The Federal Aviation Administration (FAA) is responsible for overseeing the largest, most complex, and safest aviation system in the world. It not only sets the regulatory and operational standards for the United States, it effectively sets the bar for aviation around the world - - and has for almost a half-century.

In the first decade of the 20<sup>th</sup> century, only visionaries could imagine that air travel would be a driving force behind the phenomenal growth of the American economy. But as we enter the 21<sup>st</sup> century, the future of aviation is just as hard to see. Aviation finds itself facing the one-two-three punch of terrorism, structural change, and weak global economic conditions.

The FAA is at a crossroads as well.

The FAA has met many challenges in the past. From 1926, when President Calvin Coolidge initiated federal oversight of air safety in the U.S. by signing the Air Commerce Act, to the creation of the Federal Aviation Agency in 1958, to our modern-day incarnation, the FAA and the aviation community have grown and worked together.

We've worked together to shape an industry that - - like shipping and rail before it - - conquered distance in a new way, lowered transportation costs, and created new opportunities that transformed the commercial landscape.

Today, the challenges facing aviation demand nothing less than a transformation of the system itself. This will require a willingness to embrace change on both the part of the industry and the FAA. The public's need for safe and secure air travel, the state of the industry, new technologies, and global opportunities all require that the agency and the aviation community address the challenges before us.

This Flight Plan is how we propose to meet these challenges. It is an ambitious plan, aimed at nothing less than reinvigorating global air travel and reigniting the power and the potential of aviation for the 21<sup>st</sup> Century. The Plan lays out the following four goals and the performance targets to meet them:

#### **Increased Safety**

Safety is not only a top public-interest priority, it is also an economic necessity. People will only fly if they feel safe and will only return to the skies if they are confident in the system.

# **Greater Capacity**

Like safety, additional capacity is also a necessity. Air travel can only grow if aviation capacity grows, demand with all its economic benefits will only revive and increase if passengers can move quickly and efficiently through the system and airline operations can thrive only if they are as streamlined as possible.

# International Leadership

The FAA must broaden its international network of partnerships with civil aviation authorities around the world to promote and enhance safety. This means working with key bilateral aviation partners as well as the International Civil Aviation Organization (ICAO) to support the adoption of international safety standards and implement harmonized air traffic procedures and technologies. We will also work with the European Union as it develops its own community-wide aviation safety organization and plans a more unified air traffic control system. Finally, we will work with our Western Hemisphere partners through the North American Aviation Trilateral (NAAT) and other institutions to make our safety gains available to civil aviation authorities around the world.

# Organizational Excellence

To accomplish all of this, the FAA itself must be a world-class enterprise. This requires fiscal responsibility, strong leadership, and performance-based management. It also means employing the best people possible and giving them the appropriate tools and resources in order to accomplish our mission.

In addition to these goals, the FAA, under DOT's leadership, is committed to working with other government agencies to develop a national plan for our future aviation system. FAA's Joint Planning Office is spearheading this effort with participation from National Aeronautical and Space Administration, Department of Defense, Department of

Homeland Security, and Department of Commerce. Targeted in the year 2025, the plan will lay out a concept of operations, focus research funding, and guide the transformation of air traffic management and our ground-based infrastructure to meet the needs of the 21<sup>st</sup> century.

# **Challenges To Implementation**

There are some challenges to implementing these goals that are somewhat outside the control of the FAA, but nevertheless have the potential to impact our ability to achieve them. They include:

# The Economic State Of The Industry

The financial difficulties facing the airlines and aviation manufacturers affect their ability and willingness to equip aircraft with the new technologies that will enhance safety and capacity. The financial difficulties facing the industry also impact the FAA, which is primarily funded by the Aviation Trust Fund from taxes on airline tickets. As long as airline travel remains depressed, so too will the revenues available to the FAA.

#### The Fiscal Priorities Of The Nation

Large capital investments in facility, infrastructure, or staffing needs will depend largely on the ability and willingness of Congress to fund such operations and responsibilities.

# Cooperation With State, Local, And International Agencies

The FAA's ability to improve safety or expand capacity here at home and in the international arena depends in part on the willingness of authorities on the state, local, and international levels to cooperate and collaborate with us in areas such as building new airports, expanding runways, or implementing new technologies.

# **National Security**

The FAA works closely with and supports agencies, such as the Department of Defense, Homeland Security Department, and Transportation Security Administration, that are responsible for addressing security risks associated with terrorism and our national security as a whole. Should new threats arise, our priorities may need to shift in order to meet new responsibilities.

What this plan attempts to do, in sum, is maintain and improve the safety of the aviation system, increase capacity and efficiency in an environmentally sensitive manner, without hindering the aviation industry's recovery. These goals are not easy to attain, but then, we have a long history of meeting big challenges. The safety record and the air travel system that the FAA and the aviation community have built are not only the envy of the world, but the model as well. Working together, we can exercise real leadership in setting the standards and expectations that will allow the industry to flourish.

# Federal Aviation Administration's Flight Plan 2004 – 2008

# INTRODUCTION

# The FAA's Goals Support DOT's Strategic Plan

The Department of Transportation (DOT) has consistently won awards for strategic plans developed under the requirements of the Government Performance and Results Act (GPRA).

The FAA's goals support DOT's 2003-2008 Strategic Plan. We share <u>safety</u> as the top priority. For its surface modes, DOT's goal is <u>mobility</u>, while the FAA adds capacity for the more efficient movement of people and products. The Department identifies the <u>environment</u> as a priority, and the FAA addresses environmental concerns in its capacity goal. DOT aims for <u>global connectivity</u>, while the FAA strengthens its international leadership by promoting safety and efficiency around the world. We also share <u>organizational excellence</u> as a goal. The Department's <u>security</u> goal is interwoven across the FAA's activities and objectives.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

#### **Objectives**

- Reduce the commercial fatal accident rate.
- Reduce the number of fatal accidents in general aviation.
- Reduce accident rates in Alaska.
- Reduce cabin injuries caused by turbulence.
- Reduce the risk of runway incursions.
- Prevent commercial space launch accidents.
- Complete implementation of a Safety Management System for FAA's Air Traffic Services.

#### **Overview**

Safety is the FAA's primary responsibility. Our dedication to keeping the skies safe is perhaps the single most important step we can take to revive the industry. Just as aviation is a key component in the economic health of our nation, safety is central to the public's interest, as well as to the economic health of aviation. Passengers must know they are safe. They will not fly if they do not have confidence in the system.

While aviation accident rates are at their lowest levels ever, the FAA will not become complacent; there is always room for improvement. We will continue to develop technologies that will utilize our airspace in safer, more efficient, and more environmentally-friendly ways. We will continue to work with industry to collect data that allow us to identify risks and prevent accidents before they happen, rather than the old "fix-and-fly" method of identifying a problem once an accident has already occurred. We will continue our partnerships with industry to

reduce the commercial accident rate, improve runway safety, and maintain the zero-accident record of commercial space transportation. We are also making a special commitment in Alaska, where the challenging operating environment has

The Goal: Achieve the lowest possible accident rate and constantly improve safety

targeting innovative safety solutions that will reduce the number of accidents.

led to an unacceptably high aviation accident rate. For this reason, we are

Success in Alaska will lead to safety improvements throughout the national

airspace system.

The FAA is also committed to moving the United States from a ground-based navigation system to one located within the aircraft itself. Through the use of onboard technology, pilots will be able to navigate aircraft to any point in the world using only geographical coordinates.

Required Navigation Performance (RNP) is an important step in this direction.

Because of its high degree of precision, RNP allows for more efficient use of the airspace. In addition, RNP will enable the development of constant angle descent approaches, thereby, increasing safety. Simply put, RNP will allow us to fly more planes, closer together, and more safely than ever before.

The FAA will continue to improve its safety oversight of air carriers, manufacturers, and airport operations. We will complete the implementation of a Safety Management System for FAA's Air Traffic Services. We are also making a significant changes in how we measure public safety with the development of a

The Goal: Achieve the lowest possible accident rate and constantly improve safety

new single safety index that will take into account all air accident injuries (not only fatal injuries) and their impact on passengers, employees, the public, the industry, and the economy. This new index will serve as a vital trend indicator that allows us to measure the effectiveness of many of our safety initiatives.

Safety must and will remain the FAA's top priority as the aviation industry readjusts itself to a world transformed by terrorism and economic challenges. It is the key to confidence in the system. It is the key to the future of aviation.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

# The Safety Index

The safety index is a new approach to assessing risk. It differs from existing tools that focus on measuring accident rates. By measuring the potential, frequency, and outcome of all aviation accidents, the safety index surveys the entire civil aviation system and quantifies the risk to people onboard aircraft, as well as on the ground. This tool complements other measures and will help provide a more robust indicator of the state of aviation safety.



The Goal: Achieve the lowest possible accident rate and constantly improve safety

# Objective 1. Reduce the commercial airline fatal accident rate.

#### Strategy

Continue evolution toward a performance-based National Airspace System (NAS) through the use of onboard technologies that allow aircraft greater flexibility to navigate airspace in ways that are safer, more efficient, and more environmentally-friendly than the current ground-based navigation system.

#### **Initiatives**

- Set up the Required Navigation Performance (RNP) program office.
- Implement the RNP road map, including Local Area Augmentation System (LAAS), Wide Area Augmentation System (WAAS), and Precision Approaches (PAI).

# Strategy

Expand FAA-industry partnerships and data-driven safety programs that allow us to identify risks before they lead to accidents.

#### Initiatives

- Implement Phase II of the Fuel Tank Safety Assessment for SFAR 88.
- Promote cooperative and non-punitive programs such as Flight Operational Quality Assurance (FOQA), Aviation Safety Analysis Program (ASAP), and Continued Operational Safety Program (COSP).
- Continue implementing the Air Transport Oversight System (ATOS) national program guidance and safety evaluation program.
- Continue to implement Commercial Aviation Safety Team (CAST) initiatives and continue to pursue joint identification and analysis of safety issues within CAST.
- Ensure that safety oversight keeps pace with the dynamic changes occurring in the aviation environment, to include the growing use of repair stations, domestic and foreign, as aircraft maintenance outsourcing increases.
- Continue research to identify human factors that may cause accidents and develop strategies, methods, and technologies that will reduce such accidents.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

- Develop and implement airport design standards, surface movement strategies, surface movement procedures, infrastructure, and training that enhance the efficiency of aircraft movement and reduce commercial aviation aircraft collision risk.
- Upgrade runway safety areas to meet standards or to the extent practicable.

# **Performance Target**

 Reduce airline fatal accident rate by 80 percent from the 1994-1996 baseline by FY 2007 and maintain this low rate in FY 2008 and beyond.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

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

# Strategy

Implement technologies and systems that will ensure the optimum and safest performance of flight personnel.

#### **Initiatives**

- Provide Visual Flight Rule (VFR) pilots with Instrument Flight Rule (IFR)-like environments by achieving full operational capability of the WAAS and delivery of Automatic Dependent Surveillance-Broadcast (ADS-B/TIS-B) at key sites.
- Provide text and graphical data (e.g. weather, wind shear alerts, temporary flight restrictions, notices to airmen [NOTAMS]) to the cockpit via flight information services broadcast (FIS-B) on an ADS-B link.
- To increase situational awareness, improve the capabilities of small aircraft via integrated displays, WAAS, data-link and ADS-B/TIS-B aircraft position.

#### Strategy

Establish standard procedures and guidelines for general aviation operators to enhance safety throughout the NAS.

#### Initiatives

- Ensure that safety oversight keeps pace with changes in the general aviation environment.
- Publish RNP/Area Navigation (RNAV) approaches.
- Continue to implement Joint Safety Committee (JSC) initiatives and continue to pursue joint identification and analysis of safety issues within JSC.
- Continue applied human factors research to identify human factors in accidents and to develop strategies and methods for reducing such accidents.
- Develop and implement airport design standards, surface movement strategies, surface movement procedures, infrastructure, and training that enhance the efficiency of aircraft movement and reduce General Aviation aircraft collision risk.
- Develop and implement FAA/Industry Training Standards (FITS).

The Goal: Achieve the lowest possible accident rate and constantly improve safety

# **Performance Target**

 Reduce the number of general aviation and nonscheduled Part 135 fatal accidents to 325 by FY 2008.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

#### Objective 3. Reduce accident rates in Alaska.

# Strategy

Expand and accelerate the implementation of safety and air navigation improvement programs in Alaska.

#### **Initiatives**

- Achieve full operational capability of the WAAS.
- Expand the Capstone Program through a three-phase approach affecting Bethel, Southeast Alaska, and then the entire state.
- Expand the use of weather cameras.
- Expand the Medallion Program.
- Approve RNP avionics for small aircraft that support development of an improved en-route and approach infrastructure in Alaska.

# **Performance Target**

Reduce accidents in Alaska for general aviation and all part 135 operations by 20 percent by FY 2008 (from the 2000-2002 average of 133 accidents per year to no more than 106 accidents per year).

The Goal: Achieve the lowest possible accident rate and constantly improve safety

# Objective 4. Reduce cabin injuries caused by turbulence.

# Strategy

Work with operators to encourage and expand the use of best practices to prevent turbulence injuries.

#### **Initiatives**

- Improve training to Standard Operating Procedures (SOPs) to reduce injuries.
- Improve dissemination of Pilot Reports and timeliness of weather forecasts to identify air turbulence areas.
- In partnership with air carriers, ensure the development of SOPs to reduce cabin injuries caused by turbulence.

# Strategy

Develop and evaluate new technologies to lessen the impact of turbulence.

#### *Initiative*

 Continue to evaluate new airborne weather radar and other technologies that address weather issues broadly, but which will also address turbulence.

# **Performance Target**

 Reduce serious injuries from turbulence accidents by 33 percent by FY 2008 (from the 2000-2002 average of 15 injuries per year to no more than 10).

The Goal: Achieve the lowest possible accident rate and constantly improve safety

# Objective 5. Reduce the risk of runway incursions.

# Strategy

Continuously evaluate, analyze, test, and improve procedures, training, and certification to reduce the risk of runway collisions.

#### **Initiatives**

- Reduce the risk of runway incursions resulting from pilot errors through improved training, procedures, evaluation, analysis, and testing.
- Reduce the risk of runway incursions from air traffic controller errors through improved training, procedures, evaluation, analysis, and testing.
- Reduce the risk of runway incursions resulting from errors by pedestrians, vehicle operators, tug operators, and mechanics conducting aircraft taxi operations through improved training, procedures, evaluation, analysis, and testing.

# Strategy

Modify and improve existing surface movement infrastructure to reduce the risk of runway incursions.

#### Initiatives

- Complete installation of Airport Surface Detection Equipment (ASDE-X) waterfall and retrofit of ASDE-X equipment capability into all Airport Movement Area Safety System (AMASS) installations.
- Complete development, testing, evaluation, and deployment of runway status lights at AMASS and ASDE-X airports.

# Strategy

Design and develop new equipment, procedures, and training to reduce the occurrence of runway incursions through the use of advanced modeling and simulation tools.

#### **Initiatives**

 Develop a proof of concept that leads to a prototype ground movement safety infrastructure to provide direct warning capability to pilots, drivers, and controllers to prevent runway incursions.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

- Evaluate the effectiveness of airport design simulations to reduce runway incursions and improve operational performance of future runway and taxiway projects.
- Evaluate the effectiveness of air traffic tower simulation training to enhance air traffic controller performance of error recognition, corrective action, phraseology, and procedures, during tower operations.
- Evaluate potential runway safety enhancements to pilot performance through integration of cockpit and tower cab simulation facilities.
- Complete development, testing, evaluation, and deployment of a runway incursion risk categorization model.
- Develop and evaluate runway and taxiway risk modeling tools that integrate aircraft arrival and departure risk modeling tools.

# **Performance Target**

 Reduce the number of most severe (Category A and B) runway incursions at towered airports by at least 48 percent by FY 2008 (from the 2000-2002 baseline average of 52 per year to no more than 27).

The Goal: Achieve the lowest possible accident rate and constantly improve safety

# Objective 6. Prevent commercial space launch accidents.

# Strategy

Continue developing tools, guidance, and regulations for mitigating safety risks for commercial space launches.

#### **Initiatives**

- Issue a licensing and safety requirements rule for launches from non-federal and federal launch sites.
- Issue guidance on acceptable safety verification methods for Reusable Launch Vehicles (RLV).
- Improve methodology for determining likely launch vehicle failure rates and resulting casualties.
- Complete a mishap investigation agreement with the Air Force and the National Transportation Safety Board (NTSB) to ensure that the commercial space community identifies and understands factors that may lead to launch accidents.

# **Performance Target**

Maintain zero significant commercial space launch accidents.

The Goal: Achieve the lowest possible accident rate and constantly improve safety

# Objective 7. Complete implementation of a Safety Management System for FAA's Air Traffic Services.

# Strategy

Design, develop, and implement a Safety Management System (SMS) that complies with ICAO requirements and applies a system safety approach to the FAA's Air Traffic Services.

#### **Initiatives**

- Develop a Version 1.0 of FAA SMS Manual and SMS Implementation Strategy (FY-03).
- Implement a safety risk management program within ARA for selected new system acquisitions (thru FY-08).
- Begin implementation of SMS by piloting on three to five major safety-related changes to the NAS. Includes SMS training and the use of SMS products in decision-making.
- Introduce SMS processes in ATS, ARA, AVR, and AAS to assess proposed NAS changes for risk and to monitor effectiveness of risk mitigation strategies.
- Expand the collection, consolidation, and analysis of safety data, allowing reporting and assessment.
- Expand SMS implementation beyond pilot programs to include all safety significant changes to the NAS.
- Implement initiatives in the 3-Year Plan for Operational Error prevention.

# **Performance Target**

- Apply SMS to all significant changes in the NAS.
- Reduce the number of most severe (Category A and B) operational errors by 15 percent, to no more than 574 by FY 2008.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

#### **Objectives**

- Increase airport capacity to provide a system that meets or exceeds air traffic demand.
- Improve efficient air traffic flow over land and sea.
- Increase or improve airspace capacity in the eight major metropolitan areas and corridors that most affect total system delay: New York, Philadelphia, Boston, Chicago, Washington/Baltimore, Atlanta, LA Basin, and San Francisco.
- Increase on-time performance of scheduled carriers.

#### **Overview**

The global economy, the war on terror, the war in Iraq, and Severe Acute Respiratory Syndrome (SARS) have all dealt major blows to US air travel. Passenger levels are down 8 percent from where they were in early 2001, and current industry forecasts suggest that demand will not rebound until 2005 at the earliest.

It will rebound, however. So while the airlines struggle to reinvigorate their industry at this critical time, the FAA must continue to work with local governments and airspace users to redesign a decades-old airspace that will meet the capacity demands of the future.

This redesigned airspace will have to accommodate more traffic while easing delays; increase safety and security while addressing noise and air quality; and smooth air travel between land and sea while disentangling it in major

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

metropolitan areas. More specifically, we will ease congestion over eight metropolitan areas; improve overall capacity at the nation's top 35 airports by 30 percent; increase the number of flights by building new runways; and increase traffic coordination and communication through new technologies. The end result will be an airspace that is more efficient, less costly, safer, and we will accomplish this in an environmentally friendly manner.

Capacity, like safety, is not only a priority but a necessity. Air travel cannot grow if aviation capacity does not grow with it. Passengers will not travel if they cannot move through the system safely, seamlessly, and efficiently. Capacity is therefore a vital link to realizing the full power and potential of aviation.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

# Objective 1. Increase airport capacity to provide a system that meets or exceeds air traffic demand.

# Strategy

Evaluate existing capacity levels and set investment and infrastructure priorities.

#### **Initiatives**

- Complete an evaluation of the 35 Operational Evolution Plan (OEP) airports to determine whether they will meet future demand levels by December 2003.
- Develop a system to prioritize infrastructure investments to maintain existing capacity in a cost effective manner.
- Establish financial benchmarks to evaluate whether or not initiatives are successful.
- Support new runway construction and airfield improvements to permit increased use of airports in IFR conditions.

#### Strategy

Improve access to existing capacity through operational and procedural changes.

#### Initiatives

- Set up an intra-agency team to coordinate standards, procedures, and policies to improve airport capacity.
- Improve the quality of updates of airport air traffic acceptance rates to ensure the most efficient use of existing capacity.
- Increase access to high-demand metropolitan areas for nonscheduled operations through the addition of new routes.

# Strategy

Improve bad-weather departure and landing capacity with new technologies and procedures.

#### Initiatives

 Capitalize on Spring/Summer Plan data to improve traffic flow in bad weather.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

- Develop and implement RNP/WAAS approach procedures to increase airport and runway use when visibility is restricted.
- Develop technology and procedures to increase the use of parallel runways in adverse weather conditions (e.g., RNP, PRM, ADS-B/CDM, FMA.)
- Increase airport capacity under IFR conditions through the use of Traffic Management Advisor (TMA).

# **Strategy**

Address environmental issues associated with capacity enhancements.

#### Initiatives

- Build stakeholder support for funding and technology models to address environmental impacts.
- Develop tools to understand the relationship between noise and emissions and different types of emissions.
- Ensure timely review of planning and environmental efforts at all OEP airports examining new runways and airfield reconfigurations.
- Improve data on the environmental benefits, technological feasibility, and economic reasonableness of technologies and other measures to support sound and cost-effective decision-making.
- Develop "best practices" for airport/airline community relations to educate and inform the public about aviation and the environment.
- Develop tools to reduce airborne delay.
- Implement airspace redesign to increase efficiency with consideration for environmental impacts.

#### **Performance Targets**

- Achieve an Airport Arrival Efficiency Rate of 96% at the 35 OEP airports by 2008.
- Achieve an Airport Arrival Capacity at the 35 OEP airports in excess of 50,850 per day by 2008.
- Open up to 12 new runways and increase the Annual Service Volume (ASV) of the 35 OEP airports by at least 1% annually, measured as a five year moving average, through 2008.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

- Sustain Operational Availability at 99% for the reportable facilities that support the 35 OEP airports.
- Maintain or reduce the number of people exposed to significant noise through 2008, as measured by a 3-year moving average, from the 3year average for FY 1999-2001.
- Improve aviation fuel efficiency per revenue plane-mile by 1% per year through 2008, as measured by a 3-year moving average, beginning with the 3-year average of Calendar Years 1999-2001.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

# Objective 2. Improve efficient air traffic flow over land and sea.

# Strategy

Restructure airspace to ensure efficient traffic flow between oceanic and domestic airspace.

#### **Initiatives**

- Target airspace redesign for eight major metropolitan areas: New York, Philadelphia, Baltimore/Washington, Boston, San Francisco, Chicago, Atlanta, and Los Angeles Basin.
- Take advantage of new equipment and technology to reduce enroute congestion.
- Implement high-altitude airspace redesign to reduce congestion.
- Provide communication infrastructure to make airspace restructuring feasible (e.g. expanded VSCS, BUEC, Air-to-Ground Communications).

#### Strategy

Modify separation standards and procedures to allow more efficient use of congested airspace.

#### Initiatives

- Implement time-based metering at Los Angeles Air Route Traffic Control Center (ARTCC) (ZLA), Oakland ARTCC (ZOA), Miami ARTCC (ZMA), and Houston ARTCC (ZHU).
- Implement real-time use of Special Use Airspace.
- Implement oceanic airspace redesign to improve capacity.
- Implement reduced vertical separation minima (RVSM).
- Increase arrival and departure rates through wake turbulence monitoring, operational procedures, and controller spacing tools.

#### Strategy

Implement technologies and procedures to facilitate efficient traffic flow during periods of adverse weather.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

#### Initiatives

- Develop and implement enhanced systems and techniques to improve collaborative decision-making (CDM).
- Improve the analysis and dissemination of weather information to controllers and pilots through new automated systems (e.g., ASR-WSP, TDWR, LLWAS, MIAWS).

# **Performance Target**

 Maintain average en route travel times among the eight major metropolitan areas.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

Objective 3. Increase or improve airspace capacity in the eight major metropolitan areas and corridors that most affect total system delay: New York. Philadelphia. Boston. Chicago. Washington/Baltimore. Atlanta. LA Basin. and San Francisco.

# Strategy

Identify airport improvements that are most likely to alleviate the major causes of system delay.

#### **Initiatives**

- Support master plans for airfield improvements at airports in major metropolitan areas.
- Establish a forum in conjunction with the user community to establish the most feasible capacity-enhancing policies.

# **Strategy**

Redesign the airspace and traffic flows into the congested areas that account for the majority of current delays.

#### Initiatives

- Implement terminal airspace redesign and procedural changes for the eight metropolitan areas that account for the majority of current delays.
- Complete redesign of the congested airspace in New York.
- Implement redesign of airspace to reduce runway constraints and support RNAV procedures where feasible at the eight major metropolitan areas.

#### **Performance Targets**

 Achieve an Airport Arrival Capacity for the 8 major metropolitan areas of 21,355 per day by 2008.

The Goal: In conjunction with local governments and airspace users provide national system capacity that meets or exceeds demand

#### Objective 4: Increase on-time performance of scheduled carriers.

# Strategy

Promote use of automation systems that provide more accurate and timely information for all system users.

#### **Initiatives**

- Provide seamless information sharing between Flight Operations Centers and ATCs using System Wide Information Management (SWIM).
- Achieve improved operator and passenger access to flight information (e.g. TFM/CDM capabilities).
- Validate and analyze statistics from the Department of Transportation (DOT) Delay Reporting System to identify and remedy causes of delay within the FAA's control.
- Improve modeling and forecasting techniques to better anticipate and react to volume constraints, and achieve greater conformity between expected and actual flight times.

# **Performance Targets**

 Increase the percentage of all flights arriving within 15 minutes of schedule at the 35 OEP airports by 7%, as measured from the three year FY 2000-2002 baseline, through 2008.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

#### **Objectives**

- Promote improved global safety and regulatory oversight in cooperation with bilateral, regional, and multilateral aviation partners.
- Promote global seamless operations in cooperation with bilateral, regional, and multilateral aviation partners.

#### **Overview**

The FAA has operational responsibility for almost half of the world's air traffic. We certify more than 70 percent of the world's large jet aircraft. We provide direct or indirect assistance to 129 countries around the world to help them improve their aviation systems. The United States, represented by the FAA, is the largest contributor of intellectual and financial support to the International Civil Aviation Organization (ICAO), which represents 188 of the world's civil aviation authorities.

The FAA is, therefore, inextricably engaged in an international network of partnerships aimed at promoting and enhancing air safety around the globe.

While growth in aviation over the last half century has taken place primarily in the United States, growth over the next century is going to occur primarily overseas.

The FAA wants to assure that U.S. citizens are able to travel as safely and efficiently abroad as at home.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

To achieve this, the FAA must work effectively with its key bilateral partners as well as with regional and multilateral aviation organizations, support the global implementation of proven air traffic technologies and procedures, and effectively leverage the technical and financial resources available to raise the requirements and oversight of all civil aviation authorities to a high global safety standard.

While the worldwide air accident rate has improved over the last ten years, it remains consistently greater than that of the United States. The FAA is committed to working with our international partners to bring our experience, expertise, and new technologies to create a safer, more efficient, economical, and environmentally friendly global airspace.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

Objective 1. Promote improved global safety and regulatory oversight in cooperation with bilateral, regional, and multilateral aviation partners.

#### Strategy

Provide technical assistance and training to key foreign civil aviation authorities.

# **Initiatives**

- Focus political, technical, and financial resources to provide training and technical assistance to key civil aviation authorities in meeting international standards through activities that include: Safe Skies for Africa, Third Border Initiative, and University Consortium Summits.
- By the end of 2003, implement a methodology to obtain intellectual and financial assistance to support the global aviation system from U.S. Government organizations, multilateral banks, and industry.

# Strategy

Work effectively with key bilateral partners to enable the global transfer of aeronautical products, technologies, and services.

#### Initiatives

- Develop arrangements with the European Community to ensure the highest level of safety and more efficient exchange of products between the U.S. and Europe through cooperation with the European Aviation Safety Agency (EASA).
- Set priorities and focus FAA/U.S. resources on concluding bilateral agreements recognizing safety certification/approval systems with 10 key countries or regional authorities.

#### Strategy

Support ICAO as well as the development of new regional aviation authorities.

#### Initiatives

 Dedicate focused financial and intellectual resources to the development of regional aviation authorities as a means to promote safety in a more effective manner.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

- Strengthen bilateral relations with Western Hemisphere partners in order to increase regional safety while sharing proven safety techniques with the rest of the world.
- Support expansion of ICAO's Safety Oversight Audit Program to air traffic services, accident investigation and airports.

# **Strategy**

Work with global partners to develop and implement safety-enhancing technologies and processes.

#### Initiatives

- Encourage global adoption of aviation safety and aircraft security initiatives and interventions, such as Safer Skies, to mitigate the dangers of Controlled Flight Into Terrain (CFIT) and weather related events.
- Partner with the worldwide aerospace community to develop tools and processes for collecting, analyzing, and sharing information and data to improve global aerospace safety.
- Work with developing states to encourage them to use the FAA Safety Management System as a model for their safety management programs.
- Support implementing English language proficiency training for aircrews and air traffic controllers globally.
- Work with international service partners to develop a standardized definition for runway incursion and a common categorization system and database.

# **Performance Targets**

- Provide new or expanded technical assistance to 30 key countries or regional authorities.
- Conclude new bilateral agreements recognizing safety certification/approval systems with 10 key countries or regional authorities.
- Secure a 100% increase, over FY03 levels, in intellectual and financial assistance for international aviation activities from U.S. and international government organizations, multilateral banks, and industry.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

 Support creating a minimum of four new regional aviation authorities or organizations capable of meeting globally accepted safety and/or efficiency standards.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

Objective 2. Promote global seamless operations in cooperation with bilateral, regional, and multilateral aviation partners.

# Strategy

Ensure the global implementation of technologies and processes that enhance capacity and interoperability.

#### **Initiatives**

- Promote the commercial proliferation, acceptance, integration, and use of the Global Navigation Satellite System (GNSS) and GNSS augmentation systems internationally.
- Work with the global community to develop ADS-B applications, necessary standards, equipage requirements and operational procedures for global implementation.
- Partner with key countries to develop tools and processes for exchanging flight data, radar information, and traffic flow management data to improve and harmonize global air navigation services.
- Establish new and update existing operational agreements between the FAA, Mexico, and Canada that support requirements for air traffic control communication and coordination.
- Meet RVSM program deadlines in order to harmonize U.S. domestic and North American Regional implementation.
- Promote the global implementation of RNP and the development of international air traffic routes to take advantage of enhanced aircraft equipment.

#### Strategy

Ensure the harmonization of U.S. and global technological standards.

#### **Initiatives**

- Develop a focused agenda and promote U.S. interests in the ICAO and other international groups responsible for developing global aerospace technical standards.
- Develop and validate Standards and Recommended Practices (SARPS) and all related guidance material.
- Advocate NAS technologies in global regulatory and policy-making forums.

The Goal: Increase the safety and capacity of the global civil aerospace system in an environmentally sound manner

 Support U.S. aviation spectrum interests at the World Radio Communication Conference (2003 and 2006) and other regional and international forums.

#### Strategy

Work with international partners within the ICAO Committee on Aviation Environmental Protection (CAEP) to develop global environmental standards, best practices, and guidance material.

#### **Initiatives**

- Work with CAEP members to develop and adopt ICAO guidance material on the Balanced Approach to Noise Management consistent with ICAO Resolution A33-7.
- Build on work already done within CAEP to develop industry "best practices" for emissions reductions as a basis for future voluntary agreements.
- Gain acceptance of the U.S. System for Assessing Aviation's Global Emissions (SAGE) to be used as a global emissions model within CAEP.

# **Performance Targets**

- Ensure critical new technologies and key operational procedures are implemented by the U.S., ICAO, and other international partners in a consistent and timely manner.
- Ensure reduced separation standards are implemented internationally by the end of 2005.
- Ensure that international environmental standards, recommended practices, and guidance material adopted by ICAO are globally and uniformly applied, reflect the best available technology, provide real environmental benefit and are economically sound.

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

#### Objectives

- Make the organization more effective with stronger leadership, improved focus of individual workers on organization-wide goals, and a better prepared, better trained workforce.
- Deliver quality customer service while controlling costs.
- Make decisions based on reliable data to improve our overall performance and customer satisfaction.

#### Overview

To achieve the ambitious goals outlined in this Strategic Plan, the FAA must itself become a world-class enterprise. This will require strong leadership, performance-based management, and improved fiscal responsibility. Consistent with the President's Management Agenda (PMA), this also means the FAA must set targets, measure performance, and be accountable for the results. The PMA is intended to make the government "citizen-centered, results-oriented, and market-based," and consists of the following five initiatives:

- Strategic management of human capital
- Competitive sourcing
- Improved financial performance
- Expanded electronic government
- Budget and performance integration

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

The PMA and FAA's Organizational Excellence goal both focus on government accountability while providing important services in a responsible and cost effective manner. The FAA's goal is structured to ensure that FAA employees clearly understand the agency's mission and priorities, faithfully execute their duties to accomplish this mission, and get the most out of every tax dollar. This means the FAA must set targets, measure performance, and hold ourselves accountable for the results.

Controlling costs is essential. Working with our employees and industry partners, the FAA must consistently refocus investment priorities on programs and services that *perform*, while ending those that are redundant or ineffective. To accomplish this, we will establish an agency-wide cost-control program to identify where costs can be cut and reinvested to meet the initiatives outlined in this plan. The agency will also accelerate the development of data and analytic tools that will allow us to make management decisions based on sound business principles.

The FAA's workforce is the key to achieving our mission. We are committed to finding and eliminating barriers to equity and opportunity at the FAA. The range of diversity at the agency directly relates to the strength of our organization.

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

Furthermore, we will make sure all personnel have the tools and resources they need to address successfully the challenges we face. In turn, employee compensation and salary increases should be performance-based, allowing the agency to control costs and reward success.

Our commitment to meeting these initiatives will determine our policies as we head into the future: Where to focus our resources, where to *stop* focusing resources, how to best serve the flying public, how to help the industry through a critical crossroads, and how to help American aviation advance safety and efficiency for travelers all over the world.

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

Objective: Make the organization more effective with stronger leadership. improved focus of individual workers on organization-wide goals. and a better prepared, better trained workforce.

# Strategy

Make FAA leadership at all levels more knowledgeable and more accountable.

#### **Initiatives**

- Implement an executive development program.
- Implement a management workforce planning and development program.
- Implement a timely and effective approach to conflict management.

# Strategy

Improve focus of individual workers on organization-wide goals.

# **Initiatives**

- Use multiple channels to communicate the FAA strategic plan and assist employees in forming a "line of sight" between the functions they perform and the FAA's strategic goals.
- Implement the new Performance Management System for all employees
- Directly link manager performance plans to FAA strategic goals and Line of Business and Staff Office performance plans.

#### Strategy

Create a better-prepared, better-trained workforce.

# **Initiatives**

- Implement and sustain agency human capital planning and measurement processes resulting in an integrated and actionable FAA human capital plan.
- Implement a corporate strategic investment program for employee training and development.
- Implement corporate recruitment initiatives.

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

# **Performance Targets**

- Increase Employee Attitude Survey scores in the areas of management effectiveness and accountability by at least 5%.
- Set a goal of filling at least 90% of critical positions with demonstrably qualified and diverse candidates.
- All executive and manager performance plans are directly related to FAA strategic goals and their organization's performance plans.

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

# Objective 2. Deliver quality customer service while controlling costs.

# Strategy

Improve organization-wide focus on fulfilling customer needs.

#### **Initiative**

 Annually review our customer's requirements to control costs and better align products and services.

# **Strategy**

Develop and implement ways to better control FAA costs.

#### **Initiatives**

- Fully implement the FAA Cost Accounting System (CAS) and Labor Distribution Reporting system (LDR).
- Implement an agency-wide cost control program using the FAA CAS and LDR, including:
  - An executive-level review process.
  - Identification of cross-organizational initiatives focused on controlling Operations costs. Initial focus on Information Technology expenditures. A percentage of savings identified will be used to fund unfunded strategic plan IT initiatives.
  - A program to create incentives for FAA organizations to identify and implement cost savings initiatives.

# **Performance Targets**

- Part of the strategic plan is not funded. By putting cost controls in place, and having a more efficient, effective workforce, the agency expects to fund currently unfunded portion of the strategic plan by 2008. The following are the yearly milestones for reaching this target:
  - 10% by the end of FY04
  - 20% by the end of FY05
  - 37% by the end of FY06
  - 55% by the end of FY07
  - 75% by the end of FY08

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

# Objective 3. Make decisions based on reliable data to improve our overall performance and customer satisfaction.

# Strategy

Better prepare FAA managers to use cost and performance data in making decisions.

#### **Initiatives**

- Provide tools and training to all current executives and managers on using cost data (e.g., CAS and LDR) in management decisions and reinforce the use of these skills as part of the agency-wide cost control program.
- Integrate lessons on the use of cost and performance data in all levels of FAA supervisory and management training conducted at the Center for Management Development (CMD).
- Expand the use of professional certification programs for managers and employees in key decision-making positions that impact major FAA programs and services.

# Strategy

Find faster, more efficient ways to collect and measure customer feedback.

#### *Initiatives*

- Develop a process for measuring customer satisfaction for a wider range of customer segments.
- Use the FAA strategic plan web site as a means of communicating progress and collecting feedback from internal and external customers of the initiatives contained in the plan.

#### Strategy

Improve the security of FAA data.

#### Initiative

Update and implement an agency security plan to protect our information assets.

The Goal: Ensure the success of the FAA's mission through stronger leadership, a better trained workforce, a closer eye on spending, and improved decision-making based on reliable data.

# **Performance Targets**

- Ensure that 80% of all programs published in the Capital Investment Plan (CIP) are on schedule and within budget.
- Achieve 90% of all performance targets in the FAA strategic plan.
- Increase agency scores on the American Customer Satisfaction Index.
- Achieve 90% of the milestones for the agency information security plan by 2008.

# APPENDIX A: GLOSSARY OF STRATEGIC PLAN ACRONYMS

ACRONYM	DEFINITION
AAS	Office of Airport Safety and Standards
ADS-B/TIS-B	Automatic Dependent Surveillance-Broadcast/Traffic Information
	Service-Broadcast
AMASS	Airport Movement Area Safety System
ARA	Associate Administrator for Research and Acquisition
ARTCC	Air Route Traffic Control Center
ASAP	Aviation Safety Analysis Program
ASDE-X	Airport Surface Detection Equipment
ASR-WSP	Airport Surveillance Radar Weather System Processor
ASV	Annual Service Volume
ATL	Atlanta International Airport
ATOS	Air Transport Oversight System
ATS	Air Traffic Services
AVR	Associate Administrator for Regulation and Certification
BEUC	Backup Emergency Communications
CAEP	Committee of Aviation Environmental Protection
CAO	Civil Aviation Organization
CAS	Cost Accounting System
CAST	Commercial Aviation Safety Team
CDM	Collaborative Decision Making
CFIT	Controlled Flight Into Terrain
CIP	Capital Investment Plan
CMD	Center for Management Development
COSP	Continued Operational Safety Program
DFW	Dallas-Fort Worth International Airport
DOT	Department of Transportation
EASA	European Aviation Safety Agency
FAA	Federal Aviation administration
FIS-B	Flight Information Service Broadcast
FITS	FAA/Industrial Training Standards
FMA	Final Monitor Aid
FOQA	Flight Operational Quality Assurance
FY	Fiscal Year
GNSS	Global Navigation Satellite System
GPRA	Government Performance and Results Act
ICAO	International Civil Aviation Organization
IFR	Instrument Flight Rules
JSC	Joint Safety Committee
LAAS	Local Area Augmentation System

# APPENDIX A: GLOSSARY OF STRATEGIC PLAN ACRONYMS

Labor Distribution Reporting System
Low Level Wind-shear Alert System
Medium Intensity Airport Weather Service
North American Aviation Trilateral
National Airspace System
Notice To Airmen
National Transportation Safety Board
Operational Evolution Plan
Precision Approach
President's Management Agenda
Precision Runway Monitor
Reusable Launch Vehicles
Area Navigation
Required Navigation Performance
Reduced Vertical Separation Minimum
System for Assessing Aviation's Global Emissions
Standards and Recommended Practices
Severe Acute Respiratory Syndrome
Special Federal Aviation Regulation
Safety Management System
Standard Operating Procedures
System Wide Information Management
Terminal Doppler Weather Radar
Terminal Instrument Procedures
Traffic Flow Management
Traffic Flow Management/Collaborative Decision Making
Traffic Management Advisor
United States
Visual Flight Rules
Voice Switching and Controlling System
Wide Area Augmentation System
Houston ARTCC
Los Angeles ARTCC
Miami ARTCC
Oakland ARTCC