FY 2006 are for the measures in effect during those years.

Definition of Measure

Unit of Measure: Total number of countries taking a significant step, as a result of FAA assistance and

collaboration, to implement the operational use of NextGen technologies,

procedures, or concepts.

Computation: A count of the countries involved with FAA on technical assistance or general

cooperation that have achieved significant implementation milestones on NextGen

technologies, procedures, or concepts.

Formula: N/A

Scope of Measure: Priority countries are those countries viewed by the FAA as strategic partners in

global aviation. These countries include Canada, Mexico, Brazil, Japan, India, China, and Australia, just to name a few. NextGen supporting technologies include, but are not limited to, the basic GPS system and its capabilities, Wide and Local Area Augmentation Systems (WAAS/LAAS), Performance Based Navigation (RNAV/RNP), Performance Based Communications, Performance Based Surveillance, Automatic Dependent Surveillance - Broadcast (ADS-B), Air Traffic Flow Management (ATFM), Reduced Vertical Separation Minima (RVSM) and System Wide Information

Management (SWIM).

Why the FAA Chooses this Measure

By working with international civil aviation authorities, organizations and States, the FAA can continue to enhance its international leadership role and ensure harmonization of U.S. NextGen technologies, procedures and concepts with global, regional and State-level air traffic management (ATM) modernization efforts. These same NextGen technologies, procedures, and concepts are currently being explored and implemented in the U.S. National Airspace System (NAS) and are critical to the success of the NextGen to handle the projected demands on the U.S. airspace system in the future. This global harmonization of aviation systems will increase the safety, capacity and efficiency of international aviation not only for U.S. carriers, but also for U.S. citizens traveling on foreign flag carriers.

Source of the Data

The Air Traffic Organization (ATO) Operations Planning International Office manages and oversees ATO international cooperation, and is also actively engaged in defining and managing the activities of the Joint Planning and Development Office (JPDO) NextGen Global Harmonization Working Group. As such, the ATO Operations Planning International Office will monitor all activity progress underway related to NextGen

supporting technologies, procedures and concepts, and determine which country/State cooperative activity will ultimately close out this performance target for FY 2008. Data will then be collected to justify completeness.

Statistical Issues

N/A

Completeness

The FAA ATO Operations Planning International Office, as the owner of this initiative and performance target, is the office that monitors international activity throughout the fiscal year, collects all pertinent documentation related to the completion of this performance target, and then assesses if the performance target was successfully achieved.

Reliability

The FAA ATO Operations Planning International Office will coordinate with other supporting offices related to the management, monitoring and close-out of this performance target, mainly the different ATO Service Units, the FAA Office of International Aviation, and the JPDO to cross-check and validate the successful completion of this performance target.

OPM Hiring Standard



FY 2008 Performance Target

"By FY 2008, 50 percent of FAA external hires will be filled within OPM's 45-day standard for government-wide hiring."

Flight Plan Objective and Performance Target

Objective 1: Make the organization more effective with stronger leadership, increased

commitment of individual workers to fulfill organization-wide goals, and a better

prepared, better trained, safer, diverse workforce.

Performance Target: By FY 2010, 70 percent of FAA external hires will be filled within OPM's 45-day

standard for government-wide hiring.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 ¹
Target	N/A	N/A	N/A	N/A	50%
Actual	N/A	N/A	N/A	N/A	

¹ This is a new measure for FY 2008, replacing Mission Critical Positions, which measured the reduction in hiring time for selected positions. No data are available for prior years.

Definition of Measure

Unit of Measure: The unit of measure is the percentage of external-hire job offers made within 45

business days

Computation: Using the Office Of Personnel Management (OPM) definition, OPM's 45-day hiring

process measure is defined as beginning one day after a vacancy announcement

closes and ending the day a tentative job offer is made to an applicant.

Number of external hire job offers made within the 45-day standard

Formula: Total number of external hire job offers

Scope of Measure: The measure assesses hiring time, defined as the percentage of external hire job

offers made within the OPM 45-day standard. Air Traffic Controllers (2152s) and Executive Service positions are not included in this target, but are tracked

separately.

Why the FAA Chooses this Measure

Throughout government and industry, there is fierce competition to attract a skilled workforce. The FAA must hire adequate staff with the requisite competencies in a timely manner. Using the OPM 45-day hiring standard as an Organizational Excellence performance target, the FAA will achieve greater efficiencies when it comes to hiring the agency's most valuable asset, its people. In anticipation of the forthcoming retirement bubble, with more employees becoming retirement-eligible each year, it is in the agency's best interest to ensure that the hiring process nets qualified individuals needed to achieve mission results and that the hiring is accomplished in a timely manner. Measuring hiring time is a critical step in improving this process.

Source of the Data

To compute hiring time, FAA uses data extracted from its Automated Staffing and Application Process (ASAP) system. ASAP was developed by the agency to automate the application and hiring process. AHR staffing specialists across the country fill jobs through external sources using ASAP. ASAP tracks pertinent steps in the hiring process and can be used to record the time it takes to fill positions. This enables the office to locate delays in the process steps, as well as to examine how the FAA is doing.

Statistical Issues

There are several factors that can potentially influence hiring standard performance variability and impact results. Hiring fluctuations due to agency budget constraints may significantly influence the hiring standard.

Completeness

AHR has implemented several practices to ensure the integrity of data in ASAP. For example, monthly teleconferences with regional staffing personnel have provided a forum for discussions around efficiencies in hiring processes, resulting in more standardization and streamlined practices. In addition, monthly and quarterly monitoring of the hiring standard ensures more proactive management of hiring processes.

Reliability

ASAP is a dynamic system, with hiring actions entered continually by field and headquarters staffing specialists. Because the system is constantly updated, monthly reports only reflect the data entered before the report's cut-off date. The job offer data are finalized and stabilized for the year-end status report.

Reduce Workplace Injuries



FY 2008 Performance Target

"Reduce the total workplace injury and illness case rate to no more than 2.68 per 100 employees."

Flight Plan Objective and Performance Target

Objective 1: Make the organization more effective with stronger leadership, increased

commitment of individual workers to fulfill organization-wide goals, and a better

prepared, better trained, safer, diverse workforce.

Performance Target: Reduce the total workplace injury and illness case rate to no more than 2.44 per 100

employees by the end of FY 2011, and maintain through FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	N/A	N/A	2.85 per 100	2.76 per 100	2.68 per 100
Actual	N/A	N/A	2.17 per 100 ¹	2.43 per 100 ²	

¹ FY 2006 actual result revised from projection of 2.21 per 100.

Definition of Measure

Unit of Measure: Rate of work-related injuries and illnesses per 100 employees.

Computation: The case rate is determined by dividing the total number of cases of work-related

injuries and illnesses for the entire year by the total number of employees, and

multiplying by 100. (The rate is expressed in cases per 100 employees).

For the intermediate quarterly reporting, the targets are to have less than the

following cumulative rates:

 1st Quarter:
 0.67

 2nd Quarter:
 1.34

 3rd Quarter:
 2.01

Formula: $\frac{\text{Total Cases}}{\text{Total Number of Employees}} \times 100$

Scope of Measure: This measure includes work-related injuries and illnesses to FAA employees only. It

excludes off-duty, non-work-related incidents. It also excludes injuries or illnesses of aviation employees, passengers and the general public. Consistent with the Occupational Safety and Health Act (OSHA) initiatives, we will move toward using OSHA recordkeeping analysis, which is not identical to incidents reported under the

Office of Workers' Compensation Programs regulations.

Why the FAA Chooses this Measure

The total case rate is a standard measure of safety program performance. We will continue to use the goal of reducing the total case rates by 3% per year, measured against the FY 2003 baseline. This measure shows progress in reducing workplace injuries and illnesses, which in turn leads to improved productivity and quality of life for the FAA workforce and lower costs for the FAA.

Source of the Data

The data source for the number of cases is the Department of Labor (DOL) SHARE Initiative web site (currently http://www.dol.gov/esa/owcp/share/), which summarizes injuries and illnesses reported by the various agencies. These data will be analyzed with a view toward determining OSHA recordability. Supplemental sources include the Workers' Compensation Information System and the FAA Safety Management Information System.

The data source for the number of employees is the Department of Transportation Workforce Demographics

² FY 2007 actual result revised from projection of 2.56 per 100.

website (currently http://dothr.ost.dot.gov/workforceinfo/demographics.htm). The Department of Labor website uses slightly different population counts. Those counts generally run slightly higher than the DOT counts. As a result, DOL generally reports slightly lower case rates than FAA. The SHARE data reports are available quarterly, with an approximate one-month lag time. FAA will report the case rates quarterly, with the same approximate one-month lag time.

Statistical Issues

There may be delays in the submission of claims. Also, sometimes multiple claims may result from a single workplace incident such as, chemical vapors and odors. Because of this variability, FAA provides a 10 percent margin to declare the performance status as green for the intermediate reporting (Quarters 1-3), just as is used for aviation safety targets. Thus the effective intermediate targets for reporting as green are:

 1st Quarter:
 0.60

 2nd Quarter:
 1.21

 3rd Quarter:
 1.81

If there are major delays in filing claims with the Department of Labor, or if there are unforeseen incidents that injure large numbers of people, the performance measure could change suddenly. However, based on historical data, the magnitude of such changes would likely be small.

Completeness

Data quality is expected to be high, since the computation follows a well-established formula from the Department of Labor, and the primary data sources for each variable in the formula are federal departmental level databases.

Reliability

As noted in the Completeness section, data quality is expected to be high, since the computation follows a well-established formula from the Department of Labor, and the data sources for each variable in the formula are Federal Departmental level databases. The key source of possible inaccuracy in the data is the data entry for the injury and illness reports. FAA has consolidated Workers' Compensation case management for Headquarters, Regions and both Centers, using employees with extensive specialized experience. One benefit of this consolidation should be increased data accuracy. In addition, some FAA safety professionals use the Safety Management Information System (SMIS) to cross-check mishap reports against Workers' Compensation claims to improve data accuracy.

Grievance Processing Time



FY 2008 Performance Target

"Reduce average grievance processing time by 15 percent to 124 days from the 2006 baseline of 146 days."

Flight Plan Objective and Performance Target

Objective 1: Make the organization more effective with stronger leadership, increased

commitment of individual workers to fulfill organization-wide goals, and a better

prepared, better trained, safer, diverse workforce.

Performance Target: Reduce grievance-processing time by 30 percent (to an average of 102 days) by FY

2010 over the FY 2006 baseline of 146 days, and maintain the reduction through FY

2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	N/A	N/A	Set Baseline	-10.00%	-15.00%
Actual	N/A	N/A	Baseline Set	- 61.64%	

Definition of Measure

Formula:

Unit of Measure: The average number of days to process a grievance.

Computation: Grievance-processing time will be monitored and measured against the baseline

(146 days) in FY 2007 through FY 2012. Incremental targets have been set for every fiscal year. Progress toward the overall 30 percent reduction in processing

time is cumulative and should be evident in each of the 4 out years.

Current Average Processing Time – Baseline

Baseline

Scope of Measure: All union grievances nationwide filed or in process during the fiscal year in question,

except those grievances filed under the NATCA CPC contract with an incident date starting from 3 Sept 06 onward that are procedurally-deficient because they are not filed under the correct contract and/or are pre-empted by the filing of unfair labor

practices charges.

Why the FAA Chooses this Measure

To ensure a consistent and corporate labor management program, the FAA focuses on providing effective and efficient processes to train managers and supervisors, and handle grievances, negotiations, and contract administration.

Source of the Data

Grievance Electronic Tracking System (GETS) is a proprietary FAA system for tracking and processing grievances. The data are entered and updated by authorized users in regions, centers and headquarters. Personnel in the National Policy and Programs Services Division, AHL-400, manage the system.

Statistical Issues

GETS is pre-programmed to calculate the number of "Days in Process" for each step in each grievance record. These data can then be sorted, totaled, and averaged for further analysis.

Completeness

Grievances are identified and tracked by way of a unique identifying number that is assigned by GETS only after critical information is entered into the system. Similarly, to close a record requires the entry of a decision date. AHL-400 produces monthly reports for AHR management to use to verify completeness, accuracy, consistency, and timeliness of GETS data.

Reliability

The GETS database has built-in control elements that must be populated before a record can be accepted in the database. Completed records are not deleted. Both current records and completed records can be measured.

Air Traffic Controller Workforce Plan



FY 2008 Performance Target

"Maintain air traffic control workforce at, or up to 2% above the projected annual totals in the Air Traffic Controller Workforce Plan."

Flight Plan Objective and Performance Target

Objective 1: Make the organization more effective with stronger leadership, increased

commitment of individual workers to fulfill organization-wide goals, and a better

prepared, better trained, safer, diverse workforce.

Performance Target: Maintain air traffic control workforce at or above the projected annual totals in the

Air Traffic Controller Workforce Plan.

	FY 2004	FY 2005	FY 2006	FY 2007 ¹	FY 2008
Target	N/A	N/A	N/A	0% to 2% over Plan	0% to 2% over Plan
Actual	N/A	N/A	N/A	0.45% over Plan	

¹ This was a new measure in FY 2007, replacing the measure for FY 2006, the percentage of the Workforce Plan hiring target met. No prior year data are available.

Definition of Measure

Unit of Measure: Percentage variance of actual workforce level to Workforce Plan target

Computation: The controller workforce level adherence to plan is calculated as the variance of

actual controller workforce to target, expressed as a percentage. A negative percentage of variance does not meet the target. A 0 percent to 2 percent variance

to plan is acceptable.

Actual End of Year ATC Workforce Level - Workforce Plan Target

Formula: Workforce Plan Target

Scope: Air Traffic Controller workforce level for fiscal year.

Why the FAA Chooses this Measure

The FAA's goal for maintaining the air traffic controller workforce was established after publication of the December 2004 report, *A Plan for the Future: The Federal Aviation Administration's 10-year Strategy for the Air Traffic Control Workforce*, and subsequent annual updates. This report outlines the agency's plan to hire, staff and train controllers to ensure an adequate air traffic control workforce to meet future requirements.

Source of the Data

Data on the total number of air traffic controllers are collected by the Financial Metrics group within the Office of Finance for the Air Traffic Organization. The staffing targets are generated by the Financial Analysis and Process Re-engineering group within the Office of Finance for the Air Traffic Organization. The source of the ATO staffing data is the Office of Human Resources (AHR) Management Programs and Policies Office - Information Systems Division (AHP-100). The data are obtained from the AHR Federal Personnel and Payroll System Datamart.

Statistical Issues

N/A

Completeness

The staffing data are collected and compiled monthly. Completeness is guaranteed by obtaining the data from the same source each month and validation of the reports generated from the AHR data.

Reliability

The reliability of these reports is ensured by 1) obtaining the staffing data from the same source each month; 2) the availability of resources in the Financial Metrics Team to produce reports when the data are available; and 3) a review of the staffing data to assure that all controllers are coded correctly and are included in the controller staffing level. Data fields requiring corrections are directed to the appropriate ATO Vice President for action.

Cost Reimbursable Contracts



FY 2008 Performance Target

"Close out 86 percent of eligible cost reimbursable contracts."

Flight Plan Objective and Performance Target

Objective 2: Improve financial management while delivering quality customer service.

Performance Target: Increase cost reimbursable contract closeouts by 1 percent per year, from 86

percent in FY 2008 to 90 percent in FY 2012.

	FY 2004 ¹	FY 2005	FY 2006	FY 2007	FY 2008 ²
Target	180	85.00%	85.00%	85.00%	86.00%
Actual	135	170.00%	102.00%	95.00%	

¹ The target for FY 2004 was the number of contracts closed, rather than the percentage.

Definition of Measure

Unit of Measure: The percentage of cost reimbursable contracts closed during FY 2008.

Computation: The Office of Acquisition and Policy determined the total number of cost

reimbursable-type contracts that ended and are eligible for close-out in the previous fiscal year. In FY 2007, sixty contracts became eligible for close-out. The goal for

FY 2008 is to close out 86 percent of that number, or 52 contracts.

Formula: Number of Contracts Closed Out

Number of Eligible Contracts in Previous Fiscal Year

Scope of Measure: All cost reimbursable type contracts (i.e., cost reimbursement, labor hour, time and

materials and indefinite quantity/indefinite delivery) closed throughout the fiscal

year.

Why the FAA Chooses this Measure

It is important for FAA to close out contracts on a timely basis. By doing so, contracts are administered more efficiently, liability is reduced, and the agency avoids accumulating a backlog of old, unclosed contracts. It is important to maintain high close-out rates to avoid such issues as the loss of expired funds, loss of file documents, loss of vendor's corporate knowledge, and/or changes in the contractor's business status. A high number of unclosed contracts can create potentially large liabilities where final amounts are due to or from the contractor and the agency loses the use of funds that could otherwise be recouped. Such a situation could create a material weakness in FAA's annual audit.

Source of the Data

PRISM is used to identify cost reimbursable-type contracts for which performance has ended. On a monthly basis, closed contracts are reported to the Contracting Oversight Team by either the contracting officer who closed out the contract(s) or the contractor tasked with closing out FAA contracts.

Statistical Issues

The nature of close-out activities tends to result in an increase in contract close-outs reported during the third and fourth quarters of the fiscal year. The close-out process involves obtaining a final invoice, final audit and identification of any funds necessary to close out the contract. Hence, closed contracts may not be reported evenly during the fiscal year.

² Beginning in FY 2008, the annual target was revised from 85.00% to a 1% increase per year over the previous year's target.

Completeness

The Contracting Oversight Team maintains a database of all closed contracts. Closed contract files are received by Contracting Oversight for distribution to central archives. If closed contracts are not reported to the Contracting Oversight Team by the procurement groups, they will not be entered into the database. Therefore, there is a slight risk that the number of closed contracts may be under-reported. However, contract closeouts are proactively managed by the group managers.

Reliability

Only contracts that are closed out completely (with no outstanding issues) are entered into the database. Therefore, there is no chance of entering contracts into the database that are not closed.

Cost Control



FY 2008 Performance Target

"Approved organizations throughout the FAA will continue to implement cost efficiency initiatives. The agency will also achieve FY 2008 savings towards the four specific targets listed in the Flight Plan."

Flight Plan Objective and Performance Target

Objective 2: Improve financial management while delivering quality customer service.

Performance Target: Organizations throughout the agency will continue to implement cost efficiency initiatives such as:

- 10-15 percent savings for strategic sourcing for selected products and services;
- By the end of FY 2009, reduce leased space for Automated Flight Service Stations from approximately 510,000 square feet to approximately 150,000 square feet;
- 3 percent reduction in help desk operating costs through consolidations; and
- Annual reduction of \$15 million in Information Technology operating costs.

	FY 2004 ¹	FY 2005	FY 2006	FY 2007	FY 2008
Target	NA	Implement Program	1 Activity per Organization	1 Activity per Organization	1 Activity per Approved Org. & Achievement of Targeted Svgs.
Actual	NA	Program Implemented	1 Activity per Organization	1 Activity per Organization	

Definition of Measure

Unit of Measure: At least one cost control activity from the following Lines of Business/Staff Offices:

ATO, AVS, ARP, AST, ABA, AIO, ARC, AHR, AGC, API, AEP, ASH.

Computation: A count of the number of organizations involved from those listed above and

determination of the targeted savings for FY 2008 achieved from those listed in the

performance target.

Formula: N/A

Scope of Measure: Any actions that save money, avoid incurring additional costs or streamline a process

could qualify for inclusion. Examples include reduced staffing levels, reduced travel, reduction of contract support, contracts for acquisition of goods and services, and consolidation of similar activities that may have been performed at more than one

location within the agency.

Why the FAA Chooses this Measure

FAA's operating costs have increased significantly over the past decade and oversight authorities such as the Office of Inspector General and the Government Accountability Office have raised concerns regarding FAA's escalating costs. In addition, in most fiscal years the agency must fund tens of millions of dollars of unfunded pay raises and absorb millions more in unspecified budget cuts. To address these concerns, the agency is taking aggressive steps to stem the growth of operating costs. Cost Control is a centrally developed and managed initiative under the executive direction of FAA's Chief Financial Officer. It provides the necessary impetus for implementing sustained and successful cost control activities. Organizations' participation and progress is reported to the Administrator and the Executive Management team at monthly Flight Plan meetings.

Source of the Data

Each organization - Line of Business or Staff Office (LOB/SO) - utilizes a financial template designed by the

Office of Financial Services (ABA) to propose cost saving and/or cost avoidance activities. Once submitted, the templates are reviewed by ABA analysts who validate the proposals and associated financial computations. Cost control activities are then tracked and reported on a monthly basis through an Excel spreadsheet maintained by ABA. Organizations provide regular status updates on progress toward their annual goals.

Statistical Issues

None.

Completeness

Each completed template and monthly status spreadsheet is retained on an ABA shared drive.

Reliability

ABA verifies organizations' activities, milestones, and dollars saved/avoided using a template completed by the organizations. In addition to ABA's monthly financial tracking, individual organizations are responsible for maintaining files and spreadsheets containing supporting calculations and documentation on their activities to ensure verification by audit.

Clean Audit



FY 2008 Performance Target

"Obtain an unqualified opinion on the agency's financial statements (Clean Audit with no material weaknesses [NMW])."

Flight Plan Objective and Performance Target

Objective 2: Improve financial management while delivering quality customer service.

Performance Target: Obtain an unqualified opinion on the agency's financial statements (Clean Audit with

No Material Weaknesses) each fiscal year.

	FY 2004	FY 2005	FY 2006 ¹	FY 2007	FY 2008
Target	N/A	N/A	Clean Audit w/NMW	Clean Audit w/NMW	Clean Audit w/NMW
Actual	Clean Audit	Clean Audit	Clean Audit WITH a MW ²	Clean Audit WITH a MW	

¹ Beginning in FY 2006, the new Flight Plan target specified not only a clean audit but also no material weaknesses (NMW) found.

Definition of Measure

Unit of Measure: Unqualified independent auditors' opinion rendered on FAA's annual financial

statements, with no material weaknesses.

Computation: N/A
Formula: N/A

Scope of Measure: The scope of this measure includes FAA's annual audited financial statements,

related footnotes, and required supplementary information - all of which are

published by FAA in its annual Performance and Accountability Report.

Why the FAA Chooses this Measure

The FAA chooses this measure because it is an independent assessment of FAA's internal control environment over financial reporting, FAA's compliance with certain laws & regulations, and FAA's ability to fairly present the results of its financial position and activities during the year.

Source of the Data

The data used to evaluate FAA's measure against this target comes from the independent auditors' report, issued as a result of their audit of FAA's annual financial statements. The auditors' report is published annually in FAA's Performance and Accountability Report.

Statistical Issues

N/A

Completeness

N/A

Reliability

N/A

² Result revised from Qualified Opinion. Following intensive corrective actions undertaken in FY 2007, including a comprehensive review of FAA's construction in progress balances and restatement of the FY 2006 financial statements, KPMG retracted its FY 2006 qualified opinion and reissued the opinion as unqualified (clean). However, the material weakness in this area remained.

Critical Acquisitions On Budget



FY 2008 Performance Target

"Make sure 90 percent of critical acquisition programs are within 10 percent of annual budget as reflected in the Capital Investment Plan (CIP)."

Flight Plan Objective and Performance Target

Objective 3: Make decisions based on reliable data to improve our overall performance and

customer satisfaction.

Performance Target: By FY 2008, 90 percent of major system acquisition investments are within 10

percent of annual budget and maintain through FY 2012.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008
Target	80.00%	80.00%	85.00%	87.50%	90.00%
Actual	100.00%	97.00%	100.00%	100.00%	

Definition of Measure

Unit of Measure: Percentage of programs within a 10 percent variance of the investment's total

established budget at the beginning of the fiscal year performance period.

Computation: Cost performance for each program is measured by comparing the total F&E budget-

at-completion amount established in the January FAA Capital Investment Plan (CIP) against the projected budget-at-completion amount published in the August CIP. Any program with a total budget-at-completion variance of more than 10% is

considered to not have met the established fiscal year cost performance goal.

Formula: January Budget at Completion Amount

August Budget at Completion Projection

Scope of Measure: FAA's Air Traffic Organization (ATO) Service Units select specific programs that are

determined to provide a capital asset to the NAS. For FY 2008, 51 acquisition programs will be tracked and monitored. Most of the programs selected are considered "major" and must submit an exhibit 300. Those that do not provide exhibit 300s are included because they contribute an asset to the NAS with a useful life of more than two years. The designation of "critical acquisition programs" in the title of this performance target expresses the critical value of the program to the

NAS. The budget measure is set to the January 2008 CIP.

Why the FAA Chooses this Measure

The Critical Acquisitions on Budget target represents a progressive measure for each fiscal year of the performance of critical FAA acquisition programs. The performance measure began in FY 2003 and will continue each fiscal year through the acquisition of the selected programs. The performance target increased each year until it reached 90 percent in FY 2008. This progressive increase from 80 percent in FY 2003 to 90 percent in FY 2008 ensures that the FAA's Acquisition performance is consistent with targets set in *The Department of Transportation Strategic Plan 2006-2011*. Reaching the 90 percent target by FY 2008 will also ensure that FAA performance goals meet the *Federal Acquisition Streamlining Act of 1994, Title V (FASA V)*. This Act requires agencies to establish cost and schedule performance goals for all major acquisition programs and to achieve 90 percent of those goals.

Source of the Data

ATO tracks and reports status of all schedule and cost performance targets using an automated database. ATO Service Units provide a monthly Red, Yellow, or Green assessment that indicates their confidence level in meeting their established milestones. Comments are provided monthly that detail problems, issues, and

corrective actions, ensure milestones and cost are maintained within the established performance target. The performance status is reported monthly to the ATO Executive Committee through the ATO Strategic Management Process (SMP) and to the FAA Administrator through FAA Flight Plan meetings.

Statistical Issues

The programs that are selected each fiscal year represent a cross section of programs within the ATO. They include programs that have an Exhibit 300 as well as what is referred to as "buy-by-the-pound" programs. The latter typically do not undergo a standard acquisition life cycle process.

Completeness

This measure is current with no missing data. Each DOT organization maintains its own quality control checks for cost, schedule, and technical performance data of each major systems acquisition in accordance with OMB Circulars A-11, A-109, and A-130, Federal Acquisition Regulations, and Departmental orders implementing those directives and regulations.

Reliability

Each DOT organization having major system acquisitions uses the data during periodic acquisition program reviews, for determining resource requests. They are also used during the annual budget preparation process, for reporting progress made in the President's budget and for making key program management decisions. The monthly status is reported through the SPIRE database and included in monthly high-level management reviews. Once the program is selected and approved for tracking purposes it is reported on with detailed commentary each month, and assigned a Red, Yellow, or Green Confidence indicator that the cost is within the 10% threshold. These detailed reports are reviewed at all levels of the appropriate Service Unit, Executive levels within the ATO, and the FAA Administrator.

Critical Acquisitions On Schedule



FY 2008 Performance Target

"Make sure 90 percent of critical acquisition programs are on schedule."

Flight Plan Objective and Performance Target

Objective 3: Make decisions based on reliable data to improve our overall performance and

customer satisfaction.

Performance Target: By FY 2008, 90 percent of major system acquisition investments are on schedule

and maintain through FY 2012.

	FY 2004 ¹	FY 2005	FY 2006	FY 2007	FY 2008
Target	80.00%	80.00%	85.00%	87.50%	90.00%
Actual	91.50%	92.00%	97.44%	97.00%	

¹ The result for FY 2004 was rounded up to 92% in the DOT PAR.

Definition of Measure

Unit of Measure: Percentage of programs meeting 90 percent of milestones.

Computation: Schedule performance is measured by dividing the total number of milestones for

the current fiscal year that actually met their scheduled dates by the total number of milestones planned for the current fiscal year. The total number of milestones that can be missed and remain within the 90.0 percent performance measure will vary

each fiscal year.

Total Number of Milestones Met
Total Number of Milestones Tracked

Scope of Measure:

Formula:

FAA's Air Traffic Organization (ATO) Service Units select specific milestones and completion dates against programs that are determined to provide a capital asset to the NAS. For FY 2008, 98 selected critical milestones will be tracked against 51 acquisition programs. Eighty-eight milestones must meet their targeted date to be within 90.0 percent of the performance goal. Most of the programs selected are considered "major" and must submit an Exhibit 300. Those that do not provide Exhibit 300's are included because they provide an asset to the NAS with a useful life of more than two years. The designation of "critical acquisition programs" in the title of the performance target expresses the critical value of the program to the The schedule measure is set to only those milestones selected at the beginning of the current fiscal year. Once the selected milestones are approved, no milestones are added or deleted during the year. Beginning in FY 2009, the FAA National Airspace System Capital Investment Plan will address program performance against the total program acquisition baseline. This report will document the agency's performance in compliance with the Federal Aviation Reauthorization Act of 1996, PL 104-264, Section 252 - Air Traffic Control Modernization Reviews.

Why the FAA Chooses this Measure

The Critical Acquisitions on Schedule target represents a progressive measure for each fiscal year of the performance of critical FAA acquisition programs. The performance measure began in FY 2003 and will continue each fiscal year through the acquisition of the selected programs. The performance target increased each year until it reached 90 percent in FY 2008. This progressive increase from 80 percent in FY 2003 to 90 percent in FY 2008 ensures that the FAA's acquisition performance is consistent with targets set in *The Department of Transportation Strategic Plan 2006-2011*. Reaching the 90 percent target by FY 2008 will also ensure that FAA performance goals meet the *Federal Acquisition Streamlining Act of 1994, Title V*

(FASA V). This Act requires agencies to establish, cost, schedule, and measurable performance goals for all major acquisition programs and achieve 90 percent of those goals.

Source of the Data

ATO tracks and reports status of all schedule and cost performance targets using an automated database. ATO Service Units provide a monthly Red, Yellow, or Green assessment that indicates their confidence level in meeting their established milestones. Comments are provided monthly that detail problems, issues, and corrective actions to ensure milestones and cost are maintained within the established performance target. The performance status is reported monthly to the ATO Executive Committee through the ATO Strategic Management Process (SMP) and to the FAA Administrator through FAA Flight Plan meetings.

Statistical Issues

The programs that are selected each fiscal year represent a cross section of programs within the ATO. They include programs that have an Exhibit 300 as well as what is referred to as "buy-by-the-pound" programs. The latter are typically not required to undergo a standard acquisition life cycle process. There is no bias with the selection of milestones. The milestones selected represent the program office's determination as to what effort they deem "critical" or important enough to warrant inclusion in the Acquisition Performance goal for the year. Typically there are anywhere from two to four milestones. Interim milestones are also tracked but not included in the final performance calculation.

Completeness

This measure is current with no missing data. Each DOT organization maintains its own quality control checks for cost, schedule, and technical performance data of each major systems acquisition in accordance with OMB Circulars A-11, A-109, and A-130, Federal Acquisition Regulations, and Departmental orders implementing those directives and regulations.

Reliability

Each DOT organization having major system acquisitions uses the data during periodic acquisition program reviews, for determining resource requests. They are also used during the annual budget preparation process, for reporting progress made in the President's budget and for making key program management decisions. The monthly status is reported through the SPIRE database and included in monthly high-level management reviews. Since the Acquisition Performance target is a fiscal year performance measure the specific milestone and date selected is set at the beginning of each fiscal year and not changed. The ATO Executive Council must approve all requested changes. Once the milestone is approved it is reported on with detailed commentary each month, and assigned a Red, Yellow, or Green confidence indicator that the milestone will be met on schedule. These detailed reports are reviewed at all levels of the appropriate Service Unit, Executive levels, within the ATO and up to FAA Administrator.

Customer Satisfaction



FY 2008 Performance Target

"Achieve an average score for the FAA surveys on the American Customer Satisfaction Index at or above the FY 2007 average Federal Regulatory Agency score of 60."

Flight Plan Objective and Performance Target

Objective 3: Make decisions based on reliable data to improve our overall performance and

customer satisfaction.

Performance Target: Maintain the annual average of FAA surveys on the American Customer Satisfaction

Index (ACSI) at or above the average Federal Regulatory Agency score in the

previous fiscal year.

	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 ¹
Target	N/A	N/A	N/A	N/A	60
Actual	N/A	N/A	N/A	N/A	

¹ This is a new measure for FY 2008, replacing the Customer Satisfaction survey for Commercial Pilots. No prior year data are available for the new measure.

Definition of Measure

Unit of Measure:

ACSI scores are reported on a scale of 0 to 100 at the national level, with 0 representing the worst possible performance and 100 the best performance.

Computation:

The ACSI model is a set of causal equations that link customer expectations, perceived quality, and perceived value to customer satisfaction. calculated by the University of Michigan by using the methodology of the ACSI. The FAA's average annual score of the actual surveys conducted will be measured against the Federal Regulatory Agency annual average ACSI score for the previous fiscal year (excluding the FAA) to determine if the agency's goal has been met. Once all surveys are baselined and validated (expected in FY 2011), even numbered years will have six surveys to average for a target score, odd numbered years will have five surveys to average. Surveys beyond the baselined year will be equally weighted for a target average, with the exception of the FAA Web survey, which will hold a lesser weight (approximately 50% of the weight of the other included surveys for the year). For FY 2008, the target score will be 60, based on the Federal regulatory agency average for FY 2007. The four surveys included in the FY 2008 metric will be Commercial Pilots (weighted at 29%), Aviation Maintenance Technicians (weighted at 29%), Airport Industry (weighted at 29%), and the FAA web survey (weighted at 13%). The scores will be averaged to calculate the overall actual FAA score. In the years a biennial survey is not conducted, the responsible offices will be held accountable for identifying an action plan to either improve or maintain customer satisfaction scores from the prior year's survey.

Formula:

Weighted average of all customer satisfaction scores.

Scope of Measure:

This measure includes the annual weighted average customer satisfaction scores of nine FAA ACSI surveys: commercial pilots; general aviation pilots; aviation maintenance technicians; repair stations; air carriers; manufacturers; Air Traffic Control Organization Services; airport Industry; and FAA Web. Two surveys are conducted annually (Air Traffic Organization Services and FAA Web), all others are biennial.

Why the FAA Chooses this Measure

Established in 1994, the American Customer Satisfaction Index (ACSI) is a uniform and independent measure

of household consumption experience. The ACSI tracks trends in customer satisfaction and provides benchmarking insights of the consumer economy for companies, industry trade associations, and government agencies. The ACSI is produced by the Stephen M. Ross Business School at the University of Michigan, in partnership with the American Society for Quality (ASQ) and the international consulting firm, CFI Group. This measure provides a recognized, independent source of customer satisfaction information that can be used to benchmark against other ACSI scores for regulatory and federal government satisfaction indices. Using a weighted average of customer satisfaction scores as a measure allows us to broaden the FAA's indicators of customer satisfaction to include nine customer bases: commercial pilots, general aviation pilots, mechanics, repair stations, air carriers, and customers of the Air Traffic Organization's services, manufacturers, airports, and web users.

Source of the Data

Results for the ACSI are produced by the National Quality Research Center at the University of Michigan Business School in partnership with the American Society for Quality (ASQ), Foresee Results, and the Claes Fornell International (CFI) Group. Four FAA offices (including the Office of Aviation Safety, the Air Traffic Organization, the Office of Airports, and the Office of Communications) are responsible for conducting the surveys and providing their final results to the Office of Planning, Policy and Environment, who are responsible for calculating the score for the FAA average. Each responsible organization will also report monthly on the status and progress of their action plan for improving or maintaining their customer satisfaction.

Statistical Issues

N/A

Completeness

N/A

Reliability

The FAA annual target for this measure is based on the national results for federal regulatory government agencies. The annual national average is released by the National Quality Research Center at the University of Michigan Business School.

Information Security



FY 2008 Performance Target

"Zero cyber-security events that significantly disable or degrade FAA services."

Flight Plan Objective and Performance Target

Objective 3: Make decisions based on reliable data to improve our overall performance and

customer satisfaction

Performance Target: Achieve zero cyber-security events that disable or significantly degrade FAA services.

	FY 2004 ¹	FY 2005	FY 2006	FY 2007	FY 2008
Target	90%	0	0	0	0
Actual	100%	0	0	0	

¹ The target for FY 2004 was the percentage of milestones achieved for FAA's information security plan.

Definition of Measure

Unit of Measure: Number of successful cyber attacks as determined by DOT/FAA's Cyber Security

Management Center (CSMC).

Computation: A count of the number of successful cyber-attacks in the current fiscal year.

Formula: N/A

Scope of Measure: The measure is applicable to the DOT/FAA Information Technology assets, defined

by TCP/IP systems, which contribute to the delivery of FAA services.

The FAA's information security infrastructure protects the agency's IT assets in accordance with numerous executive and legal requirements, including the Computer Security Act, Executive Order 13231, and the Federal Information Security Management Act (FISMA), as well as in accordance with DOT and FAA policy.

Why the FAA Chooses this Measure

Hackers seek to disrupt, or exploit critical infrastructure across the United States. One critical infrastructure, as identified by the President in Homeland Security Presidential Directive/ HSPD-7, is our transportation system, including aviation. Accordingly, the FAA, whose mission is to ensure the safe and efficient movement of aircraft, must be protected against the threat of cyber-attacks. The Office of Information Services (AIO) has the agency lead for ensuring that these attacks do not significantly disable or degrade FAA services.

Source of the Data

The data on cyber-security attacks are collected by the DOT/FAA Cyber Security Management Center (CSMC), which is part of AIO.

Statistical Issues

N/A

Completeness

The DOT/FAA's CSMC works collaboratively to validate cyber incidents on FAA and departmental systems. This process provides the most accurate and up-to-date measure. The FAA and DOT use current and historical data to validate trends, which indicate an increase in the number and complexity of cyber-attacks.

AIO has sensors on the DOT/ FAA's networks. AIO is the primary focal point of incident reporting to the DOT and USCERT.

Reliability

The DOT/FAA's CSMC collaborate with other ISS components in the federal government. The CSMC has the responsibility, as outlined in FAA Order 1370.82A, of being the focal point for all cyber incidents in the FAA.