

# FAA 2016

PERFORMANCE & ACCOUNTABILITY REPORT

The **FAA**. **EVOLVING** TECHNOLOGY. **ADVANCING** AVIATION.

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We Welcome Your Comments (inside back cover)

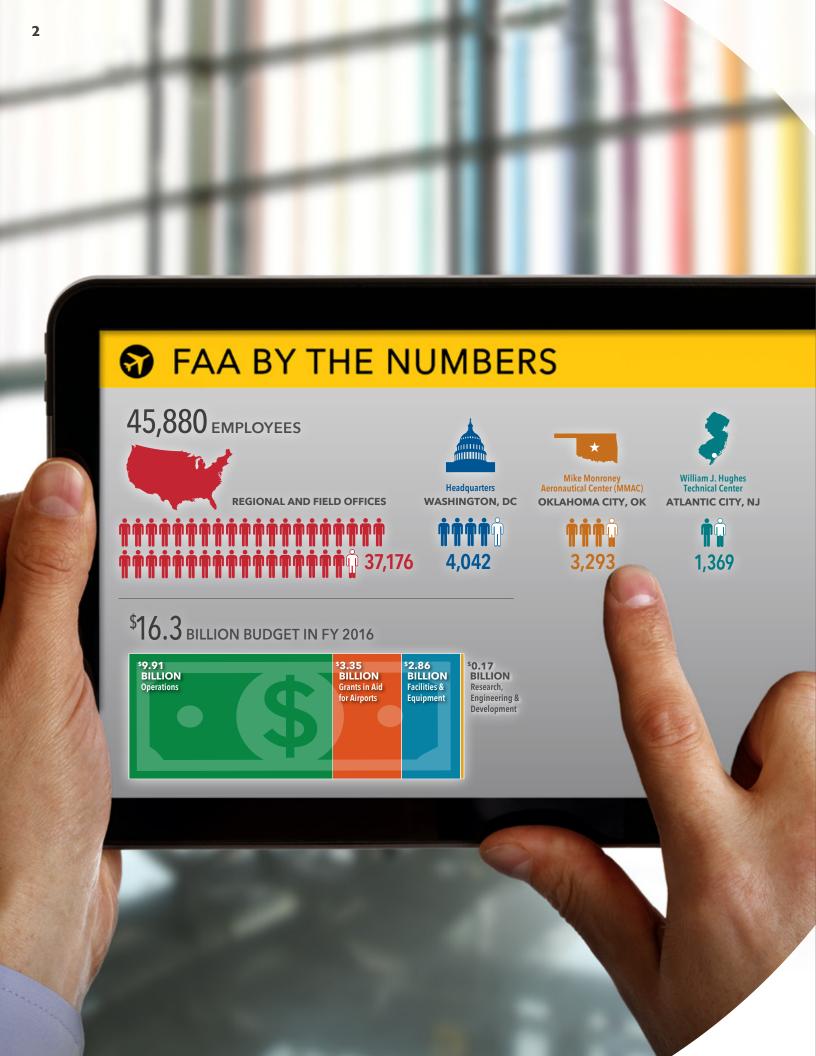
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# **FOREWORD**

The Federal Aviation Administration (FAA) is part of the U.S. Department of Transportation (DOT). By directives, the Office of Management and Budget (OMB), which implements the Chief Financial Officers Act of 1990 (CFO Act), requires the FAA to prepare financial statements separate from those of the DOT. The FAA consolidates its key data and information and provides it to the DOT to incorporate into their corresponding reports. Although the FAA is not required to prepare a separate Annual Financial Report or Performance and Accountability Report (PAR), it recognizes that it can better demonstrate the agency's accountability by presenting performance, management, and financial information using the same statutory and guidance framework as that used by the DOT. For this reason, the FAA has produced its own PAR since fiscal year (FY) 2002.

Last year, the FAA was proud to receive its 12th prestigious Certificate of Excellence in Accountability Reporting award for its PAR from the Association of Government Accountants. This award is indicative of the commitment the FAA has made in reporting financial and program performance and in candidly assessing its results.

The FAA strives to continue to improve its performance and financial accountability and to do its part to help the DOT and the federal government excel in providing high-quality services and products to the taxpayers it serves.

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- ► Get information on airport status & delays
- ► Get Notices to Airmen by airport code
- ► Read Advisory Circulars
- ► Locate a Flight Standards District Office
- ► Report a Wildlife Strike
- Report a Laser Incident





# **FY 2016 Significant Activities**

# Next Generation Air Transportation System (NextGen)

NextGen is the FAA's effort to transform the nation's airspace system through advanced technology to improve safety, increase capacity, and reduce the effects of aviation on the environment. It is the FAA's most ambitious project since establishing our current airspace system, but this transformation is no longer a futuristic aspiration. NextGen is happening now.

The FAA's Data Communications program — or Data Comm — supplements traditional voice communication between air traffic controllers and pilots with digital messages — similar to texting instead of making a telephone call. The switch from voice to digital messages speeds up clearances and enhances safety by reducing the chance of communication errors. In FY 2016, the FAA deployed Data Comm at more than 40 major airports, where controllers are now providing digital departure clearances to equipped aircraft.

The FAA is quickly transitioning from radar surveillance to a satellite-based system through its Automatic Dependent Surveillance-Broadcast (ADS-B) program. The nationwide installation of the ADS-B infrastructure is complete. In 2016, the FAA added ADS-B ground infrastructure along Mexico's Yucatan Peninsula, which is providing increased surveillance coverage over the Gulf of Mexico. This system allows controllers to capture the exact global positioning system (GPS) location, speed and altitude of a growing number of aircraft equipped with ADS-B technology. Our partners in the aviation industry are seeing the benefits of ADS-B, too, and many of them are equipping their aircraft for ADS-B well in advance of the regulatory deadline. For those who have already equipped their aircraft, ADS-B brings free weather and traffic updates to the cockpit, allowing pilots to make more informed decisions.

The FAA continues to make progress on NextGen by working closely with our industry partners through the NextGen Advisory Committee (NAC). The NAC has helped the FAA and its stakeholders establish a common vision for the modernization of the airspace system. For 2016, the FAA and the NAC chose a set of shared priorities for future NextGen investment.

# **Unmanned Aircraft Systems (UAS)**

Safely integrating unmanned aircraft systems into the national airspace is one of the FAA's top priorities. The FAA needs to incorporate unmanned aircraft into the culture of safety and responsibility that has defined the aviation industry, while fostering the innovation that makes this growing industry so vibrant. The FAA has taken a number of steps this year to ensure that both traditional aircraft and unmanned systems can share our airspace safely.

This year the FAA published its first regulation for the routine commercial use of small unmanned aircraft. The regulation allows unmanned aircraft weighing less than 55 pounds to fly in sparsely occupied areas, up to 400 feet high, and up to 100 miles per hour during the day. This rule is designed to allow commercial UAS operations while minimizing risks to other aircraft, as well as people and property on the ground. This rule will replace the need to grant authorization for most small UAS operations on a case by case basis.

The FAA also quickly implemented a streamlined and user-friendly web-based registration process for owners of small UAS. Registration is a statutory requirement for all aircraft, and our registration process helped welcome UAS users into the airspace safely and efficiently. In less than a year, the FAA has registered more than 530,000 hobbyists. Registration gives us a valuable opportunity to educate users about safe flying, and in cases where people aren't following the rules, an important step for enforcement.

In 2016, the FAA established a Drone Advisory Committee to provide the agency with advice on key UAS integration issues and to help identify challenges and prioritize improvements. The FAA asked Intel's Chief Executive Officer Brian Krzanich to chair the committee, and partnered with him in selecting a cross-section of stakeholders representing a wide variety of UAS interests, including industry, research, academia, retail, and technology.

The FAA also established an Unmanned Aircraft Safety Team that includes stakeholders from the drone and aviation industries. The team will analyze safety data to identify and prevent emerging threats that UAS may pose to aircraft, people, and property.

# **Aviation Safety**

This year, the FAA proposed new regulations that would overhaul the airworthiness standards for small general aviation airplanes. Based on industry recommendations, the proposal establishes a new performance-based regulatory structure that uses consensus-based industry standards as a method of compliance. The FAA's proposal aims to facilitate the adoption of safety enhancing technologies in small airplanes while reducing time and cost burdens for the aviation industry and the FAA. The proposal

includes new certification standards that address flight in icy conditions and loss of control accidents, the leading causes of general aviation accidents.

Once finalized, the rule will bolster the general aviation market; remove barriers to FAA certification for emerging technologies, such as electric and hybrid propulsion; and foster global harmonization of aviation standards to ensure a progressive future for our global general aviation community.

# **FY 2016 Performance Highlights**

A summary of results for all 12 of our performance measures is provided on pages 23–25 in the Management's Discussion and Analysis section. Each performance measure is linked to one of the FAA's four strategic priorities.

For 11 out of the 12 measures, year-end data was available at the time of publication, and the FAA achieved 10 of those measures. The results for the FedView Rankings measure are expected in December 2016.

Four of the 12 performance measures support U.S. Department of Transportation (DOT) priorities. As noted below, the FAA successfully achieved all four of the DOT priorities.

- Commercial Aviation Fatal Accidents Rate: With a result
  of 0.6 fatalities per 100 million people on board, the FAA
  achieved its goal of not exceeding 6.7 fatalities per 100
  million people on board.
- General Aviation Fatal Accidents Rate: The year-end result of 0.91 fatal accidents per 100,000 flights hours was below our target of not exceeding 1.02.
- Serious Runway Incursions Rate: The FY 2016 result of 0.360 serious runway incursions per million operations was below the goal of not exceeding 0.395.
- Data Comm: The FAA deployed Data Comm services at 46 airports in FY 2016, exceeding our goal of deploying services at six sites. We completed this work more than two years ahead of schedule.

Detailed information is in the Performance Results section, which begins on page 38.

# **Accountability**

The FAA remains committed to ensuring transparency and accountability to the public while achieving our mission. The performance and financial data in this report are complete, accurate, and provide a comprehensive representation of agency results. Furthermore, for the ninth consecutive year, independent auditors gave our agency an unmodified audit opinion with no material weaknesses on our financial statements. The independent auditors' report is on page 68. Also, I have

issued an unmodified statement of assurance, shown on page 35.

The FY 2016 Performance and Accountability Report, as well as a summary document, can be accessed online at *https://www.faa.gov/about/plans\_reports/#performance*.

# What's Next? Future Challenges and Priorities

While the FAA takes great pride in its achievements this year, it faces many exciting challenges in preparing for the future. Just a few years ago, unmanned aircraft were more of a curiosity than a day-to-day reality, and nobody expected to see commercial rockets that would launch, land, and then be reused. With these advancements come more complex challenges to maintain safety, improve operations, and spur innovation.

How can the FAA ensure that our airspace works for everybody who wants to use it? What additional steps can we take to ensure that other countries improve airspace safety in the places where Americans travel? How can we encourage industry to equip in preparation for the full realization of NextGen benefits? How can the FAA maintain safety without stifling America's proud tradition of innovation? These are the questions of the day, and we are in the midst of a historic time in aviation.

The FAA is confident that by working with our stakeholders and industry partners, by using technology to its full potential, and by regulating smarter, we have an opportunity to preserve America's rich aviation heritage even in the face of new challenges and remain leaders in global aviation for decades to come.

Michael P. Huerta Administrator November 10, 2016



Orville and Wilbur

Wright make first powered, sustained, and controlled flight in a heavier-thanair flying machine to first auto-pilot



The U.S. Postal Service inaugurates airmail service



trans-Atlantic flight

Lindbergh completes first solo, nonstop trans-Atlantic flight



A modern airliner, Boeing 247, flies for the first time



Jet age begins with first flight of Boeing 707 Charles E. Yeager pilots Bell X-1–the



Agency in 1958

Charles A.



first aircraft to exceed the speed of sound in level flight

# **History of Modern Aviation**

Orville Wright made the first sustained powered flight on December 17, 1903, in a plane that he and his brother Wilbur built. This 12-second flight led to the development of the first practical airplane in 1905. The early twentieth century witnessed countless aviation developments as new planes and technologies entered service. During World War I, the airplane proved its effectiveness as a military tool and, with the advent of early airmail service, showed great promise for commercial applications.

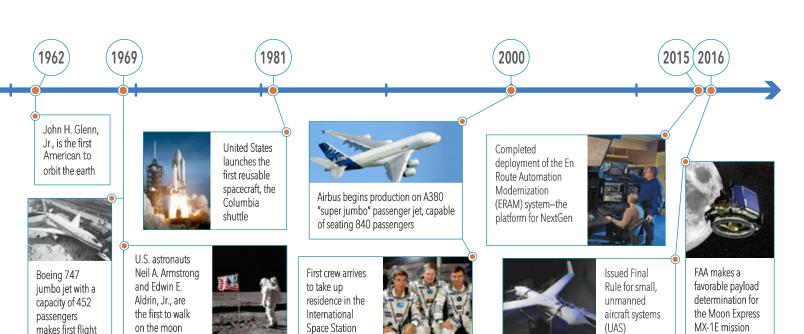
EPARTMENT OF CONNECTION AFRONAUTICS ADMINISTRATE APPROVALUTION AGENCY

ABOVE: The Civil Aeronautics Administation becomes the Federal Aviation Agency on December 31,1958. Photo: Flickr, FAA News

The first lighted airway was a 72-mile strip between Dayton and Columbus, Ohio, constructed by the Army in 1921 using rotating beacons, field floodlights, and flashing markers. As air travel increased, some airport operators began to improve safety by providing an early form of air traffic control. Early controllers stood on the field and waved flags to communicate with pilots. Development of radio navigation in the 1920s was conducted by the Post Office Department, the Navy, the Army, and the Bureau of Standards using radio transmitters on the ground and aircraft receivers with directional antennas on board. The Bureau of Standards, the Army, and other sources developed a radio system during the 1920s that would guide an aircraft along a chosen course. This system required only simple airborne equipment. With the placement of radio beacons along the airways, air commerce in the United States grew, even during the Great Depression of the 1930s.

On June 30, 1956, a Trans World Airlines Super Constellation and a United Airlines DC-7 collided over the Grand Canyon in Arizona killing all 128 people on board the two airplanes. The collision occurred while the aircraft were flying under visual flight rules in uncongested airspace. The accident dramatized the fact that even though U.S. air traffic had more than doubled since the end of World War II, little had been done to mitigate the risk of midair collisions.

Accidents like these spurred passage of the Federal Aviation Act of 1958 that transferred Civil Aeronautics Administration functions to a new independent body: the Federal Aviation Agency (which became the Federal Aviation Administration in 1967).



# **FAA Organization**

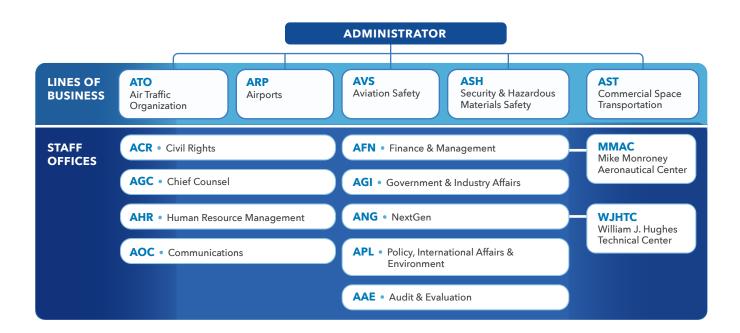
The FAA fulfills its mission through five lines of business that work collaboratively to create, operate, and maintain the national airspace system.

- Air Traffic Organization (ATO). Serves as the operational arm of the FAA. ATO is responsible for providing safe and efficient air navigation services for 30.2 million square miles of airspace. This represents more than 17 percent of the world's airspace and includes all of the United States and large portions of the Atlantic and Pacific Oceans and the Gulf of Mexico. ATO stakeholders include commercial and private aviation users and the military. ATO employees are the service providers the controllers, technicians, engineers and support personnel whose daily efforts keep aircraft moving safely and efficiently through the nation's skies.
- Airports (ARP). Provides leadership in planning and developing a safe and efficient national airport system; is responsible for all programs related to airport safety and inspections, and for standards of airport design, construction, and operation (including international harmonization of airport standards). Through the Airport Improvement Program (AIP), the office awards airport grants and approves passenger facility charge collections. ARP is also responsible for national airport planning and environmental and social requirements. In addition, ARP establishes policies related to airport rates and charges, compliance with grant assurances, and airport privatization.

- ▶ Aviation Safety (AVS). Develops, establishes, administers, and enforces safety standards for all parts of the aviation industry, impacting every facet of domestic and international civil aviation safety. AVS is responsible for the certification of aircraft, airmen (pilots, mechanics, and other designees), and aviation entities (air carriers, charter operators, flying schools, training centers, etc.).
- Security and Hazardous Materials Safety (ASH). Ensures the integrity of those who work in or support the national airspace system, protecting FAA assets from criminal and terrorist acts. ASH strives to increase safety in air transportation by preventing hazardous materials accidents and incidents aboard aircraft and ensures regulatory compliance and investigates aviation-related criminal activity.
- Commercial Space Transportation (AST). Oversees the safety of commercial space transportation activities, which includes the licensing of space launches and reentries and the inspection of space vehicles, launch sites and operations. AST also regulates the U.S. commercial space transportation industry; and encourages, facilitates, and promotes U.S. commercial space transportation.

The FAA has 9 staff offices that support these lines of business and accomplishments of the agency's mission. Key among these staff offices are:

► Finance and Management (AFN). Streamlines agency functions to ensure they are delivered as effectively and



efficiently as possible. AFN improves accountability and enhances operational efficiency through the responsible stewardship of FAA resources. AFN is comprised of the following offices:

- Financial Services
- Acquisitions and Business Services
- Information & Technology Services
- Regions and Center Operations
- Aeronautical Center. The Mike Monroney Aeronautical Center (MMAC) in Oklahoma City, OK, provides services in support of Center activities and agency programs including: logistics, enterprise business, software design, training, course design, acquisition, real property management, personal property, and equipment/management services. The MMAC also trains air traffic controllers and the technicians who repair and maintain airspace supporting systems and equipment in the field. The MMAC provides technological training, national partnerships, logistics support, simulation, and medical research.
- ▶ NextGen (ANG). The NextGen Office provides leadership in planning and developing the Next Generation Air Transportation System. This office coordinates NextGen initiatives, programs and policy development across the FAA. ANG also works with other federal and state government agencies, the FAA's international counterparts, and members of the aviation community to ensure harmonization of NextGen policies and procedures.
  - Technical Center. The William J. Hughes Technical Center, located in Atlantic City, NJ, is the FAA's air transportation laboratory and national scientific test base for research and development, test and evaluation, and verification and validation in air traffic control, communications, surveillance, navigation, traffic flow management, and weather systems. The Technical Center supports advancement in airport and aircraft safety, human factors and separation standards, system development, and cyber security. These laboratories provide a platform to explore, integrate, and evaluate aviation concepts from initial concept to deployment in the airspace system.

For more information about FAA lines of business and staff offices, please visit <a href="www.faa.gov/about/office\_org">www.faa.gov/about/office\_org</a>.





approximately .

million flights every year



FAA-operated or FAA-contracted towers at

more than 500 airports

OPERATES

24

hours
a day
a days a
week

365

days per year

The FAA

OVERSEES

a system that transports



819
million passengers
annually on U.S. carriers

# **Major Accomplishments**

# **NextGen**

NextGen is a modernization effort that is transitioning the national airspace system from ground-based radar to satellite-based navigation, from voice to digital communication, and from point-to-point data to a fully integrated information management system. These initiatives are changing how the FAA manages, navigates, and communicates in our national airspace.

NextGen is happening now. We are using satellite technology to enhance our navigation and surveillance, and digital systems to improve communication and information management. We have replaced much of our automation systems and are adding more capabilities, working toward a transformation of our air traffic operations. Airlines, pilots, and air traffic controllers now have better information and enhanced tools that get passengers to their destinations more quickly while burning less fuel and producing fewer emissions.

The NextGen improvements in place today will produce an estimated \$11.7 billion in benefits over the next fifteen years. Once all planned programs are in place and all aircraft operators are equipped, the FAA predicts NextGen will deliver \$161 billion in savings and benefits through 2030. Benefits include savings in fuel, reduced environmental impact and passenger time-savings.

#### **Data Communications (Data Comm)**

The FAA recently deployed another important NextGen innovation, Data Communications. Data Comm, as we call it, enables controllers and pilots to communicate by sending and receiving digital messages, in addition to voice communications.

Data Comm enables streamlined, two-way data exchanges between controllers and flight crews for clearances, instructions, advisories, flight crew requests, and reports. By exchanging digital messages, air traffic controllers, pilots, and airline operations centers can communicate more clearly and efficiently. Controllers can issue a departure clearance to several aircraft at once, and issue revised clearances as might be necessary during bad weather. We will be able to accomplish faster taxi times and reduced delays, while reducing controller and pilot workload, congestion on the airwaves, and the likelihood of communication errors that can occur from voice exchange.

The FAA began testing Data Comm capabilities and benefits in 2014 at Newark and Memphis with UPS, FedEx, and United Airlines, as well as select international operators. The FAA started

deploying Data Comm in air traffic control towers in late 2015, and in FY 2016, the agency has expanded the program to full operational status at more than 40 towers at major U.S. airports.

#### **ADS-B Rebate Incentive**

On September 19, 2016, our Automatic Dependent Surveillance-Broadcast (ADS-B) rebate website went live, offering a \$500 rebate for General Aviation (GA) aircraft owners who equip their aircraft for ADS-B in advance of the January 1, 2020, mandate. ADS-B is a foundational NextGen technology that transforms aircraft surveillance using satellite-based positioning. It transmits information about a plane's altitude, speed, and location to air traffic control and other nearby aircraft.

The \$500 rebate will help offset some of the cost of purchasing required avionics equipment and encourage aircraft owners to equip sooner. Accelerating equipage is critical to ensure that pilots, manufacturers, and retail facilities have adequate time and capacity to equip aircraft ahead of the January 1, 2020, regulatory deadline. This equipment is needed to fly in the same controlled airspace where transponders are required today. Aircraft that fly only in uncontrolled airspace where no transponders are required, and aircraft without electrical systems, such as balloons and gliders, are exempt from the mandate.

The FAA is issuing 20,000 rebates on a first-come, first-served basis for one year or until all 20,000 rebates are claimed — whichever comes first. The rebate is available only to owners of U.S.-registered, fixed-wing, single-engine piston aircraft that were initially registered before January 1, 2016. The FAA estimates that 160,000 aircraft need to be equipped by the deadline.

# **Challenges**

Modernizing our air traffic operation system while continuing to operate 24/7 and safely handle approximately 68,000 flights a day is always a challenge, but one that the FAA has been managing. Safety is our number one priority, and maintaining this priority is how the FAA will continue to balance current operations with NextGen modernization.

As mentioned above, the entire commercial fleet and many general aviation aircraft must equip with ADS-B over the next three years. ADS-B is a foundational NextGen technology that transforms aircraft surveillance using satellite-based positioning.

# **NextGen Programs**





**AUTOMATIC DEPENDENT SURVEILLANCE-BROADCAST (ADS-B)** is the FAA's satellite-based successor to radar. ADS-B makes use of GPS technology to determine and share precise aircraft location information, and streams additional flight information to the cockpits of aircraft equipped with ADS-B avionics.

http://www.faa.gov/nextgen/programs/adsb/



## COLLABORATIVE AIR TRAFFIC MANAGEMENT TECHNOLOGIES (CATMT) is a

suite of enhancements to the decision-support and data-sharing tools used by air traffic management personnel. These enhancements will enable a more collaborative environment among controllers and operators, improving efficiency in our nation's airspace.

http://www.faa.gov/nextgen/programs/catmt/



DATA COMMUNICATIONS (Data Comm) will enable controllers to send digital instructions and clearances to pilots. Precise visual messages that appear on a cockpit display are loadable into an aircraft's flight computer. Offering reduced opportunities for error, Data Comm will initially supplant voice communications and eventually become the primary means of communication between controllers and flight crews.

http://www.faa.gov/nextgen/programs/datacomm/



NATIONAL AIRSPACE SYSTEM VOICE SYSTEM (NVS) will supplant the FAA's aging analog voice communication systems with state-of-the-art digital technology. NVS will standardize the voice communication infrastructure among FAA facilities, and provide greater flexibility to the air traffic control system. http://www.faa.gov/nextgen/programs/nvs/



**NEXTGEN WEATHER** will help reduce weather impact by producing and delivering tailored aviation weather products via SWIM, help controllers and operators develop reliable flight plans, make better decisions, and improve on-time performance. NextGen Weather is accomplished through collaboration between FAA, NOAA and NASA.

http://www.faa.gov/nextgen/programs/weather/



**SYSTEM WIDE INFORMATION MANAGEMENT (SWIM)** is the information-sharing platform that allows members of the aviation community to access the specific information they need, in the way that they need it, to facilitate an innovative and efficiently run national airspace system. http://www.faa.gov/nextgen/programs/swim/



**TERMINAL FLIGHT DATA MANAGER** (**TFDM**) modernizes air traffic control tower equipment and processes. Using SWIM capabilities, TFDM will share real-time data among controllers, aircraft operators, and airports so they can better stage arrivals and departures for greater efficiency on the airport surface. http://www.faa.gov/air\_traffic/technology/tfdm/ Unless equipage rates increase now, installation shops and suppliers could be overwhelmed as the deadline approaches. If too many operators wait, suppliers and installers will not be able to keep up with demand. This could result in a bottleneck of long wait times and higher installation prices. The FAA's rebate program and ongoing partnerships with commercial airlines and the general aviation community will help the FAA manage this challenge in the coming years.

# **Unmanned Aircraft Systems (UAS)**

Some have called the birth of the unmanned aircraft industry the "Wright Brothers moment" of our time. America has the most complex airspace in the world – and it's the FAA's job to ensure its safety and the safety of the general public. Safely integrating UAS, commonly called "drones," into our airspace is one of the FAA's top priorities. We need to incorporate unmanned aircraft and their operators into our culture of safety and responsibility without stifling innovation and potential for this growing industry. Balancing these needs is essential for our economy and our role as a global aviation leader.

# **Small Unmanned Aircraft Rule (Part 107)**

On August 29th, our first regulation for the routine use of small unmanned aircraft went into effect. The provisions of the new rule, also known as Part 107 after the section of the Code of Federal Regulations in which it is published, are designed to safely harness new innovations, spur job growth, advance critical scientific research, and save lives. It allows unmanned aircraft weighing less than 55 pounds to fly within line-of-sight in certain airspace, up to 400 feet high, and up to 100 miles per hour during the day.



The Part 107 regulation provides new rules for the commercial use of UAS. A person flying a small commercial UAS has to be at least 16 years old, vetted by the Transportation Security Administration, and pass an aeronautical knowledge test to obtain a remote pilot Airman Certificate with a small UAS rating. Alternatively, they can operate small UAS under the direct supervision of someone who does hold the certificate.

Testing centers nationwide can now administer the Aeronautical Knowledge Test required under Part 107. After a UAS operator passes the test, they must complete an FAA Airman Certificate and/or Rating Application to receive a remote pilot certificate at: https://iacra.faa.gov/IACRA/Default.aspx.

The new rule also provides operating limitations designed to minimize risks to other aircraft and to people and property on the ground. For example, the new rule maintains the existing prohibition against operating in a careless or reckless manner. It also bars an operator from allowing any object to be dropped from the UAS.

This rule will provide an important regulatory foundation for allowing additional operations in the future. In FY 2019, we plan to propose a rule on unmanned aircraft operations over people. Under the FAA's current regulation, small UAS may not operate over people who are not directly participating in the operation.

A summary of Part 107 is available here: http://www.faa.gov/uas/media/Part\_107\_Summary.pdf.

#### **FAA Partnerships**

Creating partnerships with a wide range of government, aviation, and technology stakeholders is essential for properly integrating UAS into the national airspace. These partnerships give the FAA essential input for drafting regulations and building consensus for public education campaigns.

On August 31, 2016, we established the Drone Advisory
Committee that will be chaired by Intel CEO Brian Krzanich. This
Committee will help us prioritize our unmanned aircraft integration
activities, including the development of future regulations and
policies. It includes representatives from across the aviation
spectrum, in the form of 35 business, association, municipal
and academic leaders. The committee's first public meeting was
held on September 16, 2016, at the Center for Strategic and
International Studies in Washington, D.C.

The Drone Advisory Committee is modeled on the NextGen Advisory Committee, which regularly consults on the ongoing development of NextGen.

This year, the FAA also established an Unmanned Aircraft Safety Team that includes a wide variety of stakeholders from the drone and aviation industries. Similar to the highly successful Commercial Aviation Safety Team, this group will analyze safety data to identify emerging threats that drones may pose to aircraft, people, and property. They will also develop mitigation strategies to address these threats and prevent future accidents.

The creation of the Unmanned Aircraft Safety Team and the Drone Advisory Committee reflects the importance of this issue to our agency, and the value of our collaboration with stakeholders. We are confident that by working closely with our partners in the aviation industry and the unmanned aircraft community, we will safely integrate UAS into our airspace and serve as a model for UAS integration for the rest of the world.

## **UAS Registration**

This past year, an industry task force developed recommendations that helped the FAA create a drone registration system in just a matter of weeks. By working with our stakeholders, we registered more than 530,000 hobbyists in less than a year. Registration connects a drone with its owner, which helps the FAA communicate with operators and enforce rules in cases of noncompliance with the UAS regulations.

The registration process also gives the FAA a valuable opportunity to educate operators about how to fly their unmanned aircraft safely. We're encouraging operators to download our free smartphone app, B4UFLY, which lets operators know where it's safe and legal to fly a drone. It is available for both Apple and Android devices, and it has already been downloaded more than 100,000 times.

More details on the FAA's efforts to integrate UAS into the national airspace can be found on the following pages and here: www.faa.gov/uas/.



# You must register your unmanned or remote controlled aircraft if ALL of the following are true:

- You fly your aircraft for hobby or recreational purposes
- You fly your aircraft outdoors
- Your aircraft weighs between 0.55 and 55 lbs (Including all payload, such as an on-board camera)

# Online registration is easy and only takes a few minutes. You will need to provide:

- Your full name, home address, and email address

registermyuas.faa.gov

# FAA Progress on Integration of UNMANNED AIRCRAFT SYSTEMS

Working with our industry partners, the FAA has made progress toward safely integrating unmanned aircraft systems (UAS) into our national airspace. Here are the highlights of that progress from the past year.

# Part 107/Small UAS Rule

This year, the FAA published final regulations authorizing routine commercial use of certain small unmanned aircraft (also called drones) in our nation's airspace. The regulations are designed to provide a flexible framework of safety without impeding innovation.

These new rules for non-hobbyist small unmanned aircraft operations pertain to certain commercial uses for drones weighing less than 55 pounds. The regulations are designed to minimize risks to other aircraft and people and property on the ground. They require pilots to keep an unmanned aircraft within visual line of sight. Operations are allowed during daylight and during twilight if the drone has anti-collision lights. The new regulations also address height and speed restrictions and other operational limits, such as prohibiting flights over unprotected people on the ground who aren't directly participating in the drone operation. Drones can be used for transportation of property for compensation or hire provided that the aircraft, including its attached systems, payload and cargo weigh less than 55 pounds; the flight is conducted within visual line of sight and not from a moving vehicle or aircraft; and the flight occurs wholly within the boundaries of a state and certain other limitations.

# **Pathfinder Program**

One of the significant challenges to safe integration of UAS into the nation's airspace is unauthorized UAS flights near airports, which could pose a hazard to manned aircraft. The FAA has seen an increase in reports of small UAS close to airports over the last two years. In July, the FAA expanded its Pathfinder Program by signing cooperative agreements with three companies who will evaluate procedures and technologies designed to identify unauthorized UAS operations in and around airports.

The FAA also supports the Department of Homeland Security in an inter-agency effort to meet the threat of unauthorized UAS to U.S. security. Other participating federal agencies include: the Department of Defense, Department of Energy, U.S. Secret Service and the Federal Bureau of Investigation.

As part of the Pathfinder Program, the FAA is also partnering with three leading private businesses tasked with testing the use of UAS in various applications, and addressing their long-term use and integration into our airspace and daily lives:

- Cable News Network (CNN) is researching how UAS can be deployed in a populated environment for news-gathering purposes. Their research focuses on practicality, safety, appropriate uses, and future applications.
- Precision Hawk, a manufacturer of UAS, is surveying crops in rural areas using unmanned aircraft. They are working on new research and technology that would allow for the safe and appropriate use of UAS flying outside of the pilot's direct line of vision.
- Burlington Northern Santa Fe Railway is exploring the challenges of using UAS to conduct safety inspections and ensure security on their rail network around the country.

The FAA anticipates receiving valuable data from each of these initiatives that may inform future rulemaking.



# **UAS Registry**

Effective December 21, 2015, anyone who owns a small unmanned aircraft weighing between .55 and 55 pounds must register with the FAA's Unmanned Aircraft System (UAS) registry before they fly outdoors. People who do not register could face civil and criminal penalties.

To register a UAS, you must be 13 or older and a U.S. citizen or legal permanent resident. Registration is \$5 and the registration number must be marked on the aircraft.

Registration gives the FAA an opportunity to bring unmanned aircraft operators into the culture of safety and responsibility that defines American aviation. There are rules and regulations that must be followed to operate an unmanned aircraft safely. It will also help us connect an aircraft with its owner when rules aren't being followed.

For information on how to register your drone, please visit http://www.faa.gov/uas/faqs/#reg.

# **Drone Advisory Committee**

The FAA established a Drone Advisory
Committee (DAC) to discuss key issues
and challenges associated with integrating
unmanned aircraft in the world's busiest and
most complicated airspace system.

The members of the DAC represent a wide array of stakeholders, including unmanned aircraft manufacturers and operators, traditional manned aviation groups, labor organizations, radio and navigation equipment manufacturers, airport operators, and state and local officials.

This committee builds on the FAA's strategy to collaborate with the aviation community to safely integrate unmanned aircraft into the nation's airspace.

For more information on UAS, please visit <a href="http://www.faa.gov/uas/">http://www.faa.gov/uas/</a>.

# **Know Before You Fly**

is an educational campaign that provides users with the information and guidance they need to fly safely and responsibly.



# FLYING SAFELY

# **Know Your Surroundings**

Some municipalities prohibit the operation of remote controlled aircraft within public spaces such as parks and school grounds. There are rules of the air you need to know. Always check with local authorities before you fly your drone.

## Recreational or commercial use?

Using a drone in connection with a business is considered to be commercial use. This includes but is not limited to:

- Real estate, wedding or other photography
- Inspection or survey services
- Film or television production

Visit faa.gov/uas for more information

Go to knowbeforeyoufly.org to stay up to date on how and when you can fly your drone.

- If you own a drone, register your drone registermyuas.faa.gov
- Fly below 400 feet
- Avoid flying over groups of people and stadium events
- Never fly near other aircraft or airports
- Keep well away from emergency response efforts such as fires
- Fly within visual line of sight
- Be aware of FAA airspace requirements faa.gov/go/uastfr
- ✓ Do not fly under the influence

Visit **knowbeforeyoufly.org** and **faa.gov/uas** or follow **@FlyResponsibly** and **@FAANews** on twitter for more information.









# **Other Major Accomplishments**

# **Runway Safety Area Program**

The FAA completed the Runway Safety Area (RSA) Improvement Program this year, wrapping up safety improvements at more than 500 airports over the past 15 years.

An RSA refers to an area surrounding a runway that provides safety margins in case an aircraft undershoots, overshoots, or veers off either side of the runway. Such events are known as runway excursions. RSAs help to prevent passenger and air crew injuries, aircraft property damage, and damage to surrounding structures during such events.

There are places where geographic considerations prevent airports from acquiring additional land for a standard RSA. In these cases, there are alternative options for improvement, such as an Engineered Material Arresting System (EMAS). An EMAS is a bed of soft crushable material that is placed at the end of a runway to enhance the RSA. This material safely decelerates planes if they overrun the runway. To date, EMASs have safely stopped 10 overrunning aircraft, saving a total of 245 crew and passengers aboard those flights.

In 2006, Congress mandated that all planned RSA improvements be completed by December 31, 2015. The FAA invested approximately \$3 billion in grant funding to support this effort, and provided about \$200 million to air traffic facilities. By this date, airports across the country successfully completed runway safety

area improvements, including 1,012 runways at 537 airports, greatly increasing safety margins.

As the RSA Safety Program comes to a close, the FAA remains committed to improving safety at the nation's airports. Last summer, using a risk-based approach, the FAA identified airport runway and taxiway design risk factors. This resulted in the FAA unveiling a new safety program called the Runway Incursion Mitigation Program. Risk factors include unclear taxi markings, lighting or signage, or non-standard taxiway layouts that may cause an aircraft, vehicle or person to enter a protected area of the airfield, such as the runway. Over the next 15 years, the FAA will continue to track runway incursions at these locations across the country and measure the effectiveness of mitigation strategies.

# **Unleaded Fuel for General Aviation**

Government and industry are successfully working together to find an unleaded replacement for general aviation's leaded fuels. This year, the FAA announced that it has selected two unleaded fuels for further testing. This announcement moves the general aviation community a step closer to having new fuels that eliminate their reliance on leaded fuel.

The FAA and its industry partners are on track to have unleaded aviation gasoline testing complete and ready to be authorized for use by the general aviation fleet by 2018.

#### **EXTREME DEMANDS ON RUNWAY PAVEMENT**

In 2015, the FAA began using the world's largest heavy vehicle simulator to mimic the actual stress imposed by commercial aircraft to test the durability of runway pavement. Commercial aircraft operate at extremely heavy loads — up to 1.2 million pounds — on tire pressures in excess of 200 pounds per square inch. This is equivalent to 300 automobiles operating on tires inflated to 5 times normal pressure, and requires very durable pavement. The FAA invests over \$30 million annually in safety and pavement related research, including research on how runway pavement materials withstand such extremely heavy loads.





# RUNWAY SAFETY AREA IMPROVEMENT PROGRAM MAKES A PERFECT LANDING

In FY 2016, the FAA completed the Runway Safety Area (RSA) Improvement Program, a 15-year effort that included analyzing more than 1,000 runways at 500-plus commercial service airports to mitigate the risks of an aircraft either overrunning, undershooting, or veering off the side of a runway.

One option for increasing runway safety is to build a 1,000 foot overrun space. But sometimes overrun space is limited by, for example, insufficient land or a body of water at the end of a runway. A successful and revolutionary alternative to help runways meet safety requirements is the development of the Engineered Materials Arresting System (EMAS). EMAS is a lightweight crushable bed of material that rapidly disintegrates when aircraft wheels make contact, slowing the plane down in the process. EMAS technology improves safety benefits in cases where it is not possible to have the standard 1,000-foot overrun. A standard EMAS installation can stop an aircraft that has overrun the runway going approximately 80 miles per hour. To date, EMAS has safely stopped 10 overrunning aircraft, saving 245 crew and passengers aboard these flights.

To support the RSA Program, the FAA spent approximately \$3 billion in Airport Improvement Program funding, and nearly \$350 million in passenger facility charge funding. More information on the RSA Program and EMAS can be found at: <a href="https://www.faa.gov/news/fact\_sheets/news\_story.cfm?newsId=13754">https://www.faa.gov/news/fact\_sheets/news\_story.cfm?newsId=13754</a> and in this video: <a href="http://www.faa.gov/tv/?mediaid=1337">https://www.faa.gov/tv/?mediaid=1337</a>



# **Center of Excellence**

In August 2016, the FAA selected the University of Oklahoma and Embry-Riddle Aeronautical University to lead the new Air Transportation Center of Excellence (COE) for Technical Training and Human Performance. Members of the Center of Excellence all have nationally-recognized collegiate aviation-related education programs and core members also own and operate their own aircraft and airports. The universities will engage senior faculty as well as graduate-level and undergraduate students in their research activities. The COE will conduct research and development on technical training for air traffic controllers, aviation safety inspectors, engineers, pilots and technicians.

This public-private partnership will help the FAA take advantage of advancements in teaching, modeling, immersive human-in-the-loop simulation, and adaptive learning technologies that are standard in other technical workforces. The COE will examine human factors issues such as changes in learner expectations and academic best practices for training a new generation of learners. The center also will research innovative training methods for this new generation. This includes new technologies such as mobile learning, as well as new ways of collecting and managing training data. We expect this team will help us educate and train aviation professionals well into the future.



FAA researchers in a laboratory at the William J. Hughes Technical Center simulate uplinking turbulence data and associated graphics to an aircraft cockpit simulator. Photo: FAA

# **Performance Highlights**

The FAA is charged with promoting the safety and efficiency of the nation's aviation system. We maintain the system's integrity and reliability through our broad authority to enforce safety regulations and conduct oversight of the civil aviation industry. Our strategic plans, annual business plans, human capital plans, program evaluations, annual PARs, and constant reevaluation of our efforts create a recurring cycle of planning, program execution, measurement, verification, and reporting. We have created a strong link between resources and performance. This link helps the FAA focus on accomplishing its priorities while taking into account their costs and benefits

# **Managing Performance**

We manage organizational performance through a four-step process that is based on best practices borrowed from several private and public-sector organizations:

- Set Goals
- ▶ Plan, Work, and Budget
- Monitor Work
- Assess Results

Each year, we improve on this strategy through adaptation and enhancements of technologies that support the process.

#### **Set Goals**

The first step in the performance management process includes consulting with management, employees, and stakeholders to identify areas to target for improvement. These areas include near-term priorities and long-standing management challenges. Goals, performance measures, targets, and initiatives are laid out in the business plans developed by each of the FAA's lines of business and staff offices.

## Plan, Work, and Budget

The second step in evaluating our performance focuses on planning, which begins with reviewing the critical activities and resources required to achieve our goals. Budget formulation involves a series of steps that the FAA takes to determine where a program or activity stands at present, where it is going (i.e., reasonable expectations for progress), and what else could be done (i.e., alternative approaches) to achieve stated objectives. One of the basic objectives of the budget formulation process is

to ensure that decision-makers have the information they need to determine how best to allocate resources to achieve goals.

Our complete FY 2016 Congressional Justification can be found at: https://www.transportation.gov/mission/budget/faa-fy-2016-budget-estimates.

The FAA also has a section in the DOT-prepared Budget Highlights Fiscal Year 2016. This document can be found at: https://cms.dot.gov/sites/dot.gov/files/docs/FY2016-DOT-BudgetHighlights-508.pdf.

In addition, our strategic initiatives and FY 2016 business plans for all FAA organizations are available at <a href="http://www.faa.gov/about/plans\_reports/#business\_plans">http://www.faa.gov/about/plans\_reports/#business\_plans</a>.

#### **Monitor Work**

Monitoring occurs in the course of the various performance management activities that our executives and employees participate in each month.

The agency's overall governance model was revised in FY 2013 to streamline decision-making at the executive level. The revised model includes two groups—an Executive Council and a Business Council.

The Executive Council provides oversight for agency-wide strategic direction and decision making for critical priorities. This includes setting short and long-term agency goals; reviewing and advising on annual budgets and financial decisions; and guiding and monitoring all activities conducted by the FAA. The Executive Council is the highest deliberative body in the agency and the primary forum to advise and assist the Administrator. The Administrator is not bound by the recommendations of the Council.

The Business Council is the primary forum to advise and assist the Deputy Administrator in making decisions on significant internal (e.g., workforce, IT, and non-national airspace system facilities) issues facing the agency.

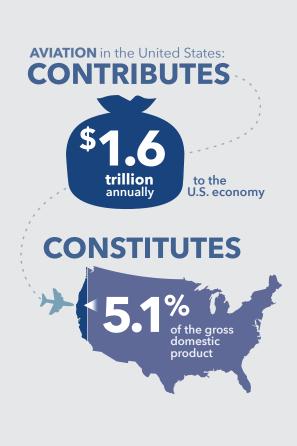
The two councils create a more transparent decision-making process, one with clear roles; they clarify decisions across the FAA and clearly communicate decisions by means of decision memos.

#### **Assess Results**

This is the final, but critically important step in the performance management process. Using performance information, the agency looks for ways to learn from past performance and improve outcomes.







Performance measures and targets support our mission to provide the American public with a safe and efficient aviation system. We have streamlined our strategic focus over the past several years. As our strategic management processes continue to mature and the focus becomes sharper, the number and mix of performance targets will shift. Targets are reviewed on a yearly basis to ensure that we are on track to meet future challenges.

## **Performance Goals**

As previously discussed, to help better prepare our nation's airspace system for forecasted growth and future changes in the industry, the Administrator has outlined key strategic priorities to meet America's growing reliance on air travel. All of the FAA's performance measures are linked to one of the four priorities.

#### ► Make aviation safer and smarter

Safety is the backbone of what the FAA does. It must build on safety management principles to proactively address emerging safety risks. The FAA wants to make smarter, system-level, risk-based decisions. This year, the FAA achieved all six of these goals. For a complete discussion of safety measures, see page 40.

▶ Deliver benefits through technology and infrastructure

The FAA must deliver the benefits of NextGen. This involves keeping NextGen on schedule and on budget, and assuring delivery of benefits to users. This year, the FAA was successful in achieving four out of five of its goals related to technology and infrastructure. For more information, please see page 49.

#### ► Enhance global leadership

It is important for the FAA to play a leadership role globally to improve safety, air traffic efficiency, and environmental sustainability around the world. The FAA will do this through shaping global aviation standards and enhancing collaboration and harmonization with other countries. A discussion of this strategic priority is provided on page 56.

#### ▶ Empower and innovate with the FAA's people

It is critical that the FAA prepares for the future by improving how it recruits and trains its workforce. The FAA needs the leadership and the technical and functional skills to ensure the U.S. has the world's safest and most productive aviation sector. Results for the performance measure related to this strategic priority, Fed-View Rankings, will be available in December 2016. A discussion of this measure begins on page 57.

# **Performance At A Glance**

A summary of our FY 2016 performance to date is reflected in the following tables and discussed in detail in the Performance Results section beginning on page 38. The measures are grouped below according to FAA strategic priority, with the exception of the Enhanced Global Leadership priority area, for which metrics are still under development. A complete discussion of the methods used to validate our reported performance information begins on page 60.

# STRATEGIC PRIORITY: MAKE AVIATION SAFER AND SMARTER

STRATEGIC OBJECTIVE: Build on safety management principles to proactively address emerging safety risk by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions

Performance Measure	FY 2013 Results	FY 2014 Results	FY 2015 Results	FY 2016 Target	FY 2016 Results	FY 2016 Status	FY 2017 Target
Commercial Air Carrier Fatality Rate* In FY 2016, the commercial air carrier fatality rate will not exceed 6.7 fatalities per 100 million people on board.	1.1	0.6	0.11	6.7	0.62	1	6.4
Serious Runway Incursions Rate* Reduce Category A & B (most serious) runway incursions to a rate of no more than .395 per million operations.	0.220	0.282	0.302	0.395	0.360 <sup>3</sup>	1	0.395
System Risk Event Rate Limit the rate of the most serious losses of standard separation to 20 or fewer for every thousand (.02) losses of standard separation within the National Airspace System	5.66	3.44	2.62	20	2.87³	1	10
IT Risk Management and Information Systems Security Address 80% of high value risks within 30 days. Continue Cybersecurity Steering Committee oversight to assure consistent risk acceptance decisions. Visualize vulnerabilities on all IP based systems.	Performance measure redefined in FY 2015	Performance measure redefined in FY 2015	100%	80%	100%	1	80%
General Aviation Fatal Accident Rate*  Reduce the general aviation fatal accident rate to no more than 1.02 fatal accidents per 100,000 flight hours.	1.11	1.09	0.99 <sup>1</sup>	1.02	0.912	1	1.01
Commercial Space Launch Accidents  No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.	0	0	0	0	0	1	0

<sup>\*</sup> Agency Priority Goal indicator

1 Preliminary estimate until final result can be confirmed by NTSB in March 2017. We do not expect any change in the final result to be significant enough to change the year-end status of achieving the result.

2 Preliminary estimate until final result can be confirmed by NTSB in March 2018. We do not expect any change in the final result to be significant enough to change the year-end status of achieving the result.

3 Preliminary estimate until the final result becomes available in January 2017. We do not expect any change in the final result to be significant enough to change the year-end status of achieving the result.

✓ Target met

★ Target not met

# William J. Hughes TECHNICAL CENTER

The FAA William J. Hughes Technical Center (Technical Center) in Atlantic City, New Jersey, is the nation's premier air transportation system laboratory. Its highly technical and diverse workforce conducts tests and evaluations, verifications, and validations, and develops scientific solutions to current and future air transportation safety challenges by conducting applied research and development. It also provides the gateway for updates and improvements to our nation's airspace systems, and operational sustainment of those systems. The FAA's organization chart on page 10 shows that the Technical Center is part of the FAA's NextGen staff office. Here are some recent accomplishments and focus areas:

▶ The Technical Center published research results of extensive fire tests on bulk shipment of lithium ion batteries. As a result of this work, 30 airlines voluntarily ceased shipping these batteries. The Technical Center also published more than 40 research reports in areas such as aircraft fire safety, software and systems, structures and propulsion, airport technology, and human factors. Human factors refer to the study of how humans behave physically and psychologically in relation to particular environments.

► The Technical Center is partnering with the Department of Homeland Security (DHS) on a research project that includes developing a process that identifies system security vulnerabilities, threats, and safety risks, including risk-mitigation information. These activities support the FAA's development of aviation policies, regulations, and training requirements to ensure flight safety and the security of aircraft network systems from cyberattacks.

▶ One of 44 simulations conducted this year was a study of weather technology in the cockpit. This simulation studied general aviation pilot cognition of weather information on enhanced cockpit displays and how it relates to information needed to safely avoid adverse weather.

➤ The Technical Center laboratories also continue to support key programs foundational to NextGen, such as ERAM, and future NextGen systems and capabilities. See page 12 for more information on NextGen programs

The Technical Center is also working to better understand evolving technologies and their impact on the future of aviation. Examples include:

autonomy in software/machines: Software and mechanical systems on airplanes are becoming increasingly complex and sophisticated. They are evolving from controlled aircraft functions to integrated electronics. New systems aid the pilot in flying the aircraft and air traffic controllers in handling millions of air traffic movements. Even though humans will be in ultimate command, these new systems will become increasingly more autonomous—with some even having the ability to make decisions. We must ensure that these new systems are able to adapt to new situations and environments, and are resistant to design defects, missing or corrupt data, and deliberate attacks. Our certification and oversight process must ensure that these new systems operate properly in safety-critical situations as the technology advances.

ADDITIVE MANUFACTURING: Aircraft and component manufacturers are beginning to use a process called additive manufacturing to produce complex parts. Unlike processes that mill or mold parts that need to be assembled, additive manufacturing allows a manufacturer to build complex pieces one thin layer at a time. Additive manufacturing can be more cost effective due to less waste, lighter finished products, and less labor time. The FAA's certification and oversight process must adapt to ensure that parts made in this manner perform as well or better than those manufactured using traditional methods.



# STRATEGIC PRIORITY: DELIVER BENEFITS THROUGH TECHNOLOGY AND INFRASTRUCTURE

• STRATEGIC OBJECTIVE: Lay the foundation for the national airspace system of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services.

Performance Measure	FY 2013 Results	FY 2014 Results	FY 2015 Results	FY 2016 Target	FY 2016 Results	FY 2016 Status	FY 2017 Target
Data Comm*  By the end of FY2016, Data Comm will be implemented at cumulative total of 6 Airport Traffic Control Towers (ATCTs).	New Performance measure in FY 2016	New Performance measure in FY 2016	New Performance measure in FY 2016	6	46	1	10
Major System Investments In FY 2016, maintain 90 percent of major system investments within 10 percent variance of current acquisition program baseline (APB) total budget at completion.	90%	95%	100%	90%	95.5%	1	90%
National Airspace System Energy Efficiency Improve aviation fuel efficiency by 22 percent relative to the calendar year 2000 baseline.	-21.66%	-22.40%	-24.37%	-22%	-24.84%	1	N/A¹
Noise Exposure  Reduce the number of people exposed to significant aircraft noise to less than 328,000 in calendar year 2016.	321, 000	321, 000	340, 000	328,000	343,000	×	315,000
Unmodified Audit Opinion Obtain an unmodified opinion with no material weakness on the agency's financial statements (Unmodified Audit Opinion with no material weakness).	Unmodified audit opinion w/ no material weakness	1	Unmodified audit opinion w/ no material weakness				
* Agency Priority Goal indicator		1				✓ Target	<b>✗</b> Target

\* Agency Priority Goal indicator

1 In FY 2017, the FAA expects to replace this measure with a measure related to carbon emissions.

✓ Target 
 met 
 not met

not met

met

# STRATEGIC PRIORITY: ENHANCE GLOBAL LEADERSHIP

STRATEGIC OBJECTIVE: Improve safety, air traffic efficiency, and environmental sustainability across the globe
 through an integrated, data driven approach that change global standards, apparence

through an integrated, data-driven approach that shapes global standards, enhances collaboration and harmonization, and better targets FAA resources and efforts.

## STRATEGIC PRIORITY: EMPOWER AND INNOVATE WITH THE FAA'S PEOPLE

STRATEGIC OBJECTIVE: Prepare FAA's human capital for the future by identifying, recruiting, and training
a workforce with the leadership, technical, and functional skills to ensure the

United States has the world's safest and most productive aviation sector.

Performance Measure	FY 2013 Results	FY 2014 Results	FY 2015 Results	FY 2016 Target	FY 2016 Results	FY 2016 Status	FY 2017 Target
FedView Rankings "Best Places to Work"  The FAA is ranked in the top 31 percent of federal agencies in the Best Places to Work FedView rankings.	40%	50%	43%	31%	TBD¹	TBD¹	28%
1 Results will not be available until December 2016.						✓ Target	<b>≭</b> Target

# Mike Monroney AERONAUTICAL CENTER (MMAC)

AERONAUT

The Mike Monroney Aeronautical Center (MMAC) in Oklahoma City, OK, provides logistics, enterprise business services, software design, training, course design, and acquisition services. MMAC also trains air traffic controllers and technicians. The FAA organization chart on page 10 shows that MMAC is part of the FAA's Office of Finance and Management. Here are some of MMAC's recent accomplishments:

FAA Academy Flight Program Implements
Safety Management - In June 2016, the FAA's
Safety Management System Program Office officially
recognized the FAA Academy's implementation
of a Safety Management System (SMS) for its
Flight Program operations. SMS is the practice
of incorporating safety in decision making
throughout all levels of an organization and
is required for most U.S. commercial airlines.
Implementing an SMS for the Academy's
Flight Program, which trains Aviation Safety
Inspectors on how to certify pilots, offers a
model for general aviation operators to follow. It
demonstrates that, although voluntary, an SMS

can be affordably scaled down to fit their smaller

operating environment.

MMAC recognized for its support of the DOT
Sustainability Program - MMAC continues to be a
leader in implementing FAA Greening Initiatives. MMAC
was selected as the winner of the 2016 DOT Sustainability
Achievement Award in the category of Leaner, Cleaner, and
Greener, as well as the Sustainable Business Processes category.
These awards were based on MMAC's outstanding recycling
program and energy conservation. MMAC diverted 2,831 tons of
solid waste and 781 tons of construction/demolition waste from
landfills. This is a 58% diversion rate for solid waste and a 72%
diversion rate for construction/demolition waste. These exceeded
the 50% diversion rates mandated in Executive Order 13693
"Planning for Federal Sustainability in the Next Decade."

#### **Global Recognition for FAA Academy Safety Training -**

The FAA Academy was certified by the International Civil Aviation Organization (ICAO) as a Regional Training Center of Excellence (RTCE) in May 2016. The FAA Academy is one of the first training centers to be certified as a RTCE, and the only one in North America. As a RTCE, the FAA Academy is recognized as a leader in the development and delivery of competency-based ICAO training courses in the authorized areas of flight safety and safety management. This designation will enhance the FAA's ability to improve aviation safety and influence safety standards globally.



Clear Dividends - The FAA Logistics Center leveraged its site overhaul and repair expertise to take on the installation of air traffic control tower cab glass. This service had always been out-sourced and endured long wait times, increased repair costs, inconsistent quality, and safety concerns. FAA technicians were trained to install 6ftx8ft one-inch-thick pieces of glass weighing more than 800 pounds. This glass is installed at tower cabs up to 300 feet tall. The successful, timely, safer, and more cost effective installation prompted FAA to use the FAA Logistics Center's services for site surveys and installations at various towers in FY2016.



# Alignment of FAA Costs and Strategic Priorities

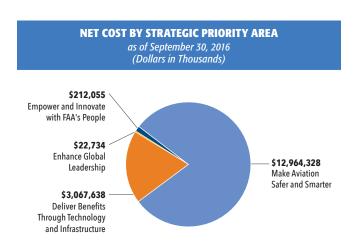
The FAA uses a cost accounting system to track and summarize costs by organizational unit and project. This enables the FAA to evaluate whether its spending is in alignment with the agency's four strategic priorities.

At the beginning of each project, the FAA determines the degree to which the project will contribute to one or more of the strategic priorities. The FAA then allocates actual project costs to the strategic priorities that are supported by the project. Because the FAA also routinely accumulates costs by organizational unit, it is then able to assign total net costs among its five lines of business and the combined staff offices, by strategic priority.

The FAA's total net cost of \$16.3 billion was allocated to its four strategic priorities, as described below and as shown in the Net Cost by Strategic Priority Area chart on this page, and in Note 11 of the financial statements on page 97.

Make aviation safer and smarter. Almost \$13 billion, or approximately 80 percent of total net cost, was devoted to the priority of ensuring the safety of the nation's airspace.

- ➤ The Air Traffic Organization (ATO) spent approximately \$9.5 billion, largely to maintain the safe separation of aircraft in the air and on the ground.
- ▶ The Office of Airports (ARP) directed \$1.6 billion to establish safe airport infrastructure.
- The Aviation Safety Organization (AVS) spent just over \$1.4 billion on its programs to regulate and certify aircraft, pilots, and airlines, directly supporting the safety of commercial and general aviation.
- ► The Security and Hazardous Materials Safety (ASH) spent almost \$112 million on its programs to ensure critical infrastructure protection, emergency operations, contingency planning, and the safe transportation of hazardous materials in air commerce.
- ► Collectively, the Office of Commercial Space Transportation (AST), other FAA staff offices, and other programs spent about \$282 million to further support the agency's safety mission.



## Deliver benefits through technology and infrastructure.

Approximately \$3.1 billion, or about 19 percent of total net costs, was assigned to expanding the capacity of the national airspace system, particularly through the pursuit of programs contributing to the NextGen initiative.

- ► The ATO spent more than \$1.5 billion, largely to finance its facilities and equipment projects.
- ▶ ARP spent almost \$1.5 billion to enhance the capacity of the country's airports through runway projects and other efforts.

Enhance global leadership. As a whole, the FAA committed approximately \$23 million to strengthening its international leadership role. These efforts included programs aimed at reducing fatal accidents around the world. Funding for training and technical assistance helped promote safety standards, as well.

Empower and innovate with the FAA's people. Approximately \$212 million supported this strategic priority, to which nearly all the lines of business and staff offices contributed. This strategic priority entails preparing the FAA's human capital for the future by identifying, recruiting, and training a workforce with the leadership, technical and functional skills to ensure the United States has the world's safest and most productive aviation sector.

# **Financial Highlights**

# Discussion and Analysis of the Financial Statements

The FAA prepares annual financial statements in conformity with accounting principles generally accepted in the United States. The financial statements are subject to an independent audit to ensure that they are free from material misstatement and that they can be used to assess the FAA's performance.

#### **FY 2016 Financial Statements Audit**

The Chief Financial Officers Act of 1990 (Public Law 101–576), as amended by the Government Management Reform Act of 1994, requires that financial statements be prepared by certain agencies and commercial-like activities of the federal government and that the statements be audited in accordance with Generally Accepted Government Auditing Standards. The FAA is required to prepare its own financial statements under OMB Bulletin No. 15–02, Audit Requirements for Federal Financial Statements. DOT's Office of Inspector General (OIG) is statutorily responsible for the manner in which the audit of the FAA's financial statements is conducted. The OIG selected KPMG LLP, an independent certified public accounting firm, to audit the FAA's FY 2016 financial statements.

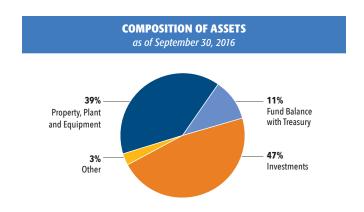
KPMG LLP has rendered an unmodified audit opinion on the FAA's FY 2016 financial statements.

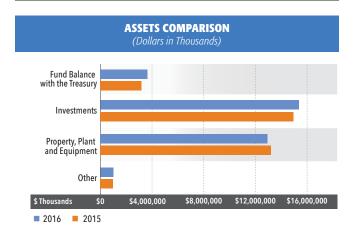
# **Understanding the Financial Statements**

The FAA's Consolidated Balance Sheets, Statements of Net Cost, Changes in Net Position, and Combined Statements of Budgetary Resources, have been prepared to report the financial position and results of operations of FAA, pursuant to the requirements of the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. The following section provides a brief description of (a) the nature of each financial statement and its relevance to FAA, (b) significant fluctuations from FY 2015 to FY 2016, and (c) certain significant balances, where necessary, to help clarify their link to the FAA's operations.

## **Balance Sheet**

The balance sheet presents the amounts available for use by FAA (assets) against the amounts owed (liabilities) and amounts that comprise the difference (net position).





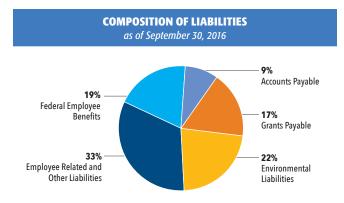
#### Assets

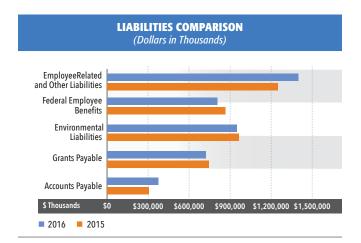
Total assets were \$32.9 billion as of September 30, 2016. The FAA's assets are the resources available to pay liabilities or satisfy future service needs. The *Composition of Assets* chart depicts major categories of assets as a percentage of total assets.

The Assets Comparison chart presents comparisons of major asset balances as of September 30, 2015 and 2016.

Fund balance with Treasury (FBWT) represents 11 percent of the FAA's current period assets and consists of funding available through the Department of Treasury accounts from which the FAA is authorized to make expenditures to pay liabilities. It also includes passenger ticket and other excise taxes deposited to the Airport and Airway Trust Fund (AATF), but not yet invested. Fund balance with Treasury increased from \$3.2 billion to \$3.7 billion.

At \$15.4 billion, *Investments* represent 47 percent of the FAA's current period assets, and are derived from the collection of passenger ticket and other excise taxes deposited semi-monthly to the AATF.





The deposited taxes are invested within several business days, thus transitioning the asset classification from fund balance with Treasury to investments. A portion of the investment balances also include premiums collected from the Aviation Insurance Program until the premium portion of the program expired, as discussed in Note 1B on page 81. These investments are redeemed, as needed, to finance the FAA's daily operations to the extent authorized by Congress, and to pay potential insurance claims. Investment balances were relatively unchanged on a comparative basis.

At \$12.9 billion, *General property, plant, and equipment, net* (PP&E) represents 39 percent of the FAA's assets as of September 30, 2016, and primarily comprises construction in progress related to the development of the national airspace system assets, and capitalized real and personal property. There was a decrease of \$267.7 million in the total composition of PP&E, as retirements, disposals, and depreciation exceeded purchases of equipment and additions to construction in progress through the normal course of business.

#### **Liabilities**

As of September 30, 2016, the FAA reported liabilities of \$4.3 billion. Liabilities are probable and measurable future outflows of resources arising from past transactions or events. The *Composition of Liabilities* chart depicts the FAA's major categories of liabilities as a percentage of total liabilities.

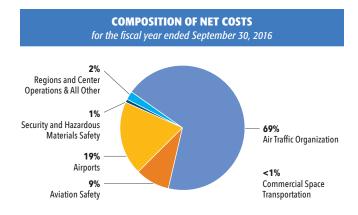
The *Liabilities Comparison* chart presents comparisons of major liability balances between September 30, 2015 and September 30, 2016. Below is a discussion of the major categories.

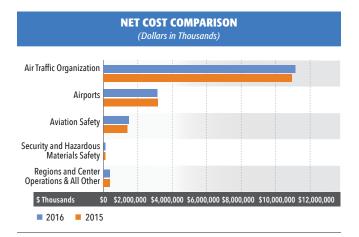
At \$1.4 billion, Employee related and other liabilities represent 33 percent of the FAA's total liabilities. These liabilities increased by \$143.4 million as of September 30, 2016 and are comprised mainly of \$285.3 million in advances received, \$179.0 million in Federal Employee's Compensation Act payable, \$297.3 million in accrued payroll and benefits, \$468.7 million in accrued leave and benefits, \$54.5 million in legal claims liability and \$61.3 million in capital lease liability.

At \$808.7 million, Federal employee benefits represent 19 percent of the FAA's current year liabilities, and consist of the FAA's expected liability for death, disability, and medical costs for approved workers compensation cases, plus a component for incurred but not reported claims. The Department of Labor calculates the liability for the DOT, and the DOT attributes a proportionate amount to the FAA based upon actual workers' compensation payments to FAA employees over the preceding four years. This liability is updated on an annual basis at year end.

Environmental liabilities represent 22 percent of the FAA's total liabilities and decreased slightly to \$950.2 million as of September 30, 2016 compared with \$962.2 million a year earlier. Environmental liabilities include a component for remediation of known contaminated sites that decreased by \$160 million due to the removal of future funding estimates for sites that either achieved regulatory site closure or were determined not to require funding for future phases due to investigative results. The other component of environmental liabilities includes the estimated costs for future facility decommissioning. This components' costs increased by \$148 million due to additional facilities, which were identified during FY 2016, that will require cleanup upon decommissioning.

The FAA's grants payable are estimated amounts incurred, but not yet claimed by Airport Improvement Program grant recipients and represent 17 percent of liabilities. Grants payable decreased slightly by \$19.7 million. Accounts payable increased \$69.0 million and





are amounts the FAA owes to other entities for unpaid goods and services received.

#### Statement of Net Cost

The Statement of Net Cost presents the cost of operating the FAA's programs. The gross expense, less any earned revenue, for each FAA program represents the net cost of specific program operations. The FAA has used its cost accounting system to prepare the annual Statement of Net Cost since FY 1999. In contrast to the budgetary basis of accounting applicable to the Statement of Budgetary Resources discussed on page 31, costs reported in the Statement of Net Cost are reported on an accrual accounting basis. Under the accrual method, revenues are recognized when earned, and expenses are recognized when a liability is incurred by the FAA (typically due to the receipt of goods or services), without regard to receipt or payment of cash.

For the fiscal years ended September 30, 2016 and September 30, 2015, FAA's net costs were \$16.3 billion and \$16.0 billion,

respectively. The *Composition of Net Costs* chart illustrates the distribution of costs among the FAA's lines of business.

The *Net Cost Comparison* chart compares net costs for the fiscal years ended September 30, 2015 and September 30, 2016.

With a net cost of \$11.2 billion, the *Air Traffic Organization* is the FAA's largest line of business, comprising 69 percent of total net costs. The Air Traffic Organization's net costs increased by \$223.7 million, on a comparative basis, primarily from increases in costs for labor and benefits, telecommunications and utilities, and other cost allocations offset by decreases in contractor services and supplies and materials.

The FAA's second largest line of business is *Airports* with a net cost of \$3.1 billion for the fiscal year ended September 30, 2016, which is 19 percent of the FAA's total net costs. Airports net costs are comprised primarily of Stewardship Investments from the Airport Improvement Program (AIP). The Stewardship Investments are made through grants to airport authorities, local and state governments, and metropolitan planning authorities for airport facilities throughout the United States and its territories and was just under \$3.0 billion for FY 2016. Airports' net costs also include \$165.2 million to administer the Airport Improvement Program, as well as overall airport safety. Year-over-year net costs decreased slightly, by \$31.9 million, primarily due to a decrease in the Airport Improvement Program Stewardship Investments.

The \$1.5 billion of net cost for *Aviation Safety* represents 9 percent of the FAA's total net costs, while *Region and Center Operations* and *All Other Programs* comprise 2 percent of total net costs. The FAA has disaggregated the *Security and Hazardous Material Safety* organization from the *Regions and Center Operations and All Other Programs* grouping to highlight this important function within the agency. Security and Hazardous Material Safety's net cost represents 1 percent of total net costs.

## Statement of Changes in Net Position

The Statement of Changes in Net Position presents those accounting items that caused the net position section of the balance sheet to change from the beginning to the end of the reporting period. Various financing sources increase net position. These financing sources include appropriations received and non-exchange revenue, such as excise taxes and imputed financing from costs paid on the FAA's behalf by other federal agencies. The agency's net cost of operations and net transfers to other federal agencies serve to reduce net position.

The FAA's *Cumulative Results of Operations* for the fiscal year ended September 30, 2016, increased by \$496.6 million primarily due to a combination of financing sources of \$1.9 billion from appropriations used, non-exchange revenue of \$14.7 billion, imputed financing of \$390.1 million, and donations of property of \$38.8 million offset by transfers out of \$284.1 million and net costs of \$16.3 billion. Unexpended appropriations increased slightly by \$17.8 million.

# **Statement of Budgetary Resources**

This statement provides information on the budgetary resources available to the FAA for the fiscal years ended September 30, 2016 and September 30, 2015, and the status of those budgetary resources.

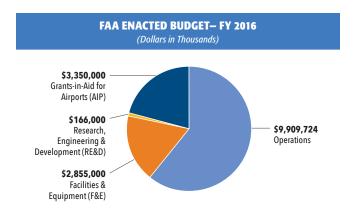
The FAA's *Total budgetary resources* result from Congressional appropriations, which include unobligated amounts carried forward from prior years and contract authority used for the Airport Improvement Program grant awards. *Total budgetary resources* were \$29.1 billion for the fiscal year ended September 30, 2016 and \$29.3 billion for the fiscal year ended September 30, 2015.

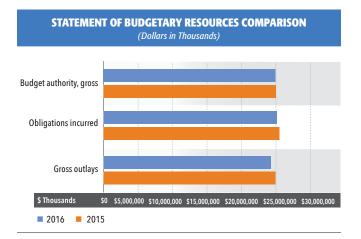
The *Unapportioned* category of budgetary resources represents resources that are not available until apportioned by the Office of Management and Budget. For the fiscal year ended September 30, 2016, the *Unapportioned* balance was \$2.1 billion showing a slight increase of \$35.3 million over the September 30, 2015 ending balance.

Budget authority, gross is the authority provided to the FAA by law to enter into obligations that will result in outlays of federal funds. Obligations incurred result from an order placed, contract awarded, service received, or similar transaction, which will require payments during the same or a future period. Obligations incurred are sourced from current year budget authority and unobligated balances carried forward. Gross outlays reflect the actual cash disbursed by the Treasury for the FAA's obligations. The FAA's gross budget authority remained constant at approximately \$25.0 billion for the fiscal years ended September 30, 2016 and September 30, 2015. New obligations and upward adjustments decreased \$362.5 million to \$25.1 billion. Gross outlays also decreased by \$705.3 million to \$24.3 billion.

#### **Stewardship Investments**

Stewardship investments are substantial investments made by the FAA for the benefit of the nation, but do not result in physical ownership of assets by the FAA. When incurred, these amounts are





treated as expenses in the Consolidated Statements of Net Cost. Our Required Supplementary Stewardship Information includes disclosure of stewardship investments over the last five years and can be found on page 109. These are disclosures of Airport Improvement Program grants by state/territory, and research and development investments. The FAA recognizes the grants expense as the recipient accomplishes the improvement work.

The FAA's research and development expenses increased in FY 2016 by \$56.2 million. One area of focus this year was to develop engine and fuel test methods to evaluate the performance, safety, durability, and operability of alternative fuel candidates for general aviation aircraft. Another area of focus was the development of the *Facility Risk Assessment Tool* to assess, rank, and track air traffic facility safety.

# **Limitations of the Financial Statements**

The FAA has prepared its financial statements to report its financial position and results of operations, pursuant to the requirements



# FAA LAUNCHES THE GOT DATA? ACCESS INITIATIVE

In 2016, the FAA launched the External Data Access Initiative to increase and improve our stakeholders' access to FAA data. Improving the type and amount of data that is available and easily accessible to our stakeholders will spur innovation, provide better opportunities for the development of new applications and services, and ultimately, advance the safety and efficiency of the aviation industry.

The FAA is dedicated to providing the public with a wide variety of information in quantity and formats best suited for the audience. The first phase of the initiative is primarily intended for pilots, manufacturers, and developers and focuses on the release of FAA aeronautical data, including for example, data used to create digital navigational charts. Subsequent phases will focus on the release of FAA data from other domains including safety and operational air traffic data. This Initiative underscores the importance of government and industry collaboration to improve processes and advance aviation.

The FAA's aeronautical data and products can be accessed on the web at <code>www.faa.gov/Got\_Data/</code>. This internet web site also offers the opportunity to subscribe to data updates, connect and collaborate with other parties interested in FAA aeronautical data, and ask a question.

We've got the data, you've got ideas. Let's bring them together.



of the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994.

While the FAA statements have been prepared from its books and records in accordance with the formats prescribed by the OMB, the statements are in addition to the financial reports used to monitor and control budgetary resources, which are prepared from the same books and records.

These statements should be read with the understanding that they are for a component of the United States Government, a sovereign entity. Liabilities not covered by budgetary resources cannot be liquidated without the enactment of an appropriation by Congress, and payment of all liabilities, other than for contracts, can be abrogated by the federal government.

# **Budgetary Integrity: FAA Resources and How They Are Used**

The FAA receives budget authority to obligate and expend funds from both the Department of the Treasury's General Fund and the Airport and Airway Trust Fund (AATF). Created by the Airport and Airway Revenue Act of 1970, the AATF is supported by excise taxes and earned interest. It pays for investments in the airport and airway system, and a majority of the FAA's operating costs. In FY 2016, the AATF paid for approximately 88 percent of our enacted budget authority per the Consolidated Appropriations Act, 2016 (P.L. 114-113).

Aviation excise taxes, which include taxes on domestic passenger tickets, freight waybills, general and commercial aviation fuel, and international departures and arrivals, are deposited into the AATF. The Department of the Treasury, which administers the AATF, invests those funds in government securities. Interest earned is also deposited into the AATF. Balances are withdrawn from the AATF as needed to meet cash disbursement needs.

The chart on page 31, FAA Enacted Budget—FY 2016, summarizes the budget enacted by Congress for the FAA. The FY 2016 enacted budget of \$16.3 billion was an increase of \$433 million (2.7 percent) over the FY 2015 enacted level. The FAA requests and receives its funding in four primary accounts:

- Operations
- ► Grants-in-Aid for Airports (AIP)
- ► Facilities and Equipment (F&E)
- ▶ Research, Engineering, and Development (RE&D)

The largest, Operations, is supported by both the general fund and the AATF. In FY 2016, the AATF supported 80 percent of the funding for the Operations account. The AATF supports 100 percent of the funding for the three other accounts — AIP, F&E, and RE&D.

**Operations.** This account finances operating costs, maintenance, communications, and logistical support for the air traffic control and air navigation systems. It also funds the salaries and costs associated with carrying out safety inspection and regulatory responsibilities. In addition, the account covers administrative and managerial costs for international, medical, engineering, and development programs, as well as for policy oversight and overall management functions. The FY 2016 Operations appropriation was \$9.91 billion, approximately 1.7 percent greater than FY 2015.

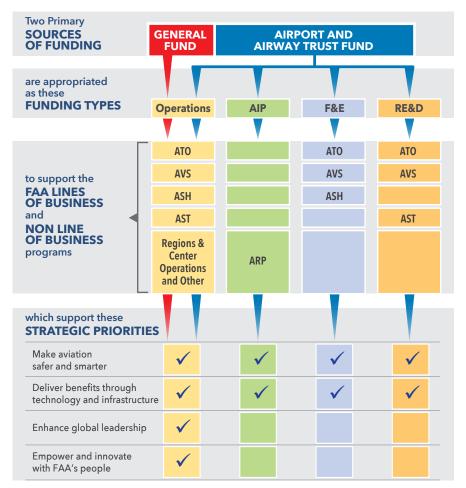
AIP. The Secretary of Transportation is authorized to award grants for airport planning and development to maintain a safe and efficient nationwide system of public airports. These grants fund approximately one-third of all capital development at the nation's public airports. The FAA issues grants to maintain and enhance airport safety, preserve existing infrastructure, and expand capacity and efficiency throughout the system. The program also supports noise compatibility and planning, the military airport program, reliever airports, and airport program administration. FY 2016 funding for AIP was \$3.35 billion, unchanged from the FY 2015 level.

# **F&E.** This account funds the capital

improvement projects necessary to establish, replace, relocate, or improve air navigation facilities and equipment and aviation safety systems across the national airspace system, particularly through programs supporting NextGen. F&E was funded at \$2.86 billion in FY 2016, approximately 9.8 percent higher than the FY 2015 level.

**RE&D.** This account funds research, engineering, and development programs to plan, conduct, and integrate domestic and international research efforts, and develop products and services

# FAA Resources and HOW THEY ARE USED



This chart aligns with the presentation of the FAA's audited Consolidated Statements of Net Cost on page 78 and net cost by program and strategic priority in Note 11 on page 97. Net costs are presented among FAA's five lines of business and collectively for its non-line of business programs. General and administrative costs from the FAA's staff offices are allocated to the lines of business they support, on a reasonable and consistent basis. For more information, also see discussion of funding sources on this page and the FAA's lines of business and staff offices on pages 10–11.

that will ensure a safe, efficient, and environmentally-compatible global air transportation system. The FY 2016 appropriation for RE&D was \$166.0 million, an increase of 5.9 percent from the FY 2015 level.

The FAA must use its funds in the way they are appropriated. On its own, the FAA does not possess the legal authority to move funds between these accounts. A transfer between accounts requires an act of Congress.

# **Management Control Highlights**

# Financial Management Integrity: Controls, Compliance and Challenges

On November 10, 2016, the FAA Administrator reported to the Secretary of DOT an unmodified statement of assurance under the Federal Managers' Financial Integrity Act (FMFIA). Every year, program managers in the FAA's lines of business and staff offices assess the vulnerability of their program. On the basis of these assessments, reviews are conducted to determine their compliance with sections 2 and 4 of FMFIA. Section 2 requires management controls to be in place, and Section 4 requires financial systems to conform to government-wide standards. The head of each line of business or staff office identifies, in writing, to the Administrator any potential material internal control weakness or system nonconformance. Identified weaknesses deemed material are consolidated in a Statement of Assurance signed by the Administrator and sent to the DOT Secretary. Our response becomes a part of the DOT Statement of Assurance sent to the President. In addition to FMFIA, we report our compliance with the Federal Financial Management Improvement Act (FFMIA). FFMIA requires an assessment of adherence to financial management system requirements, accounting standards, and U.S. Standard General Ledger transaction level reporting. For FY 2016, we are reporting overall substantial compliance.



# **Improper Payments Information Act of 2002 (IPIA)**

The Improper Payments Information Act of 2002 (IPIA), as amended by the Improper Payments Elimination and Recovery Act (IPERA) of 2010 and the Improper Payments Elimination and Recovery Improvement Act of 2012 (IPERIA) requires federal agencies to annually report to the President and the Congress information on improper payments. For purposes of this reporting, the acronym "IPIA" refers to "IPIA, as amended by IPERA and IPERIA".

IPIA spells out a systematic approach by which the federal government must address a difficult and often complex problem. The federal government loses billions of dollars a year on improper payments. OMB Circular A-123, Appendix C (October 20, 2014), provides government-wide guidance for dealing with these losses.

The purpose of these regulations and guidance is to improve agency efforts to reduce and recover improper payments. Specifically, IPIA requires agencies to identify and estimate their improper payments, conduct payment recovery audits, reuse recovered improper payments, and report compliance actions.

In simple terms, an improper payment based on IPIA is any payment that should not have been made at all, that was made in the incorrect amount (overpayments or underpayments), or that was made to an ineligible recipient, or for an ineligible good or service. Additionally, payments made without complete supporting documentation and duplicate payments are also considered improper payments.

Based on IPIA, agencies are required to review all programs and financial activities in order to identify those that are most susceptible to improper payments. This risk assessment allows agencies to identify areas that have the potential for "significant" improper payments.

The FAA's FY 2016 IPIA review did not identify any programs or activities with "significant erroneous payments," as determined in accordance with the criteria of the Office of Management and Budget (OMB), which identifies erroneous payments as those payments exceeding both \$10 million and 1.5 percent of program payments or exceeding \$100 million.

# **Management Assurances**

# **Federal Managers' Financial Integrity Act Assurance Statement, Fiscal Year 2016**

The FAA is responsible for managing risks and maintaining effective internal control and financial management systems that meet the objectives of Sections 2 and 4 of the Federal Managers' Financial Integrity Act. The FAA conducted its assessments of internal control in accordance with OMB Circular No. A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*. Based on the results of the assessment, the FAA can provide reasonable assurance that internal controls over operations, reporting, and compliance were operating effectively as of September 30, 2016.

These objectives are to ensure:

- Effectiveness and efficiency of operations
- Reliability of reporting for internal and external use
- Compliance with applicable laws and regulations

In addition, the FAA conducted its assessment of the effectiveness of internal control over financial reporting, which includes safeguarding of assets and compliance with applicable laws and regulations, in accordance with the requirements of Appendix A of OMB Circular A-123. Based on the results of this evaluation, the FAA can provide reasonable assurance that its internal control over financial reporting as of September 30, 2016 was operating effectively and no material weaknesses were found in the design or operation of internal control over financial reporting.

Michael P. Huerta

Administrator

November 10, 2016

# Financial Management Systems Strategy and Actions

# **Financial Systems Strategy**

The FAA's financial systems strategy is based on a framework called the Federal Enterprise Architecture, which is recognized across the federal government as the best practice for aligning business and technology resources to achieve strategic outcomes. The FAA is working to achieve this in all areas of our financial systems and is making it part of our organizational design and performance improvement. Our financial management systems strategy can be divided into five categories: Business, Applications, Data, Information, and Services. A summary of each is provided below:

**Business.** Initiates more centralized management of financial information as a new business model.

**Applications.** Decreases the number of financial management applications being used by the agency via a financial systems modernization program.

O POU KNOW

# AIRPORT DELAY INFORMATION

You can check airport delays by visiting this interactive site:



**Data.** Implements a financial data management roadmap and stewardship council to govern the use and sharing of FAA financial data as a common asset.

**Information.** Builds an FAA-wide financial data "warehouse" to increase the consistency of reporting while maintaining each organization's ability to meet individual core mission business reporting requirements.

**Services.** Defines and delivers shared operational and infrastructure services for the FAA's multiple financial systems.

# **Systems Critical to Financial Management and Actions**

The FAA is working with the DOT to consolidate and modernize its financial management systems and streamline processes and reports. Maintaining fewer systems will enable the FAA to operate more efficiently. It will have fewer points of data entry, fewer systems to reconcile with the official sources of the data, and fewer systems on which to train employees.

Below is a summary of the systems critical to the FAA's financial management and the actions or improvements that are recently completed, underway, or planned for each.

Accounting. Delphi is the DOT's comprehensive financial management system. The FAA uses Delphi to record financial transactions and account balances. In FY 2016, the FAA, in cooperation with DOT, has been working toward a new business intelligence reporting solution and data warehouse.

This year the FAA implemented a new application to track and account for the work performed for other federal agencies under reimbursable agreements. The new system standardized the process across all financial projects with enhanced visibility and control over core financial operations.

Acquisition. PRISM is an internet-based acquisition system that is integrated with Delphi's financial functions. PRISM provides contract award information (e.g., vendor and product/service) and communicates accounting information to Delphi. In FY 2016, the FAA began efforts to upgrade the PRISM software to version 7.2, which is compliant with the latest version of the Windows

operating system. PRISM 7.2 enables user login with personal identity verification cards and provides two new modules, Clauses (for solicitation and contract writing) and P-Card (for purchase card transactions management).

Logistics. In FY 2016, the FAA replaced its Logistics Inventory System (LIS) with a new application: Logistics Center Support System (LCSS). With the implementation of LCSS, the FAA is reengineering and automating its supply chain management processes by implementing a commercially available, off-the-shelf enterprise resource planning system.

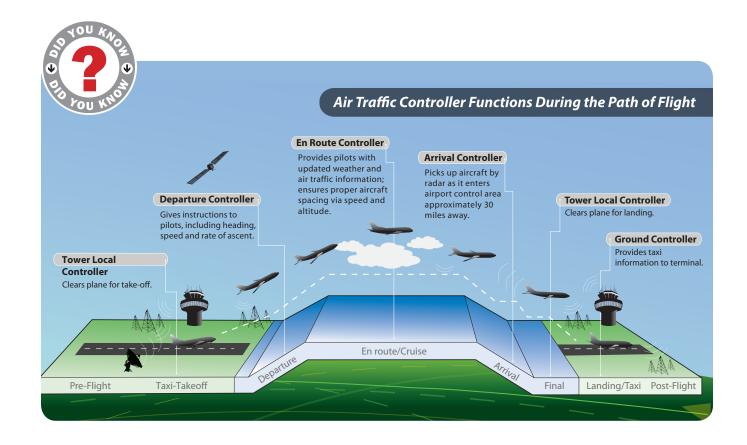
**Budget.** In FY 2016, the FAA implemented a new project toolset to help us better manage our reimbursable services. In FY 2017, the FAA plans to expand this toolset to other projects, as well.

**Financial Reporting.** In FY 2016, the FAA completed a feasibility study to integrate a new business intelligence reporting system for Delphi, as well as a new data warehouse solution. The current reporting system, which uses outdated technology, will be replaced with an analytical reporting system that is far more advanced. The new reporting system will comply with the requirements of

The Digital Accountability and Transparency Act of 2014 and help reduce discrepancies in reporting. The first phase of the project will use Business Intelligence Publisher to replace over one hundred FAA reports. The second phase will offer analytic capabilities and replace the remaining FAA reports.

**Timekeeping.** While timekeeping systems are not technically financial management systems, they are integral to proper reporting of workforce-related costs. CRU-X is a suite of software used by the FAA's Air Traffic Organization for timekeeping, schedule and position management, and labor distribution reporting. During FY 2016, the FAA is continuing the work to replace CRU-X because it is at the end of its life cycle. The replacement system will allow the FAA to use less hardware, which will reduce the maintenance costs. The updated software will also provide a more secure system environment.

**Travel.** In FY 2016, the FAA tested a feature within its online travel system, E2 Solutions, that allows portions of travel reimbursements to be paid to the traveler's government travel charge card account or the traveler, as appropriate. This feature will be implemented in early FY 2017.





# **Performance Measures Overview**

In this section, the FAA discusses its achievements in addressing our 12 performance measures. The FAA organizes its measures by the following strategic priorities:

- Make Aviation Safer and Smarter (page 40)
- ► Deliver Benefits through Technology and Infrastructure (page 49)
- ► Enhance Global Leadership (page 56)
- ► Empower and Innovate with the FAA's People (page 57)

Although the current report does not include a performance measure for the third strategic priority, Enhance Global Leadership, in FY 2016, the FAA continued to develop initiatives that supported this priority. These initiatives are discussed in the report, and the FAA continues to work on developing a performance measure that offers a sound representation of the FAA's progress. Any such performance measure will be included in future reports.

In the pages that follow, the FAA provides the FY 2016 performance targets, a discussion of our FY 2016 performance, and, when available, five years of historical trend data. We have also prepared a graph of performance measures with three or more years of data.

In FY 2016, the FAA achieved 10 of the 11 performance targets for which it had end-of-year data. One performance measure (Fedview Ranking) did not have any data results available at the time of this publication. The FAA will report those results in next year's PAR. The FAA has noted the measures for which the data provided are preliminary.

Although in some cases the FAA achieved a result this year that was significantly better than the target, the FAA did not set a new fiscal year target to reflect the prior year's result. Annual performance



is subject to greater variability than long-term performance. Over time, short-term trends tend to balance out and in doing so provide a more accurate picture of the agency's long-term performance. Moreover, some annual targets use data acquired over a multi-year period. The targets used in this section have been set to measure the FAA's performance toward long-term goals.

The Performance Results section concludes on pages 60–63 with discussions of the ways in which our performance data are verified and the completeness and reliability of our performance data.

Additionally, the FAA reports quarterly progress updates on performance goals that support DOT agency priority goals via the government-wide performance website **www.performance.gov/agency/department-transportation.** 

## STRATEGIC PRIORITY: MAKE AVIATION SAFER AND SMARTER

STRATEGIC OBJECTIVE: Build on safety management principles to proactively address emerging safety risk by using
consistent, data-informed approaches to make smarter, system-level, risk-based decisions

Performance Measure	FY 2013 Results	FY 2014 Results	FY 2015 Results	FY 2016 Target	FY 2016 Results	FY 2016 Status	FY 2017 Target
Commercial Air Carrier Fatality Rate * In FY 2016, the commercial air carrier fatality rate will not exceed 6.7 fatalities per 100 million people on board.	1.1	0.6	0.11	6.7	0.62	1	6.4
Serious Runway Incursions Rate * Reduce Category A & B (most serious) runway incursions to a rate of no more than .395 per million operations.	0.220	0.282	0.302	0.395	0.360 <sup>3</sup>	1	0.395
System Risk Event Rate Limit the rate of the most serious losses of standard separation to 20 or fewer for every thousand (.02) losses of standard separation within the National Airspace System	5.66	3.44	2.62	20	2.87³	1	10
IT Risk Management and Information Systems Security Address 80% of high value risks within 30 days. Continue Cybersecurity Steering Committee oversight to assure consistent risk acceptance decisions. Visualize vulnerabilities on all IP based systems.	Performance measure redefined in FY 2015	Performance measure redefined in FY 2015	100%	80%	100%	1	80%
General Aviation Fatal Accident Rate *  Reduce the general aviation fatal accident rate to no more than 1.02 fatal accidents per 100,000 flight hours.	1.11	1.09	0.99 <sup>1</sup>	1.02	0.91 <sup>2</sup>	1	1.01
Commercial Space Launch Accidents  No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.	0	0	0	0	0	1	0

<sup>\*</sup> Agency Priority Goal indicator

✓ Target met

★ Target not met

<sup>1</sup> Preliminary estimate until final result can be confirmed by NTSB in March 2017. We do not expect any change in the final result to be significant enough to change the year-end status of achieving the result.

<sup>2</sup> Preliminary estimate until final result can be confirmed by NTSB in March 2018. We do not expect any change in the final result to be significant enough to change the year-end status of achieving the result.

<sup>3</sup> Preliminary estimate until the final result becomes available in January 2017. We do not expect any change in the final result to be significant enough to change the year-end status of achieving the result.

# **Commercial Aviation Carrier Fatality Rate**

Reduce the commercial air carrier fatalities per 100 million persons on board by 24 percent over a 9-year period (2010–2018). No more than 6.2 in 2018.					
FY 2016 Target	No more than 6.7 fatalities per 100 million persons on board.				
FY 2016 Result	<b>0.6</b> (Preliminary estimate until the final result can be confirmed by the National Transpiration Safety Board (NTSB) in March 2018)				
Public Benefit	As fatal air carrier accidents have declined in terms of average fatalities per accident, this metric will sharpen the FAA's focus on helping air travel become even safer.				

Commercial aviation includes both scheduled and nonscheduled flights of U.S. passenger and cargo carriers. This form of transportation is one of the safest. In FY 2016, with a result of 0.6 fatalities per 100 million people on board, the FAA was successful in achieving our target of not exceeding a rate of 6.7. This success was supported by the FAA's work to implement safety management systems, participation in the Commercial Aviation Safety Team, and establishment of safety-critical regulations.

## **Safety Management Systems**

Our commercial safety record indicates the agency has successfully addressed the majority of known system hazards that contribute to accidents or incidents. However, the agency must identify and reduce risks before they lead to an accident or incident. For this reason, the FAA continues to work with aviation industry stakeholders to establish and implement safety management systems to identify and reduce risk within their operations and in the nation's airspace. With these systems in place, the FAA and the aviation industry will work together with a proactive approach that continuously improves aviation safety. The ultimate goal is to prevent accidents from happening at all.

A Safety Management System is a series of processes and procedures that everyone follows to enhance safety. The processes include evaluating data from airline and airport operations in a structured approach. Operations data can help identify patterns and trends that could possibly lead to a problem. Evaluating this information enables the industry to take action before there is a problem. A safety management system does not replace FAA oversight or inspections, but it does help foster a stronger safety culture within an airline.

## **Commercial Aviation Safety Team (CAST)**

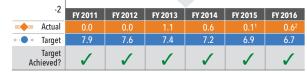
Our success in commercial aviation safety is due in part to the aviation industry and government voluntarily investing in safety enhancements that have reduced the fatality risk in commercial air travel in the United States. CAST is a joint industry/government group committed to improving aviation safety by focusing on detecting high risk areas and implementing mitigation strategies before accidents or serious incidents occur. The work of CAST, along with new aircraft, regulations, and other factors, reduced the risk in U.S. commercial aviation by 83 percent over 10 years and continues to have a positive impact in reducing the fatality rate for commercial aviation in the United States.

CAST has developed 96 safety enhancements to date, and most of these enhancements have already been completed. The last 19 enhancements were based on non-accident data, which demonstrates its progress from reactive safety enhancements to proactive risk mitigation. CAST has developed an integrated, data-driven strategy to reduce the commercial aviation fatality risk in the United States.

To learn more about CAST, please visit https://www.faa.gov/news/fact\_sheets/news\_story.cfm?newsId=18178.

# Fatalities per 100 million persons on board 10 8 6 4 2 0

**COMMERCIAL AIR CARRIER FATALITY RATE** 



- 1 Preliminary estimate until final result can be confirmed by NTSB in March 2017. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.
- 2 Preliminary estimate until final result can be confirmed by NTSB in March 2018. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.



## **COMPLIANCE PHILOSOPHY**

This year, the FAA continued efforts to implement the *Federal Aviation Administration Compliance Philosophy* throughout the agency and communicate this new approach to aviation stakeholders.

The compliance philosophy is the overarching guidance for implementing the FAA's strategic safety oversight approach, pertaining to all users of our nation's airspace. The compliance philosophy represents a focus on using, where appropriate, non-enforcement methods for correcting unintentional deviations or noncompliance that arise from factors such as flawed systems and procedures, simple mistakes, lack of understanding, or diminished skills. A compliance action is not adjudication, nor does it constitute a finding of violation.

The compliance philosophy emphasizes the importance of sharing information with and among our aviation community partners and analyzing data in order to identify safety risks and investigate the root causes of those risks. Under this philosophy, the FAA places its highest value on improving safety performance, with the understanding that traditional enforcement actions — such as civil penalties — are just one tool available to the agency as it protects the safety of our aviation system. An open and transparent exchange of information requires mutual cooperation and trust that can be challenging to achieve in a traditional, enforcement-focused regulatory model; but one that must occur to keep our increasingly congested airspace safe.

More information about the compliance philosophy can be found on the FAA's website at: https://www.faa.gov/about/initiatives/cp/.

FAA inspectors examining the landing gear on a general aviation aircraft.



## **Regulations**

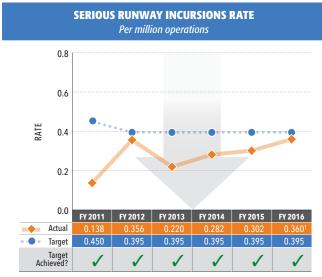
In FY 2016, the FAA established a new regulation to improve aviation safety and reduce aircraft accidents. The FAA published the "Qualification, Service, and Use of Crewmembers and Aircraft Dispatchers" final rule. This rule places emphasis on pilots' manual handling skills and includes safety-critical tasks such as recovery from stall and aircraft upset scenarios. It also provides for enhanced runway safety training and pilot monitoring training.

# Serious Runway Incursions Rate (Category A & B)

Reduce Category A & B (most serious) runway incursions to a rate of no more than .395 per million operations, and maintain or improve through FY 2018.					
FY 2016 Reduce Category A & B (most serious) runway incursion rate of no more than .395 per million operations.					
FY 2016 Result	<b>0.360</b> (Preliminary estimate until the final result becomes available in January 2017)				
Public Benefit	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.				

The FAA continuously monitors the runway safety fatality risk. It has decreased dramatically starting in 2008 and remained low since 2011 as runway safety initiatives were implemented.

To monitor the risk, FAA uses precursor events called runway incursions. These occurrences involving the incorrect presence of an aircraft, vehicle or person on the protected area of a surface designated for the landing and take-off of aircraft. In the United States, there is an average of three runway incursions daily. Each of these incidents has the potential to cause significant damage to both persons and property.



<sup>1</sup> Preliminary estimate until final result becomes available in January 2017. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.

A number of factors may lead to a runway incursion. As seen in the chart below, these factors include pilot deviations, operational incidents, and vehicle (driver) deviations.

Pilot Deviations	Crossing a runway hold marking without clearance from air traffic control	
	Taking off without clearance	
	Landing without clearance	
Operational Incidents	Clearing an aircraft onto a runway while another aircraft is landing on the same runway	
	<ul> <li>Issuing a takeoff clearance while the runway is occupied by another aircraft or vehicle</li> </ul>	
Deviations	Crossing a runway hold marking without air traffic control clearance	

The FAA has four categories of runway incursions:

- Category A: A serious incident in which a collision was narrowly avoided.
- Category B: An incident in which separation decreases and there is a significant potential for collision, which may result in a time critical corrective/evasive response to avoid a collision.
- ► Category C: An incident characterized by ample time and/or distance to avoid a collision.
- ➤ Category D: An incident that meets the definition of runway incursion such as incorrect presence of a single vehicle/person/aircraft on the protected area of a surface designated for the landing and take-off of aircraft but with no immediate safety consequences.



While the FAA tracks all four categories of runway incursions, this performance measure includes only the two most serious categories (A and B).



## **SPACE DATA INTEGRATOR**

As the U.S. commercial space industry continues to grow, the FAA is improving its ability to safely and efficiently integrate commercial space activities into our nation's airspace.

Today, when the FAA identifies a portion of the airspace that could be affected by a launch or reentry, it shuts down that airspace throughout the event. The FAA manually enters information on the vehicle's position and evolving hazards to give air traffic controllers situational awareness in case contingencies occur.

To more effectively manage commercial space launches, the FAA designed an automated system called the Space Data Integrator (SDI). SDI will replace the current manual process with an automated data feed sent directly to air traffic controllers. SDI includes a vehicle's current and projected position and plots the size and shape of the airspace that needs to be protected throughout the course of an event.

With SDI in place, the FAA will dynamically track the operation to improve efficiency by releasing airspace more readily when it is no longer needed for the space operation. The automated system also allows the FAA and its air traffic controllers to respond more quickly to contingencies.

After testing a prototype system last year, the FAA this year successfully conducted an operational demonstration during the reentry of SpaceX's CRS-9 Dragon spacecraft. The SDI system used data collected directly from the spacecraft. The FAA looks forward to a fully operational system in 2020.

As of the date of publication, the Category A and B runway incursion rate is estimated at 0.360 incursions per million operations, which indicates that the FAA achieved its target. The final results will be available in January 2017.

The FAA has made significant progress in improving runway safety at U.S. airports over the past 15 years by working with other members of the aviation community on education, training, marking and lighting, standard runway safety areas, new technology, and airfield improvements. In June 2015, the FAA Administrator convened a Runway Safety Call to Action, bringing together 108 representatives from industry, labor, and government. As a result, short, medium and long-term plans were established, including activities to improve runway safety technologies, pilot training, airport signage, and communications.

The agency plans to build on that success by working with airport sponsors over the next 10-15 years to further reduce runway risks through risk-based decision-making. In July 2015, a new FAA national initiative known as the Runway Incursion Mitigation program was launched. The program will identify airport design-related risk factors that might contribute to a runway incursion and develop strategies to help airport sponsors mitigate those risks.

To learn more about runway safety, please visit: http://www.faa.gov/airports/runway\_safety/.



# System Risk Event Rate (SRER)

Reduce risks in flight by limiting the rate of the most serious losses of

	standard separation to 20 or fewer for every thousand (.02) losses of standard separation within the National Airspace System.				
FY 2016 Target					
FY 2016	2.87				
Result	(Preliminary estimate until the final result becomes available in January 2017).				
Public Benefit	SRER safety data provides the FAA with a quantifiable list of hazards that contribute to the highest risk events in the national airspace system. By addressing the most serious hazards, this targeted approach has become one of the ATO's most powerful tools for identifying hazards, taking corrective action to mitigate the likelihood of severe LoSS events, and monitoring the results. The targeted approach is the culmination of our proactive safety management process, which includes valuing input from frontline employees, developing new policies and deploying new technology which results in a greater measure of safety for the flying public.				

At any given time, there are roughly 7,000 aircraft occupying our nation's airspace. To help maintain safe distances between aircraft while they are under the control of air traffic controllers, the FAA has established minimum separation standards, based on an aircraft's phase of flight and its size.

In 2011, in an effort to move beyond one-dimensional safety metrics (i.e., procedural noncompliance tallies), the ATO introduced the SRER, a 12-month rolling rate that shows the most serious loss of separation events across our airspace system. In FY 2016, with a result of 2.87, the FAA achieved our target of limiting the most serious losses of standard separation to 20 or fewer for every thousand losses of standard separation within the system.

What is "most serious?" All validated losses of standard separation events with 66 percent or less of standard separation are categorized as Risk Analysis Events (RAE) and are examined by a panel consisting of air traffic controllers, pilots, and other experts. For example: for an occurrence in which 3 miles lateral separation between two aircraft was required, any point where the aircrafts were separated by only 2 miles (66 percent) would be an RAE. Criteria are then used to determine if the RAE is a serious event. These criteria include: proximity, closure rate, repeatability and severity. The loss of standard separation data will then be used to compute the SRER, which is the rate of the most serious losses for every thousand losses of standard separation within the system

The SRER allows the FAA to:

- ▶ Increase the amount of data collected and analyzed to achieve better understanding of risk
- ▶ Align our approach to safety with that of our international partners
- Integrate pilot and air traffic controller performance data on all air traffic incidents
- Evaluate separation incidents caused by other factors, including pilot deviations
- ▶ Avoid underreporting and misclassification of incidents

Using the benefits of SRER, the FAA can identify losses of separation and obtain a more accurate picture of system safety performance.

The FAA's systemic view of safety within the national airspace system places more value on discovering why adverse safety occurrences happen, and in identifying risks, rather than determining who was at fault. By implementing voluntary safety reporting, new electronic separation loss detection programs, and the establishment of a proactive safety management system, the SRER has enabled the FAA to greatly enhance its ability to identify precursors, root causes, and trends of safety risks system-wide rather than reacting to single incidents. The lessons we learn through this process are then incorporated into our training of operational personnel.

With the additional data gained, the FAA is better able to determine the safety impact of new NextGen air traffic procedures and technologies and, ultimately, make more knowledgeable decisions about reductions in separation standards.

SYSTEM RISK EVENT RATE  Rate of serious losses of standard separation per thousand losses						
	Target Actual Target Achieved?					
FY 2016	20	2.87¹	1			
FY 2015	20	2.62	1			
FY 2014	20	3.44	1			
FY 2013	20	5.66	1			
FY 2012	20	9.33	1			
FY 2011	20	24.54	×			
FY 2010	This was a new measure in FY 2011					

1 Preliminary estimate. Final result available January 2017.

# IT Risk Management and Information Systems Security

Address 80 percent of the high-value risks within 30 days. Continue oversight by the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on internet protocolbased systems.

FY 2016 Target	80%
FY 2016 Result	100%
Public Benefit	The Office of the Chief Information Officer is dedicated to providing the highest level of cyber security available and is committed to the protection of personally identifiable information.

The FAA manages more than 300 information systems which collectively assure the successful execution of the agency's mission. Disruption to these systems could impact the safety and efficiency of the nation's airspace system. Through malicious cyberenabled actions, hackers seek to disrupt services by exploiting software, hardware, and network infrastructure.

Federal law requires that the FAA protect its infrastructure's integrity, availability, and confidentiality from cyber threats to ensure the safe and efficient execution of the FAA's mission. The FAA must ensure that the agency's systems are protected from cyber events. The FAA's Office of the Chief Information Officer is dedicated to providing the highest level of cybersecurity available and is committed to the protection of personally identifiable information.

Today's electronically dependent environment demands that IT systems be delivered securely and cost effectively, while meeting the agency's diverse business requirements. The IT Risk Management and Information Systems Security measure ensures that the FAA and its critical infrastructure are well protected against a persistent and evolving cyber threat, while recognizing an effective response is required, should deterrence fail.

In FY 2016, this performance measure for IT Risk Management and Information Systems Security was based on the percentage of highvalue risks addressed within 30 days from initial incident detection, as well as the continuous oversight with the Cybersecurity Steering Committee to assure consistent risk acceptance decisions and visualizing vulnerabilities on all internet protocol-based systems. High-value risks are defined as: threats identified as high and deemed exploitable within the FAA's infrastructure, vulnerabilities that affect high risk systems and can be exploited, or vulnerabilities related to current attacks and can be exploited. Through audits and scans, high-value risks can be detected across the FAA's three operating domains: Mission Support, National Air Space, and Research & Development. This performance target is measured by dividing the number of high-value risks addressed within 30 days from initial detection by the total number of high-value risks detected.

In order to achieve this goal in 2016, at least 80 percent of high value risks had to be addressed within 30 days from initial detection. The FAA's Security Operations Center executes the process to identify high-value risks and track their disposition by establishing a baseline and notifying the FAA's domain points of contact who address risk and report disposition within 30 days. The FAA established oversight with the Cybersecurity Steering Committee by reporting high-value risks on a monthly basis for review to ensure high risk acceptance decisions. This year, the FAA identified and addressed all 35 high-value risks within 30 days of detection, thereby achieving our goal.

## IT RISK MANAGEMENT AND INFORMATION SYSTEMS SECURITY

Address 80% of high value risks within 30 days. Continue oversight by the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on all internet protocol- based systems.

	Target	Actual	Target Achieved?		
FY 2016	80%	100%	1		
FY 2015	80%	100%	1		
FY 2014	This performance measure was redefined in FY 2015				

# **General Aviation (GA) Fatal Accident Rate**

Reduce the GA fatal accident rate to no more than one fatal accident per 100,000 flight hours by 2018. No more than 1.02 fatal accidents per 100,000 flight hours in FY2016.

FY 2016
Target

No more than 1.02 fatal accidents per 100,000 flight hours in FY 2016.

Target

No more than 1.02 fatal accidents per 100,000 flight hours in FY 2016.

Public Benefit

No more than 1.02 fatal accidents per 100,000 flight hours in FY 2016.

Public Benefit

Public Benefit

Public FAA can more accurately identify trends, indicating a decrease or increase of potential safety risks.

With almost 200,000 active aircraft including amateur built aircraft, rotorcraft, balloons, and highly sophisticated turbojets, the United States has the most vibrant GA community in the world. The FAA is continuously trying to work with our industry partners to reduce the number of general aviation fatalities. The FAA's goal is to reduce the GA fatal accident rate by 10 percent over a 10-year period (2009-2018).

In FY 2016, with a rate of 0.91 fatal accidents per 100,000 flight hours, the FAA achieved its goal of not exceeding a rate of 1.02. The results will not be considered final until confirmed by the NTSB in FY 2018. This marks the second year in a row that the FAA has achieved its goal in this area. The FAA is proud of its accomplishment, but the GA fatality rate still remains high and the FAA is committed to reducing it further.

To address a steady increase in fatal helicopter accidents, the FAA published the "Helicopter Air Ambulance, Commercial Helicopter, and Part 91 Helicopter Operations" final rule. This rule provides tools and procedures to prevent accidents by reducing risk and helping pilots make good safety decisions through the use of better training, procedures, and equipment. It requires the use of higher weather minimums when identifying an alternate airport in a flight plan for some commercial helicopter operations and all general aviation helicopter operations in certain airspace.

The FAA continues to analyze GA data and develop strategies to address the challenges of creating a safe environment for GA flights. The agency and industry formed the General Aviation Joint Steering Committee (GAJSC), which uses a non-regulatory, proactive, and data-driven strategy to improve safety.

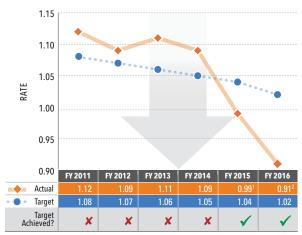
To reduce accidents, the GAJSC is reaching out to the general aviation community to educate pilots and other stakeholders on the

benefits of sharing (in a protected, non-punitive manner) safety data collected through our Aviation Safety Information Analysis and Sharing (ASIAS) program. Data submitted to ASIAS is confidential, de-identified, and will not be used for enforcement purposes. The goal of the project is to assist the GA community in reducing the number of fatal accidents by looking for systemic risks that could potentially lead to fatal accidents. The GAJSC has established training topics for airmen based on GAJSC analysis of aircraft accidents. Educational outreach is focused on one of these training topics each month.

The FAA Deputy Administrator met with leaders from the general aviation community to support the work of the GAJSC and to continue the focus on reducing inflight accidents. This meeting was used to increase the awareness of accident causes and work with industry to share safety messages during the summer flying season.

To spread safety awareness throughout the aviation community, the FAA conducts safety seminars and sends email notifications, airmen notices, and FAA Safety Team (FAAST) blasts. The FAA uses social media like Twitter and Facebook. It counsels airmen, makes presentations at aviation events, and provides safety materials on the www.FAASafety.qov website.

# GENERAL AVIATION FATAL ACCIDENT RATE Fatal accidents per 100,000 flight hours



- 1 Preliminary estimate until final result can be confirmed by NTSB in March 2017. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.
- 2 Preliminary estimate until final result can be confirmed by NTSB in March 2018. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.

# Commercial Space Launch and Reentry Accidents

No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.					
FY 2016 Target	No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.				
FY 2016 Result	0				
Public Benefit	The FAA's Office of Commercial Space Transportation (AST) oversight of the commercial space launch industry activities has resulted in no loss of life or property damage to the public.				

Last year, a private space company launched a satellite into orbit and then landed the first stage of the rocket back at its launch site at Cape Canaveral, Florida. Not long after that, another company launched a rocket to suborbital space and landed it back at the launch site on four separate occasions. You might think that this describes missions at the National Aeronautics and Space Administration or some other government space agency, but these were activities done by private industry under a license or permit from the FAA's Office of Commercial Space Transportation.

It is the FAA's mission to ensure protection of the public, property, and the national security and foreign policy interests of the United States during commercial launch or reentry activities. The FAA also is charged with encouraging, facilitating, and promoting U.S. commercial space transportation. This dual mission responsibility provides an oversight framework that has proven to be very beneficial both to the industry and to the American people. Our track record for safety bears this out.

In FY 2016, there were 17 licensed and permitted launches and reentries, and the FAA was successful in maintaining our perfect record of no fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry (return to earth's atmosphere) activities. In total, the FAA has licensed or permitted more than 290 launches and over 10 reentries. The FAA also oversees 10 active launch or reentry sites (spaceports).

The growth in the industry has been tremendous in recent years. Since 2006, the FAA has seen an increase of 200 percent in the number of launch and reentry operations it oversees; the number of licenses and permits it issues has increased by 450 percent; and the number of inspections it performs to ensure safety compliance has increased by 725 percent.

In addition to the growth of the industry, the complexity of the missions coming to the FAA for approval has changed dramatically. This year, the FAA issued a favorable payload determination for a private company that plans to land an un-crewed robot on the lunar surface, the first private company to do so. The FAA expects future missions to include space tourism, interplanetary travel, commercial space stations, and innovative new designs for traditional launch systems.

The future of commercial space is vibrant and the FAA is meeting the challenges associated with this constantly evolving industry.

To view the FAA's fact sheet on Commercial Space Transportation Activities, please visit <a href="https://www.faa.gov/news/fact\_sheets/news\_story.cfm?newsId=19074">https://www.faa.gov/news/fact\_sheets/news\_story.cfm?newsId=19074</a>.

# COMMERCIAL SPACE LAUNCH AND REENTRY ACCIDENTS

Number of fatalities, serious injuries, or significant property damage during space launch and re-entry activities

	Target	Actual	Target Achieved?
FY 2016	0	0	1
FY 2015	0	0	1
FY 2014	0	0	1
FY 2013	0	0	1
FY 2012	0	0	1
FY 2011	0	0	1

met

not met

#### **DELIVER BENEFITS THROUGH TECHNOLOGY AND INFRASTRUCTURE** STRATEGIC PRIORITY:

• STRATEGIC OBJECTIVE: Lay the foundation for the national airspace system of the future by achieving prioritized NextGen benefits, integrating new user entrants, and delivering more efficient, streamlined services.

Performance Measure	FY 2013 Results	FY 2014 Results	FY 2015 Results	FY 2016 Target	FY 2016 Results	FY 2016 Status	FY 2017 Target
Data Comm*  By the end of FY2016, Data Comm will be implemented at cumulative total of 6 Airport Traffic Control Towers (ATCTs).	New Performance measure in FY 2016	New Performance measure in FY 2016	New Performance measure in FY 2016	6	46	1	10
Major System Investments In FY 2016, maintain 90 percent of major system investments within 10 percent variance of current acquisition program baseline (APB) total budget at completion.	90%	95%	100%	90%	95.5%	1	90%
National Airspace System Energy Efficiency Improve aviation fuel efficiency by 22 percent relative to the calendar year 2000 baseline.	-21.66%	-22.40%	-24.37%	-22%	-24.84%	1	N/A¹
Noise Exposure  Reduce the number of people exposed to significant aircraft noise to less than 328,000 in calendar year 2016.	321, 000	321, 000	340, 000	328,000	343,000	×	315,000
Unmodified Audit Opinion Obtain an unmodified opinion with no material weakness on the agency's financial statements (Unmodified Audit Opinion with no material weakness).	Unmodified audit opinion w/ no material weakness	1	Unmodified audit opinion w/ no material weakness				
* Agency Priority Goal indicator						✓ Target	<b>≭</b> Target

<sup>\*</sup> Agency Priority Goal indicator

<sup>1</sup> In FY 2017, the FAA expects to replace this measure with a measure related to carbon emissions.

# **Data Communications (Data Comm) Program**

Data Comm will be delivered in several Segments and Phases. The initial deployment of Data Comm will deploy the Controller-Pilot Data Link Communications Departure Clearance in the Tower domain. The program will deliver this functionality to 56 airports by the end of FY 2017.

FY 2016
Target

Implement Data Comm at a cumulative total of six sites.

FY 2016
Result

Data Comm was implemented at a cumulative total of 46 sites.

FY 2016
Result

Data Comm was implemented at a cumulative total of 46 sites.

Public Benefit

Data Comm's initial implementation will expedite the delivery of departure clearances to aircraft, streamline clearance delivery operations and enable quicker recovery from adverse weather events. This will improve efficiency, reduce ground delays, and result in more strategic management of national airspace system resources.

A performance measure on the Data Communications (Data Comm) program replaces the measure on the En Route Automation Modernization (ERAM) system that had been included in previous editions of this report. Like ERAM, the Data Comm program is a major acquisition for the FAA and an essential part of the agency's NextGen effort. However, the ERAM investment has been completed, and Data Comm represents a new investment in NextGen capabilities.

NextGen is bringing new benefits through Data Comm, which revolutionizes communications between air traffic controllers and pilots by replacing some traditional voice communications with digital information exchanges. Voice communication is labor intensive, time consuming and can lead to miscommunications known as "read back, hear back" errors. Data Comm, by contrast, will ease congestion on our radio frequencies and reduce the potential for misunderstanding critical safety information.

Data Comm enables streamlined, two-way data exchanges between controllers and flight crews. Controllers can issue a departure clearance to several aircraft at once and revised clearances to individual aircraft as necessary during bad weather, along with instructions, advisories, flight crew requests and reports. The result is faster taxi out times and reduced delays while reducing controller and pilot workload, radio frequency congestion, and the likelihood of communication errors that can occur from voice exchange.

These improvements to the national airspace system will be delivered by Data Comm in two segments.

Segment 1 will provide Data Communications services on the airport surface, to the en route domain, and to our air traffic control facilities that manage high altitude traffic. The Data Comm en route services will reduce flight delays, and create more efficient routes for aircraft. This means increased efficiency, enhanced safety, and reduced costs. Segment 2 will build upon these services by enabling advanced NextGen operations not possible using voice communications, such as multi-dimensional trajectories and advanced flight interval management.

The FAA began testing Data Comm capabilities and benefits in 2014 at Newark and Memphis with UPS, FedEx and United Airlines, as well as select international operators. The FAA started deploying Data Comm in air traffic control towers in the fall of 2015 and now more than 40 major airport towers have Data Comm and are providing departure clearance services to equipped aircraft. Looking ahead, we are planning to deliver en route services in our first operational center in 2019. More information about Data Comm can be found at: <a href="http://www.faa.gov/nextgen/programs/datacomm/">http://www.faa.gov/nextgen/programs/datacomm/</a>.

## **Major Systems Investments**

Ninety percent of major baselined acquisition programs must be maintained within 10 percent of their current acquisition cost, schedule, and technical performance baseline as of the end of FY 2016.

FY 2016
Target

90% of major baselined acquisition programs must be maintained within 10% of their current acquisition cost, schedule, and technical performance baseline as of the end of FY 2016.

FY 2016
Result

95.5%

Public

The FAA's ability to keep acquisitions within budget and

The FAA's ability to keep acquisitions within budget and schedule will allow for a timely transition of NextGen programs and other new programs. The transition to NextGen and other new programs involves acquiring numerous systems to support precision satellite navigation; digital, networked communications; integrated weather information; layered, adaptive security; and more.

The FAA's ability to make investments in an efficient and cost-effective manner is critical to the implementation of NextGen. For this reason, the FAA established a performance measure that tracks the agency's success in staying within a 10 percent variance of its budget, schedule, and technical performance with regard to major system investments. In FY 2016, the FAA achieved this goal with a total of 95.5 percent of our major systems investments remaining within the 10 percent threshold.

The FAA's ongoing efforts involve the acquisition of numerous systems, tools, and equipment to support precision-based satellite navigation, networked digital communications, integrated weather information, and improved security. The FAA has established acquisition categories (ACATs) within its Acquisition Management System that governs major system investments. Within these categories, the following criteria are applied to determine the ACAT level of each acquisition:

- ▶ Lifecycle costs and annual costs
- Political sensitivity
- ► Risk level

**Benefit** 

- Complexity
- ▶ Likelihood of changes in the safety of the nation's airspace.

Programs that have lifecycle costs greater than \$100 million, or are classified with a medium or high rating in any of the criteria, are assigned an ACAT level of 1, 2, or 3. These are considered major capital investments. In addition, if a program is a key enabler of NextGen, it is designated a major program. The FAA tracks and reports the status of each program's acquisition program baseline, using an automated database. The data are used to convey program status and performance information to senior executives for purposes of program reporting, periodic reviews, and decision making.

Reporting on this measure ensures consistency with the Air Traffic Management System Performance Improvement Act of 1996. The Act requires the FAA Administrator to terminate programs that are funded from Facilities and Equipment appropriations that have variances of 50 percent or greater for cost, schedule, or technical performance, unless the Administrator determines that termination would be inconsistent with the development or operation of the national airspace system in a safe and efficient manner. In addition, the law requires the FAA Administrator to consider terminating any substantial acquisition that has cost, schedule, or performance variances greater than 10 percent.

MAJOR SYSTEMS INVESTMENTS  Maintain 90 percent of major system investments within budget					
	Target Actual Target Achieved?				
FY 2016	90%	95.5%	1		
FY 2015	90%	100%	1		
FY 2014	90%	95%	1		
FY 2013	90%	90%	1		
FY 2012	90%	100%	1		
FY 2011	This was a new measure in FY 2012				

# **National Airspace System Energy Efficiency**

Improve national airspace system energy efficiency (fuel burned per revenue tonne kilometer flown) by at least 2 percent annually.

FY 2016 Improve aviation fuel efficiency by 22 percent relative to the calendar year 2000 baseline.

FY 2016 Result

-24.84%

Public Benefit

Today's aircraft are up to 70% more efficient than early commercial jet aircraft. However, there is growing concern over aviation's impact on the environment and public health. Aviation is currently viewed as a relatively small contributor to those emissions that have the potential to influence air quality and the global climate. Carbon dioxide (CO2) emissions are a primary greenhouse gas and are directly related to the fuel burned during the aircraft's operation. As air traffic grows, this contribution will increase without improvements in fuel-efficient technology, optimized air traffic operations, and renewable fuels. This measure supports the development of these improvements to reduce aviation's impact on the environment and thereby improve public health and welfare. In addition, more fuel-efficient aircraft should contribute to improving the financial well-being of commercial airlines and a growing economy.

As more and more flights take place each year, there is a growing concern over the potential impact of aircraft greenhouse gas emissions on the global climate. The primary greenhouse gas from aircraft operations is carbon dioxide, which is directly related to the amount of fuel consumed.

The FAA monitors improvements in aircraft and engine technology, developments in sustainable alternative jet fuels, operational procedures, and enhancements in the airspace transportation system by measuring and tracking the overall energy efficiency of aircraft operations. Such information makes it possible to assess aviation's emissions contribution.

The FY 2016 National Airspace System Energy Efficiency value has improved 0.47 percent over FY 2015. Overall, the National Airspace System Energy Efficiency has decreased fuel burn 24.84 percent since calendar year 2000. In order to more directly measure and report on the aviation's role in reducing emissions, especially those linked to climate change, the energy efficiency measure will be replaced with a carbon neutral measure next year. The primary greenhouse gas from aircraft operations is carbon dioxide, which is directly related to the amount of fuel consumed.

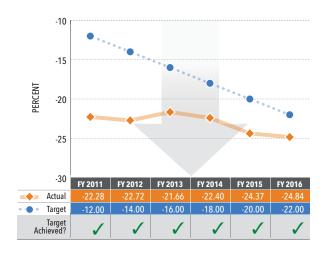
National airspace system-wide energy efficiency performance depends heavily upon commercial airline operating procedures and day-to-day operational conditions. This includes the condition of the airline's operating fleet and route assignments, air traffic conditions, weather, airport operating status, congestion in the system, and any disruptions that introduce delay in scheduled flights. Success in this measure indicates progress in improving the energy efficiency of commercial aircraft operations within the airspace system, thereby diminishing aviation's environmental impact.

The FAA also provides scientific understanding, development of new technologies, fuels and operations, and analyses to support NextGen and its goals of environmental protection that allow for sustained growth. In particular, the program helps achieve the NextGen goals to:

- Reduce significant community noise and air quality emissions impacts in absolute terms;
- ► Limit or reduce the impact of aviation greenhouse gas emissions on global climate (including the rate of fuel burn);
- ► Improve energy efficiency (including air traffic operations and alternative fuels development); and
- ▶ Proactively address other environmental issues.

#### **NATIONAL AIRSPACE SYSTEM ENERGY EFFICIENCY**

Cumulative percentage reduction from baseline



These complement activities in technology, operations, policy, science and metrics, and tools being developed under NextGen. The program is also designed to better quantify aircraft noise and emissions and their environmental impacts, develop cost-beneficial impact mitigation options, and to develop ways for improving energy efficiency and alternate fuel sources.

The FAA's work supports the United States Aviation Greenhouse Gas Emissions Reduction Plan (https://www.faa.gov/about/office\_org/headquarters\_offices/apl/environ\_policy\_guidance/policy/media/Aviation\_Greenhouse\_Gas\_Emissions\_Reduction\_Plan.pdf).



# FAA PROPOSES EXTENSIVE REVISIONS TO GENERAL AVIATION (GA) AIRWORTHINESS STANDARDS

Federal airworthiness standards define an aircraft's suitability for flight. These standards ensure that the aircraft's design and any alterations to it are approved for safe operation and that the aircraft is properly maintained. The portions of these standards that pertain to small airplanes — commonly referred to as general aviation — were originally written in 1965 based on 1950s and 1960s airplane designs. The standards ensured adequate levels of safety, but lacked the flexibility to accommodate rapidly developing technological innovations.

This year, the FAA proposed extensive revisions to its general aviation airworthiness standards. Instead of the traditional prescriptive design requirements, the FAA is proposing performance-based standards for small airplanes with seating for up to 19 passengers and a maximum takeoff weight of 19,000 pounds. The proposed rule will streamline how we approve new technologies for small piston-powered airplanes all the way to complex high-performance executive jets.

The FAA's proposal, which is based on industry recommendations, aims to facilitate the adoption of safety enhancing technologies in small airplanes while advancing safety and reducing the time and cost burdens for the aviation industry and the FAA. The proposed rule removes barriers to certification for emerging technologies such as electric and hybrid propulsion. It takes into account the needs of the general aviation community and supports a culture that fosters and rewards innovation. The shift to performance-based standards will provide general aviation with the ability to more effectively design, certify, manufacture, operate, and maintain the airplanes of today; and it will assure the future of general aviation will continue to thrive from innovation and imagination.

A short video highlighting the benefits can be viewed on the FAA's website at: <a href="http://www.faa.gov/tv/?mediaid=1258">http://www.faa.gov/tv/?mediaid=1258</a>



## **Noise Exposure**

The U.S. population exposed to significant aircraft noise around airports has been reduced to less than 300,000 persons by 2018.				
FY 2016 Target	Reduce the number of people exposed to significant aircraft noise to less than 328,000 in calendar year 2016.			
FY 2016 Result	343,000			
Public Benefit	The public benefit is reduced exposure to unwanted aircraft noise and increased capacity, thus reducing airport congestion and delays.			

With the beginning of commercial jet service in the 1950s, air travel became faster, more efficient and more widely available for the public. But with it came an escalation in the impacts of noise around the nation's airports. In 1969, Congress gave the FAA the responsibility for reducing noise through regulation of aircraft design and certification.

In the late 1970s, an estimated 7 million people were subjected to high noise levels from aircraft. Today, the number of people affected by significant aircraft noise in the United States is lower even though the number of passenger enplanements has increased significantly since that time.

For this goal, the FAA defines significant aircraft noise as being exposed to a day-night average sound level (DNL) of 65 decibels or higher. DNL is the 24-hour average sound level, in decibels, for the period from midnight to midnight, obtained after the addition of ten decibels to sound levels for the periods between midnight and 7 am, and between 10 pm and midnight, local time. DNL takes into account the number of aircraft "noise events," the noise level of each event, and whether the event occurred in the daytime or at night. A noise event is defined as a one-time noise occurrence above a prescribed decibel level.

The number of people exposed to noise at certain airports can be affected by small changes in the shape of a noise contour. A noise contour is a line on a map that connects points of equal noise exposure on the surface. A small change in a contour shape can potentially cause a large change in the population count due to the uneven distribution of the population around airports.

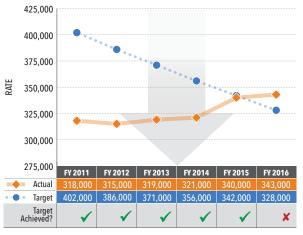
In FY 2016, with a result of 343,000 exposed to aircraft noise, the FAA did not achieve our noise exposure goal of keeping the number of people exposed to aircraft noise below 328,000. Although the FAA has succeeded in achieving this goal in the recent past, the number of people exposed to noise fluctuates every year. Factors that have contributed to increases include variations in the number

of flights at individual airports, when those flights fly, the fleet mix at those airports, and the flight paths flown. The increase in noise exposure from FY 2015 to FY 2016 was due to several factors, including an increase in overall Air Carrier operations (driven in large measure by continued growth in passenger demand), an increase in nighttime operations (defined as occurring between 10 pm and 7 am local time), and an increase in population. In addition to these factors, the underlying modeling inputs were updated which also affected the noise exposure results.

The FAA has made great strides in reducing noise impacts on the public, primarily through advancements in aircraft technology. Our CLEEN (Continuous Lower Energy Emissions and Noise) program provides incentives for manufacturers to develop lower-noise aircraft through technologies such as noise-reducing engine nozzles. More information about the CLEEN program can be found at: <a href="http://www.faa.gov/about/office\_org/headquarters\_offices/apl/research/aircraft\_technology/cleen">http://www.faa.gov/about/office\_org/headquarters\_offices/apl/research/aircraft\_technology/cleen</a>

The agency is also utilizing NextGen technologies and procedures, such as Required Navigation Performance to help reduce aviation noise. Optimized Profile Descents (OPD), also known as Continuous Descent Arrivals, provide a smooth path to the runway and eliminate the throttle noise produced during traditional step-down procedures, in which the aircraft descends and levels off at increasingly lower altitudes. Required Navigation Performance gives pilots not only the ability to fly OPDs, but also the potential to maneuver around congested neighborhoods and stay on routes designed to minimize noise.

# NOISE EXPOSURE Number of people exposed to significant aircraft noise



# **Unmodified Audit Opinion with No Material Weakness**

Obtain an unmodified opinion with no material weakness on the agency's financial statements.			
FY 2016 Target	Obtain an unmodified opinion with no material weakness on the agency's financial statements.		
FY 2016 Result	Unmodified audit opinion with no material weakness on the agency's financial statements.		
Public Benefit	The public benefit by being reasonably assured that the agency is being managed in a transparent and fiscally responsible manner.		

In FY 2016, for the ninth consecutive year, the FAA received an unmodified audit opinion with no material weaknesses. An unmodified audit opinion means that the FAA's financial statements are presented, in all material respects, in accordance with U.S. generally accepted accounting principles. Additionally, for federal agencies, it is a signal to the public and Congress that the agency is transparent and accountable in the way it uses taxpayer resources. Achieving an unmodified audit with no material weakness requires every FAA organization to assume responsibility for following accounting policy properly by entering accurate and timely source data into the accounting system.

From the highest levels of the agency down, the audit is a priority. Executive-level leadership allocate resources where they are needed so that sound internal controls operate routinely and effectively. Any audit issues are resolved promptly; the integrity of data and business system operations is ensured; and ongoing performance is monitored. This strong emphasis on fiscal responsibility is the most significant factor contributing to the achievement of this measure.

Although we achieved this measure by receiving an unmodified audit opinion on our financial statements with no material weaknesses, we faced challenges this year resulting in two significant deficiencies reported by our auditors. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness yet important enough to merit attention by those charged with governance.

We received a significant deficiency related to the completeness of our environmental decommissioning liability. To address this weakness, we will modify the estimation methodology to include the entire population of assets with environmental impacts. We received a second significant deficiency due to control weaknesses related to the implementation of our new inventory reporting system. We are taking a number of corrective actions to address those control deficiencies and have created a Change Control Board that will be responsible for approving and coordinating changes and enhancements to the system.

#### **UNMODIFIED AUDIT OPINION**

Obtain an unmodified opinion with no material weakness on the agency's financial statements (Unmodified Audit Opinion with no material weakness)

(Olimodilled Addit Opinion with no material weakness)					
	Target	Actual	Target Achieved?		
FY 2016	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	1		
FY 2015	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	1		
FY 2014	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	1		
FY 2013 <sup>1</sup>	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	1		
FY 2012 <sup>1,2</sup>	Unqualified Audit Opinion with no Material Weakness	Unqualified Audit Opinion with no Material Weakness	1		
FY 2011 <sup>2</sup>	Unqualified Audit Opinion with no Material Weakness	Unqualified Audit Opinion with no Material Weakness	1		

- 1 In FY 2012 and FY 2013, the unmodified audit opinion was one of three indicators that were aggregated to determine performance against a combined goal. The combined indicators were all part of a performance measure that is now retired (Outside Ratings – see our FY 2013 PAR for a full description of the calculation).
- 2 The term "unmodified" was used starting in FY 2013. Prior to then, the term "unqualified" was used.

#### STRATEGIC PRIORITY:

#### **ENHANCE GLOBAL LEADERSHIP**

STRATEGIC OBJECTIVE: Improve safety, air traffic efficiency, and environmental sustainability across the globe through an integrated, data-driven approach that shapes global standards, enhances collaboration and harmonization, and better targets FAA resources and efforts.

Strong partnerships and active collaboration are key elements to creating consistent aviation standards around the world and for making international travel safer. The FAA created the Global Leadership Initiative to engage with the international aviation community to improve the safety, efficiency, and environmental sustainability of the global aviation system. In FY 2016, the FAA embarked on new initiatives that support these efforts, and while there are no performance metrics for this area in this report, the engagement with other countries continues to shape how the FAA prioritizes and targets resources. The FAA is working to identify a performance measure that accurately represents this progress and plans to include this measure in future reports.

In FY 2016, the FAA created an expansive database of global aviation information to inform and drive global resource allocations and engagement decisions. A top priority validated by this process is the new agency focus on the Caribbean. The FAA launched the Caribbean Initiative to directly address identified airspace efficiency and airport safety improvements in a region that is heavily traveled by U.S. citizens. More U.S. travelers fly to the Caribbean than any other international destination, except for Europe. With air traffic between the U.S. and the Caribbean expected to grow between five and six percent over the next two decades, especially as travel to Cuba increases, focusing attention and resources on this region has never been more important.

The FAA also works closely with the International Civil Aviation Organization (ICAO) regarding international adoption of global standards of top importance to the U.S. aviation community. In 2016, the FAA established two agreements with ICAO under which the FAA provides experts in the areas of system wide information management and unmanned aircraft systems. The FAA also finalized arrangements to support global safety and security issues such as the transportation of lithium batteries, global tracking of aircraft, and data-sharing related to conflict zones and other threats to aviation safety. Finally, the FAA supports the ICAO's

environmental group. The FAA's leadership this year was essential to achieving consensus and approval of a market-based emission reduction system for reducing carbon dioxide emissions from aircraft.

The continued globalization of the aviation industry has prompted increased collaboration among the world's civil aviation authorities to harmonize regulations and certification processes. The FAA is pioneering a certification strategy in cooperation with Brazilian, European, and Canadian civil aviation authorities. This strategy focuses on confidence-building initiatives and risk-based validation principles that allow participating authorities to accept partner certification activities with limited or no technical involvement. This strategy allows the four authorities to rely on the work of the originating certification authority as much as possible, reducing the amount of effort each of the authorities need to spend on validation programs and allowing them to refocus efforts elsewhere.

In February 2016, the FAA Administrator visited Singapore and met with the Association of Southeast Asian Nations (ASEAN) aviation leaders. The FAA is working with ASEAN on regional initiatives in the areas of aviation safety, efficiency and other critical areas. While in Singapore, the Administrator signed a milestone agreement with the Civil Aviation Authority of Singapore that strengthens aviation safety and reduces the cost of repair inspections by allowing the reciprocal acceptance of Singapore and the United States' surveillance of maintenance work.

Finally, the FAA continues to place a high priority on maximizing the interoperability and harmonization of our NextGen effort with other regional modernization programs such as Europe's Single European Sky ATM Research (SESAR). Together, the FAA and its European counterparts are working to provide an aviation improvement roadmap that will expedite the implementation of new technologies, procedures and concepts around the globe.

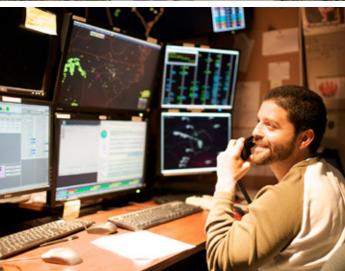
## STRATEGIC PRIORITY: EMPOWER AND INNOVATE WITH THE FAA'S PEOPLE

STRATEGIC OBJECTIVE: Prepare FAA's human capital for the future by identifying, recruiting, and training a workforce with the leadership, technical, and functional skills to ensure the United States has the world's safest and most productive aviation sector.

Performance Measure	FY 2013 Results	FY 2014 Results	FY 2015 Results	FY 2016 Target	FY 2016 Results	FY 2016 Status	FY 2017 Target
FedView Rankings "Best Places to Work"							
The FAA is ranked in the top 31 percent of federal agencies in the Best Places to Work FedView rankings.	40%	50%	43%	31%	TBD <sup>1</sup>	TBD	28%







LEFT: Tech Ops specialists after a tower climb at Los Angeles center. UPPER RIGHT: An FAA technician checks a precision approach path indicator (PAPI) — a visual aid that helps a pilot acquire and maintain the correct approach to an airport. LOWER RIGHT: Inside the Terminal Radar Approach Control Facility at Charlotte Douglas International Airport, N.C.

# **FedView Rankings: Best Places to Work**

FAA is ranked in the top 31 percent of federal agencies in the Best Places to Work (BPTW) FedView rankings.				
FY 2016 Target	FAA is ranked in the top 31 percent of federal agencies in the Best Places to Work FedView rankings.			
FY 2016 Result	<b>TBD</b> (Results will not be available until December 2016)			
Public Benefit	Improvements in FedView results that are used to calculate the rankings would indicate that the FAA is managing its workforce better. Research indicates that improved employee survey results are associated with higher organizational performance.			

Each year, the Office of Personnel Management (OPM) administers a survey that measures employees' perceptions of the extent to which conditions characterizing successful organizations are present in their agencies. The survey, known as the Federal Employee Viewpoint Survey (FedView), provides valuable insight into the challenges that agency leaders face in ensuring that their agencies are contributing to the effectiveness of the federal government's civilian workforce and the degree to which these leaders are responding to the challenges.

The survey is based on a sample of federal employees. These employees are encouraged, but not required to participate.

Additionally, workplace issues over which an employee has no control (e.g., furloughs, budgets, etc.) can negatively impact survey results. For these reasons, it is difficult to determine an overall performance trend.

The Partnership for Public Service obtains FedView survey data from the OPM and calculates the Best Places to Work (BPTW) Index. This index is used to rank federal agencies. This ranking is generally the most publicized FedView result. The FAA's long-term goal is to be ranked among the top 25 percent BPTW by 2018. For FY 2016, the FAA's target is to be ranked in the top 31 percent.

The FedView results are expected to be released by December 2016. Due to the publication date of the FY 2016 PAR, these results will not be included in this document. However, we plan to include the FAA's result in next year's PAR. Our FY 2015 results saw the FAA's ranking increase 7 percentage points, from being in the top 50 percent in FY 2014 to the top 43 percent in FY 2015. Although the FAA's ranking improved, the FAA did not achieve the goal in FY 2015, which was to be ranked in the top 34 percent.

The FAA is committed to building a strong performance and engagement culture that helps the agency achieve the long-term goal of being in the top 25 percent of best places to work agencies. The FAA Administrator challenged his senior team to address the agency's results from the FedView Survey with actions that will improve employee engagement within and across the FAA workforce. The Partnership for Public Service participated in the agency's 2016 Best Practices Roundtable and shared government and private sector best practices with FAA leadership to strengthen employee engagement.

As is the case with overall government scores, the FedView results highlight that FAA must continue to focus on promoting engagement between its employees and senior managers. As part of its fourth strategic priority — Empower and Innovate with FAA's People — the FAA Leadership and Learning Institute (FLLI) has redesigned core management and leadership courses to emphasize collaboration, communication, innovation, and the development of others.

In its second year of operation, FLLI trained 2,794 students in instructor-led courses and had 11,793 web-based training completions. FLLI's regional delivery model allowed students to travel less while learning from the newly developed curriculums in Leadership Development, Management Studies, Performance Management, Decision Making, and Communications. This new model of training deployment significantly reduced the price per student taking a FLLI class while exponentially increasing the number of students able to attend.



FAA Headquarters, Washington, DC. Photo: FAA

#### FEDVIEW RANKING: BEST PLACES TO WORK

FAA is ranked in the top 34 percent of Federal Agencies in the Best Places to Work FedView rankings.

	Target	Actual	Target Achieved?	
FY 2016	31%	TBD <sup>2</sup>	TBD <sup>2</sup>	
2015	34%	43%	×	
2014	37%	50%	×	
2013	75%	40%	1	
2012	75%	39%	<b>✓</b>	
2011	This was a new measure in FY 2012			

- 1 In FY 2014, the title of this measure changed to "FedView Rankings" from the prior title "FAA Ratings." In FY 2016, the title of this measure was changed to "FedView Rankings: Best Places to Work."
- 2 Results expected in December 2016.

In addition to leadership development, the FAA has also implemented programs to improve employee engagement through a more welcoming onboarding experience and better communication. In FY 2016, the FAA completed agency-wide implementation of the Corporate Onboarding Program. The FAA's new comprehensive onboarding program, which begins when a new employee accepts the job offer and continues through the new hire's first year, can significantly improve engagement, time-to-productivity, and retention. The FAA's Corporate Onboarding Program continues to solicit information from hiring managers, and points of contact throughout the agency to identify tools and resources that would assist hiring managers in supporting new employees through their onboarding period. The tools and resources will be incorporated into the Onboarding process in FY 2017.

A variety of agency-wide steps have been taken to foster communication, including holding regular executive town hall meetings, enhancing employee websites, publishing newsletters, and nurturing employee opportunities for collaboration and participation in work groups. These communication innovations facilitate the sharing of information and improve workforce engagement.



# CONNECTED WITH THE NEXT GENERATION FOR NEXTGEN

Employees from across the FAA's William J. Hughes Technical Center (Technical Center) volunteered to develop a unified approach for attracting and recruiting future scientific and engineering talent to the FAA. The group named the approach Aviation Science, Technology, Engineering, and Math (AvSTEM). AvSTEM builds upon the strong foundation established by these other FAA initiatives: Pathways Internship Program, Center of Excellence Fellows, Volunteer Student Service Program, Minority Serving Institutions Program interns, and participation in the FAA-Eurocontrol International Conference on Research in Air Transportation. These initiatives and others were represented this year at the first annual AvSTEM Day hosted by the Technical Center. Over 100 students and faculty attended from 26 high schools, colleges, and universities. AvSTEM gives students an introduction to the agency and the chance to see how they could make an impact on the future of aviation.

TOP: Dhaval Dadia, FAA researcher, discusses aircraft fire safety with students and faculty at the William J. Hughes Technical Center's first annual AvSTEM Day.

BOTTOM: Students participate in an experiment at the FAA's William J. Hughes Technical Center's aviation enrichment day, as part of the FAA's AvSTEM





# **Quality Assurance** and Cost Controls

# Verification and Validation of Performance Information

The FAA employs strong management controls to ensure the accuracy, completeness, and timely reporting of performance data. Because of rigorous internal and external reviews, the FAA's verification and validation process produces performance results that agency managers and the Administrator are confident of.

In addition to internal verification and review by the FAA, performance data is independently verified by the Department of Transportation. Moreover, data from several FAA safety performance measures, such as the Commercial Air Carrier Fatality Rate and the General Aviation Fatal Accident Rate, require independent verification by the National Transportation Safety Board (NTSB) and the Bureau of Transportation Statistics. Data for these measures are not considered final until the NTSB completes its report on each incident.

# **Completeness and Reliability** of Performance Data

The agency's internal review processes support the integrity of our performance data. At the beginning of each fiscal year, we update the performance measure profiles, which essentially function as a clearinghouse for accurate and detailed documentation of our performance measures. An exhaustive report includes technical definitions for each measure, as well as data source information, statistical issues, and completeness and reliability statements. Where the criteria for targets have changed, it is noted and the changes are explained.

To supplement the performance measure profiles, the agency annually conducts an internal review of the verification processes used by all internal FAA organizations responsible for collecting and reporting performance data. The agency's full understanding of these processes allows it to provide complete and definitive documentation of results at the end of the year.

# **Program Evaluations**

Program evaluations are an assessment of the manner and extent to which an agency has achieved its objectives. While performance measures use statistics to show whether the FAA has achieved its intended outcomes, program evaluations include the use of analytical techniques to assess the extent to which programs have contributed to their desired outcomes and trends. Understanding the results of program evaluations enables us to initiate actions to improve program performance. Program evaluations are conducted by contractors, academic institutions, the Office of the Inspector General, and the Government Accountability Office.

The Office of Airport Planning and Programming has standing processes in place for internal reviews of key financial programs, particularly related to Airport Improvement Program (AIP) grant documentation as well as Passenger Facility Charge (PFC) application processing. From time to time, the FAA also undertakes more formal program evaluations, in the planning, environmental or financial areas.

In FY 2016, the FAA undertook several program evaluations, including an evaluation of tests used to identify homes that may be eligible for sound insulation funded through FAA programs; an evaluation of compliance with recent legislation that requires all airport master plans to include recycling plans; and an evaluation of compliance with rules governing regional implementation of both the AIP grant program and the PFC program in order to identify best practices, anomalies in program implementation, and areas for improvement in policies, procedures, guidance, tools or training.

The FAA also took action on the findings of several program evaluations that were conducted in previous years. For example, based on the results of a review of the State Block Grant Program (SBGP), the FAA finalized a draft Advisory Circular, to be published in early FY 2017, that consolidates for the first time all of the guidance related to administration of the SBGP, for both FAA personnel and the block-grant states themselves. The FAA also published a draft of a completely revised PFC Order based on the findings of a comprehensive review of the PFC program completed in FY 2014, which included extensive input from a broad range of internal and external stakeholders, as well as internal analysis, input and review by agency field offices.

# **Improving Financial Management**

#### **Cost-Effectiveness**

The FAA's strategic plan includes an objective to improve the financial management of the agency while delivering quality customer service. A cost-control target is tracked each month. The FAA's efforts in this area are described below.

FY 2016 COST CONTROL PROGRAM RESULTS (Dollars in Thousands)						
Activity	FY 2016 Savings Estimate	Actual FY 2016 Savings	FY 2016 Savings as Percent of Estimate			
Regional Optimization	\$1,186	\$2,516	212%			
Worker's Compensation	\$7,000	\$7,890	113%			
NESS-ATO Flight Service Stations	\$5,706	\$5,143	90%			
SAVES	\$38,000	\$41,441	109%			
Glenn Dale Lease	\$1,932	\$1,932	100%			
ASO Space Consolation Project- Camp Creek	\$1,470	\$1,470	100%			
Lean Maintenance & Revalidation Program (LMRP)	\$560	\$732	131%			
Total	\$55,854	\$61,124	109%			
TARGET	\$50,268		122%			

**Regional Optimization.** By reevaluating the number of the workforce needed in each region and the relocation of personnel, the FAA was able to reduce its total workforce. This activity achieved savings of \$2.52 million as of July 2016.

Workers' Compensation Consolidation. The FAA has saved a total of \$149 million in workers' compensation claims since FY 2005. Due to the FAA's success in this area, the DOT gave the FAA centralized, department-wide responsibility for managing workers' compensation claims. In 2016, the FAA saved \$7.89 million in workers' compensation costs. The goal of the program is to mitigate Office of Workers' Compensation Program costs by undertaking proactive and centralized management of injury claims, and achieve cost containment through effective management of the workers' compensation program. Cost avoidance is computed as follows:

- Short-term disability claims (disability < one year) —
  computed as compensation payments avoided from the date
  of return to work through the remaining balance of one year
  following the employee's date of injury.</li>
- Long-term disability claims (disability > one year) computed
  as compensation payments avoided over the course of one
  full calendar year from the date of successful resolution
  (return to work, termination/reduction of benefits, etc.).
- 3. Questionable claims challenged by the FAA's Human Resource Management National Workers' Compensation Program Office and denied by the Department of Labor — computed as compensation payments avoided over the course of one full calendar year from the date of injury.

National Airspace System Efficient Streamlined Services (NESS)—Flight Service Stations. The National Airspace System of the Future requires a more efficient national airspace system with increased safety and user benefits. The FAA's Air Traffic Organization will be supporting the National Airspace System Efficient Streamlined Services (NESS) sub initiative by implementing a multi-year, phased transition plan which includes:

- 1. Using technological advances to provide efficient and affordable flight services.
- 2. Eliminating or reducing services that are redundant or obsolete, or do not support end-state core safety functions.
- Re-scoping and negotiating contracts to support the appropriate service levels.
- 4. Engaging stakeholders throughout this process.
- 5. Modifying proposed flight services changes based on stakeholder feedback and input.

This activity has yielded a FY 2016 cost savings of \$5.14 million.

The Strategic Sourcing for the Acquisition of Various Equipment and Supplies (SAVES) Program. The SAVES program is an ambitious effort that began in FY 2006 to implement private sector best practices in the FAA's procurement of administrative supplies, equipment, IT hardware, commercial off-the-shelf software, and courier services. Four of the categories are managed by FAA through nine contracts. The Maintenance, Repair and Operations and Delivery Services are purchased through GSA. The SAVES program has enabled us to gain better financial oversight in addition to significant cost savings.

Through SAVES contracts, we achieved more than \$41 million in cost savings for FY 2016, and a total savings of more than \$280 million since program implementation in 2006. SAVES contracts have produced the following relative savings rates for 2016:

- ▶ 53.3 percent for IT Commercial off-the-shelf Software.
- ▶ 33 percent for IT Hardware.
- ▶ 10.2 percent for Office Supplies.
- ▶ 3.1 percent for Office Equipment.
- ▶ 0.5 percent for Maintenance, Repair, and Operations and Delivery Services.

Glenn Dale, Maryland Lease. The FAA had an occupancy agreement with the General Services Administration (GSA) for 142,810 sq. ft. of space in Glenn Dale, Maryland. This space was primarily for printing, storing and distributing large format aeronautical and maritime maps. By relocating certain staff to other existing FAA space, FAA relinquished 64,100 sq. ft. under the Glenn Dale agreement, saving \$1.93 million in FY 2016.

Southern Region (ASO) Space Consolation Project - Camp Creek, Georgia. Before the space consolidation project, 764 southern region employees were located in space provided through the GSA. The FAA also had a lease for office space at the nearby Camp Creek Building, providing office space for 329 additional Air Traffic Organization employees. By optimizing the use of office space, the FAA was able to relocate all 329 Air Traffic employees from the Camp Creek Building to the Southern Regional Office saving the agency \$1.47 million in FY 2016.

Lean Maintenance & Revalidation Program. To sustain service and reduce costs, the FAA replaced certain older/ obsolete antennas used in air traffic control and navigation, with commercially available higher power, less costly antennas. The removed antennas and the associated antenna control units are sent back to the FAA's Logistics Center to be used as support parts for the remaining older systems. This saved \$0.732 million.

## **Efficiency**

In addition to cost control, each FAA organization develops, tracks, and reports quarterly on a comprehensive measure of its operating efficiency or financial performance.

Air Traffic Organization Cost per Operation. This cost-based metric provides a broad historic picture of the overall cost efficiency of air traffic control. The FAA regularly reviews its Air

Traffic Organization's cost per operation to evaluate cost efficiency over the course of time and compared with our international counterparts. The most recent cost per operation data available is for the fiscal years ending September 30, 2014 and 2015:

#### **Air Traffic Organization Cost per Operation**

	2014	 2015	
\$	87.16	\$ 83.80	

In FY 2015, the Air Traffic Organization Cost per Operation declined by 4 percent over FY 2014. This was driven by a 3 percent reduction in Air Traffic Organization costs and a 1 percent increase in traffic.

Data for this metric is not yet available for the full fiscal year ending September 30, 2016; however, below we have provided the Air Traffic Organization Cost per Operation Results for the first three quarters of fiscal years 2015 and 2016, ending June 30:

**Air Traffic Organization Cost per Operation Results** 

	2015	2016
\$	82.29	\$ 84.28

For the most recent partial period available, the first three quarters of FY 2016, the Air Traffic Organization Cost per Operation increased by 2 percent over the same period a year earlier. This was driven by a 1 percent increase in Air Traffic Organization costs and a 1 percent reduction in traffic.

**Overhead Rates.** This metric provides insight into the cost-effectiveness of overhead resources at the FAA. The resulting performance indicator informs management decisions concerning the allocation of general and administrative services and mission support services. The most recent overhead rate data available is for the fiscal years ending September 30, 2014 and 2015:

#### **Overhead Rates**

2014	2015
27.3%	26.6%

This is a composite overhead rate of all of the FAA's lines of business and staff offices.

Regulatory Cost per Launch/Re-entry. This metric provides trend data for the average regulatory cost per launch or re-entry of commercial space vehicles. This information is used to track how efficiently the FAA is interacting with the commercial space

industry. Trend data are also reviewed to forecast what human resources will be needed to regulate and support future launch and re-entry operations.

The commercial space industry is a rapidly evolving field. As such, metrics in this area are continually evolving, and the FAA will begin reporting on them after an evaluation process produces a mature, accurate, and reliable representation of the data.

Freeze the Footprint. As part of the federal government's commitment to increase efficiency, the Administration adopted an initiative in FY 2013 to not increase the total square footage of its domestic office and warehouse space, referred to as the "Freeze the Footprint" policy for federal real estate. In FY 2016, we moved into the next phase of the initiative, known as "Reduce the Footprint." Since implementing the Freeze the Footprint initiative, the FAA has reduced over 600,000 square feet of office and warehouse space through the end of FY 2016. Most significantly, this year we completed a space consolidation and move of our Southwest Regional office, allowing us to vacate 221,000 square feet of space, thereby avoiding \$1.47 million in associated costs in FY 2016. Office leases in Glenn Dale, Maryland and Atlanta, Georgia were also terminated, resulting in the reduction of an additional 204,000 square feet and a reduction of \$4.33 million in annual rent. Continuing our momentum, we work to strengthen our real property portfolio management through ongoing strategic planning reviews and additional space reduction projects planned in FY 2017 and beyond. We also continue to partner with the General Services Administration to identify and implement additional opportunities to reduce the federal real estate portfolio.

For more information on our Freeze the Footprint efforts, see page 123.

## **Implementing Expense Controls**

The FAA has improved its oversight of the acquisition process to help ensure that the agency is a responsible steward of the taxpayers' money. Enhanced processes and controls help us to better manage resources and arrive at sounder business decisions in relation to our external contracts.

**Procurements.** In 2005, the FAA's Chief Financial Officer (CFO) was directed to exercise greater oversight and fiscal control over all agency procurements costing \$10 million or more. Since that time, the Office of Financial Analysis has evaluated 679 procurement packages with an estimated total value of \$83.3 billion. Since the process was begun, the FAA has greatly improved its ability to better define program requirements, more accurately estimate costs, and substantiate those cost estimates. With these improvements, it has established proper controls and can manage contract resources more effectively.

The FAA Acquisition Executive established an Acquisition Executive Board during FY 2009 to oversee procurement policy. The Acquisition Executive Board is working to streamline and standardize the processes by which acquisitions are approved and managed. As part of this effort, a separate board, the Support Contract Review Board, was established to review and recommend Chief Financial Officer (CFO) approval or disapproval of any proposed support contract with a value of \$10 million or more. This board is composed of executives from the CFO's office, the Office of Acquisitions and Contracting, and the Office of the Chief Counsel. The board makes recommendations to the CFO for approval or disapproval of each large support contract.

Information Technology (IT). To better coordinate IT efforts, any IT-related spending in excess of \$250,000 must be approved by the FAA's Chief Information Officer. This requirement ensures that IT investments are coordinated and consistent with the FAA's agency-wide IT strategy. The Information Technology Shared Services Committee serves as a forum to ensure effective, secure, and cost-efficient use of IT resources.

Conferences. In 2009, the CFO and FAA Acquisition Executive issued guidance requiring that all conferences estimated to cost \$100,000 or more be approved by the CFO before funds may be committed. The FAA has continued to strengthen policies in this area. In 2010, the level of approval was elevated to the Administrator, and in 2012, it was elevated to the Deputy Secretary of the DOT. Since 2012, the Administrator took on the authority of approving all conferences costing more than \$20,000.





**Civil aviation plays a vital role in the nation's economy**, contributing more than five percent to the Gross Domestic Product annually. About 68,000 flights are safely guided through our nation's airspace system every day by the highly skilled and dedicated men and women of the FAA. In addition, the airspace system is rapidly expanding to include new entrants, such as commercial space vehicles and unmanned aircraft. Aviation is an exciting and vibrant mission, or calling, to many of us at the FAA. We are proud of our accomplishments and of the trust placed in us by the American public.

While the FAA continues to manage our nation's airspace system through the safest period in aviation history, we have made substantial progress in implementing NextGen, the modernization of the hardware and software systems essential to the operation of the airspace system. Today, FAA is ten years into its plan for NextGen, and well on its way to meeting its commitments to complete the NextGen MidTerm plan by 2025.

MARK HOUSE

Under NextGen, the FAA has successfully installed the infrastructure for surveillance, advanced communications, and information exchange. We are working with industry partners through the NextGen Advisory Committee (NAC) to make policy, process, and procedures changes that produce benefits. Since 2014, the FAA has been working with industry on a rolling plan to identify key NextGen priorities for immediate investment. Evidence that our collaborative efforts are already realizing success can be seen through increases in aircraft equipage and the publishing of industry plans and commitments to further equipage on our key NextGen initiatives through the NAC.

The FAA is completing this work in an uncertain budget environment. We begin FY 2017 under yet another continuing resolution, which is a stopgap measure to keep the federal government running temporarily while Congress deliberates full year funding levels. It has been 20 years since FAA began the fiscal year with certainty about its funding for the year ahead. In two recent years, the FAA began the year under some form of authorization or appropriation lapse, resulting in furloughs of employees.

The Future The FAA is almost entirely funded by the commercial users of the system through ticket taxes and fees that are deposited into the Airport and Airway Trust Fund (AATF). This fund pays for all of the FAA's Facilities and Equipment (F&E), Research, Engineering and Development (RE&D), and Airport Improvement Program (AIP) accounts, as well as the majority of the Operations funding necessary to operate the FAA. In FY 2016, the AATF provided 88 percent of the funding necessary to operate the FAA. Despite the AATF as the primary source of the FAA's funding, the appropriation and authorization processes can present an environment of budget and programmatic uncertainty.

As we look ahead to our next authorization, our focus remains on managing an uncertain budget environment while executing our priorities to modernize the air traffic control system, invest in infrastructure for our airways and airports, and maintain the safest and most efficient airspace system in the world.

Since the creation of the FAA's predecessor, the Federal Aviation Agency, in 1958, every Administration has recognized the importance of a stable aviation system to the economy and daily life in the United States. This year's election presents an opportunity for the next Administration to make its own mark on the future of aviation. The Administration will be able to consider questions about how to structure FAA's governance and finance, and how to ensure a stable and predictable stream of funding.

**Mark House** 

Chief Financial Officer November 10, 2016

Mark House

# Office of the Inspector General (OIG) Quality Control Review



# Memorandum

U.S. Department of Transportation

Office of the Secretary of Transportation Office of Inspector General

**ACTION:** Quality Control Review of

Audited Consolidated Financial Statements for

Fiscal Years 2016 and 2015 Federal Aviation Administration Report Number: QC-2017-011

Calvin L. Scovel III Inspector General

C. L. Dovetic

Reply to

Attn. of: JA-20

November 14, 2016

To: Federal Aviation Administrator

We respectfully submit our report on the quality control review (QCR) of the Federal Aviation Administration's (FAA) audited consolidated financial statements for fiscal years 2016 and 2015.

KPMG LLP of Washington, DC, under contract to the Office of Inspector General (OIG), completed the audit of FAA's consolidated financial statements as of and for the years ended September 30, 2016, and September 30, 2015 (see attachment). The contract required KPMG to perform the audit in accordance with generally accepted Government auditing standards and Office of Management and Budget Bulletin 15-02, "Audit Requirements for Federal Financial Statements."

KPMG concluded that the consolidated financial statements present fairly, in all material respects, FAA's financial position as of September 30, 2016, and September 30, 2015, and its net costs, changes in net position, and budgetary resources for the years then ended in accordance with U.S. generally accepted accounting principles.

## KPMG's Fiscal Year 2016 Audit Report, dated November 10, 2016

KPMG reported two significant deficiencies in internal control over financial reporting. The report did not include any instances of reportable noncompliance with tested laws and regulations.

## Significant Deficiencies

- 1. Lack of Controls over Inventory. FAA did not have adequate internal controls or policies and procedures in place prior to implementing the new Logistics Center Support System for inventory. As a result, it overstated Inventory Held for Repair by an estimated \$24 million and Inventory Held for Sale by an estimated \$47 million as of September 30, 2016. Additionally, it had to reclassify \$160 million of Inventory Held for Repair as of September 30, 2015 to Inventory Held for Sale.
- 2. Lack of Controls over Environmental Cleanup and Decommissioning Liability. FAA did not include certain assets identified in decommissioning activities in the Property Plant and Equipment records that the Agency used to develop the estimated amount it reported for environmental cleanup and decommissioning liability. Not including all assets in the estimate increases the risk and likelihood that the financial statements may be misstated.

We performed a QCR of KPMG's report and related documentation. Our QCR, as differentiated from an audit performed in accordance with generally accepted Government auditing standards, was not intended for us to express, and we do not express, an opinion on FAA's consolidated financial statements or conclusions about the effectiveness of internal controls or compliance with laws and regulations. KPMG is responsible for its report and the conclusions expressed in that report. However, our QCR disclosed no instances in which KPMG did not comply, in all material respects, with generally accepted Government auditing standards.

KPMG made seven recommendations to strengthen FAA's controls over inventory and environmental cleanup and decommissioning liability. FAA officials concurred with KPMG's findings. FAA also committed to submitting to OIG by December 31, 2016, a detailed action plan to address KPMG's findings. In accordance with DOT Order 8000.1C, the corrective actions taken in response to the findings are subject to follow up.

We appreciate the cooperation and assistance of FAA's representatives, the Office of Financial Management, and KPMG. If we can answer any questions, please contact me at (202) 366-1959, or Louis C. King, Assistant Inspector General for Financial and Information Technology Audits, at (202) 366-1407.

Attachment

# **Independent Auditors' Report**



KPMG LLP Suite 12000 1801 K Street, NW Washington, DC 20006

#### **Independent Auditors' Report**

Administrator, Federal Aviation Administration Inspector General, U.S. Department of Transportation

#### Report on the Financial Statements

We have audited the accompanying consolidated financial statements of the U.S. Department of Transportation (DOT), Federal Aviation Administration (FAA), which comprise the consolidated balance sheets as of September 30, 2016 and 2015, and the related consolidated statements of net cost, and changes in net position, and combined statements of budgetary resources for the years then ended, and the related notes to the consolidated financial statements.

#### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America, in accordance with the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, and in accordance with Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*. Those standards and OMB Bulletin No. 15-02 require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion on the Financial Statements

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the U.S. Department of Transportation (DOT), Federal Aviation Administration (FAA) as of September 30, 2016 and 2015, and its net costs, changes in net position, and budgetary resources for the years then ended in accordance with U.S. generally accepted accounting principles.



#### Other Matters

#### **Interactive Data**

Management has elected to reference to information on websites or other forms of interactive data outside the Performance and Accountability Report to provide additional information for the users of its financial statements. Such information is not a required part of the basic consolidated financial statements or supplementary information required by the Federal Accounting Standards Advisory Board. The information on these websites or the other interactive data has not been subjected to any of our auditing procedures, and accordingly we do not express an opinion or provide any assurance on it.

#### **Required Supplementary Information**

U.S. generally accepted accounting principles require that the information in the Management's Discussion and Analysis, Required Supplementary Information, and Required Supplementary Stewardship Information sections be presented to supplement the basic consolidated financial statements. Such information, although not a part of the basic consolidated financial statements, is required by the Federal Accounting Standards Advisory Board who considers it to be an essential part of financial reporting for placing the basic consolidated financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic consolidated financial statements, and other knowledge we obtained during our audits of the basic consolidated financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

#### Other Information

Our audits were conducted for the purpose of forming an opinion on the basic consolidated financial statements as a whole. The information in the Other Information, Foreword, Messages from the Administrator and the Chief Financial Officer, and Performance Results sections, as listed in the Table of Contents, of the FAA Performance and Accountability Report is presented for purposes of additional analysis and is not a required part of the basic consolidated financial statements. Such information has not been subjected to the auditing procedures applied in the audits of the basic consolidated financial statements, and accordingly, we do not express an opinion or provide any assurance on it.

#### Other Reporting Required by Government Auditing Standards

#### Internal Control Over Financial Reporting

In planning and performing our audit of the consolidated financial statements as of and for the year ended September 30, 2016, we considered the FAA's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the FAA's internal control. Accordingly, we do not express an opinion on the effectiveness of the FAA's internal control. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A material weakness is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected, on a timely basis. A significant deficiency is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.



Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that have not been identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We did identify certain deficiencies in internal control, described in Exhibit I, that we consider to be significant deficiencies.

#### Compliance and Other Matters

As part of obtaining reasonable assurance about whether the FAA's consolidated financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests of compliance disclosed no instances of noncompliance or other matters that are required to be reported herein under *Government Auditing Standards* or OMB Bulletin No. 15-02.

#### FAA's Responses to Findings

The FAA's responses to the findings identified in our audit are described and presented herein. The FAA's responses were not subjected to the auditing procedures applied in the audit of the consolidated financial statements and, accordingly, we express no opinion on the responses.

Purpose of the Other Reporting Required by Government Auditing Standards

The purpose of the communication described in the Other Reporting Required by Government Auditing Standards section is solely to describe the scope of our testing of internal control and compliance and the result of that testing, and not to provide an opinion on the effectiveness of the FAA's internal control or compliance. Accordingly, this communication is not suitable for any other purpose.



Washington, D.C. November 10, 2016

EXHIBIT I SIGNIFICANT DEFICIENCY

#### 1. Lack of Controls over Inventory

#### Background

FAA's inventory consists of items used to support FAA field locations, other domestic entities and foreign governments and is primarily classified as held for repair or held for sale. Held for repair inventory includes assets, returned from FAA field locations or other customers, that require repair in order to make the assets operational. Once an asset is repaired, it is considered serviceable and is reclassified as held for sale. Held for sale inventory also includes assets purchased from vendors. In April 2016, FAA implemented a new inventory reporting system, Logistics Center Support System (LCSS), and changed its method for valuing certain classes of inventory. Specifically, FAA transitioned from using the allowance method to the direct method to value inventory held for repair.

FAA continues to use the Warehouse Management System (WMS) as its warehouse distribution system and to facilitate its inventory cycle counts. WMS records the quantity, condition, and location of all assets on-hand in the warehouse. Inventory quantity and condition records in LCSS are generally updated based upon WMS actions such as receipts, shipments, or cycle count results.

#### Condition

System implementation controls: We identified certain internal control weaknesses related to FAA's implementation of LCSS and the transition to the new valuation methods. Specifically, we noted that:

- Management did not have a process in place to review and adjust the inventory unit values for September 30, 2016 financial reporting as the reports from LCSS necessary to perform the review had not been developed. Management did develop the appropriate reports, perform the reviews, and record the necessary adjustments to the inventory balance as of September 30, 2016, in response to our questions.
- Management did not have a process in place to reconcile the quantity and condition of assets in WMS to LCSS.
- During the system implementation process, management identified \$160 million of assets that
  were not properly classified as inventory held for sale as of September 30, 2015. Management
  corrected the classification of these assets in April 2016.

Policies and procedures over inventory: In a sample of eight assets held for sale and six assets held for repair, we noted the following:

- A systemic error in LCSS where assets may be carried at inaccurate values unless manually
  adjusted and corrected by management. We noted that the error occurs for assets where the
  previous quantity had been zero. We noted that this occurred for one held for repair asset selected
  in our sample and that management did not adjust or correct the value.
- The total repair costs captured on shop orders, which management uses to perform the year-end
  inventory adjustments, did not include the cost of direct labor hours or indirect labor and materials
  for two held for repair assets selected in our sample. In addition, the shop order for one of the
  sampled items was inappropriately valued at double the total repair cost.
- One held for sale asset was migrated into LCSS without a condition code and therefore, all onhand items of this asset type, 10 items in total, were classified as held for sale, without regard to the condition of the items, and valued at the standard cost. All of these assets were determined to be in the repairable condition, and should have been classified as held for repair and valued at the core value.

EXHIBIT I SIGNIFICANT DEFICIENCY

#### Criteria

Federal Accounting Standards Advisory Board (FASAB) Statement of Federal Financial Accounting Standards (SFFAS) 3: Accounting for Inventory and Related Property states that: Inventory shall be categorized as (1) inventory held for sale, (2) inventory held in reserve for future sale, (3) excess, obsolete and unserviceable inventory, or (4) inventory held for repair. Inventory shall be valued at either (1) historical cost or (2) latest acquisition cost. Inventory held for repair may be treated in one of two ways: (1) the allowance method or (2) the direct method. Under the allowance method, inventory held for repair shall be valued at the same value as a serviceable item. However, an allowance for repairs contra-asset account (i.e., repair allowance) shall be established. The annual (or other period) credit(s) required to bring the repair allowance to the current estimated cost of repairs shall be recognized as current period operating expenses. As the repairs are made the cost of repairs shall be charged (debited) to the allowance for repairs account. Under the direct method, inventory held for repair shall be valued at the same value as a serviceable item less the estimated repair costs. When the repair is actually made, the cost of the repair shall be capitalized in the inventory account up to the value of a serviceable item. Any difference between the initial estimated repair cost and the actual repair cost shall be either debited or credited to the repair expense account.

#### Cause

The LCSS transition was a unique, one-time, system implementation outside of normal business processes. As a result, FAA did not have sufficient policies, procedures, and controls in place to address the changes resulting from the LCSS implementation, and the change in accounting principle to ensure the inventory balance is fairly stated as of September 30, 2016 for financial reporting purposes.

#### **Effect**

The lack of effective controls related to accounting for inventory may result in a misstatement of FAA's inventory balance. Specifically, we noted the following misstatements as a result of the audit procedures performed as of September 30, 2016:

- Inventory Held for Repair as of September 30, 2016 is overstated by a known and projected amount of \$527 thousand and \$24 million, respectively.
- Inventory Held for Sale as of September 30, 2016 is overstated by a known and projected amount of \$12 thousand and \$47 million, respectively.

Additionally, we noted the following misstatements in the inventory footnote as of September 30, 2015 that were identified and corrected by management:

- Inventory Held for Repair as of September 30, 2015 was overstated by a known amount of \$160
- Inventory Held for Sale as of September 30, 2015 was understated by a known amount of \$160 million.

#### Recommendations

We recommend that FAA:

System implementation controls

1. Establish procedures and controls, at the appropriate level of precision, for unusual or infrequent events (e.g. system implementations, changes in accounting principles, or implementation of new accounting standards) in order to prevent or detect and correct a misstatement to the financial statements. Specifically for IT system implementations, establish an IT steering committee that is composed of management from all relevant stakeholder functional areas, including the IT office, program office, and financial reporting office to ensure that system implementation meets the needs of

EXHIBIT I SIGNIFICANT DEFICIENCY

all users and that policies, procedures, and system controls are appropriately redesigned, as necessary, to respond to the process changes resulting from the system implementation;

#### Policies and Procedures

- Establish policies, procedures, and controls over the periodic review of inventory unit values and develop the process for extracting the necessary reports and recording the adjustments in LCSS;
- 3. Establish policies, procedures, and controls to ensure that the inventory values assigned by LCSS are appropriate based on the asset condition;
- 4. Establish policies, procedures, and controls to reconcile the inventory items that exist in the warehouse and are recorded in WMS with the inventory items recorded in LCSS;
- 5. Perform an analysis of inventory by accounting groups and condition classifications to ensure that assets are recorded in LCSS with the appropriate condition code and the appropriate value; and
- 6. Provide training to the repair shop technicians on the new process of applying costs to LCSS shop orders to ensure repair costs are completely and accurately recorded.

EXHIBIT I SIGNIFICANT DEFICIENCY

#### 2. Lack of Controls over Environmental Cleanup and Decommissioning Liability

#### **Background**

FAA has title to various real property and other assets for use in its operations. Prior to October 1, 1988, certain of these assets may have been constructed with environmental containments, such as lead-based paint and asbestos, etc. FAA records an estimated environmental cleanup and decommissioning liability (EC&D) for the estimated costs to remove, contain, and/or dispose of the hazardous materials when the assets are decommissioned. The EC&D liability is estimated by multiplying the number of assets by an average cost of disposal. The number of assets used in this calculation is obtained from FAA's Property, Plant, & Equipment (PPE) detailed records. The average cost of disposal is calculated using actual invoices and contracts for assets currently being decommissioned and cost studies, where applicable.

#### Condition

Utilizing the EC&D liability calculation as of June 30, 2016, we selected a sample of 59 invoices related to assets currently undergoing decommissioning activities in order to validate the average cost of disposal used in the estimated EC&D liability. For nine assets, included on eleven invoices, we were unable to locate the asset in the FAA PPE detailed records as of June 30, 2016. We inquired of management and noted that these assets were not included in the PPE detailed records, as the asset did not meet FAA's capitalization threshold on the date that it was placed in service.

#### Criteria

FASAB Statement of Federal Financial Accounting Standard 5: Accounting for Liabilities of the Federal Government states: A contingent liability should be recognized when all of these three conditions are met: a past event or exchange transaction has occurred, a future outflow or other sacrifice of resources is probable, and the future outflow of sacrifice of resources is measurable.

FASAB Statement of Federal Financial Accounting Standard 6: Accounting for Property, Plant, and Equipment states: Cleanup costs are the costs of removing, containing, and/or disposing of (1) hazardous waste from property, or (2) material and/or property that consists of hazardous waste at permanent or temporary closure or shutdown of associate PP&E. Cleanup costs, as defined above, shall be estimated when the associated PP&E is placed in service.

#### Cause

Controls are not properly designed, implemented, and operating effectively to ensure that FAA's EC&D liability is estimated using a complete listing of all assets that may require future decommissioning and cleanup activites.

#### **Effect**

Not including all assets with future decommissioning and cleanup activities increases the risk and the likelihood that the financial statements may be misstated.

#### Recommendations

We recommend that FAA revise its policies and procedures to ensure that all assets, regardless of whether or not the assets were capitalized into PPE or expensed, that may require future decommissioning and cleanup activities are included in the liability.

# Management's Response to the FY 2016 Independent Auditors' Report

November 10, 2016



U.S. Department of Transportation

Office of Financial Services

800 Independence Ave. S.W. Washington, DC 20591

Federal Aviation Administration

NOV 1 0 2016

Ms. Hannah Padilla KPMG LLP 1801 K Street, NW, Suite 1200 Washington, DC 20006

Dear Ms. Padilla,

We have received your Independent Auditors' Report related to the Federal Aviation Administration's fiscal year 2016 consolidated financial statements.

We appreciate working in partnership with you in support of an efficient and effective audit, and are pleased to receive an unmodified audit result with no material weaknesses. We concur with the two significant deficiencies contained in your report. To improve the accuracy of our environmental liability estimate, we will modify the estimate methodology to include the entire population of assets with environmental impacts. To improve control weaknesses related to implementation of our new inventory reporting system, we are taking a number of corrective actions and have created a Change Control Board that will be responsible for approving and coordinating changes and enhancements to the system.

We will develop a corrective action plan to address these deficiencies and will submit it to the Office of Inspector General no later than December 31, 2016. I will monitor implementation of the plan throughout the corrective action process.

As always, we welcome the opportunity to improve our processes and procedures. Thank you for your candor and the professional manner in which you and your team conducted your audit.

Sincerely,

Mark House

Chief Financial Officer

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# **Financial Statements**

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

## **CONSOLIDATED BALANCE SHEETS**

As of September 30 (Dollars in Thousands)

ASSETS	2016	2015
Intragovernmental		
Fund balance with Treasury (Note 2)	\$ 3,653,328	\$ 3,195,055
Investments, net (Note 3)	15,358,203	14,942,387
Accounts receivable, prepayments, and other (Note 4)	231,964	222,934
Total intragovernmental	19,243,495	18,360,376
Accounts receivable, prepayments, and other, net (Note 4)	52,750	52,669
Inventory, operating materials, and supplies, net (Note 5)	719,159	695,755
Property, plant, and equipment, net (Note 6 and 9)	12,934,075	13,201,766
Total assets	\$ 32,949,479	\$ 32,310,566
LIABILITIES		
Intragovernmental liabilities		
Accounts payable	\$ 15,557	\$ 14,114
Employee related and other (Note 8)	 430,377	 383,233
Total intragovernmental liabilities	 445,934	 397,347
Accounts payable	360,428	292,839
Grants payable	722,695	742,418
Environmental (Note 7, 15, and 16)	950,159	962,237
Employee related and other (Note 8, 9, and 16)	962,479	866,218
Federal employee benefits (Note 10)	 808,657	 864,801
Total liabilities	 4,250,352	 4,125,860
Commitments and contingencies (Note 9 and 16)		
NET POSITION		
Unexpended appropriations – funds from dedicated collections (Note 12)	 1,181,726	 1,163,953
Subtotal unexpended appropriations	 1,181,726	 1,163,953
Cumulative results of operations—funds from dedicated collections (Note 12)	16,377,982	16,232,376
Cumulative results of operations—all other funds	 11,139,419	 10,788,377
Subtotal cumulative results of operations	 27,517,401	 27,020,753
Total net position	 28,699,127	 28,184,706
Total liabilities and net position	\$ 32,949,479	\$ 32,310,566

#### **CONSOLIDATED STATEMENTS OF NET COST**

For the Years Ended September 30 (Dollars in Thousands)

	2016	2015
LINE OF BUSINESS PROGRAMS (Note 11)		
Air Traffic Organization		
Expenses	\$ 11,429,654	\$ 11,218,862
Less earned revenues	(257,274)	(270,181)
Net cost	11,172,380	10,948,681
Airports		
Expenses	3,127,758	3,159,617
Net cost	3,127,758	3,159,617
Aviation Safety		
Expenses	1,486,736	1,401,631
Less earned revenues	(15,672)	(14,668)
Net cost	1,471,064	1,386,963
Security and Hazardous Materials Safety		
Expenses	114,522	115,360
Less earned revenues	(965)	(1,148)
Net cost	113,557	114,212
Commercial Space Transportation		
Expenses	21,243	19,582
Net cost	21,243	19,582
NON-LINE OF BUSINESS PROGRAMS		
Regions and Center Operations and other programs		
Expenses	642,900	645,123
Less earned revenues	(282,147)	(286,863)
Net cost	360,753	358,260
Net cost of operations		
Total expenses	16,822,813	16,560,175
Less earned revenues	(556,058)	(572,860)
Total net cost	\$ 16,266,755	\$ 15,987,315

## **CONSOLIDATED STATEMENTS OF CHANGES IN NET POSITION**

For the Years Ended September 30 (Dollars in Thousands)

#### **UNEXPENDED APPROPRIATIONS**

		2016			2015	
	Funds from dedicated collections (Note 12)	All other funds	Totals	Funds from dedicated collections (Note 12)	All other funds	Totals
Beginning balances	\$ 1,163,953	\$ _	\$ 1,163,953	\$ 1,147,857	\$ 29,016	\$ 1,176,873
Budgetary financing sources						
Appropriations received (Note 14)	1,987,724	_	1,987,724	1,145,700	_	1,145,700
Rescissions, cancellations and other	(44,917)	_	(44,917)	(33,570)	(29,016)	(62,586)
Appropriations used	(1,925,034)	 	(1,925,034)	(1,096,034)	 	 (1,096,034)
Total budgetary financing sources	17,773	 	17,773	16,096	 (29,016)	 (12,920)
Ending balances	\$ 1,181,726	\$ 	\$ 1,181,726	\$ 1,163,953	\$ 	\$ 1,163,953

## **CUMULATIVE RESULTS OF OPERATIONS**

		2016			2015	
	Funds from dedicated collections (Note 12)	All other funds	Totals	Funds from dedicated collections (Note 12)	All other funds	Totals
Beginning balances	\$ 16,232,376	\$ 10,788,377	\$ 27,020,753	\$16,617,670	\$10,481,124	\$ 27,098,794
Budgetary financing sources						
Appropriations used	1,925,034	_	1,925,034	1,096,034	_	1,096,034
Non-exchange revenue – excise taxes and other	14,693,882	-	14,693,882	14,553,812	16,809	14,570,621
Transfers-in/out without reimbursement	(284,971)	_	(284,971)	(271,606)	_	(271,606)
Other financing sources						
Donations and forfeitures of property	_	38,824	38,824	_	40,902	40,902
Transfers-in/out without reimbursement	(1,880,979)	1,881,832	853	(1,653,457)	1,741,128	87,671
Imputed financing from costs absorbed by others (Note 13)	323,877	66,187	390,064	347,742	55,076	402,818
Other	175_	(458)	(283)	(220)	(16,946)	(17,166)
Total financing sources	14,777,018	1,986,385	16,763,403	14,072,305	1,836,969	15,909,274
Net cost of operations	14,631,412	1,635,343	16,266,755	14,457,599	1,529,716	15,987,315
Net change	145,606	351,042	496,648	(385,294)	307,253	(78,041)
Ending balances	\$ 16,377,982	\$ 11,139,419	\$ 27,517,401	\$16,232,376	\$ 10,788,377	\$ 27,020,753

## **COMBINED STATEMENTS OF BUDGETARY RESOURCES**

For the Years Ended September 30 (Dollars in Thousands)

	 2016	 2015
BUDGETARY RESOURCES (Note 14)		
Unobligated balance brought forward, transfers and other	\$ 3,835,011	\$ 4,036,519
Recoveries of prior year obligations	326,704	372,325
Other changes in unobligated balance	 (56,188)	 (70,814)
Unobligated balance from prior year budget authority	 4,105,527	 4,338,030
Appropriations	12,933,191	12,513,836
Contract authority	3,350,000	3,220,000
Spending authority from offsetting collections	 8,690,971	 9,269,317
Total budgetary resources	\$ 29,079,689	\$ 29,341,183
STATUS OF BUDGETARY RESOURCES		
New obligations and upward adjustments	\$ 25,143,633	\$ 25,506,172
Apportioned unexpired accounts	1,645,490	1,576,262
Unapportioned unexpired accounts	2,146,960	2,111,705
Unexpired unobligated balance, end of year	 3,792,450	 3,687,967
Expired unobligated balance, end of year	143,606	147,044
Unobligated balance, end of year	 3,936,056	 3,835,011
Total status of budgetary resources	\$ 29,079,689	\$ 29,341,183
CHANGE IN OBLIGATED BALANCE		
Obligated balance, net, beginning of period	\$ 8,570,917	\$ 8,364,175
New obligations and upward adjustments	25,143,633	25,506,172
Gross outlays	(24,252,668)	(24,957,959)
Recoveries of prior year obligations	(326,704)	(372,325)
Change in uncollected customer payments from federal sources	(8,492)	30,854
Obligated balance, net, end of period	\$ 9,126,686	\$ 8,570,917
BUDGET AUTHORITY AND OUTLAYS		
Budget authority, gross	\$ 24,974,162	\$ 25,003,153
Actual offsetting collections	(8,692,372)	(9,314,982)
Change in uncollected customer payments from federal sources	(8,492)	30,854
Recoveries of prior year paid obligations	9,798	14,811
Budget authority, net	\$ 16,283,096	\$ 15,733,836
OUTLAYS		
Gross outlays	\$ 24,252,668	\$ 24,957,959
Actual offsetting collections	(8,692,372)	(9,314,982)
Distributed offsetting receipts	(15,674)	(7,849)
Net outlays	\$ 15,544,622	\$ 15,635,128

# **Notes to the Financial Statements**

# **NOTE 1. Summary of Significant Accounting Policies**

#### A. Basis of Presentation

The financial statements have been prepared to report the financial position, net cost of operations, changes in net position, and status and availability of budgetary resources of the Federal Aviation Administration (FAA). The statements are a requirement of the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. They have been prepared from, and are fully supported by, the books and records of the FAA in accordance with (1) the hierarchy of accounting principles generally accepted in the United States of America and standards approved by the principals of the Federal Accounting Standards Advisory Board (FASAB), (2) Office of Management and Budget (OMB) Circular No. A-136, as revised, Financial Reporting Requirements, and (3) Department of Transportation (DOT) and the FAA significant accounting policies, the latter of which are summarized in this note. These statements, with the exception of the Statement of Budgetary Resources, are different from financial management reports, which are also prepared pursuant to OMB directives that are used to monitor and control the FAA's use of budgetary resources. The statements are subjected to audit, as required by OMB Bulletin No. 15-02, Audit Requirements for Federal Financial Statements.

Unless specified otherwise, all dollar amounts are presented in thousands.

## **B.** Appropriations and Reporting Entity

Created in 1958, the FAA is a component of the DOT, a cabinet-level agency of the executive branch of the federal government. The FAA's mission is to provide a safe, secure, and efficient global aerospace system that contributes to national security and safety. As the leading authority in the international aerospace community, the FAA is responsive to the dynamic nature of customer needs, economic conditions, and environmental concerns.

Congress annually enacts appropriations to permit the FAA to incur obligations for specified purposes. In FY 2016 and 2015, the FAA was accountable for amounts made available per appropriations laws, from the Airport and Airway Trust Fund (AATF), revolving funds, a special fund, and general fund appropriations. The FAA recognizes budgetary resources as assets when authorized by congressional action and apportioned by the OMB.

The FAA has contract authority, which allows the agency to enter into contracts prior to receiving an appropriation for the payment

of obligations. A subsequently enacted appropriation provides funding to liquidate the obligations. Current contract authority is provided for the Airport Improvement Program (AIP) and funded by appropriations from the AATF.

The FAA also has spending authority from offsetting collections primarily from a non-expenditure transfer from the AATF for Operations funding. The balance of the spending authority from offsetting collections comes from other federal agencies which fund reimbursable activities performed by the FAA on their behalf.

The FAA reporting entity is comprised of the following major funds:

- ▶ The AATF, a fund from dedicated collections, is funded by excise taxes that the Internal Revenue Service (IRS) collects from airway system users. As presented in Note 3, these receipts are held for investment and are unavailable until appropriated by the U.S. Congress. Once appropriated for use, the FAA transfers AATF receipts to meet cash disbursement needs to several other funds, from which expenditures are made. The AATF fully finances the following additional FAA funds:
  - Grants-in-Aid to Airports. As authorized, grants are awarded
    with Grants-in-Aid to Airports funding and used for planning
    and development to maintain a safe and efficient nationwide
    system of public airports. These grants fund approximately
    one-third of all capital development at the nation's
    public airports, and are administered through the Airport
    Improvement Program.
  - Facilities and Equipment funds are the FAA's principal
    means of modernizing and improving air traffic control and
    airway facilities. These funds also finance major capital
    improvements required by other FAA programs, as well as
    other improvements designed to enhance the safety and
    capacity of the national airspace system.
  - Research, Engineering, and Development funds finance long-term research programs to improve the air traffic control system.
- ▶ Operations-General Fund and Operations-AATF. Operations finances operating costs, maintenance, communications, and logistical support for the air traffic control and air navigation systems. It also finances the salaries and costs associated with carrying out the FAA's safety, inspection, and regulatory

responsibilities. Operations-AATF is financed through transfers from the AATF. For administrative ease in obligating and expending for operational activities, those funds are then in turn transferred to the Operations-General Fund, which is supplemented by appropriations from the U.S. Treasury. Expenditures for operational activities, whether originally funded by the AATF or the General Fund of the U.S. Treasury, are generally made from the Operations-General Fund.

- ▶ Aviation Insurance Revolving Fund. Revolving funds are accounts established by law to finance a continuing cycle of operations with receipts derived from such operations, usually available in their entirety for use by the fund without further action by the U.S. Congress. The Aviation Insurance Revolving Fund, a fund from dedicated collections, was established to provide premium and non-premium insurance to meet the needs of the U.S. domestic airline industry not adequately met by the commercial insurance market. However, today, the aviation insurance market offers insurance products that meet the needs of the vast majority of the world's air carriers. Accordingly, on December 11, 2014, Congress allowed the FAA's authority to provide premium war risk insurance to expire. The FAA continues to provide non-premium war risk insurance, which includes hull loss and passenger, crew, and third-party liability coverage, for certain U.S. Government contracted air carrier operations, as authorized by 44 USC 344305. This non-premium insurance authority expires on December 31, 2018; pursuant to 49 USC 44310(b). The remaining balance in the Aviation Insurance Revolving Fund will be used to support the non-premium program (see Note 16).
- ▶ Administrative Services Franchise Fund (Franchise Fund).

  The Franchise Fund is a revolving fund designed to create competition within the public sector in the performance of a wide variety of support services. These services include accounting, travel, multi-media, information technology, logistics and material management, acquisition, aircraft maintenance, international training, and management training.
- ▶ Other Funds. The consolidated financial statements include other funds, such as Aviation Overflight User Fees. Aviation Overflight User Fees is a "special" fund drawn from dedicated collections whose receipts come from charges to operators of aircraft that fly in U.S. controlled airspace, but neither take off nor land in the United States. Other funds also include the Facilities, Engineering & Development General Fund and general fund miscellaneous receipts accounts established for receipts from

non-recurring activities, such as fines, penalties, fees, and other miscellaneous receipts for services and benefits.

The FAA has rights and ownership of all assets reported in these financial statements. The FAA does not possess any non-entity assets.

## C. Basis of Accounting

Transactions are recorded on both an accrual accounting basis and a budgetary accounting basis. Under the accrual method, revenues are recognized when earned, and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. Budgetary accounting facilitates compliance with legal requirements on the use of federal funds. All material intra-agency transactions and balances have been eliminated for presentation on a consolidated basis. However, the Statement of Budgetary Resources is presented on a combined basis, in accordance with OMB Circular No. A-136.

Intragovernmental transactions and balances result from exchange transactions made between the FAA and another federal government reporting entity, while those classified as "with the public" result from exchange transactions between the FAA and non-federal entities. For example, if the FAA purchases goods or services from the public and sells them to another federal entity, the costs would be classified as "with the public," but the related revenues would be classified as "intragovernmental." This could occur, for example, when the FAA provides goods or services to another federal government entity on a reimbursable basis. The purpose of this classification is to enable the federal government to prepare consolidated financial statements, and not to match public and intragovernmental revenue with costs that are incurred to produce public and intragovernmental revenue.

#### **D.** Revenues and Other Financing Sources

Congress enacts annual, multi-year, and no-year appropriations to be used, within statutory limits, for operating, capital, and grant expenditures. Additional amounts are obtained from service fees (e.g., landing, registry, and aviation user fees), Aviation Insurance Program premiums (see Note 16), and through reimbursements for products and services provided to domestic and foreign governmental entities.

The AATF is sustained by excise taxes that the IRS collects from airway system users. Excise taxes collected are initially deposited to the General Fund of the U.S. Treasury. The IRS does not receive sufficient information at the time the excise taxes are collected

to determine how they should be distributed to specific funds from dedicated collections. Therefore, the U.S. Treasury makes initial semi-monthly distributions to the AATF based on allocations prepared by its Office of Tax Analysis (OTA). These allocations are based on historical excise tax data applied to current excise tax receipts.

The FAA's September 30, 2016 financial statements reflect excise taxes certified (as actual collections) by the IRS through June 30, 2016, and excise taxes allocated by the OTA for the period July 1 through September 30, 2016, as specified by Statement of Federal Financial Accounting Standards (SFFAS) Number 7, *Accounting for Revenue and Other Financing Sources*. Actual excise tax collections data for the quarter ended September 30, 2016, will not be available from the IRS until February 2017. When actual amounts are certified by the IRS, generally four to five months after the end of each quarter, adjustments are made to the AATF to account for the difference. Additional information on this subject is disclosed in Note 12.

The AATF also earns interest from investments in U.S. Government securities. Interest income on investments is recognized as revenue on an accrual basis.

Appropriations are recognized as a financing source when expended. Revenues from services provided by the FAA associated with reimbursable agreements are recognized concurrently with the recognition of accrued expenditures for performing the services. Aviation Insurance Program premiums, through December 15, 2014 when the FAA's authority to provide premium war risk insurance expired, were recognized as revenue on a straight-line basis over the period of coverage. Aviation overflight user fees are recognized as revenue in the period in which the flights take place.

The FAA recognizes, as an imputed financing source, the amount of accrued pension and post-retirement benefit expenses for current employees paid on the FAA's behalf by the Office of Personnel Management (OPM), as well as amounts paid from the U.S. Treasury Judgment Fund in settlement of claims or court assessments against the FAA. The FAA also recognizes, as an imputed financing source, security services provided by the Department of Homeland Security on FAA's behalf through their Continuous Diagnostic and Mitigation program. The program is in support of the government-wide focus on heightened cyber security.

#### E. Taxes

The FAA, as a federal entity, is not subject to federal, state, or local income taxes and, accordingly, does not record a provision for income taxes in the accompanying financial statements.

## F. Fund Balance with the U.S. Treasury

The U.S. Treasury processes cash receipts and disbursements. Funds held at the Treasury are available to pay agency liabilities. The FAA does not maintain cash in commercial bank accounts or foreign currency balances. Foreign currency payments are made either by the U.S. Treasury or the U.S. Department of State and are reported by the FAA in the U.S. dollar equivalent.

#### **G.** Investment in U.S. Government Securities

Unexpended funds in the AATF and Aviation Insurance Revolving Fund are invested in U.S. Government securities and reported at cost. A portion of the AATF investments is liquidated monthly in amounts needed to provide cash for the FAA appropriation accounts, to the extent authorized. Aviation Insurance Revolving Fund investments are intended to be held to maturity, but may be liquidated to pay insurance claims when necessary. Investments, redemptions, and reinvestments are held and managed under the direction of the FAA by the U.S. Treasury.

### H. Accounts Receivable

Accounts receivable consists of amounts owed to the FAA by other federal agencies and the public. Amounts due from federal agencies are considered fully collectible. Accounts receivable from the public include, for example, aviation user fees, fines and penalties, reimbursements from employees, and services performed for foreign governments. An allowance for loss on uncollectible amounts due from the public is established based on historical collection experience or an analysis of the individual receivables.

#### I. Inventory

Within the FAA's Franchise Fund, inventory is held for sale to the FAA field locations and other domestic entities and foreign governments. Inventory consists of materials and supplies that the FAA uses to support our nation's airspace system and is predominantly located at the FAA Mike Monroney Aeronautical Center in Oklahoma City. Inventory costs include material, labor, and applicable manufacturing overhead.

Inventory held for sale includes both purchased inventory and refurbished inventory. Purchased inventory held for sale is valued using historical cost, applying the weighted moving average cost flow method. Refurbished inventory held for sale is valued using the standard cost method, updated monthly.

The FAA field locations frequently exchange non-operational repairable components with the Franchise Fund. These components are classified as "held for repair." Inventory held for repair may be accounted for using the allowance method or the direct method. In FY 2016, the FAA implemented a new inventory reporting system and transitioned from using the allowance method to the direct method for valuing inventory held for repair. The change in accounting method, in conjunction with the new inventory reporting system, serves to simplify the valuation process and increases transparency within the financial reporting systems. There is no change in the net value of unserviceable inventory held for repair as a result of the change in valuation method and it had no effect on the net ending balances reported in prior years.

In prior years, inventory held for repair represented both inventory in need of repair and refurbished inventory available for exchange. With the transition to the new inventory reporting system, FAA changed the criteria for identifying the category to which inventory is assigned to more closely align with the category definitions in SFFAS Number 3, *Accounting for Inventory and Related Property*. As such, the refurbished inventory available for exchange is reclassified to inventory held for sale. In prior years, refurbished inventory held for sale was valued using average weighted cost.

Raw materials and work in progress is comprised of repairable inventory components, the materials used to bring the components to a re-useable or serviceable condition along with the labor and overhead incurred during the refurbishing process. When the refurbishing process is complete, the inventory components are reclassified to "held for sale." Raw materials are valued using historical cost, applying the weighted moving average cost flow method. The repairable components, reported as work in progress, are valued at their book value at the time of transfer from the "held for repair" account to the work in progress account.

Inventory may be classified as "excess, obsolete, and unserviceable" if, for example, the quantity exceeds projected demand for the foreseeable future or if the item has been technologically surpassed. An allowance is established for "excess, obsolete, and unserviceable" inventory at 100 percent of book value.

## J. Operating Materials and Supplies

Operating materials and supplies primarily consist of unissued materials and supplies that will be used in the repair and maintenance of FAA owned aircraft. They are valued based on the weighted moving average cost method or on the basis of actual prices paid. Operating materials and supplies are expensed using the consumption method of accounting.

Operating materials and supplies "held for use" are those items that are consumed on a regular and ongoing basis. Operating materials and supplies "held for repair" are awaiting service to restore their condition to "held for use." An allowance of 50 percent has been established for operating materials and supplies "held for repair" based on historical experience.

Operating materials and supplies may be classified as "excess, obsolete, and unserviceable" if, for example, the quantity exceeds projected demand for the foreseeable future or if the item has been technologically surpassed. An allowance is established for "excess, obsolete, and unserviceable" operating materials and supplies based on the condition of various asset categories as well as the FAA's historical experience with disposing of such assets.

### **K.** Property, Plant and Equipment

The FAA capitalizes acquisitions of Property, Plant & Equipment (PP&E) when the cost equals or exceeds \$100 thousand (except for internal use software, for which the threshold is \$200 thousand) and the useful life equals or exceeds two years. The FAA records PP&E at original acquisition cost. However, where applicable, the FAA allocates an average cost of like assets within a program, commonly referred to as "unit costing." The FAA purchases some capital assets in large quantities, which are known as "bulk purchases." If the cost per unit is below the capitalization threshold of the FAA, then these items are expensed.

Depreciation expense is calculated using the straight-line method. Depreciation commences the first month after the asset is placed in service. The FAA does not recognize residual value of its PP&E.

Real property assets, such as buildings, air traffic control towers, en route air traffic control centers, mobile buildings, roads, sidewalks, parking lots, and other structures, are depreciated over a useful life of up to 40 years.

Personal property assets, such as aircraft, decision support systems, navigation-, surveillance-, communications- and weather-related equipment, office furniture, vehicles, and office equipment, are depreciated over a useful life of up to 20 years.

Internal use software, such as software used to operate programmatic and administrative information systems, is amortized over a useful life of a minimum of 5 years.

Construction in progress is valued at actual direct costs plus applied overhead and other indirect costs.

The FAA spends a significant amount of time to research and develop new technologies to support the nation's airspace system. Until such time as the research and development project reaches "technological feasibility," the costs associated with the project are expensed in the year incurred.

#### L. Leases

The FAA occupies certain real property that is leased by the DOT from the GSA. The FAA also has non-GSA leases. Payments made by the FAA are based on contractual agreements.

Buildings and equipment acquired under capital leases are amortized over the lease term. If the lease agreement contains a bargain purchase option or otherwise provides for transferring title of the asset to the FAA, the building is depreciated over a 40-year service life.

## M. Prepaid Charges

The FAA generally does not pay for goods and services in advance, except for certain reimbursable agreements, subscriptions, and payments to contractors and employees. Payments made in advance of the receipt of goods and services are recorded as prepaid charges at the time of prepayment and recognized as expenses when the related goods and services are received.

#### N. Liabilities

Liabilities covered by budgetary or other resources are those liabilities for which Congress has appropriated funds, and which are otherwise available to pay amounts due. Liabilities not covered by budgetary or other resources represent amounts owed in excess of available, congressionally appropriated funds or other amounts. The liquidation of liabilities not covered by budgetary or other resources is dependent on future congressional appropriations or other funding, including the AATF. Intragovernmental liabilities are claims against the FAA by other federal agencies.

## O. Accounts Payable

Accounts payable are amounts that the FAA owes to other federal agencies and the public. Accounts payable to federal agencies generally consist of amounts due under interagency reimbursable agreements. Accounts payable to the public primarily consist of unpaid goods and services received by the FAA in support of our nation's airspace system.

### P. Annual, Sick, and Other Leave

Annual leave is accrued as it is earned and the accrual is reduced as leave is taken. For each biweekly pay period, the balance in the accrued annual leave account is adjusted to reflect the latest pay rates and unused hours of leave. Liabilities associated with other types of vested leave, including compensatory, credit hours, restored leave, and sick leave in certain circumstances, are accrued based on latest pay rates and unused hours of leave. Sick leave is generally non-vested, except for sick leave balances at retirement under the terms of certain union agreements. Funding will be obtained from future financing sources to the extent that current or prior year appropriations are not available to fund annual and other types of vested leave earned but not taken. Nonvested leave is expensed when used.

### **Q.** Accrued Workers' Compensation

A liability is recorded for actual and estimated future payments to be made for workers' compensation pursuant to the Federal Employees' Compensation Act (FECA). The actual costs incurred are reflected as a liability because the FAA will reimburse the Department of Labor (DOL) two years after the actual payment of expenses by the DOL. Future appropriations will be used for the reimbursement to the DOL. The liability consists of (1) the net present value of estimated future payments calculated by the DOL, and (2) the unreimbursed cost paid by the DOL for compensation to recipients under FECA.

## **R.** Retirement Plan

FAA employees participate in either the Civil Service Retirement System (CSRS) or the Federal Employees Retirement System (FERS). The employees who participate in the CSRS contribute 7 percent of their pay and are beneficiaries of the FAA's matching contribution program, equal to 7 percent of pay, distributed to their annuity account in the Civil Service Retirement and Disability Fund.

FERS went into effect on January 1, 1987. FERS and Social Security automatically cover most employees hired after December 31, 1983. Employees hired prior to January 1, 1984 could elect either to join FERS and Social Security or to remain in CSRS. FERS offers a savings plan to which the FAA automatically contributes 1 percent of pay and matches any employee contribution up to an additional 4 percent of pay. For FERS participants, the FAA also contributes the employer's matching share for Social Security. The FAA's matching contributions are recognized as operating expenses.

The FAA recognizes the full cost of pensions and other retirement benefits during an employee's active years of service. The costs are covered through a combination of FAA appropriations and imputed costs. The imputed amount is calculated using the OPM's cost factors and is the difference between FAA/employee contributions during the year and the total cost of the benefit. OPM actuaries determine pension cost factors by calculating the value of pension benefits expected to be paid in the future and communicate these factors to the FAA. The OPM also provides information regarding the full cost of health and life insurance benefits. The imputed costs are completely offset with other financing sources, which are reported as an imputed financing source on the Consolidated Statements of Changes in Net Position to the extent that these costs will be paid by the OPM. Reporting of the assets and liabilities associated with the retirement plans is the responsibility of the administering agency, OPM. Therefore, the FAA does not report CSRS or FERS assets, accumulated plan benefits, or unfunded liabilities, if any, applicable to employees.

#### S. Grants

The FAA records an obligation at the time a grant is awarded. As grant recipients conduct eligible activities under the terms of their grant agreement, they request payment by the FAA, typically made via an electronic payment process. Expenses are recorded at the time of payment approval during the year. The FAA also recognizes an accrued liability and expense for estimated eligible grant payments not yet requested by grant recipients. Grant expenses, including associated administrative costs, are classified on the Consolidated Statements of Net Cost under the Airports line of business.

### T. Use of Estimates

Management has made certain estimates and assumptions when reporting assets, liabilities, revenues, and expenses, and in the note disclosures. Actual results could differ from these estimates. Significant estimates underlying the accompanying financial

statements include (a) legal, environmental, and contingent liabilities; (b) accruals of accounts and grants payable; (c) accrued workers' compensation; (d) allowance for doubtful accounts receivable; (e) allowances for operating materials and supplies; (f) allocations of common costs to construction in progress, (g) the allocation of an average cost of like property, plant, and equipment within a program, commonly referred to as unit costing; and (h) accrued benefits and benefits payable.

#### **U. Environmental Liabilities**

In compliance with applicable laws and regulations including the Clean Air Act of 1963, the Resource Conservation and Recovery Act of 1976, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 as amended by the Superfund Amendments and Reauthorization Act of 1986 and the Community Environmental Response Facilitation Act of 1992, the FAA recognizes two types of environmental liabilities: environmental remediation, and cleanup and decommissioning. The liability for environmental remediation is an estimate of costs necessary to bring a known contaminated site into compliance with applicable environmental standards. The increase or decrease in the annual liability is charged to current year expense.

Environmental cleanup and decommissioning is the estimated cost that will be incurred to remove, contain, and/or dispose of hazardous materials when an asset presently in service is shutdown. The FAA estimates the environmental cleanup and decommissioning costs at the time that an FAA-owned asset is placed in service. For assets placed in service through FY 1998, the increase or decrease in the estimated environmental cleanup liability is charged to expense. Assets placed in service in FY 1999 and after do not contain any known hazardous materials, and therefore do not have associated environmental liabilities.

There are no known possible changes to these estimates based on inflation, deflation, technology or applicable laws and regulations.

## **V. Contingencies**

A contingent liability represents a potential cost to the FAA depending on the outcome of future events. Three categories of contingent liabilities — probable, reasonably possible, and remote — determine the appropriate accounting treatment. The FAA recognizes contingent liabilities, in the accompanying balance sheet and statement of net cost, when they are both probable and can be reasonably estimated. The FAA discloses contingent liabilities in the

notes to the financial statements (see Note 16) when the conditions for liability recognition are not met but are reasonably possible.

Contingent liabilities that are considered remote are not disclosed.

In some cases, once losses are certain, payments may be made from the Judgment Fund maintained by the U.S. Treasury rather than from the amounts appropriated to the FAA for agency operations. Payments from the Judgment Fund are recorded as an "Other Financing Source" when made.

#### W. Funds from Dedicated Collections

The FAA's financial statements include the following funds, considered to be "funds from dedicated collections":

- ► AATF
- ► Operations-AATF
- ▶ Operations-General Fund
- ► Grants-in-Aid for Airports
- ► Facilities and Equipment
- ▶ Research, Engineering, and Development
- Aviation Insurance Fund
- ► Aviation User Fees

Funds from dedicated collections are those that are financed by specifically identified revenues and financing sources which remain available over time. They are required by statute to be used for designated activities, benefits, or purposes and must be accounted for separately from the government's general revenues.

The AATF is funded by excise taxes that the IRS collects from airway system users. These receipts are unavailable until appropriated by the U.S. Congress. Once appropriated for use, the FAA transfers the AATF receipts necessary to meet cash disbursement needs to several other funds, from which expenditures are made. Those funds that receive transfers from the AATF are the Operations AATF Trust Fund, Grants-in-Aid for Airports, Facilities and Equipment, and Research, Engineering and Development, all of which are funded exclusively by the AATF. These funds represent the majority of the FAA annual expenditures.

In addition, while the Operations-General Fund is primarily funded through transfers from Operations-AATF, it is also supplemented by

funding from the General Fund of the U.S. Treasury through annual appropriations. Because the Operations-General Fund is primarily funded from the AATF, and because it is not reasonably possible to differentiate cash balances between those originally flowing from the AATF versus those that come from general fund appropriations, the Operations-General Fund is presented as funds from dedicated collections. The funds from dedicated collections in the Facilities and Equipment fund are used to purchase or construct PP&E. When PP&E has been placed in service, the funds from dedicated collections are no longer available for future expenditure, have been used for their intended purpose, and are therefore classified as "other funds" on the balance sheet and the statement of changes in net position. Construction in progress is classified as "funds from dedicated collections" because although the funds have been expended, they have not yet fully achieved their intended purpose. The intended result of this presentation is to differentiate between funds from dedicated collections that remain available for future expenditure, or have not yet fully achieved their designated purpose, and funds from dedicated collections previously expended that have achieved their intended purpose.

Additional disclosures concerning funds from dedicated collections can be found in Note 12.

#### X. Reclassifications

Certain prior year amounts have been reclassified for consistency with the current year presentation.

On December 18, 2015, the FAA designated its Office of Security and Hazardous Materials Safety (ASH) as a line of business, consistent with the Consolidated Appropriations Act of 2016, Public Law 114-113. For consistency with the current year presentation, ASH has been reclassified as a line of business in the Consolidated Statement of Net Cost for the year ended September 30, 2015.

In FY 2016, the FAA transitioned from using the allowance method to using the direct method for valuing inventory held for repair. The FAA also changed its criteria for identifying the category to which inventory is assigned to improve the visibility of items that are in need of repair. The inventory balances for the year ended September 30, 2015 have been reclassified for consistency with the current year presentation.

## **NOTE 2. Fund Balance with Treasury**

Fund Balance with Treasury (FBWT) account balances as of September 30, 2016 and 2015 were:

	2010		2015
Trust funds	\$ 1,311,540	-	\$ 1,300,668
General funds	1,626,630		1,522,152
Revolving funds	695,660		365,570
Other fund types	19,498		6,665
Total	\$ 3,653,328	=	\$ 3,195,055
Status of fund balance with Treasury			
Unobligated balance			
Available	\$ 1,645,490		\$ 1,576,262
Not available	2,290,566		2,258,749
Obligated balance not yet disbursed	9,126,686		8,570,917
Investments and Contract Authority supporting obligated and unobligated balances	(9,418,650)		(9,215,691)
Non-budgetary FBWT	9,236		4,818
Total	\$ 3,653,328		\$ 3,195,055

Unobligated fund balances are reported as not available when they are not legally available to the FAA for obligation. However, balances that are not available can be used for upward adjustments of obligations that were incurred during the period of availability or for paying claims attributable to that time period. Additionally, the aviation insurance premiums collected by the FAA over time are shown as not available until authorized to pay insurance claims.

The FAA is funded with appropriations from the AATF and the General Fund of the Treasury. While amounts appropriated from the General Fund of the Treasury are included in fund balance with Treasury, AATF investments are not. AATF investments are redeemed, as needed, to meet FAA's cash disbursement needs,

at which time the funds are transferred into fund balance with Treasury. The FAA also receives contract authority which allows obligations to be incurred in advance of an appropriation. The contract authority is subsequently funded, as authorized, from the AATF allowing for the liquidation of the related obligations. Thus, investments and contract authority are not part of fund balance with Treasury; however, their balances will be transferred from the AATF to fund balance with Treasury over time to liquidate obligated balances and unobligated balances as they become obligated, and thus are necessarily included in the Status of fund balance with Treasury section of this footnote.

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#### **NOTE 3.** Investments

As of September 30, 2016 and 2015, the FAA's investment balances were as follows:

Intragovernmental Securities	Cost	Unamortized Premium	Investments (Net)	Market Value Disclosure
Nonmarketable par value	\$ 13,400,278	\$ -	\$ 13,400,278	\$ 13,400,278
Nonmarketable market-based	1,871,802	18,539	1,890,341	1,895,335
Subtotal	15,272,080	18,539	15,290,619	15,295,613
Accrued interest	67,584	_	67,584	_
Total intragovernmental securities	\$ 15,339,664	\$ 18,539	\$ 15,358,203	\$ 15,295,613
		2015	i	
1.4		Unamortized	Investments	Market Value

Intragovernmental Securities	Cost	Unamortized Premium	Investments (Net)	Market Value Disclosure
Nonmarketable par value	\$ 12,715,552	\$ -	\$ 12,715,552	\$ 12,715,552
Nonmarketable market-based	2,125,792	39,678	2,165,470	2,171,014
Subtotal	14,841,344	39,678	14,881,022	14,886,566
Accrued interest	61,365		61,365	
Total intragovernmental securities	\$ 14,902,709	\$ 39,678	\$ 14,942,387	\$ 14,886,566

The Secretary of the Treasury invests AATF funds on behalf of the FAA. The FAA investments are considered investment authority and are available to offset the cost of operations to the extent authorized by Congress. As of September 30, 2016 and 2015, \$13.4 billion and \$12.7 billion were invested respectively in U.S. Treasury Certificates of Indebtedness. Nonmarketable par value Treasury Certificates of Indebtedness are special series debt securities issued by the Bureau of Fiscal Services to federal accounts, and are purchased and redeemed at par (face value) exclusively through the Federal Investment Branch of the U.S. Treasury's Bureau of Fiscal Services. The securities are held to maturity and redeemed at face value on demand; thus, investing entities recover the full amount invested plus interest. Investments as of September 30, 2016, mature on various dates through June 30, 2017, and investments as of September 30, 2015, matured on various dates through June 30, 2016. The annual rate of return on Certificates of Indebtedness is established in the month of issuance. The average rate of return for certificates issued during FY 2016 and FY 2015 was 2.0 percent and 2.0 percent, respectively.

Nonmarketable, market-based Treasury securities are debt securities that the Treasury issues to federal entities without statutorily fixed

interest rates. Although the securities are not marketable, their terms (prices and interest rates) mirror the terms of marketable Treasury securities. The FAA invests Aviation Insurance Fund collections in nonmarketable market-based securities and amortizes premiums and discounts over the life of the security using the interest method. As of September 30, 2016, these nonmarketable, market-based securities have maturity dates ranging from December 15, 2016 to February 15, 2019 and have an average rate of return of approximately 1.9 percent. As of September 30, 2015, these nonmarketable, market-based securities had maturity dates ranging from December 15, 2016 to May 15, 2018 and had an average rate of return of approximately 1.6 percent.

The U.S. Treasury does not set aside assets to pay the future expenditures of the AATF and the Aviation Insurance Fund (i.e., dedicated collections). Instead, the cash collected from the public for the AATF and the Aviation Insurance Fund is deposited in the U.S. Treasury, and used for general government purposes. Treasury securities are issued to the FAA as evidence of the collections by the AATF and the Aviation Insurance Fund. Treasury securities are an asset to the FAA and a liability to the U.S. Treasury. Because the FAA and the U.S. Treasury are both parts of the federal

government, these assets and liabilities offset each other from the standpoint of the federal government as a whole. For this reason, they do not represent an asset or a liability in the government-wide financial statements.

To the extent authorized by law, the FAA has the ability to redeem its Treasury securities to make expenditures. When the FAA

redeems these securities, the federal government finances those expenditures from accumulated cash balances by raising tax or other receipts, borrowing from the public, repaying less debt, or curtailing other expenditures. This is the same manner in which the federal government finances all other expenditures.

# **NOTE 4. Accounts Receivable, Prepayments, and Other Assets**

Intragovernmental prepayments represent advance payments to other federal government entities for agency expenses not yet incurred or for goods or services not yet received. The allowance for uncollectible accounts is determined by using the aging method on transactions with the public. Accounts receivable from the public is shown net of an allowance for uncollectible accounts, which is based on historical collection experience or an analysis of the individual receivables. As of September 30, 2016 and 2015, accounts receivable, advances, and other assets were:

Intragovernmental	2016	2015
Accounts receivable	\$ 36,839	\$ 26,824
Prepayments and other	195,125	196,110
Intragovernmental total	 231,964	222,934
With the public		
Accounts receivable, gross	62,739	61,453
Allowance for uncollectible amounts	(11,503)	(9,934)
Accounts receivable, net	51,236	51,519
Prepayments	1,073	710
Other assets	441	440
With the public total	52,750	52,669
Total accounts receivable, prepayments, and other	\$ 284,714	\$ 275,603

# **NOTE 5. Inventory, Operating Materials, and Supplies**

Inventory is classified as either held for sale, held for repair, raw materials and work in progress, or excess, obsolete, and unserviceable. Collectively, the FAA's inventory is used to support our nation's airspace system and is predominantly located at the FAA Mike Monroney Aeronautical Center in Oklahoma City. Operating materials and supplies primarily consists of materials and supplies that will be used in the repair and maintenance of FAA-owned aircraft. As of September 30, 2016 and 2015, inventory, operating materials, and supplies were:

			2016		
	Cost		Allowance		Net
Inventory					
Held for sale	\$ 228,678		\$ _	\$	228,678
Held for repair	380,366		_		380,366
Raw materials and work in progress	49,022		_		49,022
Excess, obsolete, and unserviceable	3,514		(3,514)		_
Inventory total	661,580		(3,514)		658,066
Operating materials and supplies					
Held for use	44,521		_		44,521
Held for repair	30,961		(15,481)		15,480
Excess, obsolete, and unserviceable	 2,949		(1,857)		1,092
Operating materials and supplies total	78,431	_	(17,338)		61,093
Total inventory, operating materials, and supplies	\$ 740,011	_	\$ (20,852)	\$	719,159
			2015		
	 Cost	_	Allowance		Net
Inventory					
Held for sale	\$ 245,647		\$ _	\$	245,647
Held for repair	344,044		_		344,044
Raw materials and work in progress	47,377		_		47,377
Excess, obsolete, and unserviceable	 9,595		(9,595)		_
Inventory total	 646,663	_	(9,595)		637,068
Operating materials and supplies					
Held for use	42,790		_		42,790
Held for repair	30,729		(15,365)		15,364
Excess, obsolete, and unserviceable	1,772		(1,239)		533
Operating materials and supplies total	75,291		(16,604)		58,687
operating materials and supplies total	 70,201	_	(10,001)		

# **NOTE 6. Property, Plant, and Equipment, Net**

Property, plant, and equipment balances as of September 30, 2016 and 2015 were:

		2016	
Class of fixed asset	Acquisition value	Accumulated depreciation	Net book value
Real property, including land	\$ 6,302,459	\$ (3,396,165)	\$ 2,906,294
Personal property	18,794,173	(11,660,137)	7,134,036
Internal use software	2,603,516	(1,280,585)	1,322,931
Internal use software in development	520,117	_	520,117
Assets under capital lease (Note 9)	106,966	(49,594)	57,372
Construction in progress	993,325		993,325
Total property, plant and equipment	\$ 29,320,556	\$ (16,386,481)	\$ 12,934,075
		2015	
Class of fixed asset	Acquisition value	Accumulated depreciation	Net book value
Real property, including land	\$ 6,361,418	\$ (3,655,174)	\$ 2,706,244
Personal property	18,668,644	(11,298,118)	7,370,526
Internal use software	1,990,394	(1,032,597)	957,797
Internal use software in development	640,038	_	640,038
Assets under capital lease (Note 9)	107,288	(45,889)	61,399
Construction in progress	1,465,762		1,465,762
Total property, plant and equipment	\$ 29,233,544	\$ (16,031,778)	\$ 13,201,766

The FAA's construction in progress relates primarily to national airspace assets, which are derived from centrally funded national systems development contracts, site preparation and testing, raw materials, and internal labor charges. The accumulation of costs to be capitalized for assets in the FAA's PP&E typically flow into and remain in the construction in progress account until the asset is ready for deployment and placed in service. Once placed in service, the asset balance is transferred from the construction in progress category to its respective asset category.

## **NOTE 7. Environmental Liabilities**

The FAA's environmental liabilities as of September 30, 2016 and 2015 were:

	2010		2015
Environmental remediation	\$ 491,767	\$	651,700
Environmental cleanup and decommissioning	 458,392		310,537
Total environmental liabilities	\$ 950,159	\$	962,237

Remediation is performed at contaminated sites where the FAA has liability due to past operations or waste disposal activities. To help manage the cleanup of the contaminated sites, the FAA established an Environmental Cleanup Program that includes three service areas, which are responsible for oversight of the contaminated sites. The service area personnel use sophisticated cost estimating tools to estimate the environmental remediation liability.

The Environmental cleanup and decommissioning liability is estimated using a combination of actual costs and project specific cost proposals for certain targeted facilities. The FAA uses the

average decommissioning and cleanup costs of the targeted facilities as the cost basis for the other like facilities to arrive at the estimated environmental liability for decommissioning and cleanup.

A description of the two categories of environmental liabilities can be found in Note 1U. Information on contingencies related to environmental liabilities can be found in Note 16.

Environmental liabilities are not covered by budgetary or other resources and thus will require future appropriated funding.

# **NOTE 8. Employee Related and Other Liabilities**

As of September 30, 2016 and 2015, the FAA's employee-related and other liabilities were:

	2016				
	Non-current liabilities	Current liabilities	Total		
Intragovernmental					
Advances received	\$ -	\$ 171,317	\$ 171,317		
Accrued payroll & benefits payable to other agencies		68,781	68,781		
Liabilities covered by budgetary resources		240,098	240,098		
Federal Employees' Compensation Act payable	96,960	82,018	178,978		
Other		11,301	11,301		
Liabilities not covered by budgetary resources	96,960	93,319	190,279		
Intragovernmental total	96,960	333,417	430,377		
With the public					
Advances received and other	_	113,979	113,979		
Accrued payroll & benefits payable to employees		228,554	228,554		
Liabilities covered by budgetary resources		342,533	342,533		
Accrued unfunded annual & other leave & assoc. benefits	_	417,824	417,824		
Accrued sick leave buy back option for eligible employees	45,546	5,327	50,873		
Capital leases (Notes 9 and 15)	53,185	8,085	61,270		
Legal claims	_	54,500	54,500		
Other accrued liabilities		35,479	35,479		
Liabilities not covered by budgetary resources	98,731	521,215	619,946		
Public total	98,731	863,748	962,479		
Total employee related and other liabilities	\$ 195,691	\$ 1,197,165	\$ 1,392,856		

	2015				
	Non-current liabilities	Current liabilities	Total		
Intragovernmental					
Advances received	\$ -	\$ 135,403	\$ 135,403		
Accrued payroll & benefits payable to other agencies		53,198	53,198		
Liabilities covered by budgetary resources		188,601	188,601		
Federal Employees' Compensation Act payable	100,288	82,724	183,012		
Other		11,620	11,620		
Liabilities not covered by budgetary resources	100,288	94,344	194,632		
Intragovernmental total	100,288	282,945	383,233		
With the public					
Advances received and other	-	101,946	101,946		
Accrued payroll & benefits payable to employees		184,230	184,230		
Liabilities covered by budgetary resources		286,176	286,176		
Accrued unfunded annual & other leave & assoc. benefits	_	415,599	415,599		
Accrued sick leave buy back option for eligible employees	58,888	4,142	63,030		
Capital leases (Notes 9 and 15)	59,146	8,085	67,231		
Legal claims	_	14,050	14,050		
Other accrued liabilities	-	20,132	20,132		
Liabilities not covered by budgetary resources	118,034	462,008	580,042		
Public total	118,034	748,184	866,218		
Total employee related and other liabilities	\$ 218,322	\$ 1,031,129	\$ 1,249,451		

"Accrued payroll and benefits payable to other agencies" consists of FAA contributions payable to other federal agencies for employee benefits. These include FAA contributions payable toward life, health, retirement benefits, Social Security, and matching contributions to the Thrift Savings Plan.

An unfunded liability is recorded for the actual cost of workers' compensation benefits to be reimbursed to the DOL, pursuant to the FECA. Because the DOL bills the FAA two years after it pays such claims, the FAA's accrued liability as of September 30, 2016, includes workers' compensation benefits paid by DOL during the periods July 1, 2014, through June 30, 2016, and accrued liabilities for the quarter July 1, 2016, through September 30, 2016. The FAA's accrued liability as of September 30, 2015, included workers' compensation benefits paid by the DOL during the period July 1, 2013, through June 30, 2015, and accrued liabilities for the quarter July 1, 2015, through September 30, 2015.

The estimated liability for accrued unfunded leave and associated benefits includes annual and other types of vested leave. Additionally, under the terms of various bargaining unit agreements, employees who are in FERS have the option to receive a lump sum payment for 40 percent of their accumulated sick leave as of their effective retirement date. Based on sick leave balances, this estimated liability was \$51 million and \$63 million as of September 30, 2016 and 2015, respectively.

The FAA estimated that 100 percent of its \$54.5 million and \$14.1 million legal claims liabilities as of September 30, 2016 and 2015, respectively, would be paid from the permanent appropriation for judgments, awards, and compromise settlements (Judgment Fund) administered by the Department of Treasury.

Other accrued liabilities with the public are composed primarily of accruals for utilities, leases, and travel. Total liabilities not covered by budgetary resources are presented in Note 15.

## **NOTE 9.** Leases

The FAA has both capital and operating leases.

### **Capital Leases**

Following is a summary of FAA's assets under capital lease as of September 30, 2016 and 2015:

	2016		2015
Land, Buildings, and Machinery	\$ 106,966	\$	107,288
Accumulated Depreciation	(49,594)		(45,889)
Assets Under Capital Lease, net	\$ 57,372	\$	61,399
		_	

As of September 30, 2016, the FAA's future payments due on assets under capital lease were:

#### Future payments due by fiscal year

(Liabilities not covered by budgetary or other resources)

Year 1 (FY 2017)	\$ 8,085
Year 2 (FY 2018)	8,085
Year 3 (FY 2019)	8,092
Year 4 (FY 2020)	7,593
Year 5 (FY 2021)	7,116
After 5 Years	38,474
Less: Imputed interest	(16,175)
Total capital lease liability	\$ 61,270

The FAA's capital lease payments are authorized to be funded annually as codified in the United States Code—Title 49—Section 40110(c)(1) which addresses general procurement authority. The remaining principal payments are recorded as unfunded lease liabilities. The imputed interest is funded and expensed annually.

## **Operating Leases**

The FAA has operating leases for real property, aircraft, and telecommunications equipment. Future operating lease payments due as of September 30, 2016, were:

Fiscal year	
Year 1 (FY 2017)	\$ 167,427
Year 2 (FY 2018)	108,169
Year 3 (FY 2019)	78,890
Year 4 (FY 2020)	60,355
Year 5 (FY 2021)	44,220
After 5 Years	257,014
Total future operating lease payments	\$ 716,075

Operating lease expense incurred during the years ended September 30, 2016 and 2015 was \$210.8 million and \$222.4 million, respectively, including General Services Administration (GSA) leases that have a short termination privilege. However, the FAA intends to remain in the lease. The operating lease amounts due after five years do not include estimated payments for leases with annual renewal options. Estimates of the lease termination dates are subjective, and any projection of future lease payments would be arbitrary.

# **NOTE 10. Federal Employee Benefits Payable**

As of September 30, 2016 and 2015, FECA actuarial liabilities were \$808.7 million and \$864.8 million, respectively. The DOL calculates the FECA liability for the DOT, and the DOT allocates the liability amount to the FAA, based on actual workers' compensation payments to FAA employees over the preceding four years. FECA

liabilities include the expected liability for death, disability, medical, and miscellaneous costs for approved compensation cases, plus a component for incurred but unreported claims. The estimated liability is not covered by budgetary or other resources and thus will require future appropriated funding.

# **NOTE 11. Net Cost by Program and Other Statement of Net Cost Disclosures**

The FAA's five lines of business represent the programs reported in the Consolidated Statements of Net Cost. Cost centers assigned to each line of business permit the direct accumulation of costs. Other costs that are not directly traced to each line of business, such as agency overhead, are allocated.

The following is the net cost of operations by strategic priority for the years ended September 30, 2016 and 2015:

## For the Year Ended September 30, 2016 Strategic Priorities

Line of Business programs	Make Aviation Safer and Smarter		TI	Deliver Benefits Through Technology and Infrastructure		Enhance Global Leadership		bal Innovate with		_	Total
• •	ф	0.400.700	φ.		1 507 010	ф	1.000	ф	100 170	φ	11 170 000
Air Traffic Organization	\$	9,499,726	\$	)	1,507,816	\$	1,668	\$	163,170	\$	11,172,380
Airports		1,641,550			1,484,999		17		1,192		3,127,758
Aviation Safety		1,428,905			2,405		23,222		16,532		1,471,064
Security and Hazardous Materials Safety		111,956			593		50		958		113,557
Commercial Space Transportation		14,759			25		2,421		4,038		21,243
Non-Line of Business programs											
Regions and Center Operations and other		267,432			71,800		(4,644)		26,165		360,753
Net cost	\$	12,964,328	\$		3,067,638	\$	22,734	\$	212,055	\$	16,266,755

## For the Year Ended September 30, 2015 Strategic Priorities

Line of Business programs	Ma	ake Aviation Safer and Smarter	_	Throu	eliver Benefits gh Technology Infrastructure		nhance Global dership	In	npower and novate with AA's People		Total
Air Traffic Organization	\$	9,213,344		\$	1,566,044	;	\$ 2,358	\$	166,935	\$	10,948,681
Airports	·	1,658,279		·	1,500,060		19	·	1,259	·	3,159,617
Aviation Safety		1,329,458			3,646		30,248		23,611		1,386,963
Security and Hazardous Materials Safety		98,882			6,349		616		8,365		114,212
Commercial Space Transportation		15,950			1,037		90		2,505		19,582
Non-Line of Business programs											
Regions and Center Operations and other		251,980	_		82,199	_	(2,791)		26,872		358,260
Net cost	\$	12,567,893	_	\$	3,159,335	;	\$ 30,540	\$	229,547	\$	15,987,315

The following is the FAA's distribution of FY 2016 and FY 2015 net cost of operations by intragovernmental related activity versus "with the public":

	For the Year Ended September 30, 2016				
	Intragovernmental	With the Public	Total		
LINE OF BUSINESS PROGRAMS					
Air Traffic Organization					
Expenses	\$ 2,250,031	\$ 9,179,623	\$ 11,429,654		
Less earned revenues	(208,989)	(48,285)	(257,274)		
Net cost	2,041,042	9,131,338	11,172,380		
Airports					
Expenses	42,383	3,085,375	3,127,758		
Net cost	42,383	3,085,375	3,127,758		
Aviation Safety					
Expenses	336,799	1,149,937	1,486,736		
Less earned revenues	(2,741)	(12,931)	(15,672)		
Net cost	334,058	1,137,006	1,471,064		
Security and Hazardous Materials Safety					
Expenses	26,469	88,053	114,522		
Less earned revenues	(926)	(39)	(965)		
Net cost	25,543	88,014	113,557		
Commercial Space Transportation					
Expenses	4,397	16,846	21,243		
Net cost	4,397	16,846	21,243		
NON-LINE OF BUSINESS PROGRAMS					
Regions and Center Operations and other programs					
Expenses	112,387	530,513	642,900		
Less earned revenues	(120,501)	(161,646)	(282,147)		
Net cost	(8,114)	368,867	360,753		
Net cost of operations					
Total expenses	2,772,466	14,050,347	16,822,813		
Less earned revenues	(333,157)	(222,901)	(556,058)		
Total net cost	\$ 2,439,309	\$ 13,827,446	\$ 16,266,755		

Intragreemmental   With the Public   Total		For the Year Ended September 30, 2015					
Air Traffic Organization           Expenses         \$ 2,245,590         \$ 8,973,332         \$ 11,218,862           Less earned revenues         (226,249)         (43,932)         (270,181)           Net cost         2,019,281         8,929,400         10,948,681           Airports         ************************************		Intragovernmental	With the Public	Total			
Expenses   \$ 2,245,530   \$ 8,973,332   \$ 11,218,862     Less earmed revenues   (226,249)   (43,932)   (270,181)     Net cost   2,019,281   8,929,400   10,948,681     Airports	LINE OF BUSINESS PROGRAMS						
Case seamed revenues   Case (249)   (43,932)   (270,181)   Net cost   Case (270,181)   Net cost   Case (270,181)   Case (27	Air Traffic Organization						
Net cost         2,019,281         8,929,400         10,948,681           Airports         Expenses         37,851         3,121,766         3,159,617           Net cost         37,851         3,121,766         3,159,617           Aviation Safety         Expenses           Expenses         331,164         1,070,467         1,401,631           Less earned revenues         (2,957)         (11,711)         (14,668)           Net cost         328,207         1,058,756         1,386,963           Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         -         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS         Regions and Center Operations and other programs         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (266,963)           Net cost         1,550	Expenses	\$ 2,245,530	\$ 8,973,332	\$ 11,218,862			
Airports         37,851         3,121,766         3,159,617           Net cost         37,851         3,121,766         3,159,617           Aviation Safety         Expenses           Expenses         331,164         1,070,467         1,401,631           Less earned revenues         (2,957)         (11,711)         (14,668)           Net cost         328,207         1,058,756         1,386,963           Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         16,560,17	Less earned revenues	(226,249)	(43,932)	(270,181)			
Expenses   37,851   3,121,766   3,159,617   Net cost   331,164   1,070,467   1,401,631   1,4	Net cost	2,019,281	8,929,400	10,948,681			
Net cost         37,851         3,121,766         3,159,617           Aviation Safety         Expenses         331,164         1,070,467         1,401,631           Less earned revenues         (2,957)         (11,711)         (14,668)           Net cost         328,207         1,058,756         1,386,963           Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost of operations         1,550         356,710         358,260           Net cost of operations         1,550         356,710         358,260           Net cost of operations	Airports						
Aviation Safety   Expenses   331,164   1,070,467   1,401,631   1	Expenses	37,851	3,121,766	3,159,617			
Expenses         331,164         1,070,467         1,401,631           Less earned revenues         (2,957)         (11,711)         (14,668)           Net cost         328,207         1,058,756         1,386,963           Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           Non-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Net cost	37,851	3,121,766	3,159,617			
Less earned revenues         (2,957)         (11,711)         (14,668)           Net cost         328,207         1,058,756         1,386,963           Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Aviation Safety						
Net cost         328,207         1,058,756         1,386,963           Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         -         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations           Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Expenses	331,164	1,070,467	1,401,631			
Security and Hazardous Materials Safety           Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations           Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Less earned revenues	(2,957)		(14,668)			
Expenses         26,480         88,880         115,360           Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs           Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Net cost	328,207	1,058,756	1,386,963			
Less earned revenues         (1,148)         —         (1,148)           Net cost         25,332         88,880         114,212           Commercial Space Transportation           Expenses         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs         Expenses         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Security and Hazardous Materials Safety						
Net cost         25,332         88,880         114,212           Commercial Space Transportation         Suppose the cost         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS         Regions and Center Operations and other programs         539,701         645,123           Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Expenses	26,480	88,880	115,360			
Commercial Space Transportation           Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs           Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Less earned revenues	(1,148)		(1,148)			
Expenses         3,922         15,660         19,582           Net cost         3,922         15,660         19,582           NON-LINE OF BUSINESS PROGRAMS           Regions and Center Operations and other programs           Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Net cost	25,332	88,880	114,212			
Net cost       3,922       15,660       19,582         NON-LINE OF BUSINESS PROGRAMS         Regions and Center Operations and other programs         Expenses       105,422       539,701       645,123         Less earned revenues       (103,872)       (182,991)       (286,863)         Net cost       1,550       356,710       358,260         Net cost of operations         Total expenses       2,750,369       13,809,806       16,560,175         Less earned revenues       (334,226)       (238,634)       (572,860)	Commercial Space Transportation						
NON-LINE OF BUSINESS PROGRAMS         Regions and Center Operations and other programs         Expenses       105,422       539,701       645,123         Less earned revenues       (103,872)       (182,991)       (286,863)         Net cost       1,550       356,710       358,260         Net cost of operations         Total expenses       2,750,369       13,809,806       16,560,175         Less earned revenues       (334,226)       (238,634)       (572,860)	Expenses	3,922	15,660	19,582			
Regions and Center Operations and other programs           Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations           Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Net cost	3,922	15,660	19,582			
Regions and Center Operations and other programs           Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations           Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	NON-LINE OF BUSINESS PROGRAMS						
Expenses         105,422         539,701         645,123           Less earned revenues         (103,872)         (182,991)         (286,863)           Net cost         1,550         356,710         358,260           Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)							
Net cost         1,550         356,710         358,260           Net cost of operations         Total expenses           Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)		105,422	539,701	645,123			
Net cost of operations         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Less earned revenues	(103,872)	(182,991)	(286,863)			
Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Net cost	1,550	356,710	358,260			
Total expenses         2,750,369         13,809,806         16,560,175           Less earned revenues         (334,226)         (238,634)         (572,860)	Net cost of operations						
		2,750,369	13,809,806	16,560,175			
<b>Total net cost</b> \$ 2,416,143 \$ 13,571,172 \$ 15,987,315	Less earned revenues	(334,226)	(238,634)	(572,860)			
	Total net cost	\$ 2,416,143	\$ 13,571,172	\$ 15,987,315			

## **NOTE 12. Funds from Dedicated Collections**

Funds from dedicated collections are those that are financed by specifically identified revenues and financing sources which remain available over time. They are required by statute to be used for designated activities, benefits, or purposes and must be accounted for separately from the government's general revenues.

The FAA's funds from dedicated collections are reported in the Consolidated Statements of Changes in Net Position and on pages 101-102 among two classifications. The first classification is comprised of the financial statement balances in AATF as of the end of each fiscal year. The second classification of "All other funds from dedicated collections" is comprised of the financial statement balances of all the related funds that receive funding from the AATF and includes Operations-AATF, Grants-in-Aid for Airports, Facilities and Equipment, and Research, Engineering and Development, all of which are funded exclusively by the AATF. The "All other funds from dedicated collections" classification also includes the Operations-General Fund, which is primarily funded through transfers from Operations-AATF, but is additionally supplemented by the General Fund of the U.S. Treasury through annual appropriations. However, since the Operations account is primarily funded from the AATF, it is properly presented as a "fund from dedicated collections." The category of "All other funds from dedicated collections" also includes the Aviation Insurance Revolving Fund and aviation user fees.

In addition, this note presents only the funds from dedicated collections that are financing sources available for future expenses, and funds that have been expended but have not yet fully achieved their designated purpose, such as construction in progress. As such, PP&E that has been placed in service, though funded from Facilities and Equipment, are excluded from this note; these funds are no longer available for future expenditure and have been used for their intended purpose.

## **Airport and Airway Trust Fund**

The FAA's consolidated financial statements include the results of operations and the financial position of the AATF. Congress created the AATF with the passage of the Airport and Airway Revenue Act of 1970.

The Act provides a dedicated source of funding for the nation's aviation system through the collection of several aviation-related excise taxes. The IRS collects these taxes on behalf of the FAA's AATF. These taxes can be withdrawn only as appropriated by the U.S. Congress. Twice a month, Treasury allocates the amount collected and subsequently adjusts the allocation to reflect actual collections quarterly.

As discussed in Note 1D, FY 2016 excise tax revenue includes amounts certified as actual by the IRS for the first three quarters of the year and amounts allocated by OTA for the fourth quarter of the year.

#### **All Other Funds from Dedicated Collections**

- ▶ Until the congressional authority to collect insurance premiums expired on December 11, 2014, FAA had authority under the Aviation Insurance Program to insure commercial airlines that may have been called upon to perform various services considered necessary to the foreign policy interests of the United States, when insurance was not available commercially or was available only on unreasonable terms and conditions. The insurance issued, commonly referred to as war-risk insurance, covered losses resulting from war, terrorism, or other hostile acts. The stoppage of premium collections in early December 2014 are reflected in the revenue totals for FY 2015. The FAA reported premium insurance revenues of \$40 thousand and \$2.6 million for the periods ended September 30, 2016 and 2015, respectively. The Aviation Insurance Program activity is reported on pages 101-102 in "All other funds from dedicated collections." The Aviation Insurance Program is discussed in further detail in Notes 1B and 16.
- Aviation user fees are charged to commercial airlines that fly in U.S. controlled air space, but neither take off nor land in the U.S. The FAA reported aviation user fees of \$111.5 million and \$103.7 million for the periods ended September 30, 2016 and 2015, respectively. Aviation user fees activity is reported below in "All other funds from dedicated collections".

Fiscal data as of and for the years ended September 30, 2016 and 2015, are summarized in the following charts. Intra-agency transactions have not been eliminated in the amounts presented.

				2016		
		AATF		ther funds from ated collections		Total funds from ated collections
BALANCE SHEET						
Assets						
Fund balance with Treasury	\$	871,041	\$	2,357,716	\$	3,228,757
Investments, net		13,460,234		1,897,969		15,358,203
Accounts receivable, net		_		5,009,029		5,009,029
Other assets		_		1,886,689		1,886,689
Total assets	\$	14,331,275	\$	11,151,403	\$	25,482,678
LIABILITIES AND NET POSITION						
AATF amounts due to the FAA	\$	4,936,435	\$	_	\$	4,936,435
Other liabilities		_		2,986,535		2,986,535
Unexpended appropriations		_		1,181,726		1,181,726
Cumulative results of operations		9,394,840		6,983,142		16,377,982
Total liabilities and net position	\$	14,331,275	\$	11,151,403	\$	25,482,678
STATEMENT OF NET COST						
Program costs	\$	_	\$	14,959,880	\$	14,959,880
Less earned revenue:	*		Ψ	,000,000	Ψ	,000,000
Aviation insurance premiums		_		(353)		(353)
Overflight user fees		_		(111,530)		(111,530)
Other revenue		_		(216,585)		(216,585)
Net cost of operations	\$	_	\$	14,631,412	\$	14,631,412
STATEMENT OF CHANGES IN NET POSITION						
Cumulative results beginning of period	\$	9,412,774	\$	6,819,602	\$	16,232,376
Non-exchange revenue:	Ψ	0,112,771	Ψ	0,010,002	Ψ	10,202,010
Passenger ticket tax		9,910,134		_		9,910,134
International departure tax		3,396,371		_		3,396,371
Investment income		266,741		_		266,741
Fuel taxes		637,178		_		637,178
Waybill tax		475,959		_		475,959
Tax refunds and credits		(13,441)		_		(13,441)
Other revenue		_		20,940		20,940
Budgetary financing sources		(14,690,876)		16,330,939		1,640,063
Other financing sources		_		(1,556,927)		(1,556,927)
Net cost of operations		_		(14,631,412)		(14,631,412)
Cumulative results end of period		9,394,840		6,983,142		16,377,982
Unexpended appropriations		_		1,181,726		1,181,726
Net position end of period	\$	9,394,840	\$	8,164,868	\$	17,559,708

	2015								
	AATF			other funds from ated collections		Total funds from ated collections			
BALANCE SHEET									
Assets									
Fund balance with Treasury	\$	906,750	\$	1,930,529	\$	2,837,279			
Investments, net		12,769,545		2,172,842		14,942,387			
Accounts receivable, net		_		4,326,128		4,326,128			
Other assets		_		2,428,663		2,428,663			
Total assets	\$	13,676,295	\$	10,858,162	\$	24,534,457			
LIABILITIES AND NET POSITION									
AATF amounts due to the FAA	\$	4,263,521	\$	_	\$	4,263,521			
Other liabilities		_		2,874,607		2,874,607			
Unexpended appropriations		_		1,163,953		1,163,953			
Cumulative results of operations		9,412,774		6,819,602		16,232,376			
Total liabilities and net position	\$	13,676,295	\$	10,858,162	\$	24,534,457			
STATEMENT OF NET COST									
Program costs	\$	_	\$	14,802,413	\$	14,802,413			
Less earned revenue:									
Aviation insurance premiums		_		(2,627)		(2,627)			
Overflight user fees		_		(103,726)		(103,726)			
Other revenue		_		(238,461)		(238,461)			
Net cost of operations	\$	_	\$	14,457,599	\$	14,457,599			
STATEMENT OF CHANGES IN NET POSITION									
Cumulative results beginning of period	\$	9,556,238	\$	7,061,432	\$	16,617,670			
Non-exchange revenue:									
Passenger ticket tax		9,837,876		_		9,837,876			
International departure tax		3,310,720		_		3,310,720			
Investment income		272,683		_		272,683			
Fuel taxes		641,836		_		641,836			
Waybill tax		496,672		_		496,672			
Tax refunds and credits		(19,052)		_		(19,052)			
Other revenue		_		13,077		13,077			
Budgetary financing sources		(14,684,199)		15,508,628		824,429			
Other financing sources		_		(1,305,936)		(1,305,936)			
Net cost of operations		_		(14,457,599)		(14,457,599)			
Cumulative results end of period		9,412,774		6,819,602		16,232,376			
Unexpended appropriations		-		1,163,953		1,163,953			
Net position end of period	\$	9,412,774	\$	7,983,555	\$	17,396,329			

## **NOTE 13. Imputed Financing Sources**

The FAA recognizes, as imputed financing, the amount of accrued pension and post-retirement benefit expenses for current employees. The assets and liabilities associated with such benefits are the responsibility of the administering agency, the OPM. Amounts paid from the U.S. Treasury's Judgment Fund in settlement of claims or court assessments against the FAA are also recognized as imputed financing. The FAA also recognizes imputed financing from the Department of Homeland Security's Continuous Diagnostic and Mitigation program in support of government-wide

focus on heightened cyber security. For the fiscal years ended September 30, 2016 and 2015, imputed financing was as follows:

	2016	2015
Office of Personnel Management	\$ 373,376	\$ 391,301
Treasury Judgment Fund	10,246	11,517
Department of Homeland Security	6,442	
Total imputed financing sources	\$ 390,064	\$ 402,818

## **NOTE 14. Statement of Budgetary Resources Disclosures**

The Required Supplementary Information section of this report includes a schedule of budgetary resources by each of the FAA's major fund types. Budget authority, as reported in the Combined Statements of Budgetary Resources, includes amounts made available to the FAA from general, revolving, and special funds, as well as funds from dedicated collections. In contrast, appropriations received as reported in the Consolidated Statements of Changes in Net Position pertain only to amounts made available to the FAA from general funds. The following is a reconciliation of these amounts as of September 30:

		2016	2015
Combined Statement of Budgetary Resources-budget authority, net	\$ 16,28	33,096	\$ 15,733,836
Less amounts made available to the FAA from AATF dedicated collections	(14,28	37,626)	(14,571,750)
Less other dedicated resources	(	(7,746)	(16,386)
Consolidated Statement of Changes in Net Position-appropriations received	\$ 1,98	37,724	\$ 1,145,700

The FAA had rescissions of budgetary resources of \$5.5 million and \$260 million in FY 2016 and FY 2015, respectively.

As of September 30, 2016 and 2015, the FAA had available contract authority in the amount of \$1.4 million and \$1.0 million, respectively.

As of September 30, 2016 and 2015, the amount of budgetary resources obligated for undelivered orders was \$7.9 billion and \$7.5 billion, respectively.

The following is a reconciliation of the Combined Statement of Budgetary Resources with the Budget of the U.S. Government:

	For the Year Ended September 30, 2015						
	Budgetary Authority		New Obligations and Upward Adjustments			Net Outlays	
FAA Combined Statement of Budgetary Resources	\$	15,734	\$	25,506	\$	15,635	
Reconciliation to Budget of the U.S. Government:							
Items included in the Combined Statement of Budgetary Resources, but excluded from the President's budget:							
Obligation from Trust Funds		-		(8,595)		-	
Distributed Offsetting Receipts		-		_		8	
Obligations of non-reimbursable expired funds		_		(60)		_	
Obligations of Special funds (Aviation User Fees)		-		(16)		_	
Reimbursable obligations including Franchise fund		-		(727)		_	
Other		-		(1)		(2)	
Budget of the United States Government	\$	15,734	\$	16,107	\$	15,641	

(For consistency with the presentation of the Budget of the U.S. Government, dollars are presented in millions in this table only.)

There is no difference between Budgetary Authority as reported in the FAA's FY 2015 Combined Statement of Budgetary Resources and the Budget of the United States Government.

The FAA's Combined Statement of Budgetary Resources includes obligations resulting from transfers between the AATF and FAA Operations-General Fund, which are excluded from the Budget of the U.S. Government. In addition, new obligations and upward adjustments on the FY 2015 Combined Statement of Budgetary Resources include \$60 million of expired funds and \$727 million of certain reimbursable and revolving fund obligations that are not presented in the Budget of the U.S. Government. As a result, the FAA's FY 2015 Combined Statement of Budgetary Resources differs from the FY 2015 "actuals" reported in the appendix of the

FY 2017 Budget of the U.S. Government. (The Budget of the U.S. Government is available on the OMB's web site.) As of the date of issuance of the FAA's FY 2016 Combined Statement of Budgetary Resources, the Budget of the U.S. Government for FY 2018, which will contain "actual" FY 2016 amounts, was not yet published. The OMB is expected to publish this information early in calendar year 2017.

During FY 2016 and FY 2015, direct and reimbursable new obligations and upward adjustments against amounts apportioned under categories A and B, and amounts exempt from apportionment, as defined in OMB Circular No. A-11, Part 4, Instructions on Budget Execution, were as follows:

	2016			2015			
	Direct	Reimbursable	Total	Direct	Reimbursable	Total	
Category A	\$ 8,501,193	\$ 463,443	\$ 8,964,636	\$ 9,170,216	\$ 491,953	\$ 9,662,169	
Category B	15,958,828	220,167	16,178,995	15,608,844	235,159	15,844,003	
Exempt from apportionment	2		2				
Total	\$ 24,460,023	\$ 683,610	\$ 25,143,633	\$ 24,779,060	\$ 727,112	\$ 25,506,172	

Unobligated balances of budgetary resources for unexpired accounts are available in subsequent years until expiration, upon receipt of an apportionment from the OMB. Unobligated balances of expired accounts are not available. At the end of FY 2015, \$6.4 million of obligated balances were in appropriation accounts that

were cancelled at year-end pursuant to 31 U.S.C. 1552 and thus have not been brought forward to FY 2016. Transfers in FY 2016 to the DOT for Essential Air Services also reduced balances available for obligation.

# **NOTE 15. Liabilities not Covered by Budgetary Resources**

Liabilities not covered by budgetary resources are liabilities for which congressional action is needed before budgetary resources can be provided. The following table shows liabilities not covered by budgetary resources as of September 30, 2016 and 2015.

	2016		2015		
Intragovernmental					
Federal Employees' Compensation Act payable (Note 8)	\$	178,978	\$	183,012	
Other accrued liabilities		11,301		11,620	
Total intragovernmental		190,279		194,632	
FECA actuarial (Note 10)		808,657		864,801	
Unfunded annual & other leave & assoc. benefits (Note 8)		417,824		415,599	
Sick leave compensation benefits for eligible employees (Note 8)		50,873		63,030	
Legal claims (Note 8 and 16)		54,500		14,050	
Environmental liabilities (Note 7 and 16)		950,159		962,237	
Capital leases (Note 8 and 9)		61,270		67,231	
Other accrued liabilities (Note 8)		35,479		20,132	
Total liabilities not covered by budgetary resources		2,569,041		2,601,712	
Total liabilities covered by budgetary resources		1,681,311		1,524,148	
Total liabilities	\$	4,250,352	\$	4,125,860	

# **NOTE 16. Commitments, Contingencies, and Other Disclosures**

Continuing Resolution and Reauthorization. Effective October 1, 2016, the FAA is operating under a continuing resolution, Public Law 114-223 for its FY 2017 appropriation and many of its programmatic and financing authorities. The continuing resolution will be in effect through December 9, 2016, unless superseded by enactment of specified appropriations legislation and includes a provision that allows the FAA to continue spending at slightly less than FY 2016 rates.

In addition, the passage of the FAA Extension, Safety, and Security Act of 2016, Public Law 114-190, authorizes the FAA's programmatic and financing authorities, the Airport Improvement Program contract authority, and the authority to collect and deposit excise taxes into and make expenditures from the AATF. The new authority expires on September 30, 2017.

Airport Improvement Program. The Airport Improvement Program provides grants for the planning and development of public-use airports that are included in the National Plan of Integrated Airport Systems. Eligible projects generally include improvements that address airport safety, capacity, security, and environmental concerns. The FAA's share of eligible costs for large and medium primary hub airports is 75 percent, with the exception of noise program implementation, for which the FAA's share is 80 percent. For remaining airports (small primary, reliever, and general aviation), the FAA's share of eligible costs is 90 percent.

The FAA has authority under 49 U.S.C. 47110(e) to issue letters of intent to enter into a series of annual Airport Improvement Program grant agreements. The FAA records an obligation when a grant is awarded. As of September 30, 2016, the FAA had letters of intent extending through FY 2029 totaling \$7.5 billion. As of September 30, 2016, the FAA had obligated \$6.5 billion of this total amount, leaving \$1.0 billion unobligated.

As of September 30, 2015, the FAA had letters of intent extending through FY 2028 totaling \$7.4 billion. As of September 30, 2015, the FAA had obligated \$6.4 billion of this total amount, leaving \$1.0 billion unobligated.

Aviation Insurance Program. Until December 2014, the Aviation Insurance Revolving Fund, a fund from dedicated collections, provided insurance products to address the insurance needs of the U.S. domestic airline industry not adequately met by the commercial insurance market. On December 11, 2014, Congress allowed the FAA's authority to provide Premium War Risk Insurance to expire.

The FAA continues to provide war risk insurance for certain U.S. Government contracted operations as permitted by 49 USC 44305. Coverage is provided without premium to air carriers at the written request of other U.S. Government agencies. The scope of coverage under this Non-Premium War Risk Insurance program includes hull, bodily injury, personal injury, and property damage. The FAA is currently providing coverage only for certain U.S. Department of Defense (DOD), United States Transportation Command contracted air carrier operations.

Because insurance policies are issued only at the request of other federal departments and agencies, total coverage-in-force fluctuates throughout the fiscal year. The coverage-in-force at any given point in time does not represent a potential liability against the Aviation Insurance Revolving Fund because the Secretary of Defense has entered into an indemnity agreement with the Secretary of Transportation and will fully reimburse the Fund for all losses paid by the FAA on behalf of DOD.

Legal Claims. As of September 30, 2016 and 2015, the FAA's contingent liabilities for asserted and pending legal claims probable were estimated at \$54.5 million and \$14.1 million respectively. Pending legal claims reasonably possible as of September 30, 2016 and 2015 were estimated at \$86.2 million and \$94.2 million, respectively. There are other claims that could result in significant pay-outs; however, it is not possible at this time to determine the probability of an unfavorable outcome, or to estimate the amount of potential loss in the event of such an outcome.

Environmental Liabilities. As of September 30, 2016, the FAA estimated contingent liabilities, categorized as reasonably possible at \$178.2 million, related to environmental remediation. Contingency costs are defined for environmental liabilities as those costs that may result from incomplete design, unforeseen and unpredictable conditions or uncertainties within a defined project scope. Note 7 discloses the environmental liability accrual.

FAA is a party to environmental remediation sites in Alaska, the Pacific Islands, and New Jersey in which the extent of liability is not both probable and reasonably estimable. As a result, a liability is not recognized for these sites without further studies and negotiations with other federal agencies.

## **NOTE 17. Incidental Custodial Collections**

Cash collections that are "custodial" are not revenue to the FAA, but are collected on behalf of other federal entities or funds. Custodial collections are considered to be incidental to the FAA's primary mission. The following table presents custodial collections and the disposition of those collections for the years ended September 30, 2016 and 2015:

	2016	2015
Revenue activity:	_	
Sources of cash collections:		
Fines, penalties, and forfeitures	\$ 23,204	\$ 13,024
General fund proprietary interest	365	49
Miscellaneous recoveries and refunds	7,546	7,351
Total cash collections	31,115	20,424
Accrual adjustment	(323)	(3,752)
Total custodial revenue	30,792	16,672
Disposition of collections:		
Transferred to others (by recipient):		
Treasury (general fund)	31,115	20,424
Amounts yet to be transferred	(323)	(3,752)
Total disposition of collections	30,792	16,672
Net custodial activity	\$ 	\$ _

## **NOTE 18. Reconciliation of the Net Cost of Operations to Budget**

The FAA records transactions on both an accrual accounting basis (also called financial or proprietary accounting) and a budgetary accounting basis. The following schedule presents a reconciliation of the resources available to the FAA to finance operations (budgetary accounting basis) and the net cost of operating the FAA programs (financial or proprietary accounting basis).

	2016		2015
Resources used to finance activities			
Budgetary resources obligated			
New obligations and upward adjustments	\$ 25,143,633	\$	25,506,172
Less: Spending authority from offsetting collections and receipts and recoveries			
of prior year obligations	 9,043,262		9,674,137
Obligations, net of offsetting collections	 16,100,371		15,832,035
Other resources			
Donations and forfeitures of property	38,824		40,902
Transfers in/(out) without reimbursement	853		87,671
Imputed financing from costs absorbed by others	390,064		402,818
Other	(283)		(16,740)
Net other resources used to finance activities	429,458		514,651
Total resources used to finance activities	16,529,829		16,346,686
Resources used to finance items not part of the net cost of operations			
Change in budgetary resources obligated for goods, services and benefits ordered but			
not yet received	460,400		246,101
Resources that fund expenses recognized in prior periods (decreases in unfunded liabilities)	88,104		129,723
Resources that finance the acquisition of assets	1,165,564		1,222,294
Other resources or adjustments to net obligated resources that do not affect net cost of operations	 27,800		142,500
Total resources used to finance items not part of net cost of operations	 1,741,868		1,740,618
Total resources used to finance net cost of operations	14,787,961		14,606,068
Components of net cost of operations that will not require or generate resources in the current period			
Components requiring or generating resources in future periods			
Increases in annual leave liability and other unfunded liabilities	42,604		4,763
Components not requiring or generating resources in future periods			
Depreciation and amortization	1,329,599		1,312,258
Revaluation of Assets or Liabilities	(51,861)		(75,651)
Other	158,452		139,877
Total components of net cost of operations that will not require or generate resources	1,436,190		1,376,484
Total components of net cost of operations that will not require	 .,,	-	.,,
or generate resources in the current period	 1,478,794		1,381,247
Net cost of operations	\$ 16,266,755	\$	15,987,315

# **Required Supplementary Stewardship Information**

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

# STEWARDSHIP INVESTMENT NON-FEDERAL PHYSICAL PROPERTY AIRPORT IMPROVEMENT PROGRAM

For the Fiscal Years Ended September 30 Unaudited

State/Territory	2016	2015	2014	2013	2012
Alabama	\$ 58,137	\$ 58,003	\$ 68,873	\$ 69,580	\$ 54,765
Alaska	148,217	150,992	196,013	211,385	234,242
Arizona	51,218	55,673	70,454	59,764	73,272
Arkansas	38,207	28,517	37,698	54,673	35,746
California	247,038	294,193	247,861	231,174	212,080
Colorado	69,575	70,830	88,470	95,027	74,102
Connecticut	20,240	25,031	12,527	21,374	16,637
Delaware	9,513	3,772	8,645	15,745	5,352
District of Columbia	28,174	14,549	32,924	5,354	44,565
Florida	143,872	185,794	132,904	159,803	160,509
Georgia	62,839	59,366	61,635	69,999	90,864
Hawaii	25,999	30,589	59,741	29,153	29,024
Idaho	22,198	35,386	32,652	23,593	18,813
Illinois	150,114	143,517	177,562	178,873	161,320
Indiana	72,409	59,537	70,292	79,478	42,460
lowa	44,770	33,382	42,889	58,577	41,221
Kansas	33,421	31,642	34,803	51,988	31,476
Kentucky	45,422	46,917	33,301	37,744	24,432
Louisiana	53,763	37,298	34,447	50,276	55,676
Maine	26,115	24,057	19,712	35,512	18,257
Maryland	31,917	38,188	25,256	32,286	15,011
Massachusetts	44,120	37,243	60,985	53,349	66,044
Michigan	44,703	76,793	69,114	72,910	76,900
Minnesota	52,477	38,233	34,448	53,843	48,313
Mississippi	30,011	37,642	38,658	41,555	35,713
Missouri	68,774	41,382	46,280	55,522	46,445
Montana	38,501	29,158	27,503	44,474	48,128
Nebraska	45,490	48,299	30,446	31,781	34,711
Nevada	48,322	42,394	31,310	36,441	50,051
New Hampshire	12,686	10,756	10,940	17,623	21,070
New Jersey	61,577	39,491	59,786	99,443	47,444
New Mexico	34,611	28,783	22,869	27,787	26,163

(continued on next page)

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION STEWARDSHIP INVESTMENT

# NON-FEDERAL PHYSICAL PROPERTY AIRPORT IMPROVEMENT PROGRAM

For the Fiscal Years Ended September 30 Unaudited

State/Territory	2016	2015	2014	2013	2012
New York	\$ 80,016	\$ 83,194	\$ 72,170	\$ 98,699	\$ 94,424
North Carolina	61,926	75,198	75,162	101,080	51,337
North Dakota	38,683	45,644	37,970	53,066	28,723
Ohio	68,870	63,469	57,037	81,205	79,962
Oklahoma	40,598	34,523	30,764	59,213	37,892
Oregon	50,357	33,364	51,353	58,929	36,671
Pennsylvania	59,892	71,483	69,832	53,146	82,029
Rhode Island	28,859	42,722	16,190	11,939	3,675
South Carolina	50,956	49,729	37,411	54,621	49,512
South Dakota	19,471	27,702	25,208	39,320	32,712
Tennessee	66,648	73,043	70,404	84,893	59,545
Texas	222,141	217,574	239,187	235,366	195,321
Utah	32,597	49,761	57,880	59,188	42,705
Vermont	19,161	18,028	11,964	8,661	9,998
Virginia	45,271	40,712	50,364	60,272	42,571
Washington	94,812	67,474	61,151	79,861	89,797
West Virginia	17,394	26,942	19,037	24,015	26,544
Wisconsin	41,113	58,612	56,064	75,601	51,167
Wyoming	31,038	35,191	26,084	30,746	20,108
American Samoa	4,954	5,839	1,743	2,795	4,952
Guam	4,823	-	13,550	10,324	3,238
Northern Mariana Island	4,717	9,662	9,657	17,070	5,714
Puerto Rico	8,102	7,720	11,820	18,303	11,492
Virgin Islands	5,694	9,327	10,640	31,012	2,545
Marshall Island	_	5,132	7,157	4,226	2,669
Administration	165,235	150,165	148,652	143,312	133,576
Totals	\$ 3,127,758	\$ 3,159,617	\$ 3,189,449	\$ 3,602,949	\$ 3,139,685

The FAA makes project grants for airport planning and development under the Airport Improvement Program, in order to maintain a safe and efficient nationwide system of public-use airports that meets both the present and future needs of civil aeronautics.

The FAA works to improve the infrastructure of the nation's airports, in cooperation with airport authorities, local and state governments, and metropolitan planning authorities.

# STEWARDSHIP INVESTMENT RESEARCH AND DEVELOPMENT

For the Fiscal Years Ended September 30 Unaudited

Expenses	2016	2015	2014	2013	2012
Applied Research	\$ 110,363	\$ 106,363	\$ 155,883	\$ 119,952	\$ 133,932
Development	138,483	93,972	40	312	1,311
Administration	39,959	34,321	32,572	35,929	37,482
R&D Plant	19,766	17,711	12,479	26,086	18,974
Total	\$ 308,571	\$ 252,367	\$ 200,974	\$ 182,279	\$ 191,699

The FAA conducts on-going research as part of its mission to provide the safest, most efficient aerospace system in the world.

Research priorities include improved aircraft structures and materials; enhanced fire and cabin safety; greater crash injury protection; more sensitive explosive detection systems; ground de-icing operations and less in-flight ice buildup; better tools to predict and warn of weather hazards, turbulence, and wake vortices; advanced aerospace medicine; and optimized human factors. 'Aerospace medicine' includes, for example, the medical aspects of pilot certification, drug and alcohol testing, and ensuring that employees in safety critical duties meet medical standards. 'Human factors' refers to research on how people (e.g., air traffic controllers, pilots, and others) perform when interacting with, for example, aviation technology and equipment, under various stressful conditions. Optimizing this interaction contributes to safer air travel. Presented below are a few examples of how the FAA's research and development promotes safer air travel.

# **Develop Engine and Fuel Test Methods to Evaluate Unleaded Aviation Gasoline**

Unfortunately, use of less toxic fuels poses significant challenges in maintaining the safety of the general aviation fleet of approximately 167,000 aircraft in the United States. This fleet currently relies on 100 low lead Aviation Gasoline (AVGAS) for safe operation. 100 low lead is the only remaining transportation fuel in the United States that contains the additive tetraethyl lead, which was phased out of gasoline in the 1970's because of its neurotoxicity. Tetraethyl

lead has been used as an AVGAS additive for decades to create the very high octane levels required to prevent detonation (engine knock) in high power aircraft engines. Operation without adequate fuel octane can result in engine failure and aircraft accidents. Because of this, the impacts on performance, safety, operability, and compatibility with existing aircraft fuel system materials and engines must be carefully evaluated before approving an alternative fuel.

Before implementing a fleet wide authorization on a new fuel, a comprehensive research and test program was implemented under the Piston Aviation Fuels Initiative. This initiative focused on developing a test program for new, less toxic fuels that included laboratory testing and fleet-representative engine and flight testing. Subject matter experts had to take a preliminary plan and prepare detailed, comprehensive, test plans and procedures that would address the performance, safety and operability characteristics of candidate fuels compatible with test engines and aircraft representative of the general aviation fleet. In all, over forty-nine test plans and procedures were prepared to support testing of the ten aircraft and fifteen engine models that were selected.

This was truly a collaborative effort between the FAA and industry. Industry representatives including original equipment manufacturers provided subject matter expertise and technical support and provided engines, aircraft and other test articles as well as actually conducting portions of the test with FAA representatives present to witness test conduct.

## **Multi-Sensor Surveillance Data Fusion Strategies**

The Unmanned Aircraft Systems (UAS) Matrix team located at the FAA's William J. Hughes Technical Center is conducting research on detecting and tracking threats to the safe fight of UAS. As background, the "See and Avoid" rule is essential to safe flight in manned aircraft. See and Avoid refers to the ability of the pilot to visually scan the surrounding airspace and determine possible risks. UASs are required to have "Detect and Avoid" (DAA) systems since they don't have a pilot on board to avert risk. DAA systems have significant technical challenges in establishing and maintaining the relative position of one or more external threats (i.e., aircraft) during an encounter. Multiple sensors are needed to assure all threats (e.g., cooperative and non-cooperative) can be detected and tracked to remain well clear and safely separated. The use of multiple sensors requires strategies to combine (fuse) the position information obtained over time from each sensor. Once position information is fused it is converted to a single track output that is fed into a Detect and Avoid algorithm which provides a well clear or not clear alert as necessary.

### **Facility Risk Assessment Tool**

The FAA established the Air Traffic Safety Oversight Service (AOV) to provide independent safety oversight of various air traffic services. To support AOV's mission, a prototype decision support tool called Facility Risk Assessment Tool (FRAT) was developed to assess, rank, and track air traffic facility safety. FRAT provides a common platform for data-driven, risk-based safety analysis of air traffic services. An analytical approach integrating various techniques was employed to identify, describe, and categorize 16 risk factors and 71 input variables. Subsequently, they were used to develop four separate prototype models for FRAT that represent the Air Traffic Control Tower (ATCT), Terminal Radar Approach Control (TRACON), combined ATCT-TRACON, and Air Route Traffic Control Center (ARTCC) facility types. FRAT's quantitative approach is fundamentally data-driven and minimizes the use of subjective judgment.

## **Required Supplementary Information**

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

# SUPPLEMENTARY INFORMATION DEFERRED MAINTENANCE AND REPAIRS

As of September 30, 2016 *Unaudited* 

			Cost to return to acceptable condition					
Category	Description	Facility condition is <	Begin	ning balance	Ending balance			
Staffed Facilities								
Tier 1	ARTCCs, ATCT/TRACONs at major airports	95%	\$	163,907	\$	174,493		
Tier 2	WJHTC and MMAC	95%		38,003		38,077		
Tier 3	ATCT/TRACONs at all non-major airports	90%		47,471		21,115		
Unstaffed Facilities								
Tier 1	Long range radars	95%		65,000		60,564		
Other	Unstaffed infrastructure and fuel storage tanks	N/A		565,700		646,496		
	Total		\$	880,081	\$	940,745		

Deferred maintenance and repair is maintenance or repair that was not performed when it should have been, or was scheduled to be performed, but was delayed until a future period due to a lack of resources or funding.

FAA reports deferred maintenance for facilities critical to the operation of our nation's airspace with a Facilities Condition Index (FCI) score less than 90-95 percent — meaning that they must be maintained at 90-95 percent of prescribed levels or better to be considered in fair condition or better. These facilities include Air Route Traffic Control Centers (ARTCCs), Air Traffic Control Towers (ATCTs), Terminal Radar Approach Control (TRACON) facilities, the William J. Hughes Technical Center (WJHTC), the Mike Monroney Aeronautical Center (MMAC), and long range radar facilities. Deferred maintenance for fuel storage tanks, and unstaffed infrastructure facilities are reported if they have exceeded the expected lifecycle for those assets and the FCI score is not considered for those assets. All of these facilities are capitalized general property, plant, and equipment; and most of these facilities are fully depreciated given that they were constructed more than 50 years ago.

FAA prioritizes the maintenance of facilities by their operational significance within the National Airspace System. Tier 1 and Tier 2 facilities are staffed with FAA employees and contractors that support the busiest airports in the United States. Maintenance and

repair activities are prioritized to elevate and sustain the greatest number of those facilities in fair to good condition within available funding appropriated to FAA. Ancillary facilities such as long range radars, unstaffed infrastructure, and fuel storage tanks that support Tier 1 and Tier 2 facilities are given higher priority than those that support Tier 3 facilities. Tier 3 facilities support airports with low operational air traffic volume.

Staffed facilities are assessed for deferred maintenance and lifecycle costs on a rotating basis by a qualified engineering firm. Deferred maintenance for unstaffed facilities is determined based on facility surveys or estimated based on the age of the structure. FAA facilities that are administrative in nature have been excluded from these estimates since the state of those facilities does not have a direct impact on the control of air traffic operations. Personal property housed within these facilities has also been excluded from these estimates because it is likely to become obsolete as technology continues to advance. The FAA recognizes maintenance and repair expenses as incurred.

The significant increase in unstaffed infrastructure and fuel storage tanks is mainly attributed to the fuel storage tanks at facilities rapidly exceeding their lifecycles because they were all replaced in the late 1990s. FAA made a large push to resolve environmental issues associated with the fuel storage tanks and now those facilities are aging concurrently rather than in a staggered succession.

## SCHEDULE OF BUDGETARY RESOURCES BY MAJOR FUND TYPE

For the year ended September 30, 2016

Unaudited

	Trust Fund Grants-in-Aid to Airports	Trust Fund Facilities & Equipment	Trust Research & Develop		Insu	iation rance olving	F	ranchise Fund	_ Ope	rations_		Other Funds	_	Combined Total
Budgetary Resources														
Unobligated balance brought forward, transfers and other	\$ 15,354	\$ 1,290,983	\$ 6	66,238	\$ 2,13	31,543	\$	184,268	\$ 1	144,774	\$	1,851	\$	3,835,011
Recoveries of prior year obligations	146,694	63,297		1,643		_		32,523		82,547		_		326,704
Other changes in unobligated balance	2,141	(18,426)		(1,494)		-		258		(39,349)		682		(56,188)
Appropriations	_	2,849,625	16	66,022		_		-	1,9	987,724	7	,929,820		12,933,191
Contract authority	3,350,000	_		-		_		-		_		-		3,350,000
Spending authority from offsetting collections		72,504		553	3	36,252		506,770	8,0	074,892		_		8,690,971
Total Budgetary Resources	\$ 3,514,189	\$ 4,257,983	\$ 23	32,962	\$ 2,16	67,795	\$	723,819	\$ 10,2	250,588	\$ 7	,932,353	\$	29,079,689
Status of Budgetary Resources														
New obligations and upward adjustments	\$ 3,498,580	\$ 2,975,262	\$ 16	62,425	\$ 2	20,871	\$	463,443	\$ 10,0	099,945	\$ 7	,923,107	\$	25,143,633
Apportioned unexpired	1,445	1,232,402	6	66,245	1	16,034		260,377		61,069		7,918		1,645,490
Unapportioned unexpired	14,165	-		320	2,13	30,890		-		257		1,328		2,146,960
Unexpired unobligated balance, end or year	15,610	1,232,402		66,565	2,14	16,924		260,377		61,326		9,246		3,792,450
Expired unobligated balance, end of year	-	50,298		3,971		-		-		89,337		-		143,606
Unobligated balance, end of year	15,610	1,282,700	7	70,536	2,14	16,924		260,377	1	150,633		9,246		3,936,056
Total Status of Budgetary Resources	\$ 3,514,190	\$ 4,257,962	\$ 23	32,961	\$ 2,16	67,795	\$	723,820	\$ 10,2	250,608	\$ 7	,932,353	\$	29,079,689
Change in Obligated Balances														
Obligated balance, net, beginning of period	\$ 5,418,236	\$ 1,465,430	\$ 13	36,065	\$	1,181	\$	173,212	\$ 1,3	376,806	\$	(13)	\$	8,570,917
New obligations and upward adjustments	3,498,580	2,975,262	16	62,425	2	20,871		463,443	10,0	099,945	7	,923,107		25,143,633
Gross outlays	(3,127,587)	(2,669,578)	(16	60,115)	(2	20,692)		(448,162)	(9,9	904,444)	(7	,922,090)		(24,252,668)
Recoveries of prior year obligations	(146,694)	(63,297)		(1,643)		-		(32,523)		(82,547)		_		(326,704)
Change in uncollected customer payments from federal sources	-	4,777		1,056		-		-		(14,325)		-		(8,492)
Obligated Balance, net, end of period	\$ 5,642,535	\$ 1,712,594	\$ 13	37,788	\$	1,360	\$	155,970	\$ 1,4	175,435	\$	1,004	\$	9,126,686
Budget Authority and Outlays				<del></del>										
Budget authority, gross	\$ 3,350,000	\$ 2,922,129	\$ 16	66,575	\$ 3	36,252	\$	506,770	\$ 10,0	062,616	\$ 7	,929,820	\$	24,974,162
Actual offsetting collections	(2,141)	(79,026)		(1,694)	(3	36,347)		(507,029)	(8,0	066,135)		-		(8,692,372)
Change in uncollected customer payments from federal sources	-	4,777		1,056		-		-		(14,325)		-		(8,492)
Recoveries of prior period year paid obligation	2,141	1,746		86		_		258		5,567		-		9,798
Budget Authority, net	\$ 3,350,000	\$ 2,849,626	\$ 16	66,023	\$	(95)	\$	(1)	\$ 1,9	987,723	\$ 7	,929,820	\$	16,283,096
Net Outlays														
Gross outlays	\$ 3,127,587	\$ 2,669,578	\$ 16	60,115	\$ 2	20,692	\$	448,162	\$ 9,9	904,444	\$ 7	,922,090	\$	24,252,668
Actual offsetting collections	(2,141)	(79,026)	(	1,694)	(3	36,347)		(507,029)	(8,0	066,135)		_		(8,692,372)
Distributed offsetting receipts	-	-		-		-		_		_		(15,674)		(15,674)
Net Outlays	\$ 3,125,446	\$ 2,590,552	\$ 15	58,421	\$ (1	15,655)	\$	(58,867)	\$ 1,8	338,309	\$ 7	,906,416	\$	15,544,622

### SCHEDULE OF BUDGETARY RESOURCES BY MAJOR FUND TYPE

For the year ended September 30, 2015

Unaudited

	Trust Fund Grants-in-Aid to Airports	Trust Fund Facilities & Equipment	Trust Fund Research, Eng. & Development	Aviation Insurance Revolving	Franchise Fund	Operations	Other Funds	Combined Total
Budgetary Resources  Unobligated balance brought forward, transfers and other	\$ 144,175	\$ 1,322,493	\$ 71,762	\$ 2,145,164	\$ 185,648	\$ 136,648	\$ 30,629	\$ 4,036,519
Recoveries of prior year obligations	164,521	82,880	1,939	\$ 2,145,164 74	39,881	82,926	\$ 50,629 104	372,325
Other changes in unobligated balance	845	(19,880)	(1,111)	/4	453	(21,864)	(29,257)	(70,814)
Appropriations	040	2,600,000	156,761	_	400	1,145,700	8,611,375	12,513,836
Contract authority	3,220,000	2,000,000	130,701	_	_	1,145,700	0,011,373	3,220,000
Spending authority from offsetting collections	3,220,000	63,390	2,593	(6,212)	450,239	8,759,306	1	9,269,317
Total Budgetary Resources	\$ 3,529,541	\$ 4,048,883	\$ 231,944	\$ 2,139,026	\$ 676,221	\$ 10,102,716	\$ 8,612,852	\$ 29,341,183
<u> </u>	φ 3,323,341	\$ 4,040,003	φ 231,344	φ 2,133,020	Ψ 0/0,221	φ 10,102,710	φ 0,012,032	\$ 23,341,103
Status of Budgetary Resources	<b>.</b>	A 0.757.044	4 405 700	<b>A</b> 7404	<b>.</b>	A 0.057.004		<b>A</b> 05 500 470
New obligations and upward adjustments	\$ 3,514,187	\$ 2,757,941	\$ 165,706	\$ 7,484	\$ 491,953	\$ 9,957,901	\$ 8,611,000	\$ 25,506,172
Apportioned unexpired	988	1,238,702	62,105	41,414	177,706	53,812	1,535	1,576,262
Unapportioned unexpired	14,366	75	11	2,090,128	6,562	247	316	2,111,705
Unexpired unobligated balance, end or year	15,354	1,238,777	62,116	2,131,542	184,268	54,059	1,851	3,687,967
Expired unobligated balance, end of year	-	52,167	4,123	-	-	90,754	-	147,044
Unobligated balance, end of year	15,354	1,290,944	66,239	2,131,542	184,268	144,813	1,851	3,835,011
Total Status of Budgetary Resources	\$ 3,529,541	\$ 4,048,885	\$ 231,945	\$ 2,139,026	\$ 676,221	\$ 10,102,714	\$ 8,612,851	\$ 29,341,183
Change in Obligated Balances								
Obligated balance, net, beginning of period	\$ 5,209,502	\$ 1,475,001	\$ 131,565	\$ 1,727	\$ 177,611	\$ 1,366,694	\$ 2,075	\$ 8,364,175
New obligations and upward adjustments	3,514,187	2,757,941	165,706	7,484	491,953	9,957,901	8,611,000	25,506,172
Gross outlays	(3,140,932)	(2,681,408)	(158,953)	(7,955)	(454,783)	(9,900,958)	(8,612,970)	(24,957,959)
Recoveries of prior year obligations	(164,521)	(82,880)	(1,939)	(74)	(39,881)	(82,926)	(104)	(372,325)
Change in uncollected customer payments from federal sources		(3,224)	(314)		(1,688)	36,080		30,854
Obligated Balance, net, end of period	\$ 5,418,236	\$ 1,465,430	\$ 136,065	\$ 1,182	\$ 173,212	\$ 1,376,791	\$ 1	\$ 8,570,917
Budget Authority and Outlays								
Budget authority, gross	\$ 3,220,000	\$ 2,663,390	\$ 159,354	\$ (6,212)	\$ 450,239	\$ 9,905,006	\$ 8,611,376	\$ 25,003,153
Actual offsetting collections	(845)	(61,506)	(2,501)	6,212	(449,004)	(8,807,092)	(246)	(9,314,982)
Change in uncollected customer payments from federal sources	-	(3,225)	(314)	-	(1,688)	36,081	-	30,854
Recoveries of prior period year paid obligation	845	1,341	221	_	453	11,705	246	14,811
Budget Authority, net	\$ 3,220,000	\$ 2,600,000	\$ 156,760	\$ _	\$ _	\$ 1,145,700	\$ 8,611,376	\$ 15,733,836
Net Outlays								
Gross outlays	\$ 3,140,932	\$ 2,681,408	\$ 158,953	\$ 7,955	\$ 454,783	\$ 9,900,958	\$ 8,612,970	\$ 24,957,959
Actual offsetting collections	(845)	(61,506)	(2,500)	6,212	(449,004)	(8,807,092)	(247)	(9,314,982)
Distributed offsetting receipts							(7,849)	(7,849)
Net Outlays	\$ 3,140,087	\$ 2,619,902	\$ 156,453	\$ 14,167	\$ 5,779	\$ 1,093,866	\$ 8,604,874	\$ 15,635,128



## Summary of Financial Statement Audit and Management Assurances

## **Financial Statement Audit Summary**

Table 1 is a summary of the results of the independent audit of the FAA's consolidated financial statements by the agency's auditors in connection with the FY 2016 audit.

TABLE 1: SUMMARY OF FINANCIAL STATEMENT AUDIT										
Audit Opinion	FY 2016-unmodified									
	FY 2015-unmodified	2015-unmodified								
Restatement	No									
Material Weakness	Beginning Balance	New	Resolved	Consolidated	Ending Balance					
	0	0	0	0	0					
Total Material Weaknesses	0	0	0	0	0					

## **Management Assurances Summary**

Table 2 is a summary of management assurances related to the effectiveness of internal control over the FAA's financial reporting and operations, and its conformance with financial management system requirements under Sections 2 and 4, respectively, of the Federal Managers' Financial Integrity Act (FMFIA) of 1982. The last portion of Table 2 summarizes the FAA's compliance with the Federal Financial Management Improvement Act (FFMIA).

TABLE 2: SUMMARY OF MANAGEMENT ASSURANCES											
Effectiveness of Internal Control over Financial Reporting (FMFIA § 2)											
Statement of Assurance	Unmodified statement of assurance										
Material Weakness	Beginning Balance	New	Resolved	Consolidated	Reassessed	Ending Balance					
	0	0	0	0	0	0					
Total Material Weaknesses	0	0	0	0	0	0					

Effectiveness of Internal Control over Operations (FMFIA § 2)										
Statement of Assurance	Unmodified statement of assurance									
Material Weakness	Beginning Balance New Resolved Consolidated Reassessed Balance									
	0	0	0	0	0	0				
Total Material Weaknesses	0 0 0 0 0 0									

Conform with financial management system requirements (FMFIA § 4)										
Statement of Assurance	Systems co	onformance t	o financial n	nanagement s	ystem requir	ements				
Non-conformances	Beginning Balance	New	Resolved	Consolidated	Reassessed	Ending Balance				
Conformance of FAA's core financial management system, Delphi, is assessed and reported by the Department of Transportation.	0	0	0	0	0	0				

Compliance with Federal Financial Management Improvement Act (FFMIA)						
	Agency	Auditor				
1. System Requirements	No lack of compliance noted	No lack of compliance noted				
2. Accounting Standards	No lack of compliance noted	No lack of compliance noted				
3. USSGL at Transaction Level	No lack of compliance noted	No lack of compliance noted				

## **Summary of Improper Payments**

The Improper Payments Information Act (IPIA) of 2002 (P. L. 107-300) requires agencies to review their programs and activities to identify those susceptible to significant improper payments. IPIA was amended on July 22, 2010, by the Improper Payments Elimination and Recovery Act (IPERA) of 2010 (P. L. 111-204). IPERA strengthens the requirements for government agencies to carry out cost-effective programs for identifying and recovering overpayments, also known as "recapture auditing." Throughout FY 2016, the FAA continued implementing the most recent amendment to IPIA, the Improper Payments Elimination and Recovery Improvement Act (IPERIA) of 2012 (P. L. 112-248). The FAA has completed the implementation of the new reporting requirements created by IPERIA for FY 2016.

Office of Management and Budget (OMB) Circular A-123, Appendix C, Requirements for Effective Measurement and Remediation of Improper Payments, provides guidance on the implementation of IPERIA. OMB A-123, Appendix C defines an improper payment as any payment that should not have been made or that was made in an incorrect amount under statutory, contractual, administrative, or other legally applicable requirements. Incorrect amounts are overpayments or underpayments that are made to eligible recipients (including inappropriate denials of payment or service, any payment that does not account for credit for applicable discounts, payments that are for the incorrect amount, and duplicate payments). An improper payment also includes any payment that was made to an ineligible recipient or for an ineligible good or service, or payments for goods or services not received (except for such payments authorized by law). In addition, when an agency's review is unable to discern whether a payment was proper as a result of insufficient or lack of documentation, this payment must also be considered an improper payment.

The OMB issued M-13-07, Accountability for Funds Provided by the Disaster Relief Appropriations Act, dated March 12, 2013 that required agencies to manage funds provided under that Act with the same discipline and rigor as programs that are traditionally designated as susceptible to significant improper payments under IPERIA. These Facilities and Equipment (F&E) — Disaster Relief Appropriation Act (DRAA) funds were sampled and ultimately tested as high-risk programs.

# Federal Aviation Administration (FAA) Process

The FAA's process for complying with IPERIA and OMB Circular A-123, Appendix C, consists of the following steps:

- 1) Review program and activities to identify those susceptible to significant improper payments
- Obtain a statistically valid estimate of the annual amount of improper payments in programs and activities for those programs identified as susceptible to significant improper payments
- 3) Implement a plan to reduce erroneous payments
- 4) Report estimates of the annual amounts of improper payments in programs and activities and progress in reducing occurrence of future improper payments

For FY 2016 reporting, the FAA conducted the above four-step process for the 12-month period of October 1, 2014 to September 30, 2015 for F&E-DRAA funds (Hurricane Sandy Program).

### **I. Risk Assessment**

The DOT has completed a department-wide risk assessment for reporting in FY 2015, which includes FAA programs and funding activities. This assessment identified the Airport Improvement Program (AIP) as high-risk for FY 2015 due to the volume of payments made annually, coupled with the fact that federal funds within these programs are further administrated outside the agency by local governments and/or airport sponsors. The department-wide Improper Payment Risk Assessment conducted for FY 2015 assessed risk for FAA's following funding activities:

- ► Airport Improvement Program (AIP)
- ▶ Franchise Fund
- ► Facilities and Equipment (F&E)
- ► Operations-General Fund
- ▶ Personnel Compensation & Benefits
- ▶ Research, Engineering and Development

The susceptibility of programs making significant improper payments is determined by qualitative and quantitative factors. For quantitative factors, DOT reviewed the total expenditures for each funding activity to determine if the volume of transactions may result in an error rate of 1.5 percent and \$10 million or \$100

million. The qualitative factors were developed in accordance with the IPERA requirements and included the following:

- Payment processing controls
- ▶ Age of the program
- ▶ Operating environment
- Quality of internal monitoring controls
- ► Complexity of the program
- ► Additional grant program factors
- ► Human Capital
- ▶ Nature of payments and recipients
- ► Contract Payment Management

Based on the results of this risk assessment, the FAA had determined that AIP was still considered the only FAA high-risk program that should also be classified as high risk for the purposes of improper payment reporting.

According to IPERA, and OMB A-123, Appendix C, if a program has been reporting improper payment estimates, but has documented a minimum of two consecutive years of improper payments that are below the thresholds set by IPERA, the agency may request relief from the annual reporting requirements for this program. This request must include an assertion from the agency's Office of Inspector General (OIG) that it concurs with the agency's request for relief. In FY 2016, DOT requested the Office of Management and Budget (OMB) relieve the AIP from improper payment reporting. In its

written request, DOT adequately demonstrated that the AIP program had at least two consecutive years of improper payments reporting below the IPERA thresholds. In addition, the request included the requisite assertion from the agency's OIG that it concurs with the agency's request for relief. OMB reviewed and approved this request on July 19, 2016. Therefore, the FAA's FY 2016 PAR does not include AIP testing results.

While a risk assessment was not performed for the FAA's Hurricane Sandy Program, these disbursements are considered high-risk based on M-13-07, Accountability for Funds Provided by the DRAA and were thus included in FAA's scope of testing in FY 2016.

## **II. Statistical Sampling**

The FAA obtained the data extracts from a single source, the DOT's financial system of record, Delphi. Additionally, to verify both sample integrity and the accuracy of extrapolated programmatic improper payment estimates, we utilized procedures and processes that were developed explicitly to satisfy OIG review and to yield transparent and replicable results. The FY 2016 Hurricane Sandy Program funds sampling approach has not changed significantly from the FY 2015 approach which has been reviewed and approved by the OIG. The FY 2016 Hurricane Sandy Program funds sample plan has been submitted to OMB for review.

Sample results provided an overall improper payment point estimate of the percentage of improper payment dollars at the 90 percent confidence level within precision requirement of 2.5 percent.



Runway extension project at Ted Stevens Anchorage International Airport (ANC).

## **III. Improper Payment Reporting**

Table 1 summarizes improper payment amount for the FAA's Disaster Relief Appropriations Act Funds — F&E (DRAA funds). Improper payment percent (IP%) and improper payment dollar (IP\$) results are provided from the prior year's as well as the current

year's testing of payments. Data for projected future year is based on the timing and significance of completing corrective actions. Only previous year (PY) AIP results are required to be reported since the AIP program is no longer a high risk program as of FY 2016.

• TABLE	: 1: IMP Dollar	ROPEI		MENTS	RED	UCTI0	N OUT	[LOOI	K								
or Activity	PY Outlays	PY IP %	PY IP \$	CY Outlays	CY IP %	CY IP \$	CY Over- payment \$	CY Under- payment \$	CY + 1 Est. Outlays	CY + 1 Est. IP %	CY + 1 Est. IP \$	CY + 2 Est. Outlays	CY + 2 Est. IP %	CY + 2 Est. IP \$	CY + 3 Est. Outlays	CY + 3 Est. IP %	CY + 3 Est. IP \$
Program o	20 (Based on F	15 Testing Y 2014 Act			2016 Testing (Based on FY 2015 Actual) Act			2017 Testing 2018 Testing 2019 Tes (Based on FY 2016 (Based on FY 2017 (Based on F Actual and Estimated Data) Estimated Data) Estimated			ed on FY	2018					
FAA AIP	\$ 3,117.078	0.04%	\$ 1.265						AIP is no	longer t	ested as of	FY 2016					
FAA F&E - DRAA	\$ 9.582	0.00%	\$ -	\$ 8.646	1.59%	\$ 0.137	\$ 0.137	\$ -	\$ 3.118	1.58%	\$ 0.049	\$ 3.073	1.57%	\$ 0.048	\$ 1.649	1.56%	\$ 0.026
Total	\$ 3,126.660	0.04%	\$ 1.265	\$ 8.646	1.59%	\$ 0.137	\$ 0.137	\$ -	\$ 3.118	1.58%	\$ 0.049	\$ 3.073	1.57%	\$ 0.048	\$ 1.649	1.56%	\$ 0.026

## **IV. Improper Payment Root Cause Categories**

Beginning in FY 2015, OMB requires agencies provide a more detailed reporting of their improper payments. The following table (Table 2) includes the required categories and reports the results of the Hurricane Sandy Program funds testing for FY 2016.

• TABLE 2: IMPROF  Dollars in N	PER PAYMENT ROOT C	AUSE	CATEGO	RY M	ATRIX
		FAA F&E - DRAA			
Reason for Improper Pay	ment	Overp	ayments	Underpayments	
Program Design or Structura	l Issue	\$	_	\$	_
Inability to Authenticate Elig	ibility	\$	_	\$	_
Failure to Verify:	Death Data	\$	_	\$	
	Financial Data	\$	_	\$	
	Excluded Party Data	\$	_	\$	_
	Prisoner Data	\$	_	\$	_
	Other Eligibility Data	\$	_	\$	_
Administrative or Process	Federal Agency	\$	0.137	\$	
Error Made by:	State or Local Agency	\$	_	\$	_
	Other Party	\$	_	\$	_
Medical Necessity		\$	_	\$	_
Insufficient Documentation	to Determine:	\$	_		
Federal Agency		\$	_		
State or Local Agency		\$	_		
Other Party		\$	_		
Other Reason (a) (explain)		\$	_	\$	_
Other Reason (b) (explain)		\$		\$	_
	Total	\$	0.137	\$	-

#### V. Corrective Actions

The reported improper payments were under the threshold of being considered high-risk; therefore, formal corrective action plans will not be developed. The FAA will monitor F&E – DRAA payments more closely to further reduce the risk of improper payments.

## **VI. Internal Control Over Payments**

Beginning in FY 2015, and consistent with OMB A-123, Appendix C guidance, the FAA has summarized the status of internal controls over improper payments using: (1) a narrative explaining efforts undertaken to provide reasonable assurance that controls are in place and working; and (2) the Status of Internal Controls. Since the reported improper payments were under the threshold of being considered high-risk, the FAA is not required to publish the Status of Internal Controls Table.

## VII. Accountability

The FAA's goals and requirements of IPERIA were communicated to personnel at all levels of the organization that are held responsible and accountable for reducing and recovering improper payments.

The FAA has an existing control process with the OMB Circular A-123, Appendix A, Management's Responsibility for Enterprise Risk Management and Internal Control, which requires the FAA to review internal control over financial reporting and systems. This review includes determining if the systems are well documented, sufficiently tested, and properly assessed. The scope of these reviews includes reviewing and testing the key internal controls surrounding contractual payments.

# VIII. Agency Information Systems and Other Infrastructure

The FAA currently possesses the internal controls, human capital, and information systems necessary to maintain improper payments levels at the targeted programmatic rates.

#### IX. Barriers

The FAA does not have or foresee statutory or regulatory barriers that may limit the FAA's corrective actions in reducing improper payments.

## X. Recapture of Improper Payments Reporting

DOT's Office of Financial Management (OFM) performed a department-wide payment recapture audit which included FAA's programs and activities. OFM worked with the Enterprise Services Center (ESC) to initiate recovery of any FAA overpayments and identify payment process weaknesses. Since the overpayments identified in FY 2016 were of immaterial amounts, DOT determined that it was not cost-effective to break them down by agency (i.e., FAA) and therefore reported results at the departmental level only (in the DOT's Agency Financial Report).

#### **XI. Additional Comments**

The FAA is implementing lessons learned from DRAA improper payments. For example, the FAA continues to communicate and train acquisition staff on areas of improvement to prevent improper payments. These efforts will result in lower improper payment percentage rate and dollar amount for future years.

## XII. Agency reduction of improper payments with the Do Not Pay Initiative

The FAA and payment recipients are aware of the Do Not Pay Initiative. At the DOT level, commitment to prioritizing the Do Not Pay Initiative can be seen through the increased integration of Do Not Pay Business Center capabilities into our existing internal controls. DOT determined that it was not cost-effective to report this review by agency and therefore reported results at the departmental level (in the DOT's Agency Financial Report).

## **Combined Schedule of Spending**

The following schedule presents an overview of the major categories of the FAA's obligations and spending. The data used to populate this schedule are the same underlying data reported in the Statement of Budgetary Resources. The FAA's financial system of record is the official source from which all data is compiled. For the years ended September 30, 2016 and 2015, total budgetary resources and spending (obligations) were:

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION Unaudited

	For the Years Ended September 30			
		2016		2015
Total resources available to spend	\$	29,079,689	\$	29,341,183
Less amount available but not agreed to be spent		1,645,490		1,576,262
Less amount not available to be spent		2,290,566		2,258,749
Total amounts agreed to be spent	\$	25,143,633	\$	25,506,172
Major spending categories				
Personnel compensation and benefits	\$	7,742,689	\$	7,597,842
Contractual services and supplies		5,589,727		5,484,502
Acquisition of assets		460,793		391,688
Grants and fixed charges		3,407,622		3,424,343
Other		7,942,802		8,607,797
Total amounts agreed to be spent	\$	25,143,633	\$	25,506,172

## Freeze the Footprint

## U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION

Unaudited

In FY 2013, the Office of Management and Budget (OMB) enacted a "Freeze the Footprint" policy to control utilization and spending associated with real property. Federal agencies must maintain — and eventually reduce — the total square footage of their domestic office and warehouse inventory compared to a baseline of FY 2012 reported levels. The goal is to control taxpayer expense by reducing real property costs through reduction of square footage and leasing costs while utilizing space more efficiently.

The policy led to the establishment of new controls affecting the FAA's space management.

Over the past three years, the DOT has enhanced its real property stewardship by moving toward an approach of managing its entire portfolio of real estate collectively — across all component operating administrations of the department rather than lease-by-lease, building-by-building, or by operating administration (such as the FAA). We have supported the "Freeze the Footprint" initiative and the DOT-wide Real Property Efficiency Plan, by actively pursuing the reduction of FAA real estate space, thereby decreasing our square footage. Having moved into the next phase of the initiative called "Reduce the Footprint" effective this fiscal year, we anticipate further space reductions in the future. Some of the significant efforts are as follows:

- ▶ We are participating in DOT-wide, cross organizational reviews of administrative space, to pursue multiple space consolidation opportunities. We are doing this, for example, through participating in GSA's Client Portfolio Planning (CPP) at the FAA level, and through strategic planning. These efforts have produced projects such as the FAA's regional office consolidations/reductions of space in New York, Seattle, Los Angeles, Alaska, Fort Worth (completed in early FY 2016) and Atlanta; consolidation of several cross-organizational DOT offices into the Fallon Federal Building in Baltimore; and, continued planning toward consolidation of FAA's headquarters leases in Washington, D.C.
- ➤ To control lease costs, new and renewed leases have been placed under increased scrutiny to ensure assets are being efficiently utilized, assets support a broader portfolio strategic plan, and negotiated lease terms are competitive with market rates.

We also have been disposing of certain legacy unmanned navigation and communication sites, thereby reducing the inventory of real property assets and associated operating costs.

The FAA's annual operating costs related to direct leased and owned space as reported in the most recent DOT-wide Federal Real Property Profile (FRPP) available at the time of publication were:

### **Annual Operating Costs**

(Dollars in Thousands)

		2015
Leased space*	\$	77,540
Owned and otherwise managed space		5,775
Total annual operating costs	\$_	83,315

<sup>\*</sup> The annual operating costs of leased space consist of \$64,027 thousand of annual rent to lessors and \$13,513 thousand of other operating costs.

Table 1 is a summary of the total square footage of owned and direct lease assets in FY 2015 as compared to the FY 2012 baseline, and shows that the FAA's space has increased by 14 thousand square feet over that time period. This temporary increase over the FY 2012 baseline was due to the move into the new Southwest Regional Office in progress at the end of FY 2015. Table 2 presents progress with reducing annual operating costs by \$5,525 thousand.

#### **TABLE 1: Freeze the Footprint Progress**

FY 2012 Baseline to FY 2015

GSA, FAA Owned and Direct Lease Real Property

(Square Footage in Thousands)

	FY ZUIZ	FY 2015	Unange
Square Footage	9,292	9,306*	14

<sup>\*</sup> FY 2012 Freeze the Footprint baseline was exceeded for a brief period as Southwest Regional Office move was in progress with both old and new buildings under lease as of FY 2015 reporting. The vacated lease of 221 thousand square feet was released back to GSA in the first quarter of FY 2016.

#### **TABLE 2: Freeze the Footprint Progress**

FY 2012 Baseline to FY 2015

Annual Operating Costs of Owned and Direct Lease Real Property (Dollars in Thousands)

	FY 2012	FY 2015	Change
Operation and Maintenance Costs	\$ 88,840	\$ 83,315	\$ (5,525)

# **Civil Monetary Penalty Inflation Adjustments**

# U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION Unaudited

The Federal Civil Penalties Inflation Adjustment Act of 1990, Public Law (Pub. L.) 101-410, as amended by the Debt Collection Improvement Act of 1996, Pub. L. 104-134, and the Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (2015 Act), Pub. L. 114-74., requires agencies to make regular and consistent inflationary adjustments of civil monetary penalties to maintain their deterrent effect. Following are the civil penalties that the FAA may impose, the authority for imposing the penalty, the dates of inflation adjustments, and the current penalty level.

Penalty	Authority	Date of Previous Adjustment <sup>1</sup>	Date of Current Adjustment <sup>2</sup>	Current Penalty Level
Violation of hazardous materials transportation law	49 U.S.C. 5123(a), subparagraph (1)	July 2012 (reset by statute)	August 5, 2016	\$77,114
Violation of hazardous materials transportation law resulting in death, serious illness, severe injury, or substantial property destruction	49 U.S.C. 5123(a), subparagraph (2)	July 2012 (reset by statute)	August 5, 2016	\$179,933
Violation of hazardous materials transportation law relating to training	49 U.S.C. 5123(a), subparagraph (3)	July 2012 (reset by statute)	August 5, 2016	\$77,114
Violation by a person other than an individual or small business concern under 49 U.S.C. 46301(a)(1)(A) or (B)	49 U.S.C. 46301(a)(1)	November 2010	August 5, 2016	\$32,140
Violation by an airman serving as an airman under 49 U.S.C. 46301(a)(1)(A) or (B) (but not covered by 46301(a)(5)(A) or (B))	49 U.S.C. 46301(a)(1)	December 2003 (reset by statute)	August 5, 2016	\$1,414
Violation by an individual or small business concern under 49 U.S.C. 46301(a)(1)(A) or (B) (but not covered in 49 U.S.C. 46301(a)(5))	49 U.S.C. 46301(a)(1)	December 2003 (reset by statute)	August 5, 2016	\$1,414
Violation of 49 U.S.C. 47107(b) (or any assurance made under such section) or 49 U.S.C. 47133	49 U.S.C. 46301(a)(3)	N/A	N/A	No change-Increase above otherwise applicable maximum amount not to exceed 3 times the amount of revenues that are used in violation of such section.
Violation by an individual or small business concern (except an airman serving as an airman) under 49 U.S.C. 46301(a)(5)(A) (i) or (ii)	49 U.S.C. 46301(a)(5)(A)	June 2006	August 5, 2016	\$12,856
Violation by an individual or small business concern related to the transportation of hazardous materials	49 U.S.C. 46301(a)(5) (B)(i)	June 2006	August 5, 2016	\$12,856
Violation by an individual or small business concern related to the registration or recordation under 49 U.S.C. chapter 441, of an aircraft not used to provide air transportation	49 U.S.C. 46301(a)(5) (B)(ii)	June 2006	August 5, 2016	\$12,856

<sup>1</sup> This refers to the last time the penalty was actually changed. All penalty amounts were reviewed in 2016 as part of the catch-up adjustment, and are reviewed during each inflation adjustment, but only some were adjusted under the formula.

<sup>2</sup> The current adjustment went into effect on August 5, 2016 as part of the statutorily-required catch-up adjustment. This was implemented via an interim final rule titled Revisions to the Civil Penalty Inflation Adjustment Tables, 81 FR 43463 (July 5, 2016). A correction to the inflation adjustment was published prior to the rule's effective date, 81 FR 51079 (Aug. 3, 2016).

Penalty	Authority	Date of Previous Adjustment <sup>1</sup>	Date of Current Adjustment <sup>2</sup>	Current Penalty Level
Violation by an individual or small business concern of 49 U.S.C. 44718(d), relating to limitation on construction or establishment of landfills	49 U.S.C. 46301(a)(5) (B)(iii)	June 2006	August 5, 2016	\$12,856
Violation by an individual or small business concern of 49 U.S.C. 44725, relating to the safe disposal of life-limited aircraft parts	49 U.S.C. 46301(a)(5) (B)(iv)	June 2006	August 5, 2016	\$12,856
Tampering with a smoke alarm device	49 U.S.C. 46301(b)	November 2010	August 5, 2016	\$4,126
Knowingly providing false information about alleged violation involving the special aircraft jurisdiction of the United States	49 U.S.C. 46302	November 2010	August 5, 2016	\$22,587
Interference with cabin or flight crew	49 U.S.C. 46318	June 2006	August 5, 2016	\$34,172
Permanent closure of an airport without providing sufficient notice	49 U.S.C. 46319	June 2006	August 5, 2016	\$12,856
Violation of 49 U.S.C. 47528-47530, relating to the prohibition of operating certain aircraft not complying with stage 3 noise levels	49 U.S.C. 47531	N/A	N/A	No change-See 49 U.S.C. 46301(a)(1)(A) and (a)(5), above
Violation of a requirement of the Commercial Space Launch Act, as amended, a regulation issued under the Act, or any term or condition of a license or permit issued or transferred under the Act	51 U.S.C. 50917	October 2014	August 5, 2016	\$225,867

# Administrative Services Franchise Fund

## **Background**

The Department of Transportation and Related Agencies
Appropriation Act of 1997 authorized the FAA to establish an
Administrative Services Franchise Fund (Franchise Fund). Through
the Franchise Fund, the FAA is able to competitively provide a wide
variety of support services to various government entities. The
FAA's provision of services to various government entities results
in the consolidation and shared use of like functions and the
utilization of economies of scale. All of these measures help the
government use its resources more efficiently.

The FAA's Franchise Fund is composed of several programs, through which it offers many different services to various parts of the government. These services include accounting, travel, duplication, multimedia, information technology, logistics and material management, acquisition, aircraft maintenance, international training, and management training. The Franchise Fund's major customers are programs in the FAA's lines of business. Other customers include Department of Transportation (DOT) entities, non-DOT government agencies, and international government entities.

## **Description of Programs and Services**

The Enterprise Services Center (ESC) is based at the Mike Monroney Aeronautical Center (Aeronautical Center) in Oklahoma City, OK. The ESC is a full service financial management provider. The efficiencies and economies of scale created by this integration make it an attractive option to government customers seeking a provider of financial management services. There are three components of the ESC, all falling within the FAA Franchise Fund:

- ► Enterprise System—configuration and support of application software and databases
- Financial Operations—transaction processing, financial reporting, and analysis services
- ► Information Technology—hosting, telecommunications, information system security, and end-user support services

During FY 2005, the Office of Management and Budget (OMB) selected ESC as a Financial Management Center of Excellence (COE). As a COE, the ESC has the ability to compete to provide financial management services for other government agencies.

The ESC currently provides financial management services to all DOT agencies, and a number of other non-DOT Executive Branch agencies, including the Securities and Exchange Commission, the National Endowment for the Arts, the Commodity Futures Trading Commission, the Institute of Museum and Library Services, and the United States Government Accountability Office (Legislative Branch).

In January 2009, the OMB named the ESC one of only four government-wide information systems security shared-service providers. In May 2014, the OMB designated the ESC one of four government-wide financial management shared service providers to provide core accounting and other services to federal agencies. Using a financial management shared service provider helps customer agencies reduce the risks inherent in new system implementation, allows for faster and less expensive technological innovation, and provides long-term cost savings. A shared service provider allows customer agencies to focus resources directly on mission-related efforts. The FAA Logistics Center is also located at the Aeronautical Center in Oklahoma City and provides comprehensive logistics support and a highly sophisticated level of maintenance and repair services to ensure the safety of the flying public, to satisfy the critical needs of the nation's airspace system, and to meet related requirements. Services include materiel management (e.g., provisioning, cataloging, acquisition, inventory management, inventory supply), reliable and cost-effective depotlevel repair of line replaceable units, life cycle and performance cost analysis, logistics automation, distribution services, disposal of items no longer required, and technical support to repair and maintain the nation's airspace and related equipment. The Logistics Center also maintains the Department of Homeland Security's (DHS) Customs and Border Protection border surveillance systems, including more than 80 mobile surveillance systems and fixed towers. It provides supply chain support, depot maintenance support, engineering, and other systems support to the DHS.

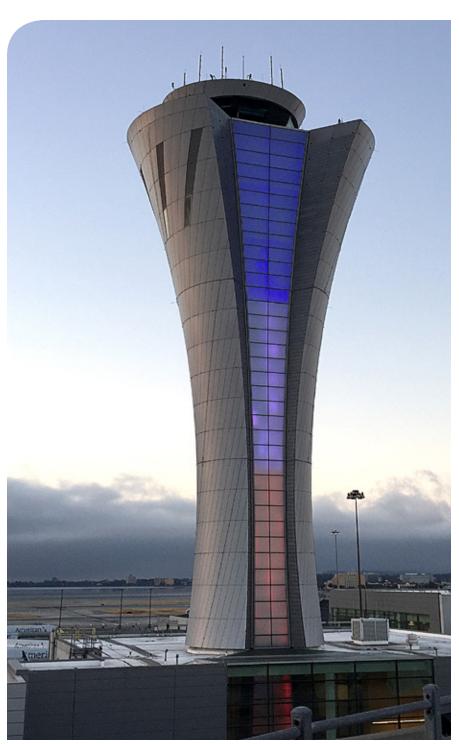
The Aeronautical Center is also home to the Aircraft Maintenance and Engineering Group. The group provides total aircraft support, including maintenance, quality assurance, and overall program management, for the FAA's uniquely equipped flight inspection aircraft fleet, as well as other customer aircraft, including the U.S. Marshals Service and the U.S. Army. Preventative services, aircraft repair, overhaul, and modification services are provided, as well as reliability and maintainability studies. Aircraft Maintenance and

Engineering has the flexibility to provide either full or partial support, depending upon customer requirements, ranging from short-term preventative maintenance or one-time engineering tasks to more involved activities, such as a full complement of maintenance services, complete with quality assurance and engineering support.

The FAA Leadership and Learning Institute (FLLI) is located in Washington, D.C. The FLLI provides non-technical training in support of the FAA mission. This institute designs and delivers face-to-face centralized training both onsite and at field locations, as well as web based training. The federal, professional, and local communities also recognize the FLLI as a premier resource for leadership and teambuilding training.

The International Training Division (ITD), an element of the FAA Academy, is located at the Aeronautical Center in Oklahoma City, OK, and delivers technical assistance and training to enhance international aviation safety and security while promoting U.S. aviation system technologies, products, and services overseas. The products and services of the ITD include training program management, instructional services, training design, development, and revision, technical training evaluations, and consulting services tailored to meet the specifically defined needs of the FAA and its international customers.

The Franchise Fund also houses a branch of acquisition services that supports the acquisition activities of the Franchise Fund organizations, as well as other activities.



San Francisco International Airport's (SFO) new control tower which became operational in October 2016, and was jointly funded by SFO and the FAA's Airport Improvement Program. The tower was built to satisfy specific technical and site requirements as well as stringent seismic, safety and security design standards, while also achieving gold certification under the Leadership in Energy and Environmental Design (LEED) rating system. The LEED system was designed by the United States Green Building Council to evaluate environmental performance and allows projects to earn points for environmentally friendly actions taken during construction and use of a building. Photo: FAA

## **FRANCHISE FUND**

Condensed Information

## **ASSETS, LIABILITIES, AND NET POSITION**

(Dollars in Thousands)

Unaudited

	As of September 30			
		2016		2015
ASSETS		<u>.</u>		
Fund balance with Treasury	\$	416,346	\$	357,480
Accounts receivable, net		22		20
Inventory and related property, net		649,113		624,245
General property, plant, and equipment, net		46,691		48,637
Other		1,916		2,814
Total assets	\$	1,114,088	\$	1,033,196
LIABILITIES				
Accounts payable	\$	18,005	\$	28,705
Advances from others		305,226		248,088
Employee related		18,731		17,081
Other		598		613
Total liabilities		342,560		294,487
NET POSITION				
Cumulative results of operations		771,528		738,709
Total net position		771,528		738,709
Total liabilities and net position	\$	1,114,088	\$	1,033,196

## **FRANCHISE FUND**

Condensed Information

## **REVENUES AND EXPENSES**

(Dollars in Thousands) *Unaudited* 

		For the years	ended September 30
		2016	2015
Enterprise Servic	es Center		
	Revenues	\$ 173,134	\$ 169,577
	Expenses	194,297	206,824
	Profit (loss)	(21,163)	(37,247)
Corp Services			
	Revenues	683	1,052
	Expenses	762	884
	Profit (loss)	(79)	168
Aircraft Maintena	nce and Engineering Group		
	Revenues	59,159	64,273
	Expenses	69,376	70,890
	Profit (loss)	(10,217)	(6,617)
FLLI			
	Revenues	8,066	7,029
	Expenses	9,376	8,050
	Profit (loss)	(1,310)	(1,021)
International			
	Revenues	4,357	3,403
	Expenses	4,806	4,381
	Profit (loss)	(449)	(978)
FAA Logistics Cer	nter		
	Revenues	259,923	257,482
	Expenses	244,357	246,470
	Profit (loss)	15,566	11,012
Acquisitions			
	Revenues	5,007	6,393
	Expenses	7,498	9,839
	Profit (loss)	(2,491)	(3,446)
Total Consolidate	d		
	Revenues	510,329	509,209
	Expenses	530,472	547,338
	Profit (loss)	\$ (20,143)	\$ (38,129)

## **FRANCHISE FUND**

Condensed Information

## FINANCING SOURCES AND NET POSITION

(Dollars in Thousands)

Unaudited

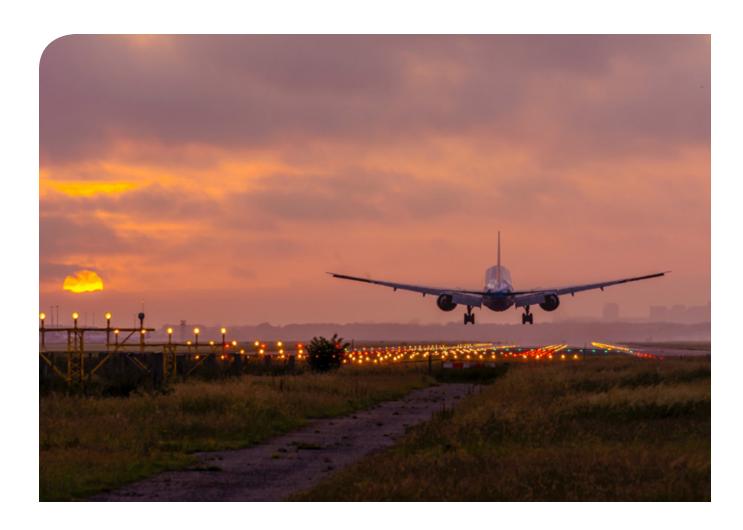
## Cumulative results of operations As of Sentember 30

	As of September 30			,
		2016		2015
Beginning balance, net position	\$	738,709	\$	743,487
Financing sources				
Transfers-in/out without reimbursement		(6,783)		(21,725)
Imputed financing from costs absorbed by others		59,745		55,076
Total financing sources		52,962		33,351
Profit (loss)		(20,143)		(38,129)
Ending balance, net position	\$	771,528	\$	738,709

## Summary of Inspector General's Top Management and Performance Challenges

The Reports Consolidation Act of 2000 requires the Inspector General (IG) to identify and report annually on the most serious management and performance challenges that federal agencies face. The Department of Transportation (DOT) IG's report highlights urgent issues facing DOT. The IG's report that summarizes the challenges DOT will face in FY 2017 is expected to be issued within two weeks after publication of this performance and accountability report, and will be available on the IG's website at <a href="https://www.oig.dot.gov/">https://www.oig.dot.gov/</a> and on the FAA's website at <a href="https://www.faa.gov/about/plans\_reports">https://www.faa.gov/about/plans\_reports</a>.

Approximately a year ago, on November 16, 2015, the IG issued its memorandum identifying the top management and performance challenges that DOT would be facing in FY 2016. The IG's memorandum is provided below, and while it is titled "DOT's Fiscal Year 2016 Top Management Challenges," the report addresses both management and performance challenges for the department. The pages immediately following contain a summary prepared by the FAA of the challenges specifically applicable to the agency and the actions it took during FY 2016 to address those challenges. The FAA provides this summary in order to present a comprehensive perspective on the FAA's FY 2016 performance activities.





# Memorandum

November 16, 2015

U.S. Department of Transportation Office of the Secretary

of Transportation Office of Inspector General

Subject: **INFORMATION:** DOT's Fiscal Year 2016

Top Management Challenges Department of Transportation Report Number PT-2016-005

Calvin L. Scovel III C. L. Scovetic

Inspector General

Date:

To: The Secretary Deputy Secretary

> The safe and efficient movement of people, goods, and information is vital to our Nation's economic growth, global partnerships, and quality of life. The Department of Transportation (DOT) spends more than \$70 billion each year on programs to protect, manage, and modernize U.S. transportation systems, and we continue to support the Department's efforts through our audits and investigations.

> Making the Nation's environment, airspace, and roads safer continues to be the Department's top priority, and it must also continue to address both emerging and longstanding safety risks in a number of critical areas. A key mission is to mitigate the significant risks posed by transportation of hazardous materials (hazmat). From 2010 through 2014, there were more than 3,000 pipeline and 78,000 hazmat incidents in the United States. Reducing safety vulnerabilities will require timely action to implement pipeline safety recommendations; enforce regulations for hazmat transported by rail; and improve the oversight, training, and guidance for programs that promote safe practices for hazmat transported via aviation cargo.

> The emergence of Unmanned Aircraft Systems (UAS) presents several new safety challenges for the Department. UAS technology is rapidly advancing, and usage is broadening from primarily the Government and military to commercial users. Analysts are predicting that as much as \$91 billion will be invested worldwide over the next decade. To safely integrate UAS into the National Airspace System, the Department and the Federal Aviation Administration (FAA) must focus on reaching consensus on new technology standards, establishing a regulatory framework for commercial use of UAS, developing systems and protocols for collecting data and tracking UAS safety incidents, and adapting oversight to ensure UAS operational safety.

Recent large-scale recalls from automotive manufacturers and motor carrier fatalities highlight a number of safety issues the Department must address to better protect those traveling on our Nation's roads. The National Highway Traffic Safety Administration (NHTSA) plays a key role in reducing the risks posed by vehicle safety defects and has undergone several reviews to determine how it can strengthen its internal processes and controls. NHTSA must now follow through on the resulting recommendations to improve how it collects and analyzes vehicle safety data and investigates defects. In addition, our safety investigations continue to identify challenges for the Department and the Federal Motor Carrier Safety Administration (FMSCA) as they seek to remove unsafe motor carriers from the Nation's highways. While FMCSA has taken enforcement actions and is collaborating with our office and other law enforcement partners, carriers intent on breaking the law continue to pose a threat to the traveling public. Key actions for FMCSA to keep unsafe carriers off the road include effective vetting of carriers' applications, focusing resources on the most high risk carriers, and prosecuting those companies that are caught violating the law.

It is critical that DOT carry out its safety mission within a framework of diligent stewardship over its assets and investments of taxpayer funds. DOT receives over \$50 billion annually to fund projects to build, repair, and maintain the Nation's surface transportation system. DOT remains committed to strengthening its oversight for highway, rail, and transit projects. To maximize Federal investments, the Department must strengthen its risk-based oversight of projects and grant controls, fully implement Moving Ahead for Progress in the 21st Century Act (MAP-21) requirements to improve performance management and project delivery, and maintain vigilance over grantees receiving funds for Hurricane Sandy recovery projects.

DOT has also invested billions of dollars in FAA's efforts to transition to a more reliable and efficient aviation system. Effective contract and acquisition management is critical to ensure the success and long-term viability of the many programs and systems required for the Next Generation Air Transportation System (NextGen). Our work continues to find that FAA must do more to structure high-dollar contracts to successfully manage risks and avoid large cost overruns, delays, and performance problems with major aviation acquisitions.

In addition, many of DOT's most critical transportation systems rely on more than 450 information systems to conduct business. Increasingly complex attacks on public and private sector information systems underscore the need for more effective contingency planning, resolution of longstanding cybersecurity weaknesses, and aggressive deterrence of insider threats to protect DOT from damaging security compromises.

The people who work for the Department are its most vital asset in maintaining a safe and vibrant transportation system. Sustaining an effective and skilled workforce in a changing environment presents a significant challenge to the Department. To maximize its efforts to use its resources wisely, the Department must focus on

identifying and hiring the right number of staff with the requisite skill mix, adapting hiring and training practices to account for Operating Administrations' changing missions and requirements, and implementing policies and procedures that promote its employees' success and ability to carry out DOT's mission effectively.

We remain committed to assisting the Department as it works to improve the management and execution of its programs and protect its resources. We considered several criteria in identifying the Department's top management challenges for fiscal year 2016, including their impact on safety, documented vulnerabilities, large dollar implications, and the ability of the Department to effect change in these areas:

- Addressing the Increasing Public Safety Risks Posed by the Transportation of Hazardous Materials
- Integrating Unmanned Aircraft Systems Safely Into the National Airspace System
- Enhancing NHTSA's Efforts To Identify and Investigate Vehicle Safety Defects
- Protecting the Department Against More Complex and Aggressive Cyber Security Threats
- Adopting Effective Practices for Managing FAA Acquisitions
- Improving Oversight of FHWA's and FTA's Surface Infrastructure Programs
- Removing High Risk Motor Carriers From the Nation's Roads
- Developing and Sustaining an Effective and Skilled DOT Workforce

We appreciate the Department's commitment to taking prompt actions in response to the issues we have identified. The final report and the Department's response will be included in the Department's Annual Financial Report, as required by law. The Department's response is included in its entirety in the appendix to this report. If you have any questions regarding this report, please contact me at (202) 366-1959. You may also contact Lou E. Dixon, Principal Assistant Inspector General for Auditing and Evaluation, at (202) 366-1427.

#

cc: DOT Audit Liaison, M-1

Of the eight management challenges identified by the Inspector General for FY 2016, DOT tasked the FAA with addressing the following five challenges:

- ► Addressing the increasing public safety risks posed by the transportation of hazardous materials
- Integrating unmanned aircraft systems safely into the National Airspace System
- Protecting the Department of Transportation against more complex and aggressive cyber security threats
- ▶ Adopting effective practices for managing FAA acquisitions
- Developing and sustaining an effective and skilled DOT workforce

Soon after the Inspector General's report was issued, the FAA developed an action plan that listed actions and timelines for addressing each of the five challenges. The FAA also submitted an "actions taken" report to DOT that describes the progress the FAA made throughout FY 2016 in addressing each of the challenges. These actions-taken reports, initial action plans and the Inspector General's comprehensive report identifying top management challenges for FY 2016 are posted on FAA's website at <a href="http://www.faa.gov/about/plans\_reports/">http://www.faa.gov/about/plans\_reports/</a> under the DOT IG Top Management Challenges section.

## Addressing the Increasing Public Safety Risks Posed by the Transportation of Hazardous Materials

#### WHY IS THIS ISSUE SIGNIFICANT?

Transportation of hazardous materials by air can present serious safety risks, and it is important for the FAA to have effective programs to address this risk. In 2006, FAA established the Hazardous Materials Voluntary Disclosure Reporting Program (HM VDRP). This program allows air carriers to voluntarily disclose violations of hazmat regulations without receiving civil penalties. The program is designed to encourage compliance with regulations, foster safe operating practices, and promote the development of internal evaluation programs by air carriers.

#### **ACTIONS TAKEN IN FY 2016:**

- The FAA strengthened its policy to close HM VDRP cases only after sufficient evidence that comprehensive fixes and self-audits were completed is provided and verified.
- The FAA plans to improve an existing VDRP system to collect data for the HM VDRP. This existing system already uses an external web portal for data collection. In FY 2016, the FAA developed technical requirements and a work schedule, and started its work on the modification to our existing system.
- The FAA implemented a tracking system at FAA headquarters to verify that HM VDRP submissions are being addressed by regional offices consistent with FAA's policies and guidance.
- In order to avoid inconsistent implementation of the HM VDRP, the FAA held regular meetings and discussions throughout FY 2016 to help division managers from the agency's field offices become more familiar with FAA policy and requirements. FAA headquarters provided feedback to division managers on a quarterly basis and collaborated closely on disposition of reports. Division managers have also participated in discussions pertaining to revisions to FAA's policy and guidance.

# ACTIONS REMAINING AND EXPECTED COMPLETION DATE:

- FAA expects to submit for publication written guidance for the HM VDRP by December 31, 2016.
- The FAA plans to complete its modifications to the existing VDRP data collection system by the end of the first quarter of

FY 2017. Testing on this modification will begin in the second quarter of FY 2017.

 Once HM VDRP data has been integrated into the existing VDRP system, the FAA will conduct WebEx briefings to provide training on the new capabilities.

#### **RESULTS OR EXPECTED RESULTS:**

The FAA analyzes HM VDRP data in conjunction with past inspection data when planning future air carrier inspection and outreach activities. The integration of HM VDRP data into the existing VDRP system will increase data sharing for FAA's analyses. In addition, better training and tracking will ensure that the HM VDRP is implemented more consistently across the agency.

## ► Integrating Unmanned Aircraft Systems Safely into the National Airspace System

#### WHY IS THIS ISSUE SIGNIFICANT?

Analysts predict that over the next decade as much as \$93 billion will be invested in UAS technology across the globe. Safely integrating UAS into the nation's airspace presents a challenge for the FAA because of the industry's fast expansion and variations in UAS size, purpose and design.

#### **ACTIONS TAKEN IN FY 2016:**

- This year, the FAA finalized its first regulation for the routine
  use of small UAS, including new rules for the commercial use
  of UAS. More information about the regulation can be found
  on page 14, and a summary of the rule is available at http://
  www.faa.gov/uas/media/Part\_107\_Summary.pdf.
- The FAA completed the implementation of an electronic registration system for small UAS, including the ability to register commercial aircraft. This registration system helps the FAA communicate with UAS operators and gives the FAA a valuable opportunity to educate operators about how to fly their UAS safely. Also, by connecting UAS to their owners, the system helps the FAA enforce rules in cases of noncompliance with UAS regulations. More information about the registration system can be found on page 15, and at <a href="https://registermyuas.faa.gov">https://registermyuas.faa.gov</a>.

- This year, the FAA published new oversight guidance related to UAS for its aviation safety inspectors. This guidance provides new standards for UAS maintenance, inspections, and conditions for safe operation, along with standards for UAS airmen certification, operational requirements and approval. The guidance is a comprehensive update to the Flight Standards Information Management System, which is available at <a href="http://fsims.faa.gov">http://fsims.faa.gov</a>.
- In September 2016, the Radio Technical Commission for Aeronautics (RTCA) approved performance requirements for a safety-of-flight command and non-payload communication function that enables an UAS pilot to safely maneuver the aircraft from the ground. The FAA chartered the RTCA to operate as a Federal advisory committee, which employs a consensus-driven process to generate minimum performance standards and recommendations on key aviation policies.
- In FY 2016, the FAA continued to work closely with the American Society for Testing and Materials (ASTM) on the development of industry consensus standards for design, production and qualification of UAS and control stations. ASTM has published four standards: Quality Assurance; Production Acceptance; Ensuring Dependability of Software in UAS; and a UAS Aircraft Flight Manual. Two of these standards were published this past year: Ensuring Dependability of Software and a UAS Aircraft Flight Manual.
- This past year, an FAA representative continued to serve as
  the vice-chair for the Joint Authorities for the Rulemaking
  of Unmanned Systems (JARUS), which is responsible for
  the development of technical, safety, and operational UAS
  standards. In FY 2016, JARUS released its Recommendations
  for Light Unmanned Aeroplane Systems for external
  comments and released its Guidelines on Specific
  Operations Risk Assessment for external comments.
- In FY 2016, the FAA participated in and guided the development of industry consensus regarding the technology standards for the integration of UAS into the national airspace. With the RTCA Special Committee 228, the FAA completed the development of Minimum Operational Performance Standards.

## ACTIONS STILL REMAINING AND EXPECTED COMPLETION DATE:

- In FY 2017, the FAA plans to propose a rule on unmanned aircraft operations over people. Under the FAA's current regulation, small UAS may not operate over people who are not directly participating in the operation.
- With RTCA, the FAA continues with the development of the detect-and-avoid minimum operational performance standard. This standard is progressing on schedule for a completion in December 2016.
- The ASTM continues its work on the development of industry consensus standards for design, production, and qualification of UAS and control stations. These standards will be updated every three years.
- The FAA continues to work with the International Civil Aviation Organization (ICAO) on changes to its standards and recommended practices.
- The FAA continues to work on a prototype system that can further automate the FAA's UAS events tracking database and analytical capability.

# WHAT ARE THE RESULTS OR EXPECTED RESULTS OF THE ACTIONS TAKEN?

The FAA's small UAS rule is the agency's first regulation to provide for the routine use of UAS. It replaces the need to grant authorization for most small UAS operations on a case by case basis. With the publication of this rule, the FAA has built an important regulatory foundation for allowing additional UAS operations in the future. The FAA's continuing efforts to develop technology standards, oversee UAS safety, and better track UAS incidents will further mitigate safety risks related to UAS.

 Protecting the Department of Transportation Against More Complex and Aggressive Cyber Security Threats

#### WHY IS THIS ISSUE SIGNIFICANT?

DOT uses more than 450 information systems to conduct business and operate some of the nation's most critical transportation systems. Many of these systems have data that are of potential interest to hackers. Preparing effective contingency plans and resolving longstanding vulnerabilities are critical for reducing the risk of catastrophic cybercrime and maintaining continuity of the FAA's vital systems in the event of a malicious attack.

#### **ACTIONS TAKEN IN 2016:**

- The FAA established a permanent office to manage major disruptions to the national airspace. This office manages the policies and guidance that prepares the FAA to respond to air traffic control disruptions. The FAA will use an incremental, risk-based approach that focuses on a range of solutions to facilitate the transfer of air traffic control services from one FAA facility to another in the event of a disruption ("divestment" of airspace).
- The FAA developed divestment requirements and started to coordinate their implementation among regional offices and air traffic facilities.
- The FAA established a goal to restore air traffic control services within 24 hours at the core 30 airports and affected airspace within 96 hours of an event.
- For air traffic control facilities that manage en route airspace, the FAA developed divestment plans that meet FAA's new targets to achieve 90 percent efficiency during contingency operations.
- The FAA demonstrated its capability to restore air traffic
  control services quickly and efficiently through airspace
  divestment planning that allowed two facilities the Oakland
  Air Route Traffic Control Center and the Anchorage Air route
  Traffic Control Center to run on a combined air traffic
  system. Each facility was successful in divesting airspace, and
  facility workgroups documented the procedures as plans and
  check lists for the exchange of airspace.

# ACTIONS STILL REMAINING AND EXPECTED COMPLETION DATE:

- The FAA anticipates having documented procedures for airspace divestment in place by fall 2019.
- The FAA expects to have domestic airspace divestment plans for facilities that serve the core 30 airports in place by 2019.
   The FAA expects to develop divestment and contingency plans to cover oceanic airspace and for other air traffic control facilities by 2020.
- The FAA will demonstrate airspace divestment capabilities through a comprehensive review of air traffic facility contingency plans and will perform exercises to validate the effectiveness of those plans.

#### **RESULTS OR EXPECTED RESULTS:**

The FAA is determined to minimize system disruptions through effective contingency planning and testing, and to deter insider threats. Having recovery plans in place that are validated and fully implemented will minimize the impact of events such as natural disasters, cybercrime attacks, or insider threats.

## Adopting Effective Practices for Managing FAA Acquisitions

### WHY IS THIS ISSUE SIGNIFICANT?

Each year the FAA relies on a variety of systems, facilities, services and infrastructure to fulfill its mission. The FAA's Acquisition Management System (AMS) establishes the policy and guidance that the FAA uses to identify, define, acquire, deploy and manage its needs. Effective implementation of the AMS is critical to ensuring the success and long-term viability of the FAA's programs and systems. Failure to effectively implement its acquisition programs could result in large cost overruns and scheduling delays. It could also put the FAA's NextGen modernization effort at risk.

#### **ACTIONS TAKEN IN FY 2016:**

 This year, the FAA completed its AMS 2016 effort. Under this effort, the agency performed a process review and risk analysis of the Acquisition Management System (AMS) acquisition lifecycle. Goals of the review included identifying areas of improvement, incorporating government and private sector best practices where feasible and ensuring that the AMS process efficiently and effectively supported FAA mission requirements.

- In March 2016, the FAA published revisions to AMS policy and guidance. These revisions focused on areas that received the most user feedback and recommendations from the IG: market analysis, effective cost and price analysis, and consistent assessment of proposed contract actions through the Chief Financial Officer review process.
- This year the FAA provided focused training to employees and key stakeholders in order to integrate these changes to the AMS into existing operations.
- This year the FAA also refined its metrics to measure the performance of the AMS. These refinements will ensure that the FAA can better measure the effectiveness of the AMS.

# ACTIONS STILL REMAINING AND EXPECTED COMPLETION DATE:

 As it continues to use the AMS, including the improvements developed through the AMS 2016 effort, the FAA will review of all of the risks and the cost estimates for major acquisitions before making an investment decision and before awarding a contract.

#### **RESULTS OR EXPECTED RESULTS:**

Initial measurable improvements include increased competition of contract awards, a reduction in FAA's one-bid rate to a best-in-government performance, and increased utilization of performance tools such as the Contractor Performance Assessment Reporting System.

## Developing and Sustaining an Effective and Skilled DOT Workforce

#### WHY IS THIS ISSUE SIGNIFICANT?

The success of FAA's mission depends on maintaining highly skilled workforces, including its air traffic controllers and employees who oversee the safety of our air transportation system. In addition, the FAA makes use of its Organization Designation Authorization (ODA) program, which allows the agency to delegate certain functions, such as approving new aircraft designs and certifying aircraft components to aviation manufacturers and other organizations. In addition to hiring

and developing its own workforce, the FAA needs to maintain sufficient staffing levels for conducting ODA oversight.

#### **ACTIONS TAKEN IN FY 2016:**

- The FAA hired over 1,600 air traffic controllers in FY 2016, exceeding the agency's hiring target.
- This year, the FAA established the new Center of Excellence for Technical Training and Human Performance, which will help the FAA access research on training improvements.
   More information on the Center can be found on page 20.
- The FAA continues to support the air traffic controller basic qualification training working group under the Aviation Rulemaking Advisory Committee. The 12-member working group is made up of representatives from academia, associations, and industry. An FAA representative participates in the working group, and FAA subject matter experts provide guidance as needed. The working group is tasked with providing recommendations on how the agency can use external training providers to deliver basic qualification training for air traffic controllers.
- This year, the FAA expanded the model it uses to estimate staffing needs for aircraft certification. The expanded model includes the FAA's office with direct responsibility for overseeing Boeing's internal inspection organization, which will improve the model's ability to forecast the FAA staff required to support ODA activities in FY 2017 and beyond.
- This year, the FAA starting using its Labor Distribution
  Reporting (LDR) system as a tool to track activities
  associated with ODA oversight activities. The FAA
  implemented and analyzed new LDR codes for designee
  management, designee training, delegated organization
  certification activities, ODA technical issue resolution,
  procedures manual reviews, program notification letter/
  certification plan reviews, notification of noncompliance,
  ODA policy development, and oversight and surveillance.

# ACTIONS REMAINING AND EXPECTED COMPLETION DATE:

- The FAA will continue to support the air traffic controller basic qualification training working group under the Aviation Rulemaking Advisory Committee. The FAA expects the working group to provide initial recommendations on air traffic controller training in March 2017. Initial recommendations on air traffic controller hiring are expected by the end of FY 2018.
- A data analysis meeting on the staffing model for aircraft
  certification will take place in December 2016. At that
  meeting, work activities will be compared to the new
  LDR hours to determine average/nominal times per work
  products completed. The team staffing model team will also
  conduct a mid-year data review meeting in July 2017 to
  determine if model adjustments to work activity counts or
  LDR hours are required.
- The work activity and LDR information included in the staffing model for aircraft certification will be used to forecast staffing needs from FY 2018 to FY 2020.

#### **RESULTS OR EXPECTED RESULTS:**

Transforming the air traffic controller training structure can shift the FAA's focus from basic qualification training to training certified controllers on advanced NextGen tools and procedures. The FAA's efforts to improve its staffing models and LDR system will help the agency better estimate the workforce level required to provide direct safety oversight and oversee the safety functions delegated to other organizations.

# Glossary

ACRONYM	NAME
AATF	Airport and Airway Trust Fund
ACAT	Acquisition categories
ADS-B	Automatic Dependent Surveillance-Broadcast
AFN	Finance and Management Staff Office (FAA staff office)
AIP	Airport Improvement Program
AMS	Acquisition Management System
ANC	Ted Stevens Anchorage International Airport
ANG	NextGen Office (FAA staff office)
APB	Acquisition Program Baseline
ARP	Airports (FAA line of business)
ARTCC	Air Route Traffic Control Centers
ASEAN	Association of Southeast Asian Nations
ASH	Security and Hazardous Materials Safety (FAA line of business)
ASIAS	Aviation Safety Information Analysis and Sharing
ASO	FAA's Southern Region
AST	Commercial Space Transportation (FAA line of business)
ASTM	American Society for Testing and Materials
ATCT	Air Traffic Control Tower
ATO	Air Traffic Organization (FAA line of business)
AVGAS	Aviation Gasoline
AVS	Aviation Safety (FAA line of business)
AvSTEM	Aviation Science, Technology, Engineering, and Math
BPTW	Best Places To Work
CAST	Commercial Aviation Safety Team
CATMT	Collaborative Air Traffic Management Technologies
CFO	Chief Financial Officer
CNN	Cable News Network
CO <sub>2</sub>	Carbon Dioxide
COE	Center of Excellence
СҮ	Calendar year
DAC	Drone Advisory Committee
Data Comm	Data Communications
Delphi	DOT's Financial Management System
DHS	Department of Homeland Security
DNL	Day-night average sound level
DOT	U.S. Department of Transportation

ACRONYM	NAME
DRAA	Disaster Relief Appropriations Act
EMAS	Engineered Material Arresting System
ERAM	En Route Automation Modernization
ESC	Enterprise Services Center
F&E	Facilities and Equipment
FAA	Federal Aviation Administration
FAAST	FAA Safety Team
FBWT	Fund Balance with Treasury
FCI	Facilities Condition Index
FedView	Federal Employee Viewpoint Survey
FFMIA	Federal Financial Management Improvement Act
FLLI	FAA Leadership and Learning Institute
FMFIA	Federal Managers' Financial Integrity Act of 1982
FRAT	Facility Risk Assessment Tool
FY	Fiscal Year
GA	General Aviation
GAJSC	General Aviation Joint Steering Committee
GPS	Global Positioning System
GSA	General Services Administration
HM VDRP	Hazardous Materials Voluntary Disclosure Reporting Program
ICAO	International Civil Aviation Organization
IP	Internet Protocol
IPERA	Improper Payments Elimination and Recovery Act of 2010
IPERIA	Improper Payments Elimination and Recovery Improvement Act of 2012
IPIA	Improper Payments Information Act of 2002
IT	Information Technology
JARUS	Joint Authorities for the Rulemaking of Unmanned Systems
LCSS	Logistics Center Support System
LDR	Labor Distribution Reporting
LIS	Logistics Inventory System
LoSS	Losses of Standard Separation
LMRP	Lean Maintenance & Revalidation Program
MMAC	Mike Monroney Aeronautical Center
NAC	NextGen Advisory Committee
NAS	National airspace system

ACRONYM	NAME
NASA	National Aeronautics and Space Administration
NESS	NAS Efficient Streamlined Services
NextGen	Next Generation Air Transportation System
NOAA	National Oceanic and Atmospheric Administration
NTSB	National Transportation Safety Board
NVS	NAS Voice System
ODA	Organization Designation Authorization
OIG	Office of the Inspector General
OMB	Office of Management and Budget
OPD	Optimized Profile Descents
PAR	Performance and Accountability Report
Part 107	Small Unmanned Aircraft Rule
PFC	Passenger Facility Charge
PP&E	Property, Plant, and Equipment
PRISM	Internet-based Acquisition System Integrated with Delphi
PY	Previous Year
RAE	Risk Analysis Events
RE&D	Research, Engineering, and Development
RSA	Runway Safety Area

ACRONYM	NAME
RTCA	Radio Technical Commission for Aeronautics
RTCE	Regional Training Center of Excellence
SAVES	Strategic Sourcing for the Acquisition of Various Equipment and Supplies
SBGP	State Block Grant Program
SDI	Space Data Integrator
SMS	Safety Management System
SRER	System Risk Event Rate
SWIM	System Wide Information Management
TBD	To Be Determined
Technical Center	William J. Hughes Technical Center
TFDM	Terminal Flight Data Manager
TRACON	Terminal Radar Approach Control
UAS	Unmanned Aircraft Systems
U.S.C.	United States Code
USSGL	U.S. Standard General Ledger
WJHTC	William J. Hughes Technical Center

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