U.S. Department of Transportation
Federal Aviation Administration

PERFORMANCE AND ACCOUNTABILITY REPORT

THE FAA · EVOLVING TECHNOLOGY · ADVANCING AVIATION

OUR MISSION

To provide the safest, most efficient aerospace system in the world.

OUR VISION

To transform the aviation system to reflect the highest standards of safety and efficiency and be a model for the world. The FAA will bring about this transformation by fostering innovation in our workforce and in how we serve our stakeholders and the American people.

OUR VALUES

SAFETY IS OUR PASSION

We work so that all air and space travelers arrive safely at their destinations.

EXCELLENCE IS OUR PROMISE

We seek results that embody professionalism, transparency, and accountability.

INTEGRITY IS OUR TOUCHSTONE

We perform our duties honestly, with moral soundness, and with the highest level of ethics.

PEOPLE ARE OUR STRENGTH

Our success depends on the respect, diversity, collaboration, and commitment of our workforce.

INNOVATION IS OUR SIGNATURE

We foster creativity and vision to provide solutions beyond today's boundaries.

CONTENTS

SIDEBARS

ON THE RADAR

This report and reports from prior years are available on the FAA website at

www.faa.gov/about/plans_reports/#performance

FAA BY THE NUMBERS*

45,711 TOTAL EMPLOYEES

REGIONAL AND FIELD OFFICES

36,998

HEADQUARTERS
WASHINGTON, DC

4,014

MIKE MONRONEY AERONAUTICAL CENTER (MMAC)
OKLAHOMA CITY, OK

3,288

WILLIAM J. HUGHES TECHNICAL CENTER
ATLANTIC CITY, NJ

1,411

** Numbers by location are approximate.*

$16.42 BILLION BUDGET IN FY 2017

$10.03 BILLION
OPERATIONS

$3.35 BILLION
GRANTS IN AID FOR AIRPORTS

$2.86 BILLION
FACILITIES & EQUIPMENT

$0.18 BILLION
RESEARCH, ENGINEERING & DEVELOPMENT

July 20, 2017 was our busiest day in 2017 ...

... there were 54,150 controlled flights across the U.S.

FOREWORD

FOREWORD

Visit us from your mobile device

m.faa.gov

- Read the latest news, updates & press releases
- Review runway safety signage and markings and test your knowledge
- Look up the N-number of an aircraft
- 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

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, 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.

The FAA is proud to have received 13 prestigious Certificate of Excellence in Accountability Reporting (CEAR) awards for its PARs from the Association of Government Accountants. In addition to the CEAR award, last year the FAA was also recognized with a special best-in-class award for the best description of improving financial management. These awards are 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.

We averaged 42,700 flights daily ...

... for a total of 15.6 million controlled flights handled by the FAA.

A MESSAGE FROM THE ADMINISTRATOR

MICHAEL P. HUERTA

The United States is considered the gold standard in aviation for one simple reason: we do not compromise on safety. Safety is our common goal, our shared principle, our mission. It is not just good business — it is our business.

In the seven years I have been with the FAA, I have seen some truly extraordinary things. I have seen drones go from being a niche and a hobby to a worldwide phenomenon with far-reaching potential for industries and consumers alike. I have seen a space launch where a reusable rocket booster landed on a ship off the coast of Florida — a feat that is dramatically changing the economics of the space business. And I have witnessed the dream to reality of NextGen; air traffic modernization that is now delivering tangible benefits to airlines, businesses, and passengers across the country.

This report summarizes the FAA's major performance and financial results for fiscal year (FY) 2017 and discusses some of our goals for the near future. Our past performance and our goals for the future reach across all areas of aviation, including general aviation, the modernization of our national airspace, unmanned aircraft systems (UAS) and commercial space transportation.

Every minute, every hour, every day, there are men and women at work to

ENSURE THE SAFETY OF OUR NATIONAL AIRSPACE.

Orville Wright Building, one of two that make up the main FAA Headquarters complex. Out of view is the Wilbur Wright Building.

GENERAL AVIATION

No other country in the world has a general aviation (GA) community as large and diverse as ours. General aviation in America is shaped by courageous pilots, visionary manufacturers, and safety-minded regulators working together. We all have a role to play in growing and improving its future. The FAA is committed to doing our part by working to become a more efficient and nimble organization and by better serving the GA community.

The FAA has streamlined and improved the way we assure safe pilots and the planes they fly. We recently rolled out a new, common sense approach to medical certification called "BasicMed." Instead of requiring pilots to see an Aviation Medical Examiner and obtain a third-class medical certificate, most pilots can now be examined by their doctor and take an online medical education course to get qualified to fly.

We also made more flexible the way we certify small GA aircraft. Instead of telling manufacturers how to build airplanes, we are defining the safety goals we want them to achieve. This approach is supported by industry and will spur innovation, lower costs, and speed up implementation of safety technologies. Industry is already working on some advanced concepts like electric propulsion systems and vertical takeoffs for aerial taxis. Our revised regulations went into effect in August.

NEXT GENERATION AIR TRANSPORTATION SYSTEM (NEXTGEN)

When you look at every important issue the FAA has tackled over the years — from decreasing the risk of commercial aviation crashes to modernizing our air traffic control system — our success has always depended on our close partnership with industry. One of the best examples of this partnership is the NextGen Advisory Committee (NAC). The NAC includes a cross section of executives from the airlines, airports, general aviation, pilots, air traffic controllers, the Department of Defense, environmental interests, international interests and providers of air traffic control technology — all committed to ensuring a successful transition to NextGen. The NAC has been instrumental in helping the FAA determine the NextGen priority areas that deliver the greatest amount of benefit in the near term.

One of NextGen's highest priorities is Data Communications, or Data Comm. This program enables air traffic controllers to send digital instructions and clearances to pilots. This year we completed the deployment of Data Comm departure clearance service at nine more airports, in addition to the 46 airports that received Data Comm deployment in 2016. In response to the NAC's request to accelerate our original schedule, we completed the task two and a half years early, and with the resulting cost savings, we will install Data Comm at seven additional airports. One of the benefits we are seeing is the reduction of aircraft taxi time by aircraft that would otherwise be delayed because of bad weather. Over the next 30 years we expect that Data Comm will generate more than $10 billion in savings for the airlines along with an estimated additional savings of $1 billion to the FAA.

Another NextGen priority is Automatic Dependent Surveillance-Broadcast (ADS-B). ADS-B uses satellites to pinpoint where aircraft are at any given moment, providing a much safer and more accurate picture of our airspace. However, ADS-B is only effective if all planes are using it. Therefore, FAA is requiring that all aircraft flying in controlled airspace be equipped with ADS-B by January 1, 2020. To encourage owners of general aviation aircraft to equip in advance of the deadline, the FAA offered $500 rebates on the required avionics. Over 12,000 aircraft owners took advantage of this opportunity.

UNMANNED AIRCRAFT SYSTEMS (UAS)

FAA is ushering in a new age of American aviation — the unmanned aircraft era. Drone technology is developing at a tremendous pace. Some of the latest models sense and avoid obstacles in their paths. Others can fit in your pocket, or be used under water. Safely integrating UAS into our nation's airspace has been a challenging, but fascinating experience that will only continue. FAA must constantly evolve in our approach to UAS integration, accommodate innovation, and as always, maintain the highest levels of safety.

The FAA shares many of its accomplishments with the UAS industry. The FAA has now approved over 8,600 requests to fly UAS in controlled airspace under the rules established by the agency's recent small UAS regulations. During Hurricane Harvey, FAA responded quickly by processing and approving hundreds of disaster response and relief waivers that included UAS locating storm victims and inspecting utilities and infrastructure in dangerous or hard to reach locations.

We will continue to support this vibrant industry by working closely with our committees, UAS manufacturers and users. The FAA is confident we will be able to protect public safety and address concerns drones pose for security and individual privacy.

COMMERCIAL SPACE

Commercial space transportation is no longer an idea for the future, but happening now. Commercial launch companies are increasingly performing missions that were once the sole provenance of the U.S. government, such as supplying the International Space Station and launching national security assets.

Several companies are developing new vehicles to be used for a variety of tasks, including space tourism, satellite resupply, and potential flights to Mars. Some of these companies are hoping to launch people on suborbital and orbital trips within the next year or two from newly developed and licensed spaceports, and many people have already signed up for their ride into space. While space flight remains risky and expensive, the FAA is working with the industry to develop consensus standards for human safety in commercial space flight. What we learn from space tourism flights and suborbital research missions will help the U.S. government and the commercial space industry build more cost-effective systems for taking people into space, whether they are going to the International Space Station or they are on the first leg of deep-space exploration mission.

PERFORMANCE HIGHLIGHTS

A summary of results for all 14 of our performance measures is provided on pages 22–23 in the Management's Discussion and Analysis section. Each performance measure is linked to one of the FAA's four strategic priorities.

For 13 out of the 14 measures, year-end data was available at the time of publication, and the FAA achieved 11 of those measures. The results for the FedView Rankings measure are expected in December 2017.

Four of the 14 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 0.3 fatalities per 100 million people on board, the FAA achieved its goal of not exceeding 6.4 fatalities per 100 million people on board.
- **General Aviation Fatal Accidents Rate:** The year-end result of 0.84 fatal accidents per 100,000 flight hours was below our target of not exceeding 1.01.
- **Serious Runway Incursion Rate:** The FY 2017 result of 0.130 serious runway incursions per million operations was below the goal of not exceeding 0.395.

- **Data Comm:** The FAA met its goal of deploying Data Comm services at nine airports in FY 2017.

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

ACCOUNTABILITY

The FAA continues its commitment 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 eleventh consecutive year, independent auditors gave our agency an unmodified audit opinion on our financial statements. However, after nine years without a material weakness in internal controls, this year we changed our method of estimating environmental decommissioning liabilities resulting in an error in our third quarter financial statements and a material weakness as a consequence. We corrected our methodology, and have put better controls in place to ensure that changes to estimation methods are sound. The independent auditors' report is on page 74. My statement of assurance, as shown on page 35, also reports the material weakness in internal controls.

FAA Administrator Michael P. Huerta at the FAA Operations Center at FAA headquarters.

The FY 2017 Performance and Accountability Report, as well as a summary document, can be accessed online at ***https://www.faa.gov/about/plans_reports/#performance***.

A LOOK AHEAD

The only guidance tools America's earliest pilots had at their disposal were their eyes. In fact, the first man-made air navigation aids were a transcontinental series of bonfires the U.S. Postal Service set up so that mail could travel at night. And the first air traffic control tower, if you can call it that, was operated out of a wheelbarrow by a person who used two signal flags by the side of the runway to let airplanes know if they should hold or land. This is hard to imagine today.

Moving from bonfires and wheelbarrows to satellites and computers took less than the span of a single lifetime. In the not-too-distant future, planes will be sharing airspace with commercial space rockets, package delivery drones, aerial taxis, and other technologies not yet imagined. What won't have to be imagined is the U.S. commitment to maintaining the safest aerospace system in the world. As we proceed with NextGen, integrate drones and other new users, and address other important questions of the day, our commitment to safety and our aviation industry partnerships will continue to guide us; and I look forward to seeing what the future will bring.

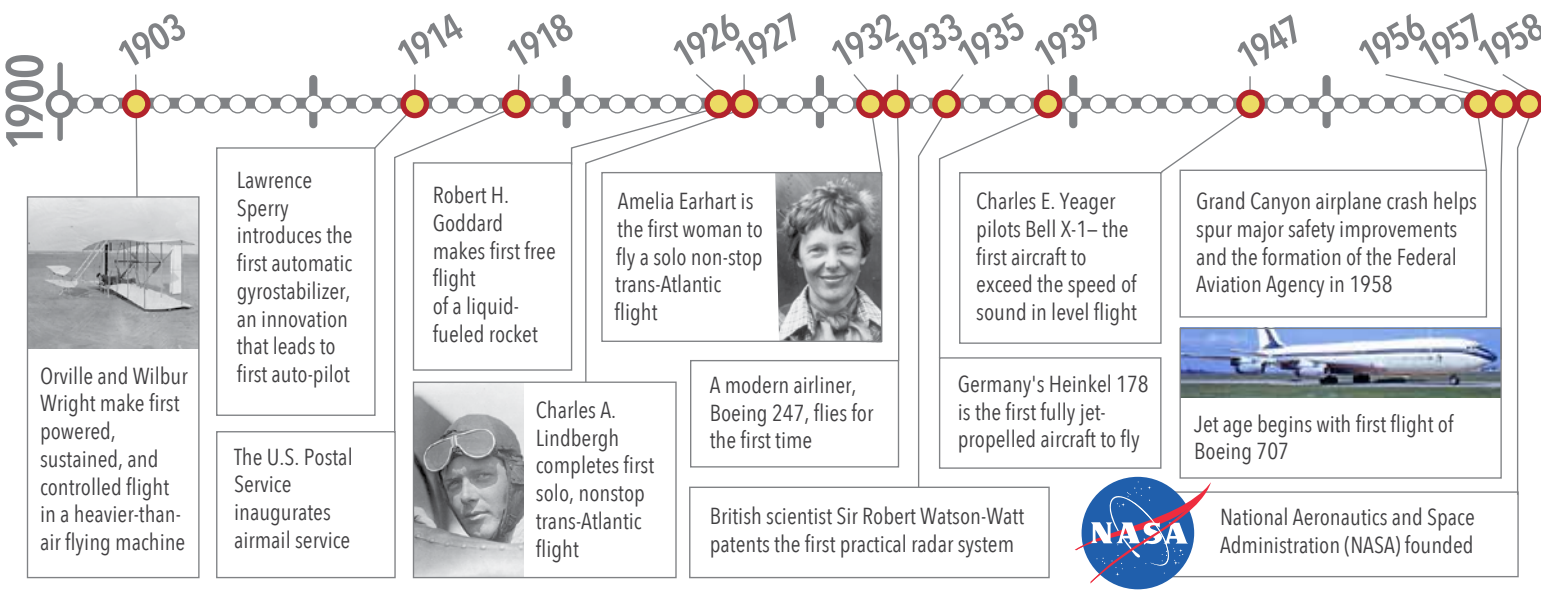
MICHAEL P. HUERTA
Administrator
November 9, 2017

MANAGEMENT'S DISCUSSION AND ANALYSIS

74,000 pieces of equipment and systems ...

... operate 24 hours a day, 7 days a week, 365 days a year.

Air Traffic Organization Technical Operations technician on tower at Orlando International Airport.



HISTORY OF MODERN AVIATION AND THE CREATION OF THE FAA

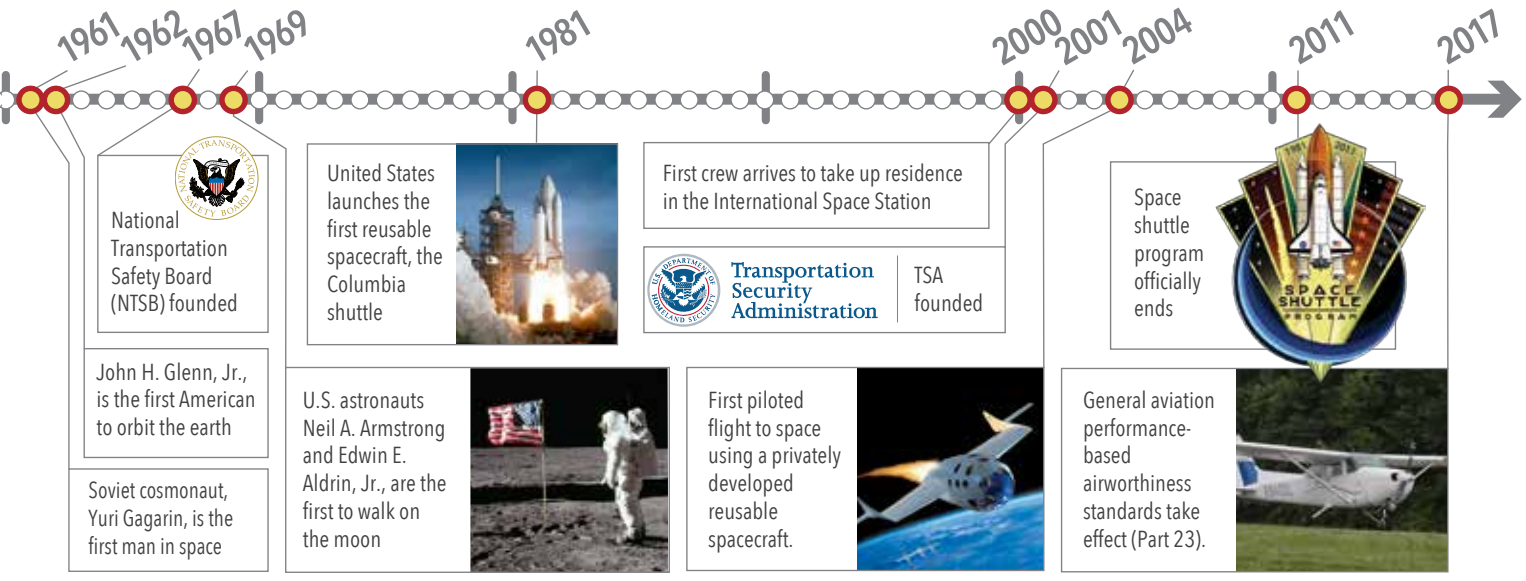
Orville Wright made the first sustained powered flight on December 17, 1903, in a plane that he and his brother Wilbur built. This 12-second flight led to the development of the first practical airplane in 1905. The early twentieth century witnessed countless aviation developments as new planes and technologies 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.

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, 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).

Since Orville Wright's first sustained powered flight in December 1903, through the advances and events that led to the creation of the FAA in 1967, we've seen unimaginable ideas become reality. Drones have become a worldwide phenomenon, space travel is now conducted by commercial entities, and reusable rocket boosters landing on ships in the sea are all examples. Today's aviation environment is one of collaboration across many governmental agencies and private entities, all working together to usher in the next generation of aviation.

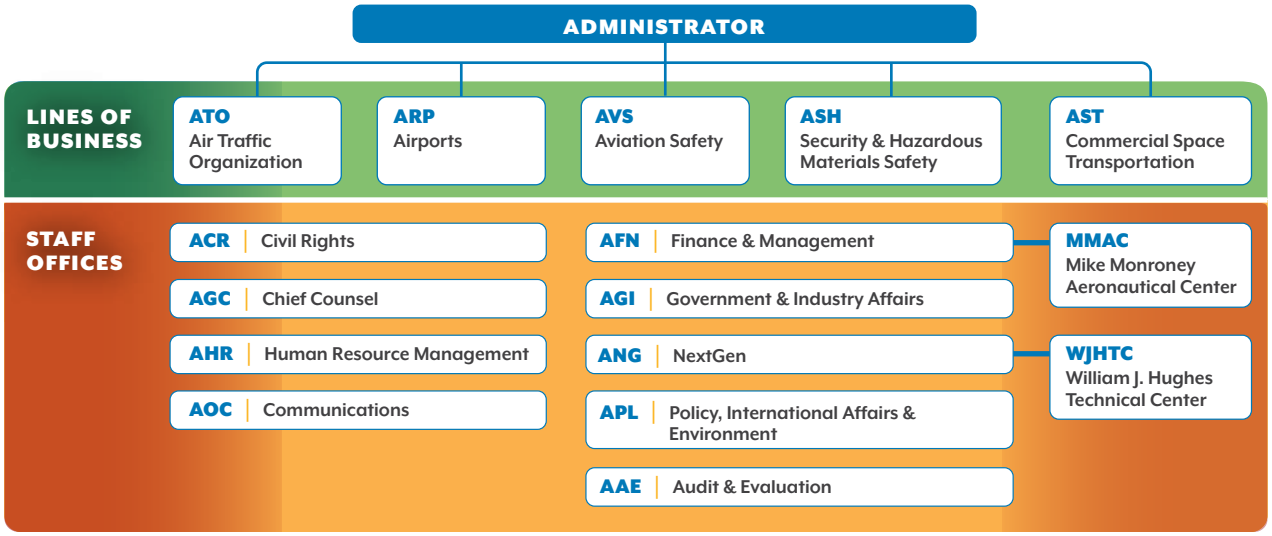


FAA ORGANIZATION

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).** Protects critical FAA assets, personnel, and the flying public from security risks, including criminal, terrorist, and insider threat actions. This is done through 24/7 emergency preparedness and response; global aviation situational awareness; intelligence threat identification, warning, and analysis; robust personnel and facility security programs; and identification media issuance. ASH collaborates within FAA and with interagency, industry, and foreign partners to provide national security support and to ensure the safety of the transportation of hazardous materials (HAZMAT) in air commerce, preventing HAZMAT-related accidents or incidents aboard aircraft using targeted, risk-based oversight, as well as education, outreach, and engagement both domestically and internationally.
- **Commercial Space Transportation (AST).** Ensures protection of the public, property, and the national security and foreign policy interests of the United States during commercial launch or reentry activities through licensing launches and reentries, and the operation of launch and reentry sites. AST also 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**
  - **Acquisition and Business Services**
  - **Information & Technology Services**
  - **Regions and Property 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, 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 ***www.faa.gov/about/office_org***.

ON THE RADAR

THE FIRST WOMEN CONTROLLERS

During World War II, women entered the ranks of air traffic controllers and aircraft communicators in large numbers to replace men who joined the war effort. To gain greater control of flight operations because of the war, on August 25, 1941, President Franklin Roosevelt signed the First Supplemental National Defense Appropriation Act that provided $12 million for the Civil Aeronautics Administration (CAA) to construct, operate, and maintain airport traffic control towers. In 1942, CAA operated 59 towers and by the end of 1944 that number had grown to 115. Desperate to find more controllers for the planned rapid growth in towers and air traffic, in early 1942, CAA Administrator Donald Connolly urged the regional offices to recruit 'older' men and women as air traffic controller replacements for draft-age personnel. The recruitment effort worked and, by late 1942, women comprised approximately 40 percent of controller trainees and served their time as controllers until the end of the war. Like many jobs performed by women during the war, serving as controllers was temporary for most until the war was over and men resumed their jobs with the CAA. A number of women, however, did remain on as controllers, even making careers of it. Even though we cannot positively identify the "first," women controllers, their love of aviation and their desire to serve their country paved the way for future women controllers and make them role models for all women.

MAJOR ACCOMPLISHMENTS

General Aviation

The phrase "general aviation" is used to describe all kinds of civil aviation excluding scheduled, commercial flights. It includes everything from weekend flights for recreation to business jets, emergency medical evacuations, and overnight package deliveries. FAA's accomplishments this past year have supported general aviation by providing more options when considering a pilot medical certification and greater flexibility for certifying new general aviation aircraft and technologies.

BasicMed

On January 10, 2017, the FAA rolled out "BasicMed." BasicMed gives general aviation pilots the option to fly without an FAA medical certificate as long as they meet certain requirements. Under BasicMed, a pilot is required to complete a medical education course, undergo a medical examination every four years and comply with aircraft and operating restrictions. The BasicMed rule keeps pilots and others safe, simplifies our regulations and keeps general aviation flying affordable. As of May 1, pilots have been able to take advantage of the regulatory relief in the BasicMed rule or opt to continue to use their FAA medical certificate. More than 14,000 people have already completed their online training and are now allowed to fly under BasicMed.

Aircraft and Technology Certification

The FAA recently published one of the largest revisions to its regulations in history, which went into effect in August of this year. The new regulations update the rules that establish airworthiness standards for general aviation aircraft. The FAA's previous safety standards were originally written in 1965 and were based on 1950s and 1960s airplane designs. The old standards ensured adequate levels of safety, but lacked flexibility to accommodate rapidly developing technological innovations. Today, instead of telling manufacturers how to build airplanes, the FAA's regulations set performance standards and allow general aviation manufacturers to develop the designs and innovations to meet those standards.

This year the FAA has also worked to streamline its process for certifying equipment that will modernize older planes. This new process is helping general aviation upgrade its equipment, lower its costs, and achieve higher levels of safety. For example, in July the FAA approved low-cost autopilot equipment. The FAA also approved a more reliable fuel gauge that will accurately provide fuel levels instead of just letting a pilot know if the tank is full or empty. The FAA hopes that soon it will certify a new invention that consolidates all of the information a pilot needs into one single display.

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. The FAA has replaced much of its automation systems and is adding more capabilities, working toward a transformation of its 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, and as always, maintaining safety.

Data Comm

This year the FAA completed the deployment of Data Communications services at nine airports, in addition to the 46 airports that received Data Comm services in 2016. The NextGen Advisory Committee (NAC) — a group of executives from airlines, airports, general aviation, pilots, air traffic controllers, the Department of Defense, environmental interests, international interests, and providers of air traffic control technology committed to ensuring the NextGen's success — requested that the FAA accelerate Data Comm's original schedule. In response, the FAA completed the deployment of Data Comm at these airports two and a half years ahead of schedule. With the resulting cost savings, the FAA will install Data Comm at seven additional airports. So far, more than 36,000 air traffic operations per week are benefiting from this capability.

Time Based Flow Management (TBFM)

Time Based Flow Management (TBFM) helps air traffic controllers improve the flow of air traffic by directing aircraft to be at a specific location at a specific time. Air traffic controllers traditionally manage air traffic by maintaining specific distances between each aircraft, but under TBFM, they use time to manage air traffic. This difference results in more efficient traffic flow, shorter flight times, and reduced fuel burn and emissions. In FY 2017, the FAA expanded the use of TBFM to a total of 87 air traffic control facilities across the country.

Terminal Flight Data Manager (TFDM)

Some of the best opportunities for improving the flow of air traffic are on the airport surface and in the airspace that immediately surrounds each airport. The FAA is developing the Terminal Flight Data Manager (TFDM) to take advantage of these opportunities. TFDM allows air traffic controllers, aircraft operators, and airports to share data and make collaborative decisions that will reduce the lines of aircraft waiting on taxiways to depart and reduce fuel burn.

Responding to the NAC's priorities, the FAA completed implementation of two significant TFDM elements. The first element shares information about what is happening on an airport's surface with other air traffic control facilities, allowing them to coordinate better with the airport's control tower. The FAA deployed this element at a total of 11 large air traffic control facilities. The other element provides electronic flight strips to controllers in an airport's tower, allowing them to manage traffic with a swipe of their finger or a click of a mouse. These electronic flight strips replace the traditional paper flight strips that have been used to track incoming and outgoing flights and needed to be physically carried across the tower cabin. The FAA implemented a prototype of electronic flight strips at three airports this year.

Unmanned Aircraft Systems (UAS)

The United States 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. Drones are the fastest growing field in aviation, and the FAA is working 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 the FAA's role as a global aviation leader.

Authorizations

In FY 2017, the number of requests to fly UAS in controlled airspace under the rules established by the agency's recent small UAS regulations reached over 8,600. The important role that drones can play was clearly demonstrated during the recent flooding in Texas after Hurricane Harvey. After the floodwaters had inundated homes, businesses, roadways and industries, a wide variety of agencies sought FAA authorization to fly drones in airspace covered by Temporary Flight Restrictions. We stepped up our authorization efforts to support emergency efforts that would save property and lives. In most cases, the FAA was able to approve individual operations within minutes of receiving a request. Our ability to quickly authorize unmanned aircraft operations was especially critical because most local airports were either closed or dedicated to emergency relief flights, and the fuel supply was low. Every drone that flew meant that a traditional aircraft was not putting an additional strain on an already strained system.

Providing Vital Information

This year we began publishing downloadable facility maps that depict areas and altitudes near airports. These maps show maximum altitudes where UAS are likely to be given the authorization to operate. The maps provide vital information that can help a UAS operator develop plans and make informed decisions. While the maps only suggest altitudes that operators may want to consider when submitting authorization requests, and they do not create any new types of airspace or grant any approvals. Using the maps can help a UAS operator tailor their requests to the FAA to have a greater chance to getting quick approval. The FAA released its first set of about 200 maps on April 27, 2017, and released a total of 491 maps in FY 2017. The FAA expects to release the remaining 234 maps by the end of the calendar year.

Commercial Space Transportation

Every month sees the announcements of new vehicles, new systems, and ambitious business plans in the field of commercial space transportation. The FAA has stepped up its efforts to keep pace with this amazing industry, but the industry's requirements continue to grow dramatically in scale and complexity. Every year we see an increase in the number of launches and launch locations. Many of those launches liftoff from Florida, but also from locations as diverse as Alaska, New Mexico, Virginia, California, and the Marshall Islands. The FAA oversees all launches by Americans and American companies, and these launches can occur across the globe. In FY 2017, for example, the FAA issued a license to an American company that launched from New Zealand. Every year we see more companies conducting launches, and each employs its own unique launch vehicle design.

In FY 2017 the FAA worked on 19 launches and three reentries. As with every year, these missions are growing increasingly complex. For example, some rocket boosters have started returning to the launch pad for study and reuse. The National Aeronautical Association's coveted 2017 Collier trophy was awarded to a company after it successfully demonstrated rocket booster reusability with its suborbital human spaceflight vehicle. The vehicle made five successful test flights on a single booster and engine, all of which performed powered vertical landings on Earth. The FAA expects that this new spaceflight vehicle will be flown with human passengers for the first time in the near future.

The FAA **OPERATES**

24 hours a day / **7** days a week / **365** days a year

FY 2017 also saw the first deployment of a rocket equipped with an automated way of self-destructing in case it goes off trajectory and represents a potential danger. This Autonomous Flight Safety System is an exciting innovation that cuts down on the cost and complexity of assuring a safe launch. The FAA worked in collaboration with the Air Force and NASA to agree to the use of this system, and there have now been nine launches using the system. While the FAA had two inspectors overseeing those flights, it makes cost-effective, reliable, and safe operations possible at spaceports that are not supported by traditional military launch ranges.

SpaceX Falcon 9 vehicle with its NROL-76 payload before its May 1, 2017 launch. The National Reconnaissance Office Launch-76 satellite, like others with the NRO, was for a classified mission. Photo: SpaceX

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) enables 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.
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 the FAA, National Aeronautics and Space Administration and National Oceanic and Atmospheric Administration.
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/

DECISION SUPPORT SYSTEMS provide air traffic controllers with the tools they need to optimize traffic flow across the national airspace. These systems include Terminal Flight Data Manager, which shares real-time data among controllers, aircraft operators, and airports so they can better stage arrivals and departures for greater efficiency on the airport surface. Decision Support Systems also include Time Based Flow Management, which uses time instead of distance to help controllers sequence air traffic. Compared to the traditional miles-in-trail process to separate aircraft, TBFM provides a more efficient traffic flow that reduces fuel burn, lowers exhaust emissions, and increases traffic capacity.
https://www.faa.gov/nextgen/update/progress_and_plans/decision_support_systems/

FAA PROGRESS ON INTEGRATION OF UNMANNED AIRCRAFT SYSTEMS

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

Enabling the Industry

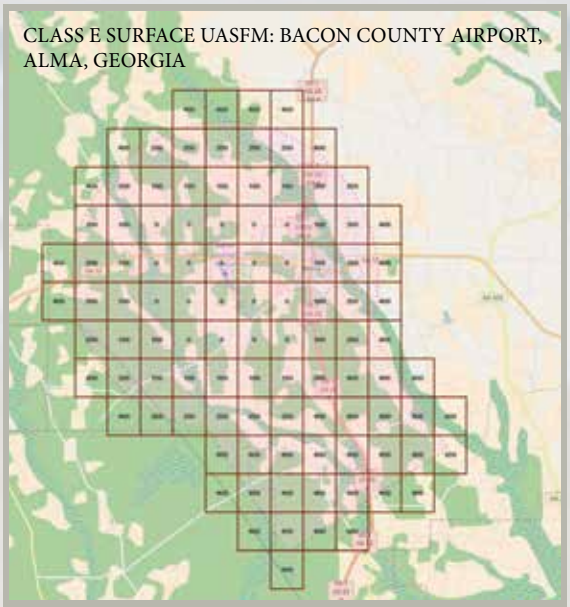
Over the past year the FAA has enabled industry to use drones in new and innovative ways. To date we have approved over 8,600 requests to fly UAS in controlled airspace under the rules established by the agency's recent small UAS regulations. In addition, the FAA has issued over 1,100 waivers that allow UAS to fly special operations that deviate from the small UAS regulations. These waivers enable operation such as flights at night, over people, beyond the operator's visual range, and using multiple aircraft.

This year, the FAA has made it even easier for operators to obtain authorizations by publishing UAS Facility Maps. When individuals request to operate UAS in controlled airspace, the FAA considers their request using UAS Facility Maps, which show the maximum altitudes around airports where the FAA may authorize UAS operations without additional safety analyses. The FAA is now publishing these maps so that applicants can decide in advance which locations and altitudes will have the greatest chance of being approved quickly. The FAA published 491 of these maps in FY 2017, with the remaining 234 maps expected by the end of the calendar year.

Despite these improvements, requests for UAS to use controlled airspace are still processed manually, which means longer waiting periods. To address this challenge, the FAA started this year to work with outside vendors to develop a Low-Altitude Authorization and Notification Capability (LAANC) that will replace today's manual process for reponding to these requests and accommodate industry growth. Under LAANC, drone operators will be able to apply for instant, digital approval to fly in U.S. controlled airspace using the same applications they use for flight planning and in-flight situational awareness. It's the first step in what will eventually become UAS Traffic Management, an air traffic management system for drones. FAA is successfully embracing innovation and working with private sector providers to open more airspace to commercial drone operations.

Regulatory Accomplishments

Last year the FAA published new rules for non-hobbyist small unmanned aircraft operations to minimize risks to other aircraft and people and property on the ground. These small UAS regulations provide unprecedented access to the national airspace while also ensuring the safety of the skies. These regulations are only the first step in the FAA's plan to integrate UAS into the national airspace. Subsequent phases will facilitate UAS operations over people, beyond the operator's visual range, and the transportation of persons and property. Moving forward, the FAA will take a phased approach to



Example of a UAS Facility Map found at ***https://www.faa.gov/uas/request_waiver/uas_facility_maps/.***

integration, using risk-based decision-making to respond to the growing operational needs and technological evolution of UAS. The FAA will incrementally expand the regulations allowing UAS operations, concentrating initially on enabling operations with the least complexity and gradually moving toward regulating operations of greater complexity – while fully maintaining critical safeguards for UAS and manned aircraft separation among existing users of the national airspace.

Since the implementation of small UAS rule on August 29, 2016, over 44,000 people have passed the aeronautical knowledge exam and the FAA has issued over 64,000 remote pilot certificates. UAS operators must pass the exam and have a remote pilot certificate to fly commercial operations under the FAA's small UAS regulations. To date, over 88,000 small commercial UAS have been registered using the FAA's new online system. These owners must register and obtain a separate, unique identifier for each UAS they own. Registration gives FAA an opportunity to bring unmanned aircraft operators into the culture of safety and responsibility that defines American aviation, and will help connect an aircraft with its operators when rules are not followed.

In June 2017, the FAA chartered an Aviation Rulemaking Committee (ARC) to develop recommendations for technology that could be used for remote identification and tracking of UAS. The ARC comprises members of the UAS industry, traditional aviation, academia, standards bodies, and law enforcement and security communities. The ARC's primary tasks are to identify and categorize existing and emerging technologies, identify requirements for meeting public safety and security needs, and evaluate the feasibility and affordability of technology solutions that meet the needs of law enforcement.

Community Engagement and Collaboration

In March 2017, FAA and the Association for Unmanned Vehicle Systems International co-hosted the second annual FAA UAS Symposium. This event built on the success of the first Symposium, with an expanded program that featured workshops on subjects ranging from UAS operational approvals and airworthiness certification to cyber-security and different levels of government jurisdiction. The Symposium provided stakeholders the opportunity to talk face-to-face with a cross-section of government and industry representatives about regulations, research, and other initiatives regarding safe UAS integration.

The FAA's Unmanned Aircraft Safety Team held its inaugural meeting in October 2016 and continues to meet on a recurring basis. Modeled after the long-standing and successful Commercial Aviation Safety Team (CAST), the Team brings UAS industry and government stakeholders together to analyze safety data, determine risks, and develop safety enhancements for the increasing number of UAS entering the airspace system.

The FAA continues to work closely with the Drone Advisory Committee (DAC), which the FAA established last year to provide an open venue for the FAA and key decision-makers supporting the safe introduction of UAS into the national airspace. This year, the DAC identified three priority areas for initial attention: identifying the roles and responsibilities of drone operators, manufacturers, and Federal, State, and local officials related to drone use in populated areas; determining which UAS operations are the highest priority and how we can enable access to the airspace to conduct these operations; and identifying funding for the services required to safely integrate UAS operations into the national airspace.

ONGOING CHALLENGES

In conducting its work this past year, the FAA has faced several challenges that the agency will continue to address in the coming years. The most difficult issues are usually not technical in nature, but instead are value laden and pose questions about balancing aviation's positive role in our lives and its less desirable impacts. Two of the FAA's recent challenges from 2017 exemplify this difficulty; they are efforts to address community noise and integration of UAS into the national airspace.

Noise

In the late 1970s an estimated 7 million people were subjected to high noise levels from aircraft. Today, even though the number of passenger enplanements has increased, the number of people affected by significant aircraft noise in the United States has dropped to less than 500,000. Even so, people rightfully have higher expectations for the safety and quality of their environment, and their expectations include quieter skies.

The FAA has used Performance Based Navigation (PBN) technology to improve the safety and efficiency of the national airspace system. PBN uses satellites and updated aircraft equipment for flight procedures that are more precise and accurate than ground-based navigation aids and standard avionics. PBN routes save time and money, and while they can reduce the overall amount of noise in any given community, the precise nature of PBN procedures concentrates that noise over a smaller geographical area.

The effect of PBN on the experience of aircraft noise has generated a significant amount of debate. The FAA has worked closely with communities where PBN procedures had been implemented at nearby airports. In 2017, the FAA hired a community involvement manager and greatly stepped up its community engagement activities. Nevertheless, as the agency implements flight procedures that rely on satellite technology, the FAA will continue to face the challenge of making safety and efficiency improvements while addressing community concerns over aircraft noise.

Unmanned Aircraft Systems (UAS)

The FAA has worked tirelessly to integrate UAS into the national airspace, protecting the safety of our skies and the general public while supporting the growth of an innovative new industry. In conducting this work, the FAA must also be sensitive to concerns over individual privacy and our national security.

Concerns over individual privacy were raised this past year regarding the FAA's small UAS registry. The FAA established an online registry last year for small UAS weighing between 0.55 and 55 pounds. People who did not register their UAS could face civil and criminal penalties. 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 unmanned aircraft safely, and the UAS registry serves as an educational tool. It also helps the FAA connect an aircraft with its owner when rules are not being followed. To date, over 88,000 small commercial UAS have been registered using the FAA's new online system.

The requirement for UAS operators to register model aircraft has recently been challenged in court. The FAA continues to work on clarifying the implications of the court decision, and our "Know Before You Fly" educational campaign (***http://knowbeforeyoufly.org/***) is still educating the community of drone hobbyists on UAS safety. The educational campaign

began a few short years ago as an initiative among the FAA, the Association of Unmanned Vehicle Systems International, and the Academy of Model Aeronautics. Now, the campaign has almost 150 partners including drone manufacturers, law enforcement, aviation groups, retailers, labor organizations and academia, among others.

This past year, the FAA has also conducted its work on UAS integration while being sensitive to our nation's security needs. For example, FY 2017 saw the completion of the fifth and final field evaluation of potential drone detection systems. The FAA will use the information from these evaluations to develop minimum performance standards for drone detection technology that might be deployed around airports in the U.S. In March, the FAA asked the Aviation Rulemaking Committee to consider important questions for the identification and tracking of UAS, including: What technology is available or needs to be created to identify and track unmanned aircraft in flight? How can we work closely with law enforcement to ensure safe and secure operations? How can we smoothly incorporate identification and tracking into the world's most complex airspace?

Difficult questions like these and from those affected by aircraft noise, and that arise from other FAA challenges will be discussed with our stakeholders and with the broader public so that aviation progress continues to be implemented safely and responsibly.

ON THE RADAR

AIRCRAFT NOISE — A CONTINUING CHALLENGE FOR FAA

Environmental challenges are not new for aviation. The first editorial complaint about aircraft noise appeared in AeroMagazine in 1911 — 3 years before the first commercial aviation flight (1914). Yet, by continuously addressing environmental challenges, aviation has been able to grow. While passenger enplanements have nearly quadrupled in the United States since 1975, community noise exposure has decreased by a factor of 20.

Two of FAA's newest environmental challenges involve the envisioned return of civil supersonic aircraft flight and the growth of commercial space launch travel. Both of these operations involve speeds above Mach 1 which generate sonic boom, so it is paramount that noise mitigation procedures and technology be brought to bear in order to lower sonic boom and associated vehicle noise to comparable subsonic aviation noise levels, both for landing and takeoff. Secondly, any future supersonic aircraft must be able to be operated world-wide, thus making international acceptance of a common sonic boom standard a fundamental necessity for unrestricted operability.

To maintain responsible growth in the industry, FAA will face these new challenges just like it addresses other environmental concerns: through technology improvements developed under the FAA Continuous Lower Energy, Emissions and Noise (CLEEN) Program, community involvement, and continued monitoring of air travel on health and the environment. For example, with regard to addressing aircraft noise, FAA recently developed new guidance materials to enhance our methods of engagement with the public. We are also planning to release by the end of 2017, a nation-wide aircraft noise annoyance survey and analysis to better understand the relationship between aircraft noise exposure and its effects on communities around airports. Under FAA's CLEEN Program, Pratt and Whitney completed ground testing of an Ultra-High Bypass Ratio engine that will result in reduced aircraft noise and fuel burn. And United Technologies Aerospace Systems continued to make progress on advanced thrust reverser technologies, building upon successful rig testing of thrust reverser noise reduction technologies in 2016.

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 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 2017 Congressional Justification can be found at: ***https://www.transportation.gov/mission/budget/faa-fy-2017-budget-estimates***.

The FAA also has a section in a DOT-prepared document that provides highlights of the FY 2017 budget request. This document can be found at: ***https://www.transportation.gov/mission/budget/fiscal-year-2017-budget-highlights-book***.

In addition, our strategic initiatives and FY 2017 business plans for all FAA organizations are available at ***http://www.faa.gov/about/plans_reports/#business_plans***.

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; annual budget 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 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 our nation's airspace system better prepare 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 FAA's performance measures are linked to one of the four priorities.

- **Make aviation safer and smarter**
  Safety is the backbone of what 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, FAA achieved all seven of these goals. For a complete discussion of safety measures, see page 40.

- **Deliver benefits through technology and infrastructure**
  We 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 three out of five of its goals related to technology and infrastructure. For more information, please see page 52.

- **Enhance global leadership**
  It is important for the FAA to play a leadership role globally to improve safety and air traffic efficiency across the globe. FAA will do this through shaping global aviation standards and enhancing collaboration and harmonization with other countries. This year the FAA is introducing a new performance measure to reflect the agency's progress in global leadership. The FAA achieved its target this year. A discussion of this measure is provided on page 58.

- **Empower and innovate with the FAA's people**
  It is critical that FAA prepare for the future by improving how it recruits and trains its workforce. FAA needs the leadership, 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, FedView Rankings, will be available in December 2017. A discussion of this measure can be found on page 60.

N79, a Beech King Air (Beechcraft 300) used by the FAA for flight inspection, taxiing at Will Rogers World Airport next to the Mike Monroney Center, Oklahoma City, Oklahoma.

Performance At a Glance

Our FY 2017 performance is summarized in the following tables and discussed in detail in the Performance Results section. The measures are grouped below according to the Administrator's strategic priorities.

For FY 2018, the U.S. Department of Transportation, including the FAA, is making significant revisions to its strategic plan and the performance measures that support the strategic plan. As a result of these revisions, the FAA continues to develop or refine several of the performance measures that the agency expects to report in next year's PAR. Therefore, in this report, these measures are reported as "TBD" for FY 2018.

Strategic Priority:	**MAKE AVIATION SAFER AND SMARTER**
Strategic Objective:	**Build on safety management principles to proactively address emerging safety risks by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions.**

Performance Measure	FY 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
Commercial Air Carrier Fatality Rate ✦ In FY 2017, the commercial air carrier fatality rate will not exceed 6.2 fatalities per 100 million people on board.	0.6	0.1	0.6[1]	6.4	0.3[2]	✓	6.2
Serious Runway Incursions Rate ✦ Reduce Category A & B (most serious) runway incursions to a rate of no more than 0.395 per million operations.	0.282	0.302	0.380	0.395	0.130[3]	✓	TBD
System Risk Event Rate Limit the rate of the most serious losses of standard separation to 10 or fewer for every thousand losses of standard separation within the national airspace system.	3.44	2.62	2.66	10	2.24[3]	✓	10
IT Risk Management and Information Systems Security Address 80 percent of high value risks within 30 days. Continue oversight by the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on IP-based systems.	Performance measure redefined in FY 2015	100%	100%	80%	100%	✓	80%
General Aviation Fatal Accident Rate ✦ Reduce the general aviation fatal accident rate to no more than 1.01 fatal accidents per 100,000 flight hours.	1.09	0.99	0.91[1]	1.01	0.84[2]	✓	1.0
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	✓	0
Unmanned Aircraft System (UAS) Priorities Achieve three milestones identified as FY 2017 UAS priorities.	This is a new measure for FY 2017	This is a new measure for FY 2017	This is a new measure for FY 2017	3	3	✓	TBD

✦ This performance measure supports a DOT Agency Priority Goal.

✓ Target met ✘ Target not met

1 Preliminary estimate until final result can be confirmed by the National Transportation Safety Board (NTSB) in March 2018. We do not expect any change in the final 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 the National Transportation Safety Board (NTSB) in March 2019. We do not expect any change in the final result to be significant enough to alter our year-end status of achieving the target.

3 Preliminary estimate until the final result becomes available in January 2018. We do not expect any change in the final result to be significant enough to alter our year-end status of achieving the target.

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 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
Data Communications ✦ Deploy at remaining nine sites for a cumulative total of 55 towers.	This is a new measure for FY 2016	This is a new measure for FY 2016	46	9	9	✓	TBD
Major System Investments Maintain 90 percent of major baselined acquisition programs within 10 percent of their current acquisition cost, schedule, and technical performance baseline as of the end of FY 2017.	95%	100%	95%	90%	95%	✓	90%
Carbon Neutral Goal for Domestic Operations Maintain carbon dioxide emissions from domestic aircraft operations below the 2005 level of 132.7 teragrams.	This is a new measure for FY 2017	This is a new measure for FY 2017	This is a new measure for FY 2017	132.7 teragrams	120.4 teragrams	✓	TBD
Noise Exposure Reduce the number of people exposed to significant aircraft noise to less than 315,000 in calendar year 2017.	321,000	340, 000	343,000	315,000	408,000	✘	300,000
Unmodified Audit Opinion Obtain an unmodified audit opinion with no material weakness on the agency's financial statements.	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/1 material weakness	✘	Unmodified audit opinion w/no material weakness

✦ This performance measure supports a DOT Agency Priority Goal. ✓ Target met ✘ Target not 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 shapes global standards, enhances collaboration and harmonization, and better targets FAA resources and efforts.**

Performance Measure	FY 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
Enhance Global Leadership Add data-based priorities at the global and regional levels to the FAA International Strategy for future FAA engagement and support.	This is a new measure for FY 2017	This is a new measure for FY 2017	This is a new measure for FY 2017	Add priorities to int'l strategy	Priorities added to int'l strategy	✓	TBD

✓ Target met ✘ Target not met

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 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
FedView Rankings FAA is ranked in the top 28% of federal agencies in the Best-Places-to-Work FedView rankings.	50%	43%	53%	28%	TBD[4]	TBD[4]	TBD

4 Results for FY 2017 will be available in December 2017. ✓ Target met ✘ Target not met

FAA 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 and its vast array of world class laboratory facilities provide a unique environment to enable research, engineering, development, test, and evaluation of advanced aviation technologies. The Technical Center also provides the gateway for operational evolution and sustainment of deployed aviation system components. Continued advancement of laboratory and technology capabilities, partnerships with academia, and cultivation of our aviation workforce are the center's key focus areas. Noteworthy 2017 accomplishments and activities include:

- Conducted research into emerging aviation structural design, fabrication techniques, and materials in the new Structures and Materials Laboratory (SML). The SML has a strong floor with mounting points capable of withstanding 100,000 pounds of force, allowing it to become part of a test fixture. This greatly reduces the cost of full-scale testing of aircraft structures such as an upcoming project to investigate structural bonding on a Cirrus SR22 wing. The lab includes a suite of material test machines, an electron microscope, and an Aircraft Beam Structural Test (ABST) capability. The ABST is a collaborative effort with Boeing and can test wing structure and how repairs to planes perform under realistic flight conditions.
- General aviation gasoline (AvGas) is being evaluated for replacement of current commercial fuel that contains lead additives. The Propulsion and airPOWer Engineering Research (POWER) Lab is used to conduct tests of AvGas on multiple engine types.
- The Technical Center's laboratories were used to conduct studies to evaluate air traffic tools that can make more efficient and shorten the timespan that the nation's airspace is closed to commercial and general aviation airplanes to improve the integration of commercial space launches and some unmanned aircraft system flights with other aviation traffic. For safety reasons, all air traffic must be redirected when there is a commercial space launch.
- The Technical Center's Test and Evaluation organizations ensured operational readiness of future NextGen systems and capabilities by testing key NextGen programs such as NAS Voice Switch and Traffic Flow Data Manager. See page 15 for more information on NextGen programs.
- The Technical Center's workforce published a full scale revision to the Human Factors Design Standard. The field of human factors is about understanding human behavior and performance. When applied to aviation operations, designing for human factors can improve safety and performance and help optimize the fit between people and the systems in which they work. The Standard serves as the primary source of human factors requirements for major acquisition programs in air traffic control and is the most important technical resource used by human factors engineers in the FAA. The Technical Center's workforce also published more than 40 technical reports and 19 journal articles in the areas of aircraft fire safety, software and systems, structures and propulsion, and airport technology.
- The Technical Center also supports FAA's academia outreach and engagement activities through research grants and partnerships. Nine new Technical Center aviation research grants were awarded that totaled $1.4 million, and additional funds were added to 18 active grants totaling $4.2 million. Research projects include probabilistic integrity and risk assessment of turbine engines and the effect of swept-wing ice accretion, and more. In addition, the FAA's Centers of Excellence awarded more than 200 new research grants totaling nearly $22 million to recipient teams representing 73 colleges and universities.
- The Technical Center continues to seed and cultivate the FAA's workforce of the future through our Pathways Program by recruiting eight new interns and converting four graduates to full time permanent employees. Also, through our Aviation Science, Technology, Engineering, and Math (AvSTEM) initiative, we hired nine interns from our Centers of Excellence program and two students from minority serving institutions, to assist the Technical Center in meeting its mission and succession planning goals.

ON THE RADAR

The Rosenbauer America Panther fire truck is delivered to the FAA's William J. Hughes Technical Center for use in aviation firefighting research.

FAA RESEARCH TO IMPROVE AVIATION FIREFIGHTING

FAA fire researchers at the William J. Hughes Technical Center are studying new equipment that could dramatically improve aviation firefighting.

Researchers in the FAA's Aircraft Rescue and Firefighting Research Program are testing a compressed air foam system for extinguishing aviation fuel fires. Injecting air into the foam stream changes the foam properties. The addition of air in foam can improve the fire extinguishing properties of the foam and the reach of the foam stream. The FAA wants to determine if air-injected foam will be more effective extinguishing aviation fires.

The compressed air foam system is not a new concept; it has been used in other fire industries for years. But this is the first attempt to apply it to aviation firefighting. There's a significant difference between aviation firefighting and other types of fires. Aviation fires often involve liquid fuel spills, something not commonly seen in structure fires. They can also occur inside an engine, or buried within a cargo hold, so gaining access is a big issue. And there are many types of materials onboard an airplane that can burn at different rates and intensities that must be accounted for.

The fire extinguishing tests are being conducted on a "Panther" which is a high-performance airfield fire truck. It is the first in North America to feature the compressed air foam system.

The results of this study will allow FAA to update applicable advisory circulars on aviation firefighting and will be presented to the National Fire Protection Association and International Civil Aviation Organization to consider changes in their standards.

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.

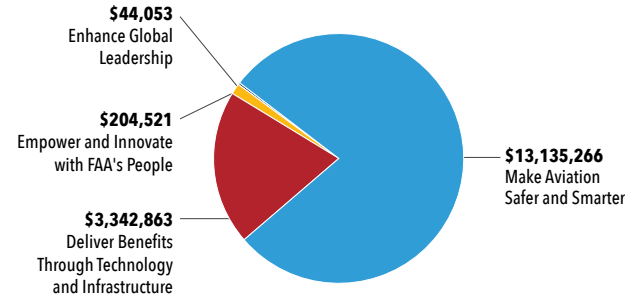
At the beginning of each project, the FAA determines the degree to which the project will contribute to one or more of the strategic priorities. The FAA then allocates actual project costs to the strategic priorities that are supported by the project. Because the FAA also routinely accumulates costs 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 $16.7 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 104.

Make aviation safer and smarter. A little over $13.1 billion, or approximately 79 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 $1.7 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 $98 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 $372 million to further support the agency's safety mission.

NET COST BY STRATEGIC PRIORITY AREA
as of September 30, 2017
(Dollars in Thousands)



Deliver benefits through technology and infrastructure. Approximately $3.3 billion, or about 20 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 $1.7 billion, largely to finance its facilities and equipment projects.
- ARP spent almost $1.6 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 $44 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 $205 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

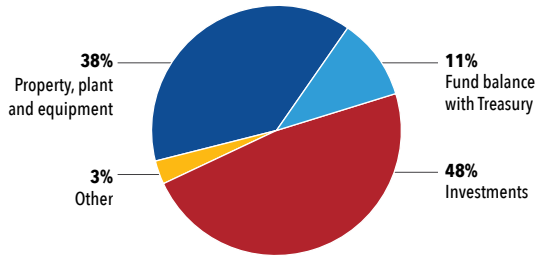
The FAA prepares annual financial statements in conformity with accounting principles generally accepted in the United States. The financial statements are subject to an independent audit to ensure that they are free from material misstatement and that they can be used to assess the FAA's performance.

FY 2017 Financial Statements Audit

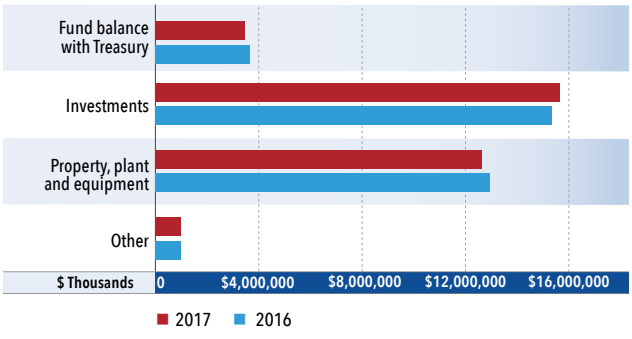
The Chief Financial Officers Act of 1990 (Public Law 101–576), as amended by the Government Management Reform Act of 1994, requires that financial statements be prepared by certain agencies and commercial-like activities of the federal government and that the statements be audited in accordance with Generally Accepted Government Auditing Standards. The FAA is required to prepare its own financial statements under OMB Bulletin No. 17-03, 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 2017 financial statements.

KPMG LLP has rendered an unmodified audit opinion on the FAA's FY 2017 financial statements.

COMPOSITION OF ASSETS
as of September 30, 2017



ASSETS COMPARISON
(Dollars in Thousands)



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 2016 to FY 2017, 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 $32.8 billion as of September 30, 2017. 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, 2016 and 2017.

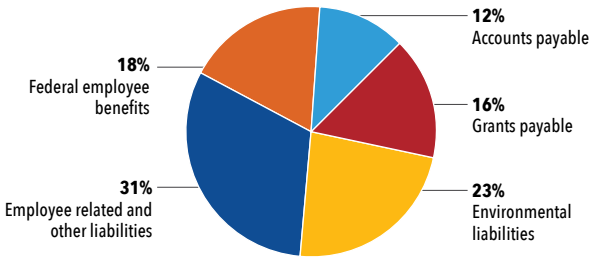
Fund balance with Treasury represents 11 percent of the FAA's current period assets and consists of funding available through the Department of Treasury accounts from which the FAA is authorized to make expenditures to pay liabilities. It also includes passenger ticket and other excise taxes deposited to the Airport and Airway Trust Fund (AATF), but not yet invested. Fund balance with Treasury decreased from $3.7 billion to $3.5 billion.

At $15.7 billion, *Investments* represent 48 percent of the FAA's current period assets, and are derived primarily from the collection of passenger ticket and other excise taxes deposited semi-monthly to the AATF.

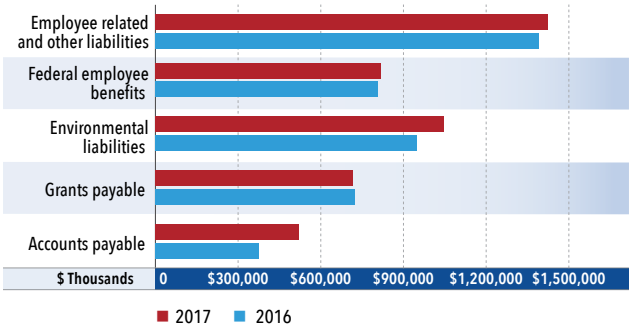
The deposited taxes are invested within several business days, thus transitioning the asset classification from fund balance with Treasury to investments. The investment balances also include the Aviation Insurance Program investments. Investments are redeemed, as needed, to finance the FAA's daily operations to the extent authorized by Congress, and to pay potential insurance claims. Investment balances increased approximately $314 million on a comparative basis.

At $12.6 billion, ***General property, plant, and equipment, net*** (PP&E) represents 38 percent of the FAA's assets as of September 30, 2017, 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 $292.3 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.

COMPOSITION OF LIABILITIES
as of September 30, 2017



LIABILITIES COMPARISON
(Dollars in Thousands)



Liabilities

As of September 30, 2017, the FAA reported liabilities of $4.5 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, 2016 and September 30, 2017. Below is a discussion of the major categories.

At $1.4 billion, ***Employee related and other liabilities*** represent 31 percent of the FAA's total liabilities. These liabilities increased by $32.0 million as of September 30, 2017 and are comprised mainly of $357.0 million in advances received, $171.0 million in Federal Employee's Compensation Act payable, $305.1 million in accrued payroll and benefits, $472.6 million in accrued leave and benefits, $30.4 million in legal claims liability and $59.7 million in capital lease liability.

At $818.7 million, ***Federal employee benefits*** represent 18 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 23 percent of the FAA's total liabilities and increased to $1.048 billion as of September 30, 2017 compared with $950.2 million a year earlier. ***Environmental liabilities*** include a component for remediation of known contaminated sites that increased by less than $1 million on a comparative basis. The other component of environmental liabilities includes the estimated costs for future facility decommissioning. This component's costs increased by $97.1 million due to additional facilities, which were identified during FY 2017, 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 16 percent of liabilities. ***Grants payable*** decreased slightly by $6.3 million. ***Accounts payable*** represents 12 percent of liabilities and increased $146.3 million. ***Accounts payable*** are the 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 30, balances reported on 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.

For the fiscal years ended September 30, 2017 and September 30, 2016, FAA's net costs were $16.7 billion and $16.3 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, 2016 and September 30, 2017.

With a net cost of $11.4 billion, the ***Air Traffic Organization*** is the FAA's largest line of business, comprising 68 percent of total net costs. The Air Traffic Organization's net costs increased by $232.6 million, on a comparative basis, primarily from increases in costs for labor and benefits and contractor services offset by decreases in materials and supplies and other cost allocations.

The FAA's second largest line of business is ***Airports*** with a net cost of $3.3 billion for the fiscal year ended September 30, 2017, which is 20 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. Airports' net costs also include $156.1 million to administer the Airport Improvement Program, as well as overall airport safety. Year-over-year net costs increased by $157.7 million, primarily due to an increase in the Airport Improvement Program Stewardship Investments.

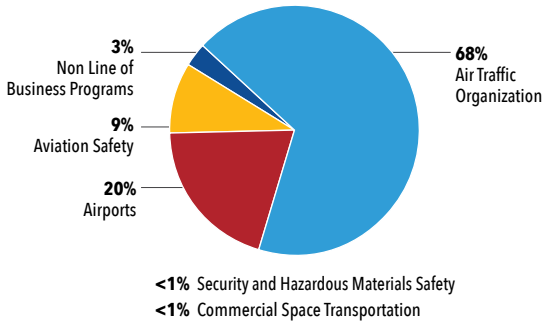
At $1.5 billion, the net cost for ***Aviation Safety*** represents 9 percent of the FAA's total net costs, while ***Non-Line of Business Programs*** comprise 3 percent of total net costs. Net costs of Security and Hazardous Material Safety and Commercial Space Transportation each represent less than 1 percent of total net costs.

Statement of Changes in Net Position

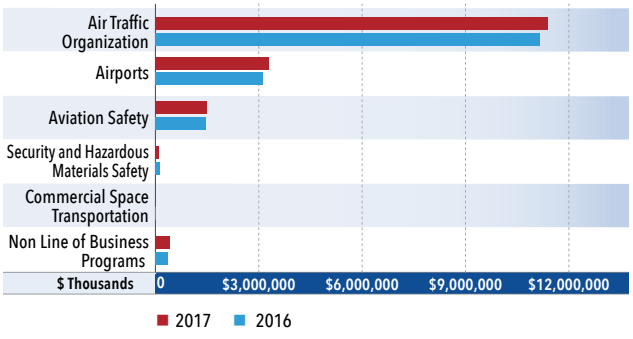
The ***Statement of Changes in Net Position*** presents those accounting items that caused the net position section of the balance sheet to change from the beginning to the end of the reporting period. Various financing sources increase net position. These financing sources include appropriations received 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, 2017, decreased by $248.9 million primarily due to a combination of financing sources of $1.0 billion from appropriations used, non-exchange revenue of $15.4 billion, and imputed financing of $317.5 million, offset by transfers out of $252.3 million and net costs of $16.7 billion. Unexpended appropriations decreased by $216.6 million.

COMPOSITION OF NET COST
for the fiscal year ended September 30, 2017



NET COST COMPARISON
(Dollars in Thousands)



Statement of Budgetary Resources

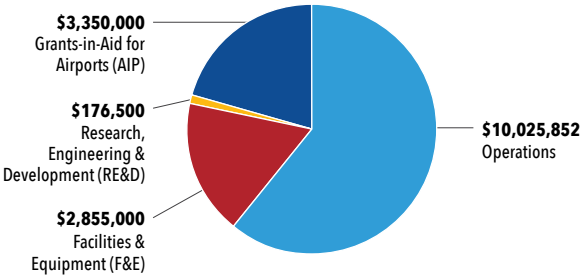
This statement provides information on the budgetary resources available to the FAA for the fiscal years ended September 30, 2017 and September 30, 2016, and the status of those budgetary resources.

The FAA's *Total budgetary resources* consist of new budget authority and unobligated balances of budget authority provided in previous years. *Budget authority, gross* is the authority provided to the FAA by law to enter into obligations that will result in outlays of federal funds. *New obligations and upward adjustments* result from an order placed, contract awarded, service received, or similar transaction, which will require payments during the same or a future period. *Gross outlays* reflect the actual cash disbursed by the Treasury for the FAA obligations.

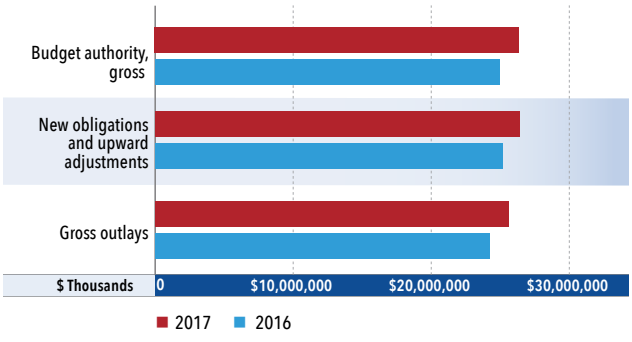
Total budgetary resources were $30.7 billion, of which $26.4 billion comes from new budget authority, for the fiscal year ended September 30, 2017 and $29.1 billion, of which $25.0 billion comes from new budget authority, for the fiscal year ended September 30, 2016. *New obligations and upward adjustments* increased $1.3 billion to $26.4 billion. *Gross outlays* increased by $1.4 billion to $25.6 billion.

The *Unapportioned* status 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, 2017, the *Unapportioned* balance was $2.2 billion showing a slight increase of $41.6 million over the September 30, 2016 ending balance.

FAA ENACTED BUDGET - FY 2017
(Dollars in Thousands)



STATEMENT OF BUDGETARY RESOURCES COMPARISON
(Dollars in Thousands)



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 116. 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.

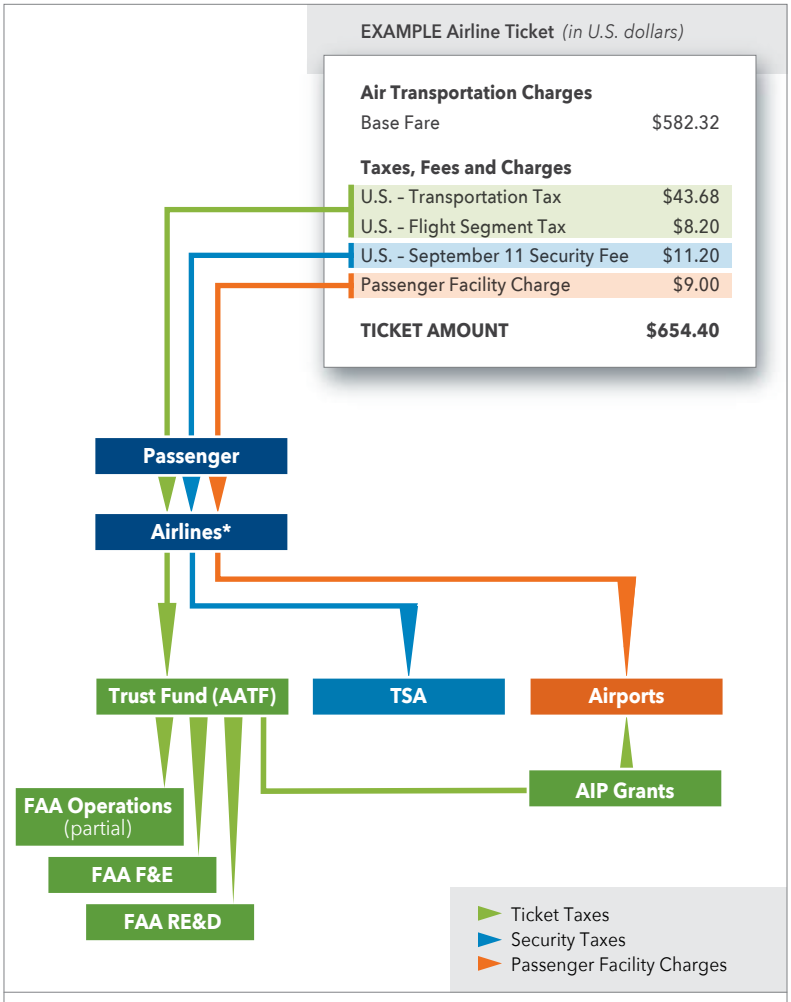
The FAA's research and development expenses increased in FY 2017 by $40.5 million. One area of focus this year involved various experiments conducted in the FAA's Full-Scale Fire Test Facility to determine the mode of flame spread on a carbon fiber reinforced polymer fuselage structure in hidden areas and enclosed spaces in an airplane cabin. Another area of focus was the analyses of aircraft generated wake and associated airport weather data collected at NextGen Core airports, leading to the conclusion that ATC applied wake risk mitigation separations could be reduced if certain weather conditions were present at and around an airport, enabling additional airport runway throughput capacity during periods of peak demand at the airport.

Limitations of the Financial Statements

The principal financial statements are prepared to report the financial position and results of operations of the reporting entity, pursuant to the requirements of 31 U.S.C. 3515(b). The statements are prepared from the books and records of the entity in accordance with federal generally accepted accounting principles and the formats prescribed by OMB. Reports used to monitor and control budgetary resources are prepared from the same books and records. The financial statements should be read with the realization that they are for a component of the U.S. Government.

WHAT'S IN THE PRICE OF AN AIRLINE TICKET?

Many passengers are unaware that when they purchase an airline ticket, they are paying for more than a seat on a flight. The diagram below shows the breakdown of an example ticket price for a domestic flight. Although the total ticket price is collected by the airlines, the airlines must forward a portion of those funds to others, for various purposes.



* This diagram illustrates only the flow of fees and taxes. Airlines also pay airports for landing fees, rents and leases. See page 32 for more info on how AATF funds are used.

Taxes collected as part of the purchase of a domestic passenger ticket are shown in green: a U.S. transportation tax and a flight segment tax. These taxes, along with other excise taxes, are deposited into the Airport and Airway Trust Fund (AATF) which is a dedicated source of funding for the nation's aviation system. To the extent made available by law, FAA uses some of these funds to finance a portion of its Operations. The AATF is the sole source of funding for FAA's Airport Improvement Program grants (AIP); Facilities & Equipment (F&E); and Research, Engineering, and Development (RE&D) activities. These activities are explained further on pages 30-33, and further information on AIP grants is also provided on pages 10 and 87.

Another part of the cost of an airline ticket is the passenger security service fee, also known as the September 11 Security Fee, shown in blue. This fee is collected by airlines from passengers at the time a ticket is purchased. Airlines then remit the fees to the Transportation Security Administration (TSA).

Passenger Facility Charges (PFC) are shown in orange and are an important source of capital for U.S. airport infrastructure. PFCs are collected by airlines at the time a ticket is purchased and the funds that are raised are transferred directly to the appropriate airports. It is up to the individual airport to decide whether, and how it will use PFC funds subject only to airline consultation and FAA approval of the application. Airports use these fees to fund FAA approved projects that enhance safety, security, or capacity; reduce noise; or increase carrier competition. PFC funds may also be used as the matching share for AIP grants. In addition, PFC funds may be used to pay for debt service on bonds used to raise capital for larger improvement projects allowing for a significant degree of leverage for PFC funds. Since 1992, FAA has approved over $100 billion of PFC projects.

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 2017, the AATF paid for approximately 95 percent of our enacted budget authority per the Consolidated Appropriations Act, 2017 (Public Law 115-31).

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.

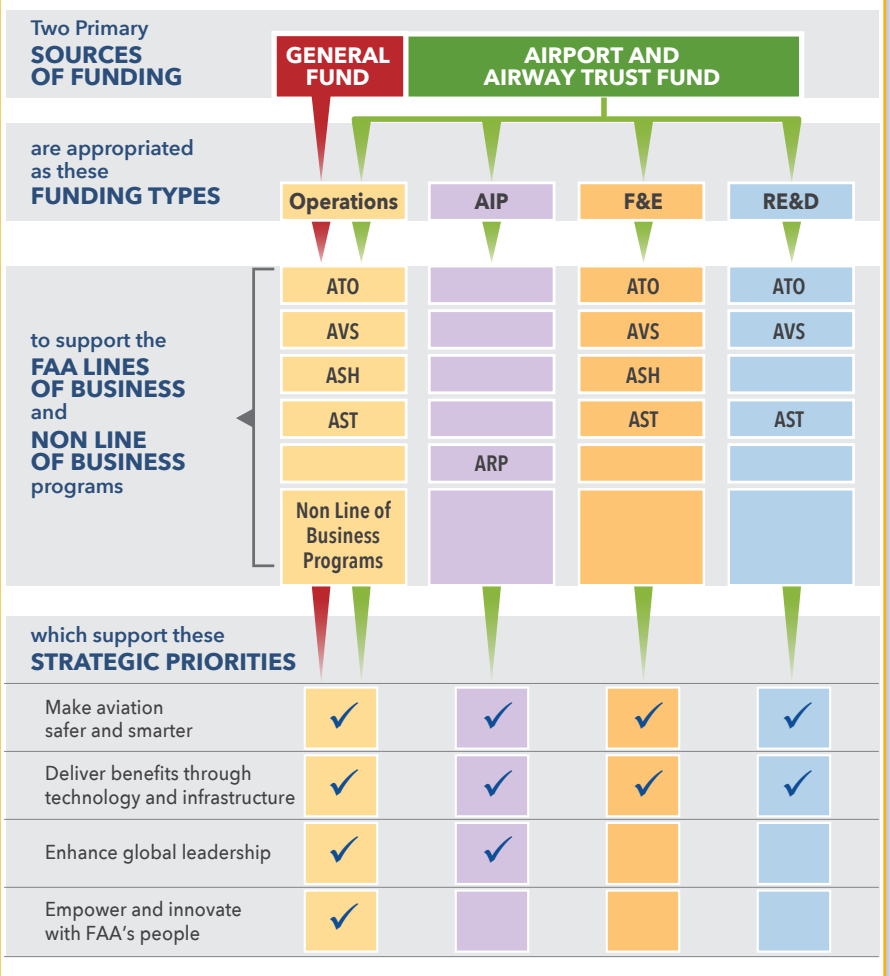
The chart on page 30, FAA Enacted Budget–FY 2017, summarizes the budget enacted by Congress for the FAA. The FY 2017 enacted budget of $16.4 billion was an increase of $127 million (0.8 percent) over the FY 2016 enacted level. The FAA requests and receives its funding in four primary accounts:

- 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 2017, the AATF supported 91 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

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 84 and net cost by program and strategic priority in Note 11 on page 104. 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.

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 2017 Operations appropriation was $10.03 billion, approximately 1.2 percent greater than FY 2016.

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 2017 funding for AIP was $3.35 billion, unchanged from the FY 2016 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 2017, unchanged from the FY 2016 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 that will ensure a safe, efficient, and environmentally-compatible global air transportation system. The FY 2017 appropriation for RE&D was $176.5 million, an increase of 6.3 percent from the FY 2016 level.

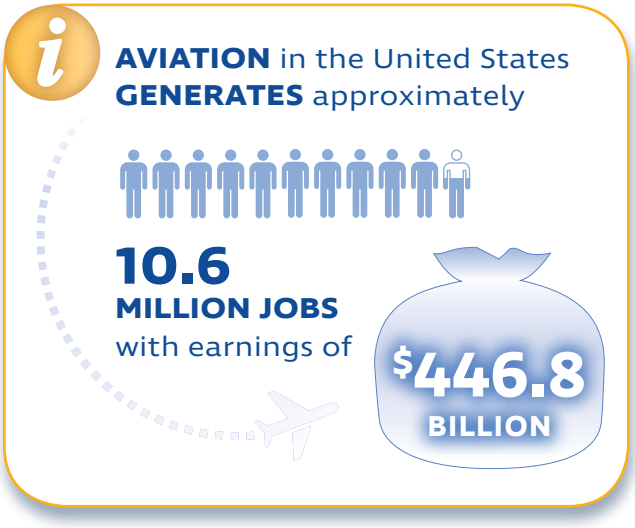
The FAA must use its funds in the way they are appropriated. On its own, the FAA does not possess the legal authority to move funds between these accounts. A transfer between accounts requires an act of Congress.

American Airlines A-319 (part of the A320 family) getting de-iced at Washington Reagan National Airport.

MANAGEMENT CONTROL HIGHLIGHTS

Financial Management Integrity: Controls, Compliance and Challenges

On November 9, 2017, 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 2017, we are reporting overall substantial compliance.



Payment Integrity

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 2017 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 significant 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 2017

The FAA is responsible for managing risks and maintaining effective internal control and financial management systems that meet the objectives of Section 2 and Section 4 of the Federal Managers' Financial Integrity Act. This includes conducting assessments to determine the effectiveness of internal control and conformance with financial system requirements. The FAA conducted its assessments in accordance with 0MB Circular No. A-123, ***Management's Responsibility for Enterprise Risk Management and Internal Control***, Appendices A and D.

The FAA's assessments considered the effectiveness of internal control over operations, financial reporting which also includes safeguarding of assets, and compliance with applicable laws and regulations. The objectives are to ensure:

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

Based on the results of this assessment, the FAA can provide reasonable assurance that its internal control over operations, financial reporting, and compliance were operating effectively as of September 30, 2017, except for one material weakness related to environmental decommissioning estimation methodology and recording of the associated liability in the interim financial statements. We corrected the estimation methodology and strengthened our internal controls around financial reporting, to fully remediate this deficiency before September 30, 2017.

The FAA also assessed its financial management systems' conformance with financial system requirements, in accordance with the requirements of OMB Circular A-123 Appendix D. Based on this assessment, the FAA can provide reasonable assurance that its financial management systems conform to these requirements and no material non-conformances or instances of noncompliance were identified.

MICHAEL P. HUERTA
Administrator
November 9, 2017

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.

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 DOT to consolidate and modernize its financial management systems and streamline processes and financial reports. Maintaining fewer systems will enable the FAA to operate more efficiently by having 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 and 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 2017, the FAA, in cooperation with DOT, has been working toward modernizing its financial reporting, moving from web-based financial reports to an upgraded financial reporting platform. In addition, work is underway on a "data warehouse" which will aggregate financial data from multiple financial systems into a single reporting environment. During the first phase, the data warehouse will be populated with Delphi, Purchase Request Information System (PRISM), and Logistics Center Support System (LCSS) data. The data warehouse will provide more efficient and timely access to financial data that will also be more consistent and reliable.

Last 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. The system is operational and is undergoing minor refinements.

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 2017, the FAA upgraded 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).

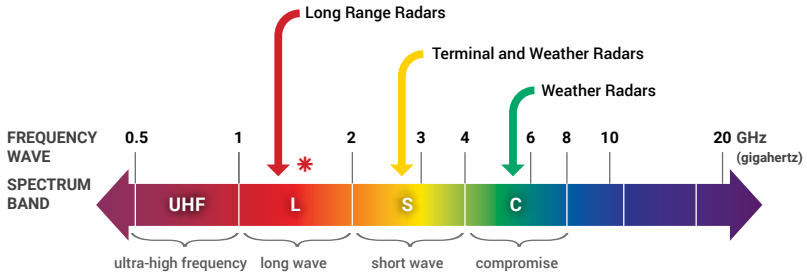
Logistics. Last year, the FAA replaced its Logistics Inventory System (LIS) with a new application, LCSS. With the implementation of LCSS, the FAA is reengineering and automating its supply chain management processes by implementing a commercially available, off-the-shelf enterprise resource planning system. Work continues on this system to better meet user, audit, and compliance requirements.

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 2017, the FAA is continuing the work to replace CRU-X because it is at the end of its life cycle. Plans for new software will allow the FAA to use less hardware, which will reduce maintenance costs. The updated software will also provide a more secure system environment.

Travel. In FY 2017, the FAA implemented a feature within its online travel system, E2 Solutions, which allows portions of travel reimbursements to be paid by FAA directly to the traveler's government travel charge card account. This feature, called Split Pay, reduces the timeframe from receipt of the charge card statement to payment, and therefore reduces payment delinquencies.

ON THE RADAR

SPECTRUM BANDS USED BY CERTAIN FAA RADAR SYSTEMS



* FAA is studying the feasibility of freeing up at least 30 megahertz (MHz) of the 1300–1350 MHz (1.3–1.35 gigahertz [GHz]) spectrum band.

WHAT IS SPECTRUM?

Spectrum refers to the nation's radio frequencies allocated to the mobile industry, air traffic control, weather surveillance, and other sectors for communication over the broadband airwaves. Demand for space on the radio spectrum is steadily growing due to technological innovations such as 4G mobile services and rapid expansion of wireless internet services. In response to increased demand, the Spectrum Pipeline Act was enacted in 2015 to make the federal government's use of the spectrum more efficient so that more of the spectrum would be available for public use. The Act provides funds for federal agencies to perform research and development, engineering studies, planning activities, and economic analysis with an end goal of updating surveillance technology that would use less spectrum so that it could be made available for public auction by 2024. The auction proceeds would cover costs incurred by federal agencies to become more spectrum-efficient and for spectrum sharing costs. It is estimated that the auction could yield approximately $11-$19 billion for the U.S. federal government.

WHAT IS THE SENSR PROGRAM?

Spectrum Efficient National Surveillance Radar (SENSR) is a cross-agency initiative of which FAA is a partner, to determine the feasibility of freeing up at least 30 MHz of the 1300-1350 MHz spectrum band. The objective is to modernize the existing systems and enhance national air surveillance capabilities in support of long-range and short-range aircraft tracking, air traffic, law enforcement, national defense, and weather missions. Many of the surveillance systems currently in use were originally developed when demand for spectrum was low. These systems unfortunately were not designed to be spectrum efficient or use spectrum-efficient technology. The SENSR program looks to identify more efficient surveillance solutions and the practicality of acquiring new surveillance solutions including radar and non-radar. Also being able to consolidate existing surveillance systems would result in less spectrum used.

PERFORMANCE RESULTS

There are **19,601** airports in the U.S. ...

... **5,116** public airports ...

... and **14,485** private airports.

Engineer conducting a flammability test on an evacuation slide material. FAA flammability requirements mandate the evacuation slide materials for transport aircraft meet this stringent,3-minute test to ensure slides remain inflated for passenger escape in the event of a postcrash external fuel fire.

PERFORMANCE MEASURES OVERVIEW

In this section, the FAA discusses its achievements in addressing our 14 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 52)
- **Enhance Global Leadership** (page 58)
- **Empower and Innovate with the FAA's People** (page 60)

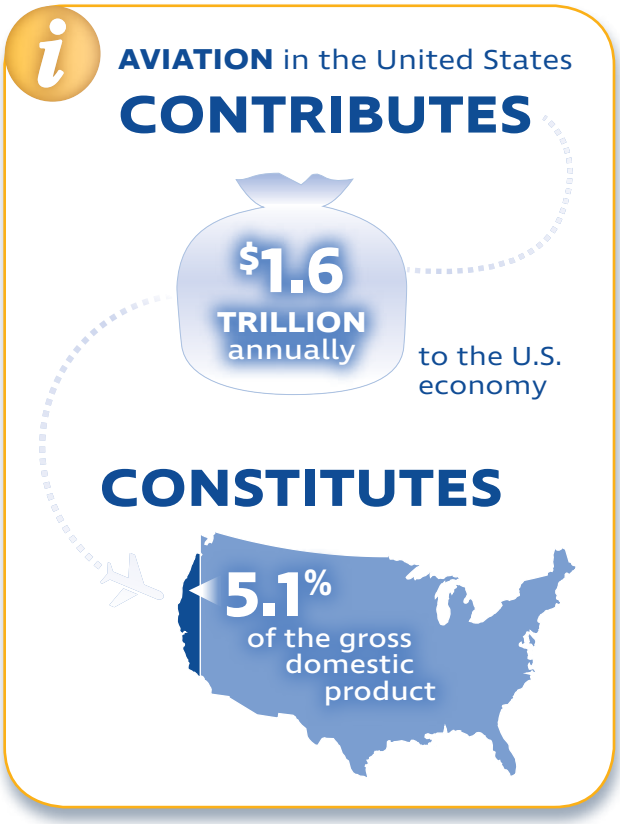
In the pages that follow, the FAA provides the FY 2017 performance targets, a discussion of our FY 2017 performance, and, when available, up to five years of historical trend data. We have also prepared a graph of performance measures when appropriate.

In FY 2017, the FAA achieved 11 of the 13 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.

For FY 2018, the U.S. Department of Transportation, including the FAA, is making significant revisions to its strategic plan and the performance measures that support the strategic plan. As a result of these revisions, the FAA continues to develop or refine several of the performance measures that the agency expects to report in next year's PAR. Therefore, in this report, these measures are reported as "TBD" for FY 2018.

The Performance Results section includes a discussion on page 63 of the ways in which our performance data are verified and the completeness and reliability of our performance data.



Air Traffic Organization Technical Operations personnel prepare to climb communications tower at Los Angeles Air Route Traffic Control Center.

STRATEGIC PRIORITY: MAKE AVIATION SAFER AND SMARTER

Strategic Priority:	**MAKE AVIATION SAFER AND SMARTER**
Strategic Objective:	**Build on safety management principles to proactively address emerging safety risks by using consistent, data-informed approaches to make smarter, system-level, risk-based decisions.**

Performance Measure	FY 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
Commercial Air Carrier Fatality Rate ✦ In FY 2017, the commercial air carrier fatality rate will not exceed 6.2 fatalities per 100 million people on board.	0.6	0.1	0.6[1]	6.4	0.3[2]	✓	6.2
Serious Runway Incursions Rate ✦ Reduce Category A & B (most serious) runway incursions to a rate of no more than 0.395 per million operations.	0.282	0.302	0.380	0.395	0.130[3]	✓	TBD
System Risk Event Rate Limit the rate of the most serious losses of standard separation to 10 or fewer for every thousand losses of standard separation within the national airspace system.	3.44	2.62	2.66	10	2.24[3]	✓	10
IT Risk Management and Information Systems Security Address 80 percent of high value risks within 30 days. Continue oversight by the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on IP-based systems.	Performance measure redefined in FY 2015	100%	100%	80%	100%	✓	80%
General Aviation Fatal Accident Rate ✦ Reduce the general aviation fatal accident rate to no more than 1.01 fatal accidents per 100,000 flight hours.	1.09	0.99	0.91[1]	1.01	0.84[2]	✓	1.0
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	✓	0
Unmanned Aircraft System (UAS) Priorities Achieve three milestones identified as FY 2017 UAS priorities.	This is a new measure for FY 2017	This is a new measure for FY 2017	This is a new measure for FY 2017	3	3	✓	TBD

✦ This performance measure supports a DOT Agency Priority Goal.

✓ Target met ✘ Target not met

1 Preliminary estimate until final result can be confirmed by the National Transportation Safety Board (NTSB) in March 2018. We do not expect any change in the final 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 the National Transportation Safety Board (NTSB) in March 2019. We do not expect any change in the final result to be significant enough to alter our year-end status of achieving the target.

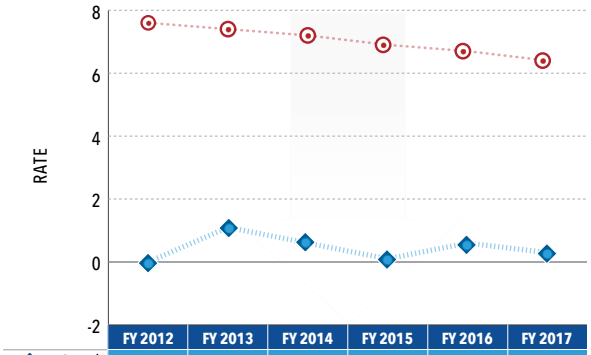
3 Preliminary estimate until the final result becomes available in January 2018. We do not expect any change in the final result to be significant enough to alter our year-end status of achieving the target.

Commercial Air Carrier Fatality Rate

Reduce the commercial air carrier fatalities per 100 million persons on board by 24 percent over 9-year period (2010-2018). No more than 6.2 in 2018.	
FY 2017 Target	No more than 6.4 fatalities per 100 million persons on board.
FY 2017 Result	**0.3** *(Preliminary estimate until the final result can be confirmed by the National Transpiration Safety Board (NTSB) in March 2019)*
Public Benefit	As fatal air carrier accidents have declined in terms of average fatalities per accident, this metric will sharpen FAA's focus on helping air travel become even safer.

COMMERCIAL AIR CARRIER FATALITY RATE

Fatalities per 100 million persons on board



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Actual	0.0	1.1	0.6	0.1	0.6[1]	0.3[2]
Target	7.6	7.4	7.2	6.9	6.7	6.4
Target Achieved?	✓	✓	✓	✓	✓	✓

1 Preliminary estimate until 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.

2 Preliminary estimate until result can be confirmed by NTSB in March 2019. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.

Commercial aviation includes both scheduled and nonscheduled flights of U.S. passenger and cargo carriers. This form of transportation is one of the safest, and the FAA must strive every year to maintain this record. Not all fatalities captured in the FAA's performance measures are associated with large commercial air carriers. Recent fatalities have all been attributed to small air carriers, which are not widely reported. However, if there were just one accident involving a medium or large carrier, the FAA's performance would be well above the target for the year. In FY 2017, with a result of 0.3 fatalities per 100 million people on board, we were successful in achieving our target of not exceeding a rate of 6.4. This success was supported by the FAA's work to implement safety management systems, participation in the Commercial Aviation Safety Team, establishment of safety-critical regulations, and implementation of the Takeoff and Landing Performance Assessment initiative.

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 and reduce incidents as much as possible.

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 the aviation community.

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 reduce the fatality risk in commercial air travel in the United States. CAST brings together representatives from government, pilot and air traffic controller associations, airlines, airports, and aviation manufacturers to analyze data, identify top safety concerns, and implement interventions to address those risks. The work of CAST, along with new aircraft, regulations, and other activities, continues to have a positive impact in reducing the fatality rate for commercial aviation in the United States. The group has reduced the fatality risk in commercial aviation by focusing resources on the following risk areas:

- Runway excursions
- Controlled flight into terrain
- Approach and landing accidents
- Loss of control
- Runway incursions
- Weather
- Turbulence
- Icing
- Cargo-related accidents
- Maintenance
- Midair collisions
- Uncontained engine failures

CAST has developed over 100 safety enhancements to date. The last 25 enhancements were based on non-accident data, demonstrating 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***.

Regulations

In FY 2017, the FAA worked on developing a final rule to enhance the professional development of pilots who work for commercial air carriers. Once published, this final rule will reduce pilot errors that can lead to a catastrophic event. The FAA also worked on developing a final rule regarding "Regulatory Relief: Aviation Training Devices, Pilot Certification, Training, and Pilot Schools" that will make it easier for pilots to obtain experience, training and certification.

Takeoff and Landing Performance Assessment (TALPA) Initiative

In FY 2017 the FAA implemented the Takeoff and Landing Performance Assessment(TALPA) initiative at all airports to report runway surface conditions. The TALPA initiative uses standardized reports to compare runway conditions with manufacturer's aircraft-specific performance data, helping pilots determine the runway length needed to safely stop an aircraft after a rejected takeoff or a landing. The TALPA initiative also enables airplane operators, pilots, and flight planners to determine more accurately the distance required to stop on wet or contaminated runways. The FAA pursued this initiative following the overrun of a large commercial aircraft at Midway International Airport in December 2005. While landing in a snowstorm, the aircraft crashed into automobile traffic, killing a six-year-old boy.

Crash test dummies at the Civil Aerospace Medical Institute impact facility, located at FAA's Mike Monroney Aeronautical Center in Oklahoma City, OK.

Serious Runway Incursion Rate (Category A & B)

Reduce Category A & B (most serious) runway incursions to a rate of no more than 0.395 per million operations, and maintain or improve through FY 2018.	
FY 2017 Target	Reduce Category A & B (most serious) runway incursions to a rate of no more than 0.395 per million operations.
FY 2017 Result	**0.130** *(Preliminary estimate until the final result becomes available in January 2018)*
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. This risk has remained below the FAA's target over the past five years, and has decreased in FY 2017 based on initiatives such as runway safety promotion, outreach and education. However, even small changes in the number of serious runway incursions can result in large changes in the rate, which reflects the number of incursions per 1 million operations.

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.

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/pedestrian deviations.

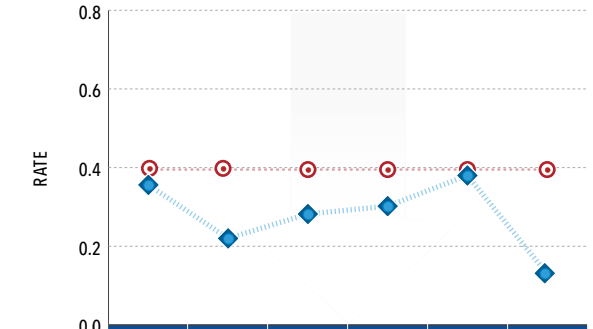
Pilot Deviations	○ Crossing a runway hold marking without clearance from air traffic control ○ Taking off without clearance ○ Landing without clearance
Operational Incidents	○ Clearing an aircraft onto a runway while another aircraft is landing on the same runway ○ Issuing a takeoff clearance while the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

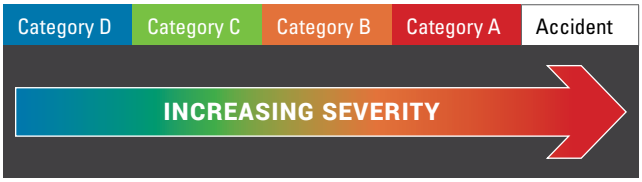
SERIOUS RUNWAY INCURSION RATE

Per million operations



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Actual	0.356	0.220	0.282	0.302	0.380	0.130[1]
Target	0.395	0.395	0.395	0.395	0.395	0.395
Target Achieved?	✓	✓	✓	✓	✓	✓

1 Preliminary estimate until final result becomes available in January 2018. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.



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

As of the date of publication, the Category A and B runway incursion rate is estimated at 0.130 incursions per million operations, which indicates that the FAA achieved its target. The final results will be available in January 2018.

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,

ON THE RADAR

LAND ANIMALS ALSO POSE THREAT TO AIRCRAFT

The average air traveler is well aware of the threat that birds pose to aircraft, especially after a flock of them forced the most famous water landing in aviation history in 2009. But did you know alligators and other land animals pose a threat to aircraft? Wildlife can pose either a direct hazard, like a strike, or they can be an indirect hazard that can be just as significant, by burrowing under airport pavement, chewing on wires, or disrupting antennas and radars.

The June 2017 gator strike in Florida drew national attention to the risks land animals pose at airports. When the small airplane struck a fairly large gator — 11 feet long and 500 pounds — at 2 am after the tower was shut down for the night, the pilot was uninjured, but the gator was killed and the wing of the plane was damaged. The FAA Wildlife Strike Database indicates that aircraft hit gators 19 times between 1990 and 2016.

Other repeat offenders among land animals that pose a hazard at U.S. airports include: deer (1,000+), rabbits and jackrabbits (564), coyote (510), skunks (380), possums (211), foxes (238), groundhogs (150) and raccoons (113), and turtles (213). Nine aircraft hit antelope, and one hit a black bear. Incidents with pet dogs and cats (76), cattle (11), and pigs (2) also have been reported. About 33% of collisions cause damage to the aircraft.

The FAA requires airports to maintain a safe operating environment for people, equipment, and wildlife. Airports must conduct a Wildlife Hazard Assessment and prepare a Wildlife Hazard Management Plan, when there has been a wildlife strike at the airport. The FAA's wildlife hazard management program has been in place for more than 50 years and focuses on mitigating wildlife hazards through habitat modification, harassment technology, and research.

training, marking and lighting, standard runway safety areas, new technology, and airfield improvements. In June 2015, a Runway Safety Call to Action was convened by FAA Administrator Michael Huerta bringing together 108 representatives from industry, labor, and government. The Summit established short, medium, and long-term plans 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, the FAA initiated a new program called the Runway Incursion Mitigation (RIM) program to address runway/taxiway intersections that have challenges with incursions. RIM focuses on locations that had three or more incursions in a single calendar year, or those that average one or more incursions a year over the study period (approximately 6 years). In FY 2017, the FAA began mitigation projects at 28 RIM locations (exceeding the agency's goal of 10 locations), and implemented a RIM data management tool to track mitigations and monitor incursions to observe trends for improvement.

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 10 or fewer for every thousand losses of standard separation within the National Airspace System.	
FY 2017 Target	Reduce risks in flight by limiting the rate of the most serious losses of standard separation (LoSS) to 10 or fewer for every thousand losses of standard separation within the National Airspace System.
FY 2017 Result	**2.24** *(Preliminary estimate until the final result becomes available in January 2018)*
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.

SYSTEM RISK EVENT RATE

Rate of serious losses of standard separation per thousand losses

	Target	Actual	Target Achieved?
FY 2017	10	2.24[1]	✓
FY 2016	20	2.66	✓
FY 2015	20	2.62	✓
FY 2014	20	3.44	✓
FY 2013	20	5.66	✓
FY 2012	20	9.33	✓

1 Preliminary estimate until the final result becomes available in January 2018. We do not expect any change in the final result to be significant enough to alter our year-end status of achieving the target.

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. A target of 20 had been set for FY 2012 through FY 2016 to establish a baseline while deploying improved analysis and loss of standard separation detection capability. Based on analysis of the historical data, the determination was made to lower the target to 10 in FY 2017. The FAA is currently analyzing the risk analysis process and how events become classified as risk analysis events. The results of this analysis could change the way events are assessed, which could increase the number of risk analysis events and impact how the FAA sets its targets in the future. In FY 2017, with a result of 2.24, the FAA is achieving our target of limiting the most serious losses of standard separation to 10 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 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

ON THE RADAR

CESSNA COMES TO A CONCRETE-CRUSHING HALT

The special material FAA has been installing at the end of runways to stop planes since the mid-1990s proved its worth yet again when a Cessna Citation recently overshot a runway on April 30, 2017, at Hollywood Burbank Airport. The Cessna pilot touched down too far into the runway and wasn't able to stop before the pavement ended. It penetrated about 40 feet into the Engineered Materials Arresting System (EMAS), a crushable material designed to stop aircraft in such situations.

Only the two pilots were on board, and neither was injured. "The EMAS pretty much just exploded. It went flying up into the air and brought him to an abrupt stop," said the air traffic controller who was working the airspace.

The FAA first installed EMAS in 1996 at JFK International Airport in New York. It is now at the end of 106 runways at 67 airports across the country, with more installations planned. A dozen aircraft with passengers and crew totaling 284 people have been stopped by EMAS beds, preventing more serious and potentially fatal accidents.

The EMAS bed at Hollywood Burbank Airport was installed in 2002, two years after a commercial jetliner tore through a metal blast fence and airport perimeter wall, and stopped near a gas station on a city street. Two people on board that flight were seriously injured, and 42 sustained minor injuries.

"It's a great invention" said FAA's lead airport certification safety inspector in the Western-Pacific Region. "And it has saved many lives and many aircraft." "I can't recall any time where [EMAS] has actually caused damage to the aircraft, and it has kept aircraft from colliding with objects. Every time it works, it works beautifully."

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 training 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 informed decisions about reductions in separation standards.

Information Technology (IT) Risk Management and Information Systems Security

Address 80 percent of Internet Protocol (IP) high value risks within 30 days. Continue oversight by the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on IP-based systems.	
FY 2017 Target	80%
FY 2017 Result	**100%**
Public Benefit	The FAA is undertaking multiple strategic and tactical initiatives in the development of a comprehensive and strategic framework to reduce cybersecurity risks to the national airspace system, civil aviation, and agency information and information systems. Cybersecurity ensures the availability, integrity and usability of information systems for the flying public.

IT RISK MANAGEMENT AND INFORMATION SYSTEMS SECURITY

Address 80 percent of Internet Protocol (IP) high value risks within 30 days. Continue oversight by the Cybersecurity Steering Committee to assure consistent risk acceptance decisions. Visualize vulnerabilities on all IP-based systems.

	Target	Actual	Target Achieved?
FY 2017	80%	100%	✓
FY 2016	80%	100%	✓
FY 2015	80%	100%	✓

High value risks are threats and vulnerabilities to FAA's infrastructure that could disrupt mission critical operations; lead to inappropriate access and destruction of sensitive information, including personally identifiable information; and threaten national security. Cybersecurity vulnerabilities have the potential to cause significant safety, economic, and social impacts. The IT Risk Management and Information Systems Security measure ensures that the FAA is well protected against persistent and evolving cyber threats, while recognizing an effective response is required when incidents occur.

The national airspace system is a critical part of the national infrastructure and a key resource for which a cyber-attack could have economic, catastrophic, and national defense impacts compromising the safety of the flying public and the nation. The FAA plays a crucial role through management of the national airspace and other mission critical systems for air transportation. The FAA Security Operations Center (SOC) is an all-day everyday operation that serves as the foundation of the FAA security program and is the central reporting point for all cyber events occurring within the FAA and Department of Transportation (DOT). The SOC represents DOT as a single source provider of the cyber "big picture" when reporting to the Department of Homeland Security (DHS). At the Federal reporting level, the SOC participates in the National Cyber Response Coordination Group, the DHS-sponsored emergency action team, and the advisory council reporting directly to the White House.

Assuring that FAA systems — whether they are a part of the operating the national airspace system or not — are protected and secure reduces the risk of potential threat damage and the compromising of FAA systems and aviation safety related information, including Air Traffic, Airport Information Systems, Pilot and Airman Medical processing and Certifications. Detection of threats, attacks and weaknesses across all three FAA operating domains: Mission Support, National Air Space, and Research & Development, are the SOC's first priority.

For FY 2017, this performance target is measured by dividing the number of high value risks addressed by the total number of high value risks detected. The FAA continued oversight through the Cybersecurity Steering Committee by reporting IP high value risks on a monthly basis ensures consistent risk acceptance decisions and maintains visualization of vulnerabilities on all IP-based systems. The FAA identified and addressed 14 IP high value risks within 30 days from initial detection, thereby achieving our goal.

The FAA's performance far exceeded expectations this year. However, the agency experiences continuous and emerging threats of cyber-attack, and the nature of those threats can change rapidly. After further analysis of performance and risk, the FAA may consider increasing its target for FY 2019.

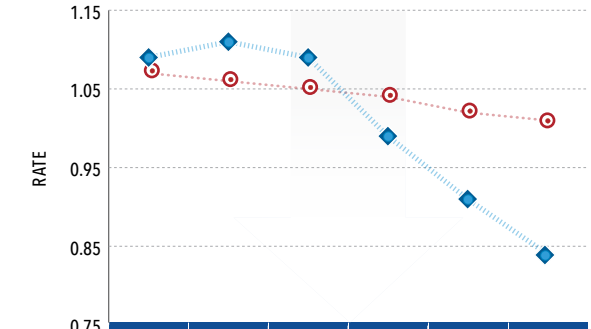
IT technician performing cyber security diagnostics.

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 1.01 fatal accidents per 100,000 flight hours in FY 2017.	
FY 2017 Target	No more than 1.01 fatal accidents per 100,000 flight hours in FY 2017.
FY 2017 Result	**0.84** *(Preliminary estimate until the final result can be confirmed by the NTSB in March 2019)*
Public Benefit	By tracking the rate of fatal GA accidents per flight hours, the FAA can more accurately identify trends, indicating a decrease or increase of potential safety risks.

GENERAL AVIATION FATAL ACCIDENT RATE

Fatal accidents per 100,000 flight hours



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Actual	1.09	1.11	1.09	0.99	0.91[1]	0.84[2]
Target	1.07	1.06	1.05	1.04	1.02	1.01
Target Achieved?	✗	✗	✗	✓	✓	✓

1 Preliminary estimate until 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.

2 Preliminary estimate until result can be confirmed by NTSB in March 2019. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.

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. As an agency, we are continuously trying to work with the greater GA community and industry to reduce the number of general aviation fatalities. Our goal is to reduce the GA fatal accident rate by 10 percent over a 10-year period (2009-2018).

In FY 2017, with a rate of 0.84 fatal accidents per 100,000 flight hours, we achieved our goal of not exceeding a rate of 1.01. The results will not be considered final until confirmed by the NTSB in FY 2018. This marks the third year in a row that we have achieved our goal in this area. We are proud of this accomplishment and are committed to reducing the GA fatality rate even further.

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 reaches out to the general aviation community to educate pilots and other stakeholders on the benefits of sharing (in a protected, non-punitive manner) collected safety data 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 initiative 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.

In FY 2017, the GAJSC focused on safety enhancements related to system component failures (engine-related) and loss of control, which are both outreach topics identified in a 2014 study. Loss of control is defined as significant unintended departure from stable, expected flight paths while inflight. To date, 39 safety enhancements have been developed, with over 20 completed. Additionally, targeted outreach on both of these areas have been organized into a topic of the month program. FAA and industry groups coordinate their communications and provide educational content on these monthly topics. The GAJSC recently chartered its next working group to study the second largest cause of fatal GA accidents, controlled flight into terrain. Controlled flight into terrain is defined as a collision or near collision with terrain, water, or an obstacle without any indication of loss of control. The working group will begin its work in early FY 2018.

To spread safety awareness throughout the aviation community we conduct approximately 4,800 live safety seminars and over 100 webinars per year. In addition, we send email notifications, airmen notices, and FAA Safety Team (FAAST) blasts to approximately 250,000 airmen who request them from the ***www.FAASafety.gov*** website, which has a total of over 800,000 users. We use social media like Twitter and Facebook as well as provide airman counseling, presentations/booths at aviation events, and safety materials on the ***www.FAASafety.gov*** website. Of the 255 on-line courses that we provide, we've had over 1,060,000 course completions, including close to 39,000 Unmanned Aircraft Systems (UAS) course completions. Safety outreach has played a major role in accident reduction and continues to be key to progress.

ON THE RADAR

The FAA Q51 Mobile tower is loaded onto a Russian AN-124

A mobile radio transmitter/ receiver deployed at the Tampa Technical Support Center.

The newest Large Mobile Air Traffic Control Towers.

FAA TOWERS ON THE MOVE

An airport traffic control tower is one of the most recognizable buildings in the world. Towering above stretches of flat ground, even a small one dominates the landscape it inhabits. Like a lighthouse, both its shape and its function are immediately identifiable. And like a lighthouse, a tower is often an enduring and familiar local landmark.

That's why it might surprise some to learn that mobile towers can also be moved from place to place. The FAA needs mobile assets, including towers, primarily to respond to emergency situations including forest fires, floods, and earthquakes. The program grew out of the FAA's response to the devastating earthquake that struck Haiti in 2010. After Hurricane Irma struck in September, the United States Air Force flew an FAA mobile air traffic control tower from Idaho to St. Thomas. The tower and FAA team provided vital communication efforts and support for relief flights by numerous branches of the U.S. armed services and the Federal Emergency Management Agency, as well as the limited non-military flights that were possible shortly after the hurricane struck. Also, this summer, the FAA helped the U.S. Forest Service fight fires in Arizona, Utah, and Idaho through the deployment and staffing of mobile towers. The mobile tower controllers provided service to the pilots of firefighting aircraft — helicopters and planes — from small airports in remote locations affected by the forest fires.

FAA's mobile asset program maintains and deploys more than 100 pieces of mobile, temporary equipment. The program even has a mini-tower packed inside a suitcase that can be deployed on a desktop. In addition to providing support during disaster recovery, the program also augments air traffic services when needed on a temporary basis. FAA has deployed mobile air traffic control facilities and equipment to supplement flight operations during events that range from political conventions to the Super Bowl. These deployments help localities manage temporary surges in air traffic to ensure the safety of the flying public.

The program is also developing large mobile air traffic control towers housed in 53-foot semi-trailers. These new trailers will be more capable than the existing mobile towers, will have 50 percent more equipment rack space, and will elevate the controller's position an additional six feet. They will also be transportable by large military transport aircraft.

Commercial Space and Reentry Launch Accidents

No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.	
FY 2017 Target	No fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.
FY 2017 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.

COMMERCIAL SPACE LAUNCH ACCIDENTS

Number of fatalities, serious injuries, or significant property damage to the uninvolved public during space launch and reentry activities.

	Target	Actual	Target Achieved?
FY 2017	0	0	✓
FY 2016	0	0	✓
FY 2015	0	0	✓
FY 2014	0	0	✓
FY 2013	0	0	✓
FY 2012	0	0	✓

In 2017, a private space company conducted the first successful launch of a U.S. launch vehicle using an autonomous flight safety system, removing a person from the decision to terminate the rocket's flight based on safety concerns. The same company completed its sixteenth successful "fly-back" of its first stage booster. Another private space company launched the maiden flight of its rocket with an engine made largely of 3-D printed components. You might think that the National Aeronautics and Space Administration (NASA) or some other government space agency launched these missions, but these were done by private industry under a license or permit from the FAA's Office of Commercial Space Transportation.

It is FAA's mandate 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 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 2017 there were 22 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 310 launches and over 10 reentries. The FAA oversees 10 active launch or reentry sites (spaceports), and several active safety approvals.

The growth in the industry has been tremendous in recent years. Since 2010, the FAA has seen an increase of approximately 300 percent in the number of launch and reentry operations it oversees; a 150 percent increase in the number of licenses and permits it issues; and an 800 percent increase in the number of inspections FAA performs to ensure safety compliance.

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 moon, 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.

To view FAA's fact sheet on commercial space transportation activities, please visit ***https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=19074***.

Blue Origin launch vehicle shown landing. Crew module has separated and lands via parachute. Both are intended to be reusable.

Unmanned Aircraft System (UAS) Priorities

Achieve three milestones identified as FY 2017 UAS priorities	
FY 2017 Target	**Milestone 1:** Convene and facilitate an Aviation Rulemaking Committee (ARC) on Unmanned Aircraft System identification and tracking, and obtain concurrence from the Administrator and Deputy Administrator on the upcoming final rule for small UAS registration. **Milestone 2:** Respond to 80 percent of waiver applicants under the small UAS regulation (received between October 1, 2016 and June 30, 2017) within 90 days of receipt with either an approval of waiver, denial of waiver, or request for additional information, for the first 9,800 waiver applications received. **Milestone 3:** Respond to 80 percent of authorization applicants under the small UAS regulation (received between October 1, 2016 and June 30, 2017) within 90 days of receipt with either an approval of authorization, denial of authorization, or request for additional information, for the first 9,800 authorization applications received.
FY 2017 Result	**Achieved all three milestones identified as FY 2017 UAS priorities.**
Public Benefit	The American public experience and expect a high standard of safety in aviation. As unmanned aircraft use increases in both volume and complexity, the FAA will preserve our high safety standards by managing the new sources of risk created as UAS are integrated into the national airspace.

The FAA's vision for fully integrating UAS into the national airspace entails UAS operating harmoniously, side-by-side with manned aircraft in a safe and secure manner. This vision goes beyond the accommodation practices in use today, which largely rely on segregating UAS from manned aircraft to maintain the safety of the national airspace. As more uses for drones are developed, the FAA intends to work incrementally to introduce UAS into the national airspace after careful consideration of the safety of people and property both in the air and on the ground.

The FAA has included a new performance measure in this year's PAR in order to reflect the priority of its UAS integration efforts.

The FAA's target for FY 2017 is to achieve three milestones that have been identified as high priorities among the agency's UAS integration work. The first milestone is to convene and facilitate an Aviation Rulemaking Committee (ARC) on Unmanned Aircraft System identification and tracking, and obtain concurrence from the Administrator and Deputy Administrator on the upcoming final rule for small UAS registration. The work described in this first milestone will help the FAA address security concerns related to the operation of UAS. The ARC is comprised of members of the UAS industry, traditional aviation, academia, standards bodies, and law enforcement and security communities, and it will develop criteria for remotely identifying operators and owners of small UAS. As the volume of UAS operations increases, the ability to remotely identify small UAS will allow law enforcement agencies to identify the nature, purpose, and owner of each small UAS in the field. Registration of small UAS will also help connect an aircraft with its operators when rules are not followed. The final rule will incorporate comments received during previous steps in the rulemaking process, including feedback provided by national security agencies.

The FAA's second and third milestones relate to its small UAS rule. Under this rule, operators can fly their UAS under certain conditions, including keeping the vehicle within the operator's line of sight, flying during daylight hours, and never flying over people. The FAA issues authorizations that allow UAS to fly in controlled airspace under the rules established by the agency's recent small UAS regulations, and it issues waivers to allow UAS to fly special operations that deviate from the standard rules such as flights at night, over people, beyond the operator's visual range, and using multiple aircraft.

Meeting the second and third milestones required the FAA to make timely responses to authorization and waiver requests under the agency's small UAS rule. Specifically, for the second milestone, the FAA had to respond to 80 percent of the first 9,800 applicants for a waiver received between October 1, 2016, and June 30, 2017, within 90 days of receipt. For the third milestone, the FAA had to respond to 80 percent of the first 9,800 applicants for an authorization received between October 1, 2016, and June 30, 2017, within 90 days of receipt. Responses include an approval of the waiver or authorization, denial of the waiver or authorization, or request for additional information.

The FAA met its FY 2017 target, achieving all three of these milestones.

STRATEGIC PRIORITY: DELIVER BENEFITS THROUGH TECHNOLOGY AND INFRASTRUCTURE

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 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
Data Communications ✦ Deploy at remaining nine sites for a cumulative total of 55 towers.	This is a new measure for FY 2016	This is a new measure for FY 2016	46	9	9	✓	TBD
Major System Investments Maintain 90 percent of major baselined acquisition programs within 10 percent of their current acquisition cost, schedule, and technical performance baseline as of the end of FY 2017.	95%	100%	95%	90%	95%	✓	90%
Carbon Neutral Goal for Domestic Operations Maintain carbon dioxide emissions from domestic aircraft operations below the 2005 level of 132.7 teragrams.	This is a new measure for FY 2017	This is a new measure for FY 2017	This is a new measure for FY 2017	132.7 teragrams	120.4 teragrams	✓	TBD
Noise Exposure Reduce the number of people exposed to significant aircraft noise to less than 315,000 in calendar year 2017.	321,000	340, 000	343,000	315,000	408,000	✘	300,000
Unmodified Audit Opinion Obtain an unmodified audit opinion with no material weakness on the agency's financial statements.	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/no material weakness	Unmodified audit opinion w/1 material weakness	✘	Unmodified audit opinion w/no material weakness

✦ This performance measure supports a DOT Agency Priority Goal. ✓ Target met ✘ Target not met

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 55 airports by the end of FY 2017.	
FY 2017 Target	Deploy at remaining nine sites for a cumulative total of 55 towers.
FY 2017 Result	**Data Comm was deployed at remaining nine sites for a cumulative total of 55 towers.**
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 resources.

DATA COMMUNICATIONS (DATA COMM) PROGRAM

	Target	Actual	Target Achieved?
FY 2017	9[1]	9	✓
FY 2016	6	46	✓

1 This target was amended since the FY 2016 PAR, which showed a target of 10 remaining sites. However, Data Comm was deployed at one of those 10 sites in September 2016, and was included in the 46 deployments listed for FY 2016.

The Data Communications (Data Comm) program is a major acquisition for the FAA and an essential component of the agency's NextGen effort. Data Comm 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 for clearances, instructions, advisories, flight crew requests and reports. Controllers can issue a departure clearance to several aircraft at once or to individual aircraft as necessary, along with instructions, advisories, flight crew requests and reports. The result is faster taxi out times and reduced delays while improving controller and pilot efficiency, reducing radio frequency congestion, and reducing the likelihood of communication errors that can occur from voice exchange.

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

Segment 1 Phase 1 will provide data communications services on the airport surface and Segment 1 Phase 2 will deliver data communications services to the en route domain, 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 successfully completed deployment in December 2016. This early completion of Data Comm implementation was in response to the NextGen Advisory Committee (NAC) identification of Data Comm as a priority and a request for the FAA to significantly accelerate the tower deployment to all sites by the end of calendar year 2016. The FAA was also able to achieve this accelerated pace because the cost of installation was lower than expected. Looking ahead, we're planning to deliver en route services in our first operational center in 2019. More information about Data Comm can be found at: ***http://www.faa.gov/nextgen/programs/datacomm/***.

Data Comm unit, including keypad, in the cockpit of a Boeing 777. Photo taken at a Data Comm event at Washington Dulles International in September 2016.

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 2017.	
FY 2017 Target	90 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 2017.
FY 2017 Result	**95 percent of the major baselined acquisition programs were within 10 percent of their current cost, schedule and technical performance baseline.**
Public Benefit	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.

MAJOR SYSTEMS INVESTMENTS

Maintain 90 percent of major system investments within budget

	Target	Actual	Target Achieved?
FY 2017	90%	95%	✓
FY 2016	90%	95%	✓
FY 2015	90%	100%	✓
FY 2014	90%	95%	✓
FY 2013	90%	90%	✓
FY 2012	90%	100%	✓

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 2017, the FAA achieved this goal, with a total of 95 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 the 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
- Complexity
- Political Sensitivity
- Security
- Risk level
- 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 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.

Carbon Neutral Goal for Domestic Operations

Maintain carbon dioxide emissions from domestic aircraft operations below the CY 2005 level of 132.7 teragrams through CY 2020.	
FY 2017 Target	Maintain carbon dioxide emissions from domestic aircraft operations below the CY 2005 level of 132.7 teragrams.
FY 2017 Result	**120.4 teragrams**
Public Benefit	Aviation is currently viewed as a relatively small contributor to emissions that have the potential to influence air quality and upper atmospheric composition. Carbon dioxide (CO_2) emissions are directly related to the fuel burned during the aircraft's operation. As air traffic grows, this contribution will increase without improvements.

This year, the FAA is replacing its performance measure for energy efficiency with one that more directly measures aviation's role in reducing emissions. The FAA had previously reported on efforts to improve national airspace energy efficiency by at least 2 percent each year. Energy efficiency was calculated as fuel burned per revenue tonne kilometer flown. This year, the FAA is beginning to report on its efforts to keep carbon dioxide emissions from domestic aircraft operations through CY 2020 below the CY 2005 level of 132.7 teragrams.

The FAA's new measure for carbon dioxide emissions was introduced in order to more directly measure and track overall improvements in fuel efficiency that come from aircraft and engine technology and optimizations in aircraft routing despite a growth in the number of domestic operations.

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. This information makes it possible to assess aviation's emissions contribution.

The primary greenhouse gas from aircraft operations is carbon dioxide, which is directly related to the amount of fuel consumed. The amount of carbon dioxide emissions across the national airspace depends heavily upon commercial airline operating procedures and day-to-day operational conditions, including the condition of the airlines' 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 relies on improving the 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 FAA 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.

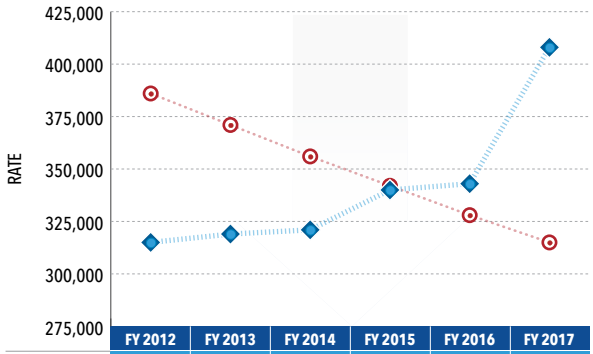
These goals complement activities in technology, operations, policy, science and metrics, and tools being developed under NextGen. The FAA is also working to better quantify aircraft noise and emissions and their environmental impacts, develop cost-beneficial impact mitigation options, and to develop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

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 2017 Target	Reduce the number of people exposed to significant aircraft noise to less than 315,000 in calendar year 2017.
FY 2017 Result	**408,000**
Public Benefit	The public benefit is reduced exposure to unwanted aircraft noise and increased capacity, thus reducing airport congestion and delays.

NOISE EXPOSURE

Number of people exposed to significant aircraft noise



	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
Actual	315,000	319,000	321,000	340,000	343,000	408,000
Target	386,000	371,000	356,000	342,000	328,000	315,000
Target Achieved?	✓	✓	✓	✓	✗	✗

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 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 much lower, even though the number of passenger enplanements has increased significantly since that time.

In FY 2017, with a result of 408,000 people exposed to aircraft noise, the FAA did not achieve our noise exposure goal of keeping the number of people exposed to aircraft noise below 315,000. For this goal, FAA defines significant aircraft noise as being exposed to day-night average sound level (DNL) of 65 decibels (dB) 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 a.m., and between 10 p.m., 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 caused by an aircraft.

Although the FAA has succeeded in achieving this goal in the past, the number of people exposed to noise fluctuates every year, but has been increasing the last several years. 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 2016 to FY 2017 was due to several factors including an increase in overall air carrier operations, 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 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.

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 is a public-private partnership in which manufacturers develop lower-noise aircraft through technologies such as noise-reducing engine nozzles. More information about the CLEEN program can be found at: ***https://www.faa.gov/about/office_org/headquarters_offices/apl/research/%20aircraft_technology/cleen***

The agency is also using Performance Based Navigation (PBN) technology to help reduce aviation noise. Using this technology allows an aircraft to follow 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. While the precise nature of PBN flight paths concentrates noise over a smaller geographic area, it also gives pilots the ability to maneuver around congested neighborhoods and stay on routes designed to minimize noise.

Unmodified Audit Opinion with No Material Weakness

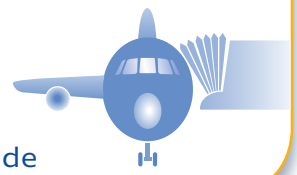
Obtain an unmodified audit opinion with no material weakness on the agency's financial statements.	
FY 2017 Target	Obtain an unmodified audit opinion with no material weakness on the agency's financial statements.
FY 2017 Result	**Unmodified audit opinion with one material weakness**
Public Benefit	The public benefits by being reasonably assured, by independent auditors, that the consolidated financial statements of the FAA are presented fairly, in all material respects.

UNMODIFIED AUDIT OPINION

Obtain an unmodified audit opinion with no material weakness on the agency's financial statements

	Target	Actual	Target Achieved?
FY 2017	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion	✘
FY 2016	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	✓
FY 2015	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	✓
FY 2014	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	✓
FY 2013	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	✓
FY 2012	Unmodified Audit Opinion with no Material Weakness	Unmodified Audit Opinion with no Material Weakness	✓

The FAA **OPERATES** and **MAINTAINS FACILITIES** and **EQUIPMENT** at almost **13,000** **SITES** nationwide



The unmodified audit opinion target is a critical indicator of financial condition, because it independently assesses the fair presentation of FAA's financial statements, and in connection with that process, considers the internal control over financial reporting.

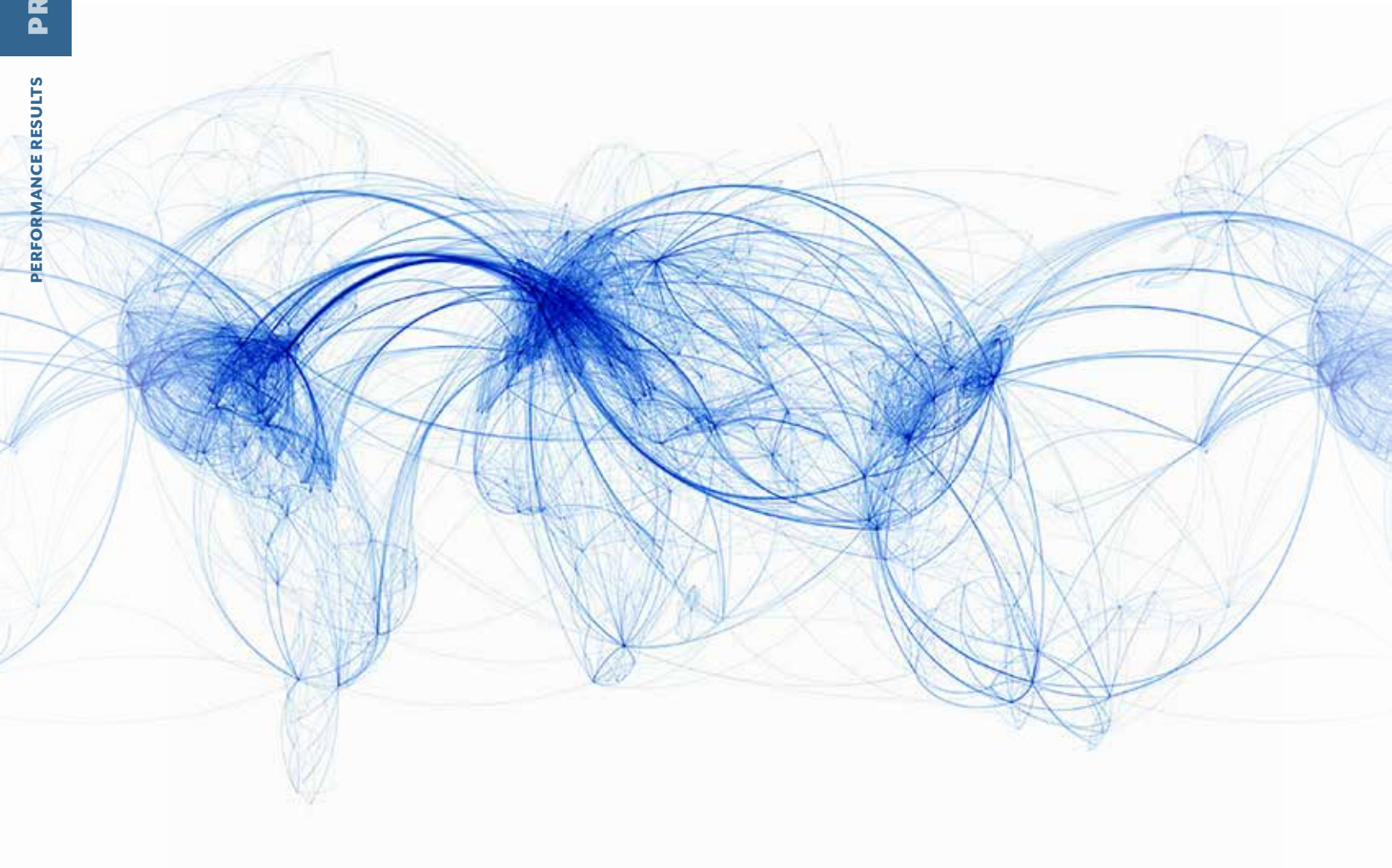
In FY 2017, for the eleventh consecutive year, FAA received an unmodified audit opinion on its consolidated financial statements. An unmodified audit opinion means that the financial statements are presented, in all material respects, in accordance with U.S. generally accepted accounting principles. However, this year we changed our method of estimating environmental decommissioning liabilities, introducing an error to our third quarter unaudited financial statements, and resulting in a material weakness as a consequence. Therefore, this performance measure, which requires both an unmodified audit opinion and no material weaknesses, was not achieved in FY 2017. We have corrected the environmental decommissioning liability estimation methodology and we have additionally strengthened the controls and internal FAA communications surrounding changes to estimation methodologies.

STRATEGIC PRIORITY: ENHANCE GLOBAL LEADERSHIP

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.**

Performance Measure	FY 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
Enhance Global Leadership Add data-based priorities at the global and regional levels to the FAA International Strategy for future FAA engagement and support.	This is a new measure for FY 2017	This is a new measure for FY 2017	This is a new measure for FY 2017	Add priorities to int'l strategy	Priorities added to int'l strategy	✓	TBD

✓ Target met ✘ Target not met



Visualization of airline routes across the globe.

Enhance Global Leadership

Add data-based priorities at the global and regional levels to the FAA International Strategy for future FAA engagement and support, and identify next steps for implementation of those data-informed priorities.	
FY 2017 Target	Add data-based priorities at the global and regional levels to the FAA International Strategy for future FAA engagement and support.
FY 2017 Result	**The FAA added data-based priorities at the global and regional levels to its International Strategy priorities to guide future FAA global engagement and support.**
Public Benefit	Using an integrated data-informed approach will help the FAA better target resources to shape global standards and assist countries to improve aviation safety, efficiency, and environmental sustainability to the benefit of the U.S. flying public.

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 safety, efficiency, and environmental sustainability of the global aviation system. In addition, U.S. citizens traveling abroad and flights between the United States and other countries benefit from increased safety due to FAA expertise in developing international regulations and standards. The FAA is introducing a new performance measure this year to reflect the agency's progress.

Engagement with aviation partners on a global and regional level and outreach among the broader aviation community are critical elements of the FAA's Global Leadership Initiative. The actual form of engagement is dependent upon the unique characteristics of the regional and global communities with which the FAA interacts, as well as the data and factors influencing each situation. At a time of rapid change, with new players in the global aviation community and new technologies, products, and business models, the FAA continues to adapt to this shifting landscape with new methods of engagement and outreach.

The FAA maintains an International Strategy that focuses on both global and regional levels. The International Strategy describes how the FAA is adapting its international efforts to address evolving global challenges and achieve U.S. aviation objectives. This strategy also provides a multi-year approach for coordinating and executing FAA's international mission. The International Strategy is supported by annual strategic plans that track activities and progress at both the global and regional levels.

The FAA uses an approach that is informed by data and involves collaboration across the agency to make decisions about how it engages globally and how it can better target resources. Last year, the FAA created an expansive database of global aviation information to inform and drive global resource allocations and engagement decisions. For example, analysis of this database showed the value in a new agency focus on the Caribbean. The FAA launched the Caribbean Initiative to improve airspace efficiency and airport safety 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, focusing attention and resources on this region has never been more important.

In FY 2017, the FAA continued to refine its focus on international engagement by outlining priorities in its International Strategy at the global and regional levels. Next year, the FAA will continue to expand this effort by identifying, tracking and executing key activities to accomplish U.S. goals within the priorities defined during this past year. New performance measures for the Global Leadership Initiative in FY 2018 will further the use of data analysis to inform the FAA's resource allocations related to the agency's international engagement.

In addition, in FY 2017, the FAA's global and regional engagements resulted in several accomplishments. As part of the FAA's Caribbean Initiative, the FAA conducted airport safety workshops and improved air traffic controller communications between the FAA and air traffic control facilities in the Caribbean. The increased communication, through daily operational calls, proved to be extremely effective in coordinating operations and relief assistance during and after Hurricane Irma. The U.S. was approved as a "Dialogue Partner" to the Association of South East Asian Nations (ASEAN), which is comprised of 10 countries. This new partnership will provide an opportunity for FAA to collaborate with ASEAN nations collectively on safety, efficiency and modernization efforts in the region. Finally, working through a partnership between the European Union, Canada, Brazil and the U.S., the FAA has agreed to expedited technical reviews of certain avionics products manufactured in these countries. They have likewise agreed to expedited reviews of certain U.S. avionics products being exported to their countries. This new arrangement will reduce the time and cost of bringing these products to market.

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

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 2014 Results	FY 2015 Results	FY 2016 Results	FY 2017 Target	FY 2017 Results	FY 2017 Status	FY 2018 Target
FedView Rankings FAA is ranked in the top 28% of federal agencies in the Best-Places-to-Work FedView rankings.	50%	43%	53%	28%	TBD[1]	TBD[1]	TBD

1 Results for FY 2017 will be available in December 2017.

✓ Target met ✘ Target not met

Student controllers in training at the FAA Academy, Oklahoma City, Okla.

FedView Rankings: Best Places to Work

FAA is ranked in the top 28 percent of federal agencies in the Best-Places-to-Work (BPTW) FedView rankings.	
FY 2017 Target	FAA is ranked in the top 28 percent of federal agencies in the Best-Places-to-Work FedView rankings.
FY 2017 Result	**TBD** *(Results will not be available until December 2017)*
Public Benefit	Improvements in FedView results that are used to calculate the rankings would indicate that FAA is managing its workforce better. Research indicates that improved employee survey results are associated with higher organizational performance.

FEDVIEW RANKINGS: BEST PLACES TO WORK[1]

FAA is ranked in the top 28 percent of federal agencies in the Best-Places-to-Work FedView rankings.

	Target	Actual	Target Achieved?
FY 2017	28%	TBD[2]	TBD[2]
FY 2016	31%	53%	✘
FY 2015	34%	43%	✘
FY 2014	37%	50%	✘
FY 2013	75%	40%	✓
FY 2012	75%	39%	✓

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 2017.

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. The survey is also subject to sampling errors. For these reasons, it may take several years before an overall performance trend emerges.

The Partnership for Public Service obtains FedView survey data from the Office of Personnel Management and calculates the Best Places to Work (BPTW) Index. This index, which is based on averaging the positive responses to three items from FedView and weighting the score according to a proprietary formula 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 on the BPTW by 2018. For FY 2017, the FAA's target is to be ranked in the top 28 percent.

The results for the FY 2017 survey will not be available until December 2017. Due to the publication date of the FY 2017 PAR, the FAA's result will not be included in this document. However, we plan to include the result in next year's PAR. The results of the FY 2016 survey became available in December 2016. Our FY 2016 result saw FAA's ranking decrease 10 percentage points, from being in the top 43 percent in FY 2015 to the top 53 percent in FY 2016. Since FAA's ranking dropped, the agency did not achieve the goal in FY 2016, which was to be ranked in the top 31 percent. FAA's lower ranking in 2016 can partially be explained by the fact that our BPTW Index score was unchanged from 2015 and 73 percent of other agencies that were ranked with FAA increased their 2016 BPTW scores.

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 Government Accountability Office's (GAO) Strategic Issues Group participated in the agency's 2017 Best Practices Roundtable and shared government and private sector best practices with FAA leadership to strengthen employee engagement.

The FAA's third strategic priority, Empower and Innovate with the FAA's People, emphasizes transformational leadership practices to strengthen workforce engagement. FAA's new Strategic Leadership Capabilities form the foundation of the agency's leadership development strategy and include engagement-related leadership competencies such as developing others, collaboration, communication, innovation, and diversity and inclusion. The FAA Leadership and Learning Institute (FLLI) developed 17 core management and leadership courses integrating these new strategic leadership capabilities.

Since the first year of operation (2014), FLLI trained 8,076 students in instructor-led courses and had 33,801 web-based training completions. FAA's new Foundational Leadership Curriculum combines the latest in learning best practices with

the essential knowledge and skills FAA managers need to be successful leading the FAA. This year-long training program allows new managers to grow as leaders, develop and engage their employees, and build relationships with fellow leadership peers.

In FY 2016, FAA completed agency-wide implementation of the Corporate Onboarding Program. 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. Overall, new hire satisfaction with the FAA's orientation and onboarding process has improved 8 percent since the implementation of the Corporate Onboarding Program. FAA's Corporate Onboarding Program also solicited 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. These tools and resources have been incorporated into the Onboarding process throughout FY 2017, including manager checklists, a benefits webinar, and a comprehensive new hire handbook.

In addition, a variety of agency-wide steps have been taken to foster communication, including holding regular executive town hall meetings, known as Leadership Path to Success events, enhancing the new employee onboarding website, publishing articles about new hires and engagement, leading site visits to area facilities in the Washington region to see the mission in action, and nurturing employee opportunities for collaboration and participation in work groups. These communication innovations facilitate the sharing of information and improve workforce engagement.

ON THE RADAR

GE aviation engineer installs 3-D printed aircraft components on the GE90 turbofan jet engine.

3-D PRINTING BRINGS CHANGES TO THE AVIATION INDUSTRY

Aircraft and component manufacturers are beginning to use an industrial-grade 3-D printing process called Additive Manufacturing (AM) to produce complex parts. Unlike conventional manufacturing processes where parts are machined and assembled, AM allows a manufacturer to build complex geometry from 3-dimensional models, usually layer upon layer. AM can reduce the number of parts needed, reduce material waste, and improve performance due to design improvements.

Due to its multiple benefits, the use of AM is rapidly expanding in aviation and other industries. For instance, GE is working on developing and certifying the world's "most printed" Advanced Turboprop engine in which 855 normally made parts will be replaced with just 12 3-D printed components. Boeing is in the process of obtaining FAA certification for its first 3-D printed titanium structural, load-bearing part to be used in its 787 Dreamliner.

FAA's certification and oversight process must ensure that aircraft parts produced with AM will perform as well or better than those manufactured using traditional methods. To meet this requirement, FAA chartered a national team tasked to develop a certification process for 3-D printed parts called the AM Certification Roadmap, and this effort is well underway. Also, FAA is creating guidance documents on AM technology and training engineers and technicians on the creation and use of 3-D printed parts.

AM is also becoming increasingly popular with the commercial space industry as a means of reducing the cost of launches, and increasing the availability of launch vehicles to serve all space sectors. Earlier this year, under an FAA license, Rocket Lab USA conducted the maiden launch of its Electron rocket using an engine made largely of 3-D printed components. Also, companies such as SpaceX, and Aerojet Rocketdyne, have successfully made, tested, and flown 3-D printed launch vehicle engine components. Currently, the International Space Station hosts a 3-D printer to make simple replacement parts, tools, and medical devices.

QUALITY ASSURANCE AND COST CONTROLS

Verification and Validation of Performance Information

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, 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 clearing house 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, FAA also undertakes more formal program evaluations in the planning, environmental, or financial areas.

In FY 2017, the FAA undertook several program evaluations, including an evaluation of regional implementation of 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, published in 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 has begun implementation of program improvements based on the findings of a comprehensive review of the PFC program completed in FY 2014. This program review 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 2017 COST CONTROL PROGRAM RESULT
(Dollars in Thousands)

Activity	FY 2017 Savings Estimate	Actual FY 2017 Savings	FY 2017 Savings as Percent of Estimate
National Wireless Program	$1,300	$1,824	140%
Worker's Compensation	$7,000	$7,328	105%
Administrative Space Reduction	$347	$12	3%
SAVES	$38,000	$33,695	89%
Lean Maintenance & Revalidation Program	$530	$552	104%
Total	**$47,176**	**$43,411**	**92%**
TARGET	**$42,459**		

National Wireless Program. This program manages the ever growing mobile connected workforce and achieves cost savings by leveraging inventory volume and size of the contract. Through July, the current fiscal year savings for this activity were $1.82 million.

Workers' Compensation. The FAA has saved a total of $158 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 FY 2017, the FAA saved $7.33 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:

1. 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.
2. 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.

Administrative Space Reduction. The FAA is implementing and managing programs that drive the efficient and economical use of FAA's real property assets. Annually since FY 2014, the FAA has established a goal to achieve a square footage reduction in its administrative space portfolio by identifying and implementing space consolidation, relocation, and colocation initiatives. Due to delays, FY 2017 savings are $12,000 with the remaining to be realized in FY 2018.

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. In FY 2017, the SAVES contracts achieved $33.7 million in cost savings, and a total savings of more than $300 million since program implementation in 2006. SAVES contracts have produced the following relative savings rates for 2017:

- 65.0 percent for IT commercial off-the-shelf software.
- 31.1 percent for IT hardware.
- 4.3 percent for office equipment.
- 0.3 percent for maintenance, repair, and operations and delivery services.

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. In FY 2017, this saved $0.55 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, 2015 and 2016:

Air Traffic Organization Cost per Operation

2015	2016
$ 83.80	$ 83.51

In FY 2016, the Air Traffic Organization Cost per Operation declined slightly by 0.4 percent over FY 2015. This was driven by a one percent reduction in Air Traffic Organization costs and a two 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 two quarters of FY 2016 and FY 2017, ending March 31:

Air Traffic Organization Cost per Operation

2016	2017
$ 85.06	$ 83.59

For the most recent partial period available, the first two quarters of FY 2017, the Air Traffic Organization Cost per Operation declined by two percent over the same period a year earlier. This was driven by a one percent reduction in Air Traffic Organization costs and a 0.4 percent increase 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, 2015 and 2016:

Overhead Rates

2015	2016
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/Reentry. This metric provides trend data for the average regulatory cost per launch or reentry 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 reentry operations.

Reduce 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. Last year, we moved into the next phase of the initiative, known as "Reduce the Footprint." Under these initiatives, the FAA's office and warehouse space has decreased by 745 thousand square feet from FY 2015 to FY 2016, the latest date for which information is available, and reducing associated operations and maintenance costs by more than $1.6 million over the same period. We continue to 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 Reduce the Footprint efforts, see pages 129–130.

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 762 procurement packages with an estimated total value of $92 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 Acquisition and Business Services, 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.

Researchers performing final test cell instrumentation checks in preparation for testing at the William J. Hughes Technical Center. (Propulsion and Airpower Engineering and Research Lab).

MIKE MONRONEY AERONAUTICAL CENTER (MMAC)

THE MIKE MONRONEY AERONAUTICAL CENTER (MMAC) iin Oklahoma City, Oklahoma, is home to the FAA's second largest concentration of employees, performing mission critical activities to support a diverse customer base. The MMAC complex is comprised of over 130 buildings providing 3.3 million square feet of industrial, administrative, and laboratory space. The MMAC's workforce delivers unique functions across the agency: technical training through MMAC's Academy; centralized supply chain management through MMAC's FAA Logistics Center; field site services such as maintenance, repair, overhaul, and distribution; financial management shared services across government through MMAC's Enterprise Services Center; aviation medical and human factors research through MMAC's Civil Aerospace Medical Institute; and registration of the nation's civil aircraft, including Unmanned Aircraft Systems (UAS), and all official airman records through MMAC's Registry. The MMAC is the FAA's only cross-government shared services provider and is driving efficiency and cost reductions in over 60 federal agencies through shared services in technical training, logistics, and financial services.

- The MMAC's Academy improved the delivery of technical training through classroom modernization, expansion of distance learning, blended learning, and field conducted learning.
  - By leveraging new technology, the Academy expanded the virtual desktop infrastructure (VDI) to expand virtual learning. Multiple classrooms were equipped with VDI terminals. The new virtual instructor-led training program allows instructors and students to conduct synchronous training while participating from various locations across the country.
  - The Academy converted an instructor led concepts course to interactive distance learning. This supports the agency's Technical Operations training transformation effort to move toward more web-based training.
  - The Academy expanded FAA's global influence through partnerships with several countries to assist in the development and delivery of aviation safety training in locations from Asia to Africa.
- The MMAC's FAA Logistics Center provided critical field support to the FAA by distributing over 615,000 parts, repairing and testing over 35,000 parts, and conducting over 420 site restorations for radar and navigation equipment annually.
  - As a shared services provider, other government agencies utilize the Logistics Center's unique capabilities. The Logistics Center provides program management, engineering support, supply chain management, and on-site restoration services for Department of Defense surveillance and navigational equipment and U.S. Customs and Border Protection mobile surveillance systems and towers. Through these partnerships, the Logistics Center plays a vital role in protecting our nation's national security interests and borders while driving cost reduction across the federal government.
- The MMAC Enterprise Services Center (ESC) delivers federal financial and technology services for over 60 different federal agencies, processing millions of financial transactions annually.
  - ESC led the Department of Transportation's implementation of the Digital Accountability and Transparency Act of 2014 requirements. ESC was among the first across the federal government to successfully complete submission of data to the government website, *USASpending.gov*.
  - ESC completed baseline functionality for an electronic invoicing system to reduce invoice processing costs and time to make payments to vendors, standardize business processes, and improve services to customers and vendors.

FINANCIAL RESULTS

There are **14,050** air traffic controllers ...

... working at **518** airport traffic control towers in the U.S.

Air traffic controller at work at the tower at Washington Reagan National Airport.

A MESSAGE FROM THE CHIEF FINANCIAL OFFICER

ALLISON W. RITMAN

The FAA safely orchestrates thousands of flights and millions of passengers through our national airspace every day. At any given time, there are approximately 5,000 aircraft in the sky or on the ground being guided by FAA air traffic controllers. Air traffic controllers managed an average of 42,700 flights a day, which adds up to more than 15.6 million flights in a year! These flights arrive safely at their destination, connecting families and helping to grow our nation's economy. This amazing achievement is business as usual for the FAA.

We have made remarkable advances in recent years. For example, the FAA is integrating unmanned aircraft systems and the latest commercial space vehicles into what was already the world's most complex airspace system. We are enabling an even safer American general aviation community through technological innovation. We are also achieving key NextGen modernization initiatives in collaboration with our industry partners. We have completed En Route Automation Modernization (ERAM), the platform required for FAA to implement other NextGen capabilities such as Automatic Dependent Surveillance-Broadcast (ADS-B) and Data Communications. ADS-B is the FAA's satellite-based successor to radar, and uses GPS technology to share precise aircraft location and flight information. Data Communications enables controllers to send digital instructions and clearances to pilots, improving efficiency and reducing opportunities for error.

The FAA has also proven itself as diligent steward of taxpayer dollars. Independent auditors have given our agency an unmodified audit opinion on our financial statements for the eleventh consecutive year. However, this year we changed our method of estimating environmental decommissioning liabilities, introducing an error to our third quarter unaudited financial statements, resulting in a material weakness. We corrected the estimation methodology and strengthened processes surrounding changes to estimation methods. Achieving financial excellence takes constant vigilance, but it is a responsibility that we take very seriously. Our award-winning Performance and Accountability Report exemplifies our commitment to fiscal responsibility and transparency. The FAA has been awarded the prestigious Certificate of Excellence in Accountability Reporting (CEAR) award thirteen times, and six special "best in class" CEAR awards since 2003.

I am proud of the FAA's track record. Serving as CFO, however, I see an opportunity for taking that record even further. Today, the FAA relies on federal excise taxes, paid primarily by commercial users of the national airspace, that are deposited to the Airport and Airway Trust Fund. In FY 2017, the trust fund provided approximately 95 percent of the FAA's funding. Because the FAA is part of the federal government, it is funded through the authorization and appropriation processes, which can result in programmatic and budget uncertainty that can stand in the way of innovation and investment. A non-federal entity governed by the users of our national airspace and funded by a system of user fees would provide a more

direct link between those users and investments in our aviation infrastructure. User fees would be more efficient and less burdensome than the patchwork of aviation taxes that supports the system today. Importantly, a board of directors that gives fair representation to all of the airspace users and stakeholders would give them a direct say in how investments are being made into the aviation system, and an opportunity to set priorities and support innovation.

The Administration has begun looking at just such a long-term plan for restructuring the FAA and how air traffic control services are provided in the U.S. This summer, the Administration published a set of principles that called for the creation of an independent, non-governmental organization to provide air traffic control services, while keeping the FAA's focus on critical safety oversight. Patterned off the highly successful NAVCanada model, the new air traffic control organization would be self-sustaining, financed through fees paid by the users of the national airspace. This concept would modernize the structure of air traffic control and the FAA, and let the United States join the more 60 countries that have successfully separated their day-to-day air traffic management responsibilities from government agencies.

The FAA looks forward to working with the Administration and Congress to ensure the U.S. remains the gold standard for aviation around the world.

Allison W. Ritman

ALLISON W. RITMAN
Acting Chief Financial Officer
November 9, 2017

OFFICE OF THE INSPECTOR GENERAL (OIG) QUALITY CONTROL REVIEW

U.S. Department of Transportation
Office of Inspector General

Memorandum

Subject: **ACTION:** Quality Control Review of Audited Consolidated Financial Statements for Fiscal Years 2017 and 2016, Federal Aviation Administration Report Number: QC2018006

Date: November 13, 2017

From: Calvin L. Scovel III
Inspector General

Reply to Attn. of: JA-20

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 2017 and 2016.

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, 2017, and September 30, 2016 (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 17–03, *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, 2017, and September 30, 2016, 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 (GAAP).

KPMG's Fiscal Year 2017 Audit Report, dated November 9, 2017

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

Material Weakness

Lack of Sufficient Controls Over Management's Calculation of the Environmental Clean-up and Decommissioning (EC&D) Liability Assumptions and Methodology and Management Approval of Journal Entries. Controls were not properly implemented and operating effectively over the estimation and recording of EC&D liability to ensure compliance with GAAP. More specifically, certain costs that did not comply with GAAP were included in the liability. Furthermore, a new cost model used for June 30, 2017 reporting was not supported by sufficient audit evidence and contained mathematical inaccuracies used in the final calculation of EC&D liability. Also, journal entry review was not performed at a level of detail or precision necessary to identify the deficiencies and preclude erroneous posting to the general ledger and interim financial statements. These errors resulted in a material overstatement of approximately $600 million in EC&D liability and related expense in the interim financial statements of June 30, 2017.

Significant Deficiency

Lack of Sufficient Controls Over the Accuracy of EC&D Facility Quantities Report. Controls were not properly implemented and operating effectively to ensure the accuracy of the EC&D facility quantities report used to calculate EC&D liability. The report included assets that did not exist and that were not included in the official property records. These errors required revision of the facility quantities report to remove 407 non-existent assets totaling approximately $22.8 million that, if not correct, could have resulted in a future misstatement of EC&D liability and related expenses.

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 five recommendations to strengthen FAA's controls over EC&D liability. FAA officials concurred with KPMG's recommendations, and committed to submitting to OIG, by December 31, 2017, 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 you have 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

#

cc: The Secretary
DOT Audit Liaison, M-1

INDEPENDENT AUDITORS' REPORT

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

Independent Auditors' Report

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

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, 2017 and 2016, 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. 17-03, *Audit Requirements for Federal Financial Statements*. Those standards and OMB Bulletin No. 17-03 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, Federal Aviation Administration as of September 30, 2017 and 2016, 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 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, 2017, 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.

Our consideration of internal control was for the limited purpose described in the preceding 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. However, as described in the accompanying Exhibits I and II, we identified certain deficiencies in internal control that we consider to be a material weakness and a significant deficiency.

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. We consider the deficiency described in Exhibit I Section A to be a material weakness.

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 consider the deficiency described in Exhibit II Section B to be a significant deficiency.

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 disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* or OMB Bulletin No. 17-03.

FAA's Responses to Findings

The FAA's responses to the findings identified in our audit are described and presented on page 82. 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.

KPMG LLP

Washington, DC
November 9, 2017

A. Lack of Sufficient Controls Over Management's Calculation of the Environmental Clean-up and Decommissioning (EC&D) Liability Assumptions and Methodology and Management's Approval of Journal Entries (JEs)

Background

The FAA has title to various real property and other assets for use in its operations. Prior to October 1, 1988, these assets may have been constructed with environmental containments, such as lead-based paint, asbestos, etc. The FAA develops an estimate for the environmental cleanup and decommissioning (EC&D) liability which encompasses 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 (PP&E) detailed records. During fiscal year (FY) 2017 the FAA's Office of Investment Planning and Analysis created a new cost model related to the EC&D liability. The cost model was created for the 13 largest asset types within the EC&D liability. The Office of Investment Planning and Analysis is responsible for the calculation of the liability and preparation of the manual journal entry to record the liability. The Director of the Office Investment Planning and Analysis reviews and approves the entry. The entry is then provided to the Financial Statements and Reporting Division for review and approval prior to recordation into the general ledger.

Criteria

Statement of Federal Financial Accounting Statement 6: *Accounting for Property, Plant, and Equipment* states:

> 85. 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.
>
> 86. Hazardous waste is a solid, liquid, or gaseous waste, or combination of these wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.
>
> 87. Cleanup may include, but is not limited to, decontamination, decommissioning, site restoration, site monitoring, closure, and postclosure costs.
>
> 88. This standard applies only to cleanup costs from Federal operations known to result in hazardous waste which the Federal Government is required by Federal, state and/or local statutes and/or regulations that have been approved as of the balance sheet date, regardless of the effective date, to cleanup (i.e., remove, contain or dispose of).
>
> 95. The estimate shall contemplate:
>
> - the cleanup plan, including
> - level of restoration to be performed
> - current legal or regulatory requirements, and
> - current technology; and

- Current cost which is the amount that would be paid if all equipment, facilities, and services included in the estimate were acquired during the current period.

The *Standards for Internal Control in the Federal Government* issued by the Comptroller General of the United States, Principle No. 10, *Design Control Activities* provides that management should design control activities to respond to risks and achieve objectives. Principle No. 10 states:

> 10.03 Management clearly documents internal control and all transactions and other significant events in a manner that allows the documentation to be readily available for examination. The documentation may appear in management directives, administrative policies, or operating manuals, in either paper or electronic form. Documentation and records are properly managed and maintained.
>
> 10.08 Management designs control activities for appropriate coverage of objectives and risks in the operations. Operational processes transform inputs into outputs to achieve the organization's objectives. Management designs entity-level control activities, transaction control activities, or both depending on the level of precision needed so that the entity meets its objectives and addresses related risks.

Condition

Controls are not properly implemented and operating effectively over the estimation calculation and recordation of the EC&D liability to ensure compliance with generally accepted accounting principles (GAAP). Based on a review of the new estimation methodology, in conjunction with our review of the interim financial statements, as of and for the period ended June 30, 2017, we noted the following:

- There was a significant increase in the EC&D liability over the prior year of approximately $600 million as of June 30, 2017. Based on our review of the increase, we noted that clean-up and decommissioning costs were erroneously included in the liability as the inclusion of such costs is not in accordance with GAAP. Specifically, management included total costs to clean and decommission the specified real property assets and not solely the costs associated with removing, containing and/or disposing hazardous wastes.
- Management could not readily provide sufficient audit evidence to support data inputs in the updated cost model.
- The cost model contained various mathematical inaccuracies used in the final calculation of the liability.
- The evidence supporting the estimate calculation and resulting adjustment to the financial statements was not accurate.
- The journal entry review was not performed at a level of detail or precision necessary to identify the deficiencies described above, resulting in a material erroneous posting to the general ledger, and interim financial statements.

Based on the conditions identified above, management ultimately reverted to the previous methodology to compute and record the EC&D liability estimate for year-end financial statement preparation.

Cause

There was a lack of coordination between the Office Investment Planning and Analysis and the Financial Statements and Reporting Division to ensure that the EC&D cost model was developed properly in accordance

with GAAP. The new model was not supported by sufficient audit evidence. There was insufficient time allotted during the review process to ensure the EC&D journal entry was accurate and substantiated by sufficient, appropriate evidence.

Effect

Management recorded an overstatement of the EC&D liability and related expense in the interim financial statements of approximately $600 million, as of and for the period ended June 30, 2017.

Recommendations

We recommend that management:

1. Continue to refine the EC&D estimation methodology to ensure that the methodology is based on relevant, sufficient, and reliable data which is properly supported by sufficient appropriate audit evidence.
2. Review any refinements to the methodology to ensure that the estimate is presented in conformity with applicable accounting principles and that the related disclosure is adequate.
3. Establish appropriate communication channels with personnel outside of the Financial Statements and Reporting Division to ensure proper communication and coordination related to the calculation of material financial statement information.
4. Perform an adequate review and approval of the accounting estimates, including:
    - Review of sources of relevant factors
    - Review of development of assumptions
    - Review of reasonableness of assumptions and resulting estimates
    - Consideration of changes in previously established methods to arrive at accounting estimates

B. Lack of Sufficient Controls Over the Accuracy of EC&D Facility Quantities Report

Background

The FAA has title to various real property and other assets for use in its operations. Prior to October 1, 1998, these assets may have been constructed with environmental contaminants, such as lead-based paint and asbestos, etc. FAA records an estimated environmental cleanup and decommissioning (EC&D) liability 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 (PP&E) detailed records of capital and expensed assets. The average cost of disposal is calculated using actual invoices and contracts for assets currently being decommissioned and cost studies, where applicable.

Criteria

Statement of Federal Financial Accounting Statement 5: *Accounting for Liabilities of the Federal Government* states:

> "38. A contingent liability should be recognized when all of these 3 conditions are met:
>
> - A past event or exchange transaction has occurred.
> - A future outflow or other sacrifice of resources is probable.
> - The future outflow of sacrifice of resources is measurable."

Statement of Federal Financial Accounting Statement 6: *Accounting for Property, Plant, and Equipment* states:

> "85. 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."
>
> "94. Cleanup costs, as defined above, shall be estimated when the associated PP&E is placed in service."

Condition

Controls were not properly implemented and operating effectively to ensure the accuracy of the EC&D facility quantities report used in calculating the EC&D liability. Specifically, we agreed the assets included on the EC&D facility quantities report to the property records. We noted a total of five assets on the report that did not exist (i.e., were not included in the property records), requiring management to revise the EC&D facility quantities report, resulting in the removal of 407 assets, totaling approximately $22.8 million.

Cause

Management did not review the PP&E facility quantities report at the appropriate level of precision to ensure that FAA's EC&D liability is estimated using an accurate listing of PP&E assets.

Effect

The FAA may include assets without future decommissioning and cleanup costs in the estimate calculation, which could result in a misstatement to the EC&D liability and related expenses.

Recommendations

We recommend that management develop and implement policies and procedures to ensure that only assets that exist and that may require future decommissioning and cleanup activities are included in the EC&D liability estimate.

MANAGEMENT'S RESPONSE TO THE FY 2017 INDEPENDENT AUDITORS' REPORT

November 9, 2017

U.S. Department
of Transportation
Federal Aviation Administration

Office of Financial Services

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

NOV 09 2017

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 2017 consolidated financial statements.

We appreciate working in partnership with you in support of an efficient and effective audit. The audit is an essential part of our fiscal responsibility to our citizens, which we take very seriously. While we are pleased to have received an unmodified audit this year, we also look forward to the opportunity to demonstrate the effectiveness of our corrective actions to resolve the material weakness and regaining the higher standard that we hold for ourselves.

We concur with the material weakness related to our environmental decommissioning estimation methodology and the recording of the associated liability in our interim financial statements. We have corrected the estimation methodology and strengthened our internal controls to fully remediate this weakness before September 30, 2017. We also concur with the significant deficiency contained in your report, related to the facility quantities used in calculating the environmental decommissioning liability. To address this weakness, we will develop policies and procedures to confirm that the liability is computed based on accurate facility counts.

We will develop a detailed corrective action plan to address all recommendations and will submit it to the Office of Inspector General no later than December 31, 2017. I will monitor implementation of the plan throughout the corrective action process.

Thank you for your candor and the professional manner in which you and your team conducted your audit.

Sincerely,

Allison W. Ritman

Allison W. Ritman
Acting Chief Financial Officer

FINANCIAL STATEMENTS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

CONSOLIDATED BALANCE SHEETS

As of September 30
(Dollars in Thousands)

ASSETS	**2017**	**2016**
Intragovernmental		
Fund balance with Treasury (Note 2)	$ 3,469,614	$ 3,653,328
Investments, net (Note 3)	15,671,840	15,358,203
Accounts receivable, prepayments, and other (Note 4)	217,717	231,964
Total intragovernmental	19,359,171	19,243,495
Accounts receivable, prepayments, and other, net (Note 4)	52,069	52,750
Inventory, operating materials, and supplies, net (Note 5)	710,839	719,159
Property, plant, and equipment, net (Note 6 and 9)	12,641,781	12,934,075
Total assets	$ 32,763,860	$ 32,949,479
LIABILITIES		
Intragovernmental liabilities		
Accounts payable	$ 17,604	$ 15,557
Employee related and other (Note 8)	468,269	430,377
Total intragovernmental liabilities	485,873	445,934
Accounts payable	504,682	360,428
Grants payable	716,428	722,695
Environmental (Note 7, 15, and 16)	1,047,940	950,159
Employee related and other (Note 8, 9, and 16)	956,573	962,479
Federal employee benefits (Note 10)	818,732	808,657
Total liabilities	4,530,228	4,250,352
Commitments and contingencies (Note 9 and 16)		
NET POSITION		
Unexpended appropriations – funds from dedicated collections (Note 12)	965,149	1,181,726
Subtotal unexpended appropriations	965,149	1,181,726
Cumulative results of operations—funds from dedicated collections (Note 12)	16,702,372	16,377,982
Cumulative results of operations—all other funds	10,566,111	11,139,419
Subtotal cumulative results of operations	27,268,483	27,517,401
Total net position	28,233,632	28,699,127
Total liabilities and net position	$ 32,763,860	$ 32,949,479

The accompanying notes are an integral part of these financial statements.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

CONSOLIDATED STATEMENTS OF NET COST

For the Years Ended September 30

(Dollars in Thousands)

	2017	2016
LINE OF BUSINESS PROGRAMS (Note 11)		
Air Traffic Organization		
Expenses	$ 11,648,610	$ 11,412,454
Less earned revenues	(260,851)	(257,274)
Net cost	11,387,759	11,155,180
Airports		
Expenses	3,285,443	3,127,758
Net cost	3,285,443	3,127,758
Aviation Safety		
Expenses	1,514,572	1,484,936
Less earned revenues	(18,743)	(15,672)
Net cost	1,495,829	1,469,264
Security and Hazardous Materials Safety		
Expenses	126,394	134,522
Less earned revenues	(26,810)	(965)
Net cost	99,584	133,557
Commercial Space Transportation		
Expenses	23,300	21,243
Net cost	23,300	21,243
NON-LINE OF BUSINESS PROGRAMS		
Expenses	696,964	641,900
Less earned revenues	(262,176)	(282,147)
Net cost	434,788	359,753
NET COST OF OPERATIONS		
Total expenses	17,295,283	16,822,813
Less earned revenues	(568,580)	(556,058)
Total net cost	$ $16,726,703	$ 16,266,755

The accompanying notes are an integral part of these financial statements.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

CONSOLIDATED STATEMENTS OF CHANGES IN NET POSITION

For the Years Ended September 30
(Dollars in Thousands)

UNEXPENDED APPROPRIATIONS

	2017			2016		
	Funds from dedicated collections (Note 12)	All other funds	Totals	Funds from dedicated collections (Note 12)	All other funds	Totals
Beginning balances	$ 1,181,726	$ –	$ 1,181,726	$ 1,163,953	$ –	$ 1,163,953
Budgetary financing sources						
Appropriations received (Note 14)	852,852	–	852,852	1,987,724	–	1,987,724
Rescissions, cancellations and other	(35,414)	–	(35,414)	(44,917)	–	(44,917)
Appropriations used	(1,034,015)	–	(1,034,015)	(1,925,034)	–	(1,925,034)
Total budgetary financing sources	(216,577)	–	(216,577)	17,773	–	17,773
Ending balances	$ 965,149	$ –	$ 965,149	$ 1,181,726	$ –	$ 1,181,726

CUMULATIVE RESULTS OF OPERATIONS

	2017			2016		
	Funds from dedicated collections (Note 12)	All other funds	Totals	Funds from dedicated collections (Note 12)	All other funds	Totals
Beginning balances	$ 16,377,982	$ 11,139,419	$ 27,517,401	$ 16,232,376	$ 10,788,377	$ 27,020,753
Budgetary financing sources						
Appropriations used	1,034,015	–	1,034,015	1,925,034	–	1,925,034
Non-exchange revenue – excise taxes and other	15,362,658	–	15,362,658	14,693,882	–	14,693,882
Transfers-in/out without reimbursement	(261,348)	–	(261,348)	(284,971)	–	(284,971)
Other financing sources						
Donations and forfeitures of property	–	15,691	15,691	–	38,824	38,824
Transfers-in/out without reimbursement	(1,101,806)	1,110,817	9,011	(1,880,979)	1,881,832	853
Imputed financing from costs absorbed by others (Note 13)	255,073	62,471	317,544	323,877	66,187	390,064
Other	214	–	214	175	(458)	(283)
Total financing sources	15,288,806	1,188,979	16,477,785	14,777,018	1,986,385	16,763,403
Net cost of operations	14,964,416	1,762,287	16,726,703	14,631,412	1,635,343	16,266,755
Net change	324,390	(573,308)	(248,918)	145,606	351,042	496,648
Ending balances	$ 16,702,372	$ 10,566,111	$ 27,268,483	$ 16,377,982	$ 11,139,419	$ 27,517,401

The accompanying notes are an integral part of these financial statements.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

COMBINED STATEMENTS OF BUDGETARY RESOURCES

For the Years Ended September 30
(Dollars in Thousands)

	2017	2016
BUDGETARY RESOURCES (Note 14)		
Unobligated balance brought forward, transfers and other	$ 3,936,056	$ 3,835,011
Recoveries of prior year obligations	399,675	326,704
Other changes in unobligated balance	(55,058)	(56,188)
Unobligated balance from prior year budget authority	4,280,673	4,105,527
Appropriations	13,064,322	12,933,191
Contract authority	3,350,000	3,350,000
Spending authority from offsetting collections	10,001,910	8,690,971
Total budgetary resources	$ 30,696,905	$ 29,079,689
STATUS OF BUDGETARY RESOURCES		
New obligations and upward adjustments	$ 26,427,382	$ 25,143,633
Apportioned unexpired accounts	1,943,301	1,645,490
Unapportioned unexpired accounts	2,188,530	2,146,960
Unexpired unobligated balance, end of year	4,131,831	3,792,450
Expired unobligated balance, end of year	137,692	143,606
Unobligated balance, end of year	4,269,523	3,936,056
Total status of budgetary resources	$ 30,696,905	$ 29,079,689
CHANGE IN OBLIGATED BALANCE		
Obligated balance, net, beginning of period	$ 9,126,686	$ 8,570,917
New obligations and upward adjustments	26,427,382	25,143,633
Gross outlays	(25,627,322)	(24,252,668)
Recoveries of prior year obligations	(399,675)	(326,704)
Change in uncollected customer payments from federal sources	(260,694)	(8,492)
Obligated balance, net, end of period	$ 9,266,377	$ 9,126,686
BUDGET AUTHORITY AND OUTLAYS		
Budget authority, gross	$ 26,416,232	$ 24,974,162
Actual offsetting collections	(9,761,049)	(8,692,372)
Change in uncollected customer payments from federal sources	(260,694)	(8,492)
Recoveries of prior year paid obligations	19,743	9,798
Budget authority, net	$ 16,414,232	$ 16,283,096
OUTLAYS		
Gross outlays	$ 25,627,322	$ 24,252,668
Actual offsetting collections	(9,761,049)	(8,692,372)
Distributed offsetting receipts	(13,286)	(15,674)
Net outlays	$ 15,852,987	$ 15,544,622

The accompanying notes are an integral part of these financial statements.

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, (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. 17-03, *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 2017 and 2016, 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, provides 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 44305. This non-premium insurance authority expires on December 31, 2019; pursuant to 49 USC 44310(b).
- **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), 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 and later adjusted to agree to actual collections when certified by the IRS.

The FAA's September 30, 2017 financial statements reflect excise taxes certified by the IRS through June 30, 2017, and excise taxes allocated by the OTA for the period July 1 through September 30, 2017, as specified by Statement of Federal Financial Accounting Standards Number 7, ***Accounting for Revenue and Other Financing Sources***. Actual excise tax collections data for the quarter ended September 30, 2017, will not be available from the IRS until February 2018. 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 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. Inventory held for sale is valued using historical cost, applying the weighted moving average cost flow method.

The FAA field locations frequently exchange non-operational repairable components with the Franchise Fund. These components are classified as "held for repair" and valued using the direct method.

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 deemed to be "excess, obsolete, and unserviceable" if, for example, the quantity exceeds projected demand for the foreseeable future or if the item has been technologically surpassed. The "excess, obsolete, and unserviceable" inventory is determined to have no residual net realizable value, therefore, a loss is recognized to write off the inventory in the current period.

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 generally amortized over a useful life of five years. However, it may be adjusted if a determination is made by specific program office and/or subject matter experts to have a longer or shorter useful life (not less than two years).

Construction in progress and internal use software in development are valued at actual direct costs plus applied overhead and other indirect costs.

The FAA researches and develops new technologies to support the nation's airspace system. Until such time as a 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. Future payments are disclosed for both cancellable and non-cancellable operating leases, but not disclosed separately since most lease agreements are either cancellable or contain termination rights.

Capital leases for buildings and equipment 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 buildings are depreciated over a 40-year service life and the equipment is depreciated over its estimated useful 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. Non-vested leave is expensed when used.

Q. 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.

In prior years, FAA recognized a loss for "Excess, Obsolete, and Unserviceable" inventory by establishing an allowance. Beginning FY 2017, the FAA writes off "Excess, Obsolete, and Unserviceable" inventory to recognize the loss. The inventory balances for the year ended September 30, 2016 have been reclassified.

In FY 2017, the Aviation Insurance Program was realigned from a non-line of business program to a program within the Office of Security and Hazardous Materials Safety. The Aviation Insurance Program has been reclassified in the Consolidated Statement of Net Cost for the year ended September 30, 2016.

NOTE 2. Fund Balance with Treasury

Fund balance with Treasury account balances as of September 30, 2017 and 2016 were:

	2017	2016
Trust funds	$ 1,628,688	$ 1,311,540
General funds	1,350,922	1,626,630
Revolving funds	464,110	695,660
Other fund types	25,894	19,498
Total	$ 3,469,614	$ 3,653,328
Status of fund balance with Treasury		
Unobligated balance		
Available	$ 1,943,301	$ 1,645,490
Not available	2,326,222	2,290,566
Obligated balance not yet disbursed	9,266,377	9,126,686
Investments and Contract Authority supporting obligated and unobligated balances	(10,076,667)	(9,418,650)
Non-budgetary FBWT	10,381	9,236
Total	$ 3,469,614	$ 3,653,328

Fund balance with Treasury includes both unobligated and obligated budgetary account balances, which are also reflected on the Statement of Budgetary Resources. Unobligated balances remain legally available for obligation when the funds are apportioned by OMB and the period of availability is unexpired. Unobligated balances are not available when the funds are not yet apportioned or the period of availability is expired. Although expired funds are unavailable, they 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. Aviation insurance investments are shown as not available until authorized, for example, in the event of a major air carrier loss caused by a war risk occurrence. Obligated balances not yet disbursed include unpaid obligations offset by uncollected customer payments from other U.S. federal government entities.

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.

NOTE 3. Investments

As of September 30, 2017 and 2016, the FAA's investment balances were as follows:

	2017			
Intragovernmental Securities	Cost	Unamortized Premium	Investments (Net)	Market Value Disclosure
Nonmarketable par value	$ 13,404,154	$ –	$ 13,404,154	$ 13,404,154
Nonmarketable market-based	2,209,819	(6,154)	2,203,665	2,198,284
Subtotal	15,613,973	(6,154)	15,607,819	15,602,438
Accrued interest	64,021	–	64,021	–
Total intragovernmental securities	$ 15,677,994	$ (6,154)	$ $15,671,840	$ 15,602,438

	2016			
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

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, 2017 and 2016, $13.4 billion and $13.4 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 U.S. Treasury's Bureau of the Fiscal Service 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 the Fiscal Service. 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, 2017, mature on various dates through June 30, 2018, and investments as of September 30, 2016, matured on various dates through June 30, 2017. 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 2017 and FY 2016 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, 2017, these nonmarketable, market-based securities have maturity dates ranging from November 15, 2017 to January 31, 2023 and have an average rate of return of approximately 1.5 percent. As of September 30, 2016, these nonmarketable, market-based securities had maturity dates ranging from December 15, 2016 to February 15, 2019 and had an average rate of return of approximately 1.9 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, 2017 and 2016, accounts receivable, prepayments, and other assets were:

Intragovernmental		**2017**		**2016**
Accounts receivable	$	26,367	$	36,839
Prepayments and other		191,350		195,125
Intragovernmental total		217,717		231,964
With the public				
Accounts receivable, gross		60,689		62,739
Allowance for uncollectible amounts		(9,299)		(11,503)
Accounts receivable, net		51,390		51,236
Prepayments		608		1,073
Other assets		71		441
With the public total		52,069		52,750
Total accounts receivable, prepayments, and other	$	269,786	$	284,714

NOTE 5. Inventory, Operating Materials, and Supplies

Inventory is classified as either held for sale, held for repair, or raw materials and work in progress. 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. Inventory that is deemed to be excess, obsolete and unserviceable is expected to have no net realizable value and a loss is recognized for the carrying amount. The carrying amount before identification as excess, obsolete and unserviceable inventory was $27.2 million in fiscal year 2017.

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, 2017 and 2016, inventory, operating materials, and supplies were:

	2017		
	Cost	Allowance	Net
Inventory			
Held for sale	$ $241,215	$ –	$ 241,215
Held for repair	359,421	–	359,421
Raw materials and work in progress	48,427	–	48,427
Inventory total	649,063	–	649,063
Operating materials and supplies			
Held for use	44,235	–	44,235
Held for repair	33,397	(16,699)	16,698
Excess, obsolete, and unserviceable	2,513	(1,670)	843
Operating materials and supplies total	80,145	(18,369)	61,776
Total inventory, operating materials, and supplies	$ 729,208	$ (18,369)	$ 710,839

	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
Inventory total	658,066	–	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	$ 736,497	$ (17,338)	$ 719,159

NOTE 6. Property, Plant, and Equipment, Net

Property, plant, and equipment balances as of September 30, 2017 and 2016 were:

	2017		
Class of fixed asset	Acquisition value	Accumulated depreciation	Net book value
Real property, including land	$ 6,421,628	$ (3,546,710)	$ 2,874,918
Personal property	18,370,089	(11,556,792)	6,813,297
Internal use software	2,737,365	(1,553,669)	1,183,696
Internal use software in development	709,395	–	709,395
Assets under capital lease (Note 9)	106,063	(51,289)	54,774
Construction in progress	1,005,701	–	1,005,701
Total property, plant and equipment	$ 29,350,241	$ (16,708,460)	$ 12,641,781

	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

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, 2017 and 2016 were:

	2017	2016
Environmental remediation	$ 492,436	$ 491,767
Environmental cleanup and decommissioning	555,504	458,392
Total environmental liabilities	$ 1,047,940	$ 950,159

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 both actual costs and an automated, parametric cost-estimating tool that provides estimates for all phases of investigation and remediation 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, 2017 and 2016, the FAA's employee-related and other liabilities were:

	2017		
Intragovernmental	Non-current liabilities	Current liabilities	Total
Advances received	$ –	$ 212,491	$ $212,491
Accrued payroll & benefits payable to other agencies	–	70,789	70,789
Liabilities covered by budgetary resources	–	283,280	283,280
Federal Employees' Compensation Act payable	91,641	79,377	171,018
Other accrued liabilities	–	13,971	13,971
Liabilities not covered by budgetary resources	91,641	93,348	184,989
Intragovernmental total	91,641	376,628	468,269
With the public			
Advances received and other	–	144,544	144,544
Accrued payroll & benefits payable to employees	–	234,344	234,344
Liabilities covered by budgetary resources	–	378,888	378,888
Accrued unfunded annual & other leave & assoc. benefits	–	424,486	424,486
Accrued sick leave buy back option for eligible employees	41,751	6,338	48,089
Capital leases (Notes 9 and 15)	51,236	8,458	59,694
Legal claims	–	30,405	30,405
Other accrued liabilities	–	15,011	15,011
Liabilities not covered by budgetary resources	92,987	484,698	577,685
With the public total	92,987	863,586	956,573
Total employee related and other liabilities	$ 184,628	$ 1,240,214	$ $1,424,842

	2016		
Intragovernmental	Non-current liabilities	Current liabilities	Total
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 accrued liabilities	–	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
With the public total	98,731	863,748	962,479
Total employee related and other liabilities	$ 195,691	$ 1,197,165	$ 1,392,856

"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, 2017, includes workers' compensation benefits paid by DOL during the periods July 1, 2015, through June 30, 2017, and accrued liabilities for the quarter July 1, 2017, through September 30, 2017. The FAA's accrued liability as of September 30, 2016, included workers' compensation benefits paid by the DOL during the period July 1, 2014, through June 30, 2016, and accrued liabilities for the quarter July 1, 2016, through September 30, 2016.

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 $48.1 million and $50.9 million as of September 30, 2017 and 2016, respectively.

The FAA estimated that 100 percent of its $30.4 million and $54.5 million legal claims liabilities as of September 30, 2017 and 2016, 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, 2017 and 2016:

	2017	2016
Land, Buildings, and Machinery	$ 106,063	$ 106,966
Accumulated Depreciation	(51,289)	(49,594)
Assets Under Capital Lease, net	$ 54,774	$ 57,372

As of September 30, 2017, 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 2018)	$ 8,458
Year 2 (FY 2019)	8,468
Year 3 (FY 2020)	7,913
Year 4 (FY 2021)	7,489
Year 5 (FY 2022)	7,489
After 5 Years	33,816
Less: Imputed interest	(13,939)
Total capital lease liability	$ 59,694

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, 2017, were:

Fiscal year	
Year 1 (FY 2018)	$ 175,451
Year 2 (FY 2019)	141,115
Year 3 (FY 2020)	121,612
Year 4 (FY 2021)	106,084
Year 5 (FY 2022)	94,075
After 5 Years	610,514
Total future operating lease payments	$ 1,248,851

Operating lease expense incurred during the years ended September 30, 2017 and 2016 was $200.1 million and $210.8 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, 2017 and 2016, FECA actuarial liabilities were $818.7 million and $808.7 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 net cost for non-line of business programs includes services provided by the Aeronautical Center, aviation overflight user fees, and other programs.

The following is the net cost of operations by strategic priority for the years ended September 30, 2017 and 2016:

	For the Year Ended September 30, 2017				
	Strategic Priorities				
	Make Aviation Safer and Smarter	Deliver Benefits Through Technology and Infrastructure	Enhance Global Leadership	Empower and Innovate with FAA's People	Total
Line of Business programs					
Air Traffic Organization	$ 9,491,134	$ 1,727,606	$ 4,544	$ 164,475	$ 11,387,759
Airports	1,724,257	1,559,850	102	1,234	3,285,443
Aviation Safety	1,450,041	2,718	26,039	17,031	1,495,829
Security and Hazardous Materials Safety	97,689	925	96	874	99,584
Commercial Space Transportation	2,911	27	15,014	5,348	23,300
Non-Line of Business programs	369,234	51,737	(1,742)	15,559	434,788
Net cost	$ 13,135,266	$ 3,342,863	$ 44,053	$ 204,521	$ 16,726,703

	For the Year Ended September 30, 2016				
	Strategic Priorities				
	Make Aviation Safer and Smarter	Deliver Benefits Through Technology and Infrastructure	Enhance Global Leadership	Empower and Innovate with FAA's People	Total
Line of Business programs					
Air Traffic Organization	$ 9,482,526	$ 1,507,816	$ 1,668	$ 163,170	$ 11,155,180
Airports	1,641,550	1,484,999	17	1,192	3,127,758
Aviation Safety	1,427,105	2,405	23,222	16,532	1,469,264
Security and Hazardous Materials Safety	131,956	593	50	958	133,557
Commercial Space Transportation	14,759	25	2,421	4,038	21,243
Non-Line of Business programs	266,432	71,800	(4,644)	26,165	359,753
Net cost	$ 12,964,328	$ 3,067,638	$ 22,734	$ 212,055	$ 16,266,755

The following is the FAA's distribution of FY 2017 and FY 2016 net cost of operations by intragovernmental related activity versus "with the public":

	For the Year Ended September 30, 2017		
	Intragovernmental	With the public	Total
LINE OF BUSINESS PROGRAMS			
Air Traffic Organization			
Expenses	$ 2,177,042	$ 9,471,568	$ 11,648,610
Less earned revenues	(213,744)	(47,107)	(260,851)
Net cost	1,963,298	9,424,461	11,387,759
Airports			
Expenses	55,787	3,229,656	3,285,443
Net cost	55,787	3,229,656	3,285,443
Aviation Safety			
Expenses	335,537	1,179,035	1,514,572
Less earned revenues	(2,494)	(16,249)	(18,743)
Net cost	333,043	1,162,786	1,495,829
Security and Hazardous Materials Safety			
Expenses	30,206	96,188	126,394
Less earned revenues	(1,055)	(25,755)	(26,810)
Net cost	29,151	70,433	99,584
Commercial Space Transportation			
Expenses	4,354	18,946	23,300
Net cost	4,354	18,946	23,300
NON-LINE OF BUSINESS PROGRAMS			
Expenses	118,377	578,587	696,964
Less earned revenues	(102,444)	(159,732)	(262,176)
Net cost	15,933	418,855	434,788
NET COST OF OPERATIONS			
Total expenses	2,721,303	14,573,980	17,295,283
Less earned revenues	(319,737)	(248,843)	(568,580)
Total net cost	$ 2,401,566	$ 14,325,137	$ 16,726,703

	For the Year Ended September 30, 2016		
	Intragovernmental	With the Public	Total
LINE OF BUSINESS PROGRAMS			
Air Traffic Organization			
Expenses	$ 2,250,031	$ 9,162,423	$ 11,412,454
Less earned revenues	(208,989)	(48,285)	(257,274)
Net cost	2,041,042	9,114,138	11,155,180
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	1,148,137	1,484,936
Less earned revenues	(2,741)	(12,931)	(15,672)
Net cost	334,058	1,135,206	1,469,264
Security and Hazardous Materials Safety			
Expenses	26,469	108,053	134,522
Less earned revenues	(926)	(39)	(965)
Net cost	25,543	108,014	133,557
Commercial Space Transportation			
Expenses	4,397	16,846	21,243
Net cost	4,397	16,846	21,243
NON-LINE OF BUSINESS PROGRAMS			
Expenses	112,387	529,513	641,900
Less earned revenues	(120,501)	(161,646)	(282,147)
Net cost	(8,114)	367,867	359,753
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

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 108–109 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 2017 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

- The Aviation Insurance Program had investments of $2.2 billion and revenues of $41.8 million for the period ended September 30, 2017 compared to $1.9 billion and $17 million for the period September 30, 2016. The Aviation Insurance Program is also discussed in Notes 1B, 1G 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 $123.1 million and $111.5 million for the periods ended September 30, 2017 and 2016, respectively.

Fiscal data as of and for the years ended September 30, 2017 and 2016 are summarized in the following charts. Intra-agency transactions have not been eliminated in the amounts presented.

	2017		
	AATF	All other funds from dedicated collections	Total funds from dedicated collections
BALANCE SHEET			
Assets			
Fund balance with Treasury	$ 1,011,443	$ 1,986,300	$ 2,997,743
Investments, net	13,460,739	2,211,101	15,671,840
Accounts receivable, net	–	6,144,803	6,144,803
Other assets	–	2,068,711	2,068,711
Total assets	$ 14,472,182	$ 12,410,915	$ 26,883,097
Liabilities and net position			
AATF amounts due to the FAA	$ 5,806,555	$ –	$ 5,806,555
Other liabilities	–	3,409,021	3,409,021
Unexpended appropriations	–	965,149	965,149
Cumulative results of operations	8,665,627	8,036,745	16,702,372
Total liabilities and net position	$ 14,472,182	$ 12,410,915	$ 26,883,097
STATEMENT OF NET COST			
Program costs	$ –	$ 15,314,996	$ 15,314,996
Less earned revenue:			
Aviation insurance	–	(20,101)	(20,101)
Overflight user fees	–	(123,144)	(123,144)
Other revenue	–	(207,335)	(207,335)
Net cost of operations	$ –	$ 14,964,416	$ 14,964,416
STATEMENT OF CHANGES IN NET POSITION			
Cumulative results beginning of period	$ 9,394,840	$ 6,983,142	$ 16,377,982
Non-exchange revenue:			
Passenger ticket tax	10,069,332	–	10,069,332
International departure tax	3,844,342	–	3,844,342
Investment income	281,797	–	281,797
Fuel taxes	651,116	–	651,116
Waybill tax	504,809	–	504,809
Tax refunds and credits	(14,801)	–	(14,801)
Other revenue	–	26,063	26,063
Budgetary financing sources	(16,065,808)	16,838,475	772,667
Other financing sources	–	(846,519)	(846,519)
Net cost of operations	–	(14,964,416)	(14,964,416)
Cumulative results end of period	8,665,627	8,036,745	16,702,372
Unexpended appropriations	–	965,149	965,149
Net position end of period	$ 8,665,627	$ 9,001,894	$ 17,667,521

	2016		
	AATF	All other funds from dedicated collections	Total funds from dedicated 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:			
Aviation insurance	–	(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:			
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

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, 2017 and 2016, imputed financing was as follows:

	2017	2016
Office of Personnel Management	$ 303,957	$ 373,376
Treasury Judgment Fund	10,858	10,246
Department of Homeland Security	2,729	6,442
Total imputed financing sources	$ 317,544	$ 390,064

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:

	2017	2016
Combined Statement of Budgetary Resources–budget authority, net	$ 16,414,232	$ 16,283,096
Less amounts made available to the FAA from AATF dedicated collections	(15,554,499)	(14,287,626)
Less other dedicated resources	(6,881)	(7,746)
Consolidated Statement of Changes in Net Position–appropriations received	$ 852,852	$ 1,987,724

The FAA had reductions to budgetary resources of $90 thousand and $5.5 million in FY 2017 and FY 2016, respectively, due to rescissions and sequestration.

As of September 30, 2017 and 2016, the FAA had available contract authority in the amount of $2.1 million and $1.4 million, respectively.

As of September 30, 2017 and 2016, the amount of budgetary resources obligated for undelivered orders was $7.9 billion and $7.9 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, 2016		
	Budgetary Authority	New Obligations and Upward Adjustments	Net Outlays
FAA Combined Statement of Budgetary Resources	$ 16,283	$ 25,144	$ 15,545
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	–	(7,922)	–
Distributed Offsetting Receipts	–	–	16
Obligations of non-reimbursable expired funds	–	(46)	–
Reimbursable obligations including Franchise fund	–	(684)	–
Other	–	(4)	–
Budget of the United States Government	$ 16,283	$ 16,488	$ 15,561

(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 2016 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 2016 Combined Statement of Budgetary Resources include $46 million of expired funds and $684 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 2016 Combined Statement of Budgetary Resources differs from the FY 2016 "actuals" reported in the appendix of the FY 2018 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 2017 Combined Statement of Budgetary Resources, the Budget of the U.S. Government for FY 2019, which will contain "actual" FY 2017 amounts, was not yet published. The OMB is expected to publish this information early in calendar year 2018.

During FY 2017 and FY 2016, 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:

	2017			2016		
	Direct	Reimbursable	Total	Direct	Reimbursable	Total
Category A	$ 109,098	$ 512,972	$ 622,070	$ 8,501,193	$ 463,443	$ 8,964,636
Category B	25,574,399	230,898	25,805,297	15,958,828	220,167	16,178,995
Exempt from apportionment	15	–	15	2	–	2
Total	$ 25,683,512	$ 743,870	$ 26,427,382	$ 24,460,023	$ 683,610	$ 25,143,633

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 2016, $6.4 million of obligated balances were in appropriation accounts that were canceled at year-end pursuant to 31 U.S.C. 1552 and thus have not been brought forward to FY 2017. Transfers in FY 2017 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, 2017 and 2016.

	2017	2016
Intragovernmental		
Federal Employees' Compensation Act payable (Note 8)	$ 171,018	$ 178,978
Other accrued liabilities	13,971	11,301
Total intragovernmental	184,989	190,279
FECA actuarial (Note 10)	818,732	808,657
Unfunded annual & other leave & assoc. benefits (Note 8)	424,486	417,824
Sick leave compensation benefits for eligible employees (Note 8)	48,089	50,873
Legal claims (Note 8 and 16)	30,405	54,500
Environmental liabilities (Note 7 and 16)	1,047,940	950,159
Capital leases (Note 8 and 9)	59,694	61,270
Other accrued liabilities (Note 8)	15,011	35,479
Total liabilities not covered by budgetary resources	2,629,346	2,569,041
Total liabilities covered by budgetary resources	1,900,882	1,681,311
Total liabilities	$ 4,530,228	$ 4,250,352

NOTE 16. Commitments, Contingencies, and Other Disclosures

Continuing Resolution and Reauthorization. Effective October 1, 2017, the FAA is operating under a continuing resolution, Public Law 115-56, for its FY 2018 appropriation and many of its programmatic and financing authorities. The continuing resolution will be in effect through December 8, 2017, unless superseded by enactment of specified appropriations legislation and includes a provision that allows the FAA to continue spending at slightly less than FY 2017 rates.

In addition, the passage of the Disaster Tax Relief and Airport and Airway Extension Act of 2017, Public Law 115-63, 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 March 30, 2018.

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, 2017, the FAA had letters of intent extending through FY 2026 totaling $7.1 billion. As of September 30, 2017, the FAA had obligated $6.6 billion of this total amount, leaving $488 million unobligated.

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 $964 million unobligated.

Aviation Insurance Program. The FAA provides non-premium 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 the Non-Premium War Risk Insurance program includes hull, bodily injury, personal injury, and property damage. The FAA is currently providing coverage for certain U.S. Department of Defense (DOD) 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, 2017 and 2016, the FAA's contingent liabilities for asserted and pending legal claims probable were estimated at $30.4 million and $54.5 million respectively. Pending legal claims reasonably possible as of September 30, 2017 and 2016 were estimated at $233.8 million and $86.2 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, 2017, the FAA estimated contingent liabilities, categorized as reasonably possible at $178.5 million, related to environmental remediation. Contingency costs are defined for environmental remediation 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 remediation 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.

Impairment Contingency. Hurricane Maria caused significant damage to Puerto Rico in September 2017. All known impairments to property, plant, and equipment as of September 30, 2017 were recognized as a loss in fiscal year 2017; however, there is at least a reasonable possibility that additional losses due to impairments will be identified and recognized in fiscal year 2018.

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, 2017 and 2016:

	2017	2016
Revenue activity		
Sources of cash collections		
Fines, penalties, and forfeitures	$ 11,273	$ 23,204
General fund proprietary interest	44	365
Miscellaneous recoveries and refunds	6,442	7,546
Total cash collections	17,759	31,115
Accrual adjustment	1,741	(323)
Total custodial revenue	19,500	30,792
Disposition of collections		
Transferred to others (by recipient):		
Treasury (general fund)	17,759	31,115
Amounts yet to be transferred	1,741	(323)
Total disposition of collections	19,500	30,792
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).

	2017	2016
Resources used to finance activities		
Budgetary resources obligated		
New obligations and upward adjustments	$ 26,427,382	$ 25,143,633
Less: Spending authority from offsetting collections and receipts and recoveries of prior year obligations	10,397,216	9,043,262
Obligations, net of offsetting collections	16,030,166	16,100,371
Other resources		
Donations and forfeitures of property	15,691	38,824
Transfers in/(out) without reimbursement	9,011	853
Imputed financing from costs absorbed by others	317,544	390,064
Other	214	(283)
Net other resources used to finance activities	342,460	429,458
Total resources used to finance activities	16,372,626	16,529,829
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	(30,259)	460,400
Resources that fund expenses recognized in prior periods (decreases in unfunded liabilities)	36,757	88,104
Resources that finance the acquisition of assets	1,169,484	1,165,564
Other resources or adjustments to net obligated resources that do not affect net cost of operations	101,519	27,800
Total resources used to finance items not part of net cost of operations	1,277,501	1,741,868
Total resources used to finance net cost of operations	15,095,125	14,787,961
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	114,517	42,604
Components not requiring or generating resources in future periods		
Depreciation and amortization	1,359,659	1,329,599
Revaluation of Assets or Liabilities	8,563	(51,861)
Other	148,839	158,452
Total components of net cost of operations that will not require or generate resources	1,517,061	1,436,190
Total components of net cost of operations that will not require or generate resources in the current period	1,631,578	1,478,794
Net cost of operations	$ 16,726,703	$ 16,266,755

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
(Dollars in Thousands)
Unaudited

State/Territory	2017	2016	2015	2014	2013
Alabama	$ 48,682	$ 58,137	$ 58,003	$ 68,873	$ 69,580
Alaska	249,894	148,217	150,992	196,013	211,385
Arizona	72,091	51,218	55,673	70,454	59,764
Arkansas	34,796	38,207	28,517	37,698	54,673
California	283,464	247,038	294,193	247,861	231,174
Colorado	71,764	69,575	70,830	88,470	95,027
Connecticut	10,996	20,240	25,031	12,527	21,374
Delaware	26,436	9,513	3,772	8,645	15,745
District of Columbia	16,969	28,174	14,549	32,924	5,354
Florida	141,151	143,872	185,794	132,904	159,803
Georgia	52,729	62,839	59,366	61,635	69,999
Hawaii	21,831	25,999	30,589	59,741	29,153
Idaho	16,888	22,198	35,386	32,652	23,593
Illinois	159,250	150,114	143,517	177,562	178,873
Indiana	49,488	72,409	59,537	70,292	79,478
Iowa	26,757	44,770	33,382	42,889	58,577
Kansas	47,430	33,421	31,642	34,803	51,988
Kentucky	27,895	45,422	46,917	33,301	37,744
Louisiana	75,542	53,763	37,298	34,447	50,276
Maine	21,598	26,115	24,057	19,712	35,512
Maryland	36,904	31,917	38,188	25,256	32,286
Massachusetts	42,646	44,120	37,243	60,985	53,349
Michigan	84,331	44,703	76,793	69,114	72,910
Minnesota	42,502	52,477	38,233	34,448	53,843
Mississippi	38,671	30,011	37,642	38,658	41,555
Missouri	74,503	68,774	41,382	46,280	55,522
Montana	49,120	38,501	29,158	27,503	44,474
Nebraska	24,925	45,490	48,299	30,446	31,781
Nevada	25,277	48,322	42,394	31,310	36,441
New Hampshire	13,103	12,686	10,756	10,940	17,623
New Jersey	30,115	61,577	39,491	59,786	99,443
New Mexico	37,733	34,611	28,783	22,869	27,787

(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
(Dollars in Thousands)
Unaudited

State/Territory	2017	2016	2015	2014	2013
New York	$ 76,184	$ 80,016	$ 83,194	$ 72,170	$ 98,699
North Carolina	87,561	61,926	75,198	75,162	101,080
North Dakota	39,935	38,683	45,644	37,970	53,066
Ohio	77,012	68,870	63,469	57,037	81,205
Oklahoma	31,164	40,598	34,523	30,764	59,213
Oregon	56,965	50,357	33,364	51,353	58,929
Pennsylvania	59,800	59,892	71,483	69,832	53,146
Rhode Island	30,400	28,859	42,722	16,190	11,939
South Carolina	68,717	50,956	49,729	37,411	54,621
South Dakota	36,031	19,471	27,702	25,208	39,320
Tennessee	84,038	66,648	73,043	70,404	84,893
Texas	235,373	222,141	217,574	239,187	235,366
Utah	35,970	32,597	49,761	57,880	59,188
Vermont	21,627	19,161	18,028	11,964	8,661
Virginia	50,099	45,271	40,712	50,364	60,272
Washington	75,317	94,812	67,474	61,151	79,861
West Virginia	13,048	17,394	26,942	19,037	24,015
Wisconsin	36,591	41,113	58,612	56,064	75,601
Wyoming	25,665	31,038	35,191	26,084	30,746
American Samoa	5,263	4,954	5,839	1,743	2,795
Guam	5,797	4,823	–	13,550	10,324
Northern Mariana Island	4,694	4,717	9,662	9,657	17,070
Puerto Rico	7,221	8,102	7,720	11,820	18,303
Virgin Islands	9,437	5,694	9,327	10,640	31,012
Marshall Island	–	–	5,132	7,157	4,226
Administration	156,053	165,235	150,165	148,652	143,312
Totals	**$ 3,285,443**	**$ 3,127,758**	**$ 3,159,617**	**$ 3,189,449**	**$ 3,602,949**

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.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

STEWARDSHIP INVESTMENT
RESEARCH AND DEVELOPMENT

For the Fiscal Years Ended September 30
(Dollars in Thousands)
Unaudited

Expenses	2017	2016	2015	2014	2013
Applied Research	$ 117,736	$ 110,363	$ 106,363	$ 155,883	$ 119,952
Development	169,961	138,483	93,972	40	312
Administration	40,016	39,959	34,321	32,572	35,929
R&D Plant	21,314	19,766	17,711	12,479	26,086
Total	**$ 349,027**	**$ 308,571**	**$ 252,367**	**$ 200,974**	**$ 182,279**

The FAA conducts ongoing 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 about 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 safe and efficient air travel.

Mode of Flame Spread on Structural Composites in Hidden Areas and Enclosed Spaces

Experiments were conducted in the FAA's Full-Scale Fire Test Facility to determine the mode of flame spread on carbon fiber reinforced polymer (CFRP) fuselage structure in hidden areas and enclosed spaces in an airplane cabin. The test series was performed in response to an incident on a parked and unoccupied Boeing 787, in which the lithium batteries used in the emergency locator transmitter (ELT) failed and went into thermal runaway. Thermal runaway occurs when the rate of internal heat generation exceeds the rate at which the heat can be expelled. During thermal runaway, a lithium battery can inadvertently heat up, causing a buildup of internal pressure and subsequent release of the flammable electrolyte, which is ignited from the hot surface of the battery casing. During the Boeing 787 incident, high temperature flame jets from the ELT batteries impacted the inboard surfaces of the CFRP fuselage skin and structure.

The tests indicate that although composite skin can spread flames during on-ground conditions, the aerodynamic cooling on the external skin surface experienced during in-flight conditions results in minimal flame span and no hazard to the occupants. This outcome provides further evidence that the level of safety of the current certification basis of composite fuselage aircraft is equivalent to a traditional aluminum-skinned aircraft during an in-flight hidden area fire event. The test results were delivered to the Transport Airplane Directorate and presented publicly to the aerospace community.

Risk of Leg Injury Guidance

Application of FAA Policy Statement PS-ANM-25-03-R1, Technical Criteria for Approving Side-Facing Seats, has revealed a need for additional guidance regarding risk of leg injury, protection of occupants during crashes that are not severe enough to deploy inflatable restraints, and risk of injury due to submarining (safety belt sliding up onto the abdomen) during rebound. The Civil Aerospace Medical Institute reviewed existing literature and conducted a series of sled tests to provide recommendations addressing questions regarding leg injuries, airbag threshold pulses, and risk of injury during submarining. These observations may be useful for developing new guidance to address these side-facing seat certification issues. More information is available in the technical report DOT/FAA/AM-17/2 by David Moorcroft et al. (Jan 2017). For additional information, visit ***https://www.faa.gov/data_research/research/med_humanfacs/oamtechreports/2010s/media/201702.pdf***.

NEXTGEN – Wake Turbulence Re-categorization (RECAT) PHASE II – An Application of Wake Turbulence Research

The RECAT Phase II wake risk mitigation separation standards are now in use by controllers at the Philadelphia (PHL), Los Angeles (LAX), Minneapolis (MSP) and Miami (MIA) airports. These wake risk mitigation standards are applied in a controller's setup of aircraft arrivals to and departures from an airport's runway so that the aircraft do not encounter the wake of the aircraft landing or departing in front of them. The RECAT Phase II project developed standards for wake safe minimum separation distances between 123 aircraft types. For a given airport, many of the aircraft types covered in the Phase II standards never or infrequently operate at that airport. The Phase II standards allows grouping of the most frequent aircraft types operating at that airport into six to seven categories that cover the separation minimums of the grouped aircraft types. This grouping into wake risk separation categories allows more departures per hour per runway under all weather conditions and more arrivals per hour when conditions (e.g., weather) at the airport requires the controllers to use instrument flight rule arrival operations. This RECAT Phase II deployment fulfilled the FAA's commitment to the FAA/RTCA NextGen Advisory Committee to implement RECAT Phase II at three major metropolitan airports.

NEXTGEN – Wake Turbulence Research Enabling Greater National Airspace System Throughput

Based on the analyses of aircraft generated wake and associated airport weather data collected at NextGen Core airports, a determination was made that air traffic controller-applied wake risk mitigation separations could be reduced if certain weather conditions were present at and around an airport. Reducing the separation between aircraft would provide additional airport runway throughput capacity during periods of peak demand. A feasibility evaluation decision support tool (DST) for use in reducing single runway wake risk mitigation separation standards was accomplished by adapting a DST that is in current use by controllers for monitoring RECAT static separations during instrument flight rule approaches to a single runway. The feasibility evaluation DST can accommodate an increased number of wake separation categories and can also provide a monitor display and alert warnings in terms of time interval separation between aircraft rather than distance.

REQUIRED SUPPLEMENTARY INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SUPPLEMENTARY INFORMATION
DEFERRED MAINTENANCE AND REPAIRS

As of September 30, 2017
(Dollars in Thousands)
Unaudited

			Cost to return to acceptable condition	
Category	**Description**	**Facility condition is <**	**Beginning balance**	**Ending balance**
Staffed Facilities				
Tier 1	ARTCCs, ATCT/TRACONs at major airports	95%	$ 174,493	$ 165,827
Tier 2	WJHTC and MMAC	95%	38,077	56,250
Tier 3	ATCT/TRACONs at all non-major airports	90%	21,115	14,807
Unstaffed Facilities				
Tier 1	Long range radars	95%	60,564	68,537
Other	Unstaffed infrastructure and fuel storage tanks	N/A	646,496	671,759
	Total		$ 940,745	$ 977,180

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 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 Facilities Condition Index 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 those 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 increase in unstaffed infrastructure and fuel storage tanks is attributed to the fuel storage tanks at facilities rapidly exceeding their lifecycles because a large population of the facilities were 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. Additionally, FAA revised the methodology for computing the deferred maintenance for unstaffed infrastructure in FY 2017. FAA now maintains an itemized database that contains all active capital assets along with their associated lifecycles and replacement costs. The current computation is based upon asset lifecycles instead of the previous estimate methodology which was based upon a 2008 engineering assessment and annual sustainment requirements.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

SCHEDULE OF BUDGETARY RESOURCES BY MAJOR FUND TYPE

For the year ended September 30, 2017 (Dollars in Thousands)

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	$ 15,610	$ 1,282,699	$ 70,537	$ 2,146,924	$ 260,376	$ 150,663	$ 9,247	$ 3,936,056
Recoveries of prior year obligations	192,675	111,419	2,193	–	26,668	66,720	–	399,675
Other changes in unobligated balance	7,888	(36,695)	(1,696)	–	92	(23,965)	(682)	(55,058)
Appropriations	–	2,855,000	176,506	–	–	852,852	9,179,964	13,064,322
Contract authority	3,350,000	–	–	–	–	–	–	3,350,000
Spending authority from offsetting collections	1,471	135,542	8,346	56,970	486,523	9,313,058	–	10,001,910
Total Budgetary Resources	$ 3,567,644	$ 4,347,965	$ 255,886	$ 2,203,894	$ 773,659	$ 10,359,328	$ 9,188,529	$ 30,696,905
Status of Budgetary Resources								
New obligations and upward adjustments	$ 3,549,657	$ 2,828,243	$ 174,720	$ 991	$ 512,972	$ 10,186,177	$ 9,174,622	$ 26,427,382
Apportioned unexpired	2,067	1,473,642	76,998	35,220	260,687	84,518	10,169	1,943,301
Unapportioned unexpired	15,920	–	–	2,167,683	–	1,189	3,738	2,188,530
Unexpired unobligated balance, end of year	17,987	1,473,642	76,998	2,202,903	260,687	85,707	13,907	4,131,831
Expired unobligated balance, end of year	–	46,080	4,168	–	–	87,444	–	137,692
Unobligated balance, end of year	17,987	1,519,722	81,166	2,202,903	260,687	173,151	13,907	4,269,523
Total Status of Budgetary Resources	$ 3,567,644	$ 4,347,965	$ 255,886	$ 2,203,894	$ 773,659	$ 10,359,328	$ 9,188,529	$ 30,696,905
Change in Obligated Balances								
Obligated balance, net, beginning of period	$ 5,642,535	$ 1,712,594	$ 137,787	$ 1,360	$ 155,970	$ 1,475,437	$ 1,003	$ 9,126,686
New obligations and upward adjustments	3,549,657	2,828,243	174,720	991	512,972	10,186,177	9,174,622	26,427,382
Gross outlays	(3,291,806)	(2,672,790)	(169,869)	(759)	(446,077)	(10,149,998)	(8,896,023)	(25,627,322)
Recoveries of prior year obligations	(192,675)	(111,419)	(2,193)	–	(26,668)	(66,720)	–	(399,675)
Change in uncollected customer payments from federal sources	–	6,797	164	–	–	(267,655)	–	(260,694)
Obligated Balance, net, end of period	$ 5,707,711	$ 1,763,425	$ 140,609	$ 1,592	$ 196,197	$ 1,177,241	$ 279,602	$ 9,266,377
Budget Authority and Outlays								
Budget authority, gross	$ 3,351,471	$ 2,990,542	$ 184,852	$ 56,970	$ 486,523	$ 10,165,910	$ 9,179,964	$ 26,416,232
Actual offsetting collections	(9,360)	(142,538)	(8,624)	(57,060)	(486,615)	(9,056,852)	–	(9,761,049)
Change in uncollected customer payments from federal sources	–	6,797	164	–	–	(267,655)	–	(260,694)
Recoveries of prior period year paid obligation	7,888	200	114	–	92	11,449	–	19,743
Budget Authority, net	$ 3,349,999	$ 2,855,001	$ 176,506	$ (90)	$ –	$ 852,852	$ 9,179,964	$ 16,414,232
Net Outlays								
Gross outlays	$ 3,291,806	$ 2,672,790	$ 169,869	$ 759	$ 446,077	$ 10,149,998	$ 8,896,023	$ 25,627,322
Actual offsetting collections	(9,360)	(142,538)	(8,624)	(57,060)	(486,615)	(9,056,852)	–	(9,761,049)
Distributed offsetting receipts	–	–	–	–	–	–	(13,286)	(13,286)
Net Outlays	$ 3,282,446	$ 2,530,252	$ 161,245	$ (56,301)	$ (40,538)	$ 1,093,146	$ 8,882,737	$ 15,852,987

U.S. DEPARTMENT OF TRANSPORTATION

FEDERAL AVIATION ADMINISTRATION

SCHEDULE OF BUDGETARY RESOURCES BY MAJOR FUND TYPE

For the year ended September 30, 2016 (Dollars in Thousands)

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	$ 15,355	$ 1,290,961	$ 66,238	$ 2,131,543	$ 184,268	$ 144,794	$ 1,852	$ 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	166,022	–	–	1,987,724	7,929,820	12,933,191
Contract authority	3,350,000	–	–	–	–	–	–	3,350,000
Spending authority from offsetting collections	–	72,504	553	36,252	506,770	8,074,892	–	8,690,971
Total Budgetary Resources	$ 3,514,190	$ 4,257,961	$ 232,962	$ 2,167,795	$ 723,819	$ 10,250,608	$ 7,932,354	$ 29,079,689
Status of Budgetary Resources								
New obligations and upward adjustments	$ 3,498,580	$ 2,975,262	$ 162,425	$ 20,871	$ 463,443	$ 10,099,945	$ 7,923,107	$ 25,143,633
Apportioned unexpired	1,445	1,232,402	66,245	16,034	260,376	61,069	7,919	1,645,490
Unapportioned unexpired	14,165	–	320	2,130,890	–	257	1,328	2,146,960
Unexpired unobligated balance, end of year	15,610	1,232,402	66,565	2,146,924	260,376	61,326	9,247	3,792,450
Expired unobligated balance, end of year	–	50,297	3,972	–	–	89,337	–	143,606
Unobligated balance, end of year	15,610	1,282,699	70,537	2,146,924	260,376	150,633	9,247	3,936,056
Total Status of Budgetary Resources	$ 3,514,190	$ 4,257,961	$ 232,962	$ 2,167,795	$ 723,819	$ 10,250,608	$ 7,932,354	$ 29,079,689
Change in Obligated Balances								
Obligated balance, net, beginning of period	$ 5,418,236	$ 1,465,430	$ 136,065	$ 1,181	$ 173,212	$ 1,376,806	$ (13)	$ 8,570,917
New obligations and upward adjustments	3,498,580	2,975,262	162,425	20,871	463,443	10,099,945	7,923,107	25,143,633
Gross outlays	(3,127,587)	(2,669,578)	(160,115)	(20,692)	(448,162)	(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	$ 137,788	$ 1,360	$ 155,970	$ 1,475,435	$ 1,004	$ 9,126,686
Budget Authority and Outlays								
Budget authority, gross	$ 3,350,000	$ 2,922,129	$ 166,575	$ 36,252	$ 506,770	$ 10,062,616	$ 7,929,820	$ 24,974,162
Actual offsetting collections	(2,141)	(79,026)	(1,694)	(36,347)	(507,029)	(8,066,135)	–	(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	$ 166,023	$ (95)	$ (1)	$ 1,987,723	$ 7,929,820	$ 16,283,096
Net Outlays								
Gross outlays	$ 3,127,587	$ 2,669,578	$ 160,115	$ 20,692	$ 448,162	$ 9,904,444	$ 7,922,090	$ 24,252,668
Actual offsetting collections	(2,141)	(79,026)	(1,694)	(36,347)	(507,029)	(8,066,135)	–	(8,692,372)
Distributed offsetting receipts	–	–	–	–	–	–	(15,674)	(15,674)
Net Outlays	$ 3,125,446	$ 2,590,552	$ 158,421	$ (15,655)	$ (58,867)	$ 1,838,309	$ 7,906,416	$ 15,544,622

OTHER INFORMATION

The FAA works **24/7/365** to ensure the safety of our national airspace while ...

... **2,586,582** passengers fly every day ...

... in **5,282,000** square miles of U.S. domestic airspace.

Fuel chemistry engineers perform two-dimensional compositional analyses of alternate fuels.

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 2017 audit.

Table 1: SUMMARY OF FINANCIAL STATEMENT AUDIT

Audit Opinion	FY 2017-unmodified				
	FY 2016-unmodified				
Restatement	No				
Material Weakness	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Ending Balance**
Environmental Liabilities	0	1	0	0	1
Total Material Weaknesses	**0**	**1**	**0**	**0**	**1**

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**					
Material Weakness	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
Environmental Liabilities	0	1	0	0	0	1
Total Material Weaknesses	**0**	**1**	**0**	**0**	**0**	**1**

Effectiveness of Internal Control over Operations (FMFIA § 2)

Statement of Assurance	**Unmodified**					
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**

Compliance with Federal Financial Management System Requirements (FMFIA § 4)

Statement of Assurance	**Federal Systems comply, except for instances of non-compliance to financial management system requirements**					
Non-Compliance	**Beginning Balance**	**New**	**Resolved**	**Consolidated**	**Reassessed**	**Ending Balance**
	0	0	0	0	0	0
Total non-compliances	**0**	**0**	**0**	**0**	**0**	**0**

Compliance with Section 803(a) of the Federal Financial Management Improvement Act (FFMIA)

	Agency	**Auditor**
1. Federal Financial Management System Requirements	No lack of compliance noted	No lack of compliance noted
2. Applicable Federal 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

PAYMENT INTEGRITY

The Improper Payments Information Act (IPIA) of 2002 (Public Law 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 (Public Law 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." After IPERA, the FAA continued implementing the most recent amendment to IPIA, the Improper Payments Elimination and Recovery Improvement Act (IPERIA) of 2012 (Public Law 112-248).

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 Circular 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.

OMB issued memorandum M-13-07, Accountability for Funds Provided by the Disaster Relief Appropriations Act, dated March 12, 2013 (M-13-07) that requires agencies to manage disaster relief funds with the same discipline and rigor as programs that are traditionally designated as susceptible to significant improper payments under IPIA. As required by M-13-07, FAA sampled and tested Facilities and Equipment—Disaster Relief Act funds (F&E – DRAA) as a high-risk program. For more detailed information on improper payments as well as information reported in past FAA performance and accountability reports but not included in the FY 2017 PAR, see *https://paymentaccuracy.gov/*.

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
2) 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 2017 reporting, the FAA conducted the above four-step process for the 12-month period of October 1, 2015 to September 30, 2016 for Facilities and Equipment—Disaster Relief Act funds (Hurricane Sandy Program).

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 that OMB relieve the FAA's Airport Improvement Program (AIP) from improper payment reporting. In its written request, AIP adequately demonstrated that the 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 approved this request on July 19, 2016. Therefore, the FAA's FY 2017 PAR does not include AIP testing results.

While a risk assessment was not performed for FAA's Hurricane Sandy Program, these disbursements are considered to be high-risk based on M-13-07 and were thus included in FAA's scope for testing for FY 2016. In FY 2017, DOT requested OMB relieve the program from reporting and testing. In the written request, FAA demonstrated that the size of the program expenditures

remaining did not warrant the level of effort required for testing and could not mathematically exceed the IPERA OMB acceptable thresholds for improper payments. OMB approved the request on August 8, 2017. As a result, the FAA's FY 2017 PAR does not include Hurricane Sandy testing results.

I. 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 2017 Hurricane Sandy Program funds sampling approach has not changed significantly from the FY 2016 approach which has been reviewed and approved by the OIG. The FY 2017 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.

II. Payment Reporting

Table 1 summarizes the 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. Because of the waiver, DRAA is reported for FY 2016 only.

III. 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 FAA's Enterprise Services Center (ESC) to initiate recovery of any FAA overpayments and identify payment process weaknesses. Since the overpayments identified in FY 2017 were immaterial amounts, DOT determined that it was not cost-effective to report them by DOT agency (i.e., FAA) and therefore reported results at the department-wide level only (in the DOT's Agency Financial Report).

Table 1: **IMPROPER PAYMENTS REDUCTION OUTLOOK (DOLLARS IN MILLIONS)**

Program or Activity	PY Outlays	PY IP %	PY IP $	CY Outlays	CY IP %	CY IP $	CY Over-payment $	CY Under-payment $
	2016 Testing (Based on FY 2015 Actual Data)			2017 Testing (Based on FY 2016 Actual)				
FAA F&E - DRAA	$ 8.646	1.59%	$ 0.137	*DRAA is no longer tested as of FY 2017.*				
TOTAL	**$ 8.646**	**1.59%**	**$ 0.137**					

FRAUD REDUCTION REPORT

The Fraud Reduction and Data Analytics Act of 2015 (FRDA) requires the Office of Management and Budget (OMB) to issue guidelines that federal agencies must use to establish financial and administrative controls to address fraud. Specifically, federal agencies must have controls to identify and assess fraud risks and they must design and implement control activities to prevent, detect, and respond to fraud, including improper payments.

The FRDA specifies that OMB's guidelines incorporate the leading practices identified in a report published by the Government Accountability Office (GAO) on July 28, 2015, entitled "Framework for Managing Fraud Risks in Federal Programs.

In 2017, DOT will report department-wide progress toward these requirements. The FAA's FRDA activities are incorporated as part of the DOT's 2017 Agency Financial Report.

DOT is employing a phased approach to establish a formal fraud risk management program in accordance with FRDA requirements. The approach enables us to utilize a maturity model to build out and adapt the program over time. DOT will implement FRDA requirements in three phases:

- **Phase 1:** Develop DOT's Fraud Risk Management Implementation Plan
- **Phase 2:** Establish DOT's Fraud Risk Management Program
- **Phase 3:** Implement DOT's Fraud Risk Management Framework

During FY 2017, DOT finalized the Fraud Risk Management Implementation Plan and initiated efforts to gather information on fraud, waste and abuse involving DOT programs or activities. The plan provides a schedule and milestones for identifying risks and vulnerabilities to fraud. The plan also incorporates the GAO's Fraud Risk Management Framework.

One component of the GAO's Fraud Risk Management Framework is to commit to combating fraud by creating an organizational structure and culture conducive to fraud risk management. The implementation plan establishes conceptual roles and responsibilities to aid in the development of formal governance, financial and administrative controls, and other steps to curb fraud.

In FY 2017, DOT started the second phase of the approach by aggregating the results of existing fraud risk management activities. DOT plans to use this data to advance fraud risk assessment efforts and to mature our fraud risk management program.

Aircraft awaiting departure clearance from air traffic controller.

REDUCE 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. Under subsequent "Reduce the Footprint" guidance, agencies must reduce the total square footage of their domestic office and warehouse space compared to a baseline of FY 2015 reported levels. The goal is to control taxpayer expense by reducing real property costs through reduction of square footage and leasing costs while using space more efficiently.

Over the past four 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 DOT rather than lease-by-lease, building-by-building, or by operating administration (such as the FAA). We have supported the "Freeze the Footprint" and now "Reduce the Footprint" initiatives as described in the DOT-wide Real Property Efficiency Plan, by actively pursuing activities which increase real property efficiencies. We have completed space reduction projects in each fiscal year since the implementation of Freeze the Footprint and 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 administrative space portfolio reviews at the FAA level, and business case analysis of office space requirements. These efforts have produced projects such as the FAA's regional office consolidations/reductions of space in Seattle, Los Angeles, Anchorage, Fort Worth and Atlanta; and, continued planning toward consolidation of FAA's headquarters leases in Des Plaines, IL; Kansas City, MO; Jamaica-Queens, NY; and Washington, DC.
- 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 have continued disposing of certain legacy unmanned navigation and communication sites, thereby reducing the inventory of real property assets and associated operating costs.

In its latest Real Property Efficiency Plan, DOT has established office space reduction targets for FY 2018-2022 as follows:

Fiscal Year	Targeted Office Space Reduction *(Thousand Square Feet)*
2018	59
2019	47
2020	50
2021	25
2022	25

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 available at the time of publication were:

Annual Operating Costs
(Dollars in Thousands)

	2015	2016
Leased space*	$ 80,043	$ 78,891
Owned and otherwise managed space	6,393	5,927
Total annual operating costs	$ 86,436	$ 84,818

** The annual operating costs of leased space consists of rent paid to lessors and additional operations and maintenance costs paid by FAA, excluding GSA space.*

Table 1 is a summary of the total square footage of Reduce the Footprint General Services Administration (GSA), FAA direct leased, and FAA owned assets in FY 2016 as compared to the FY 2015 baseline, and shows that the FAA's space has decreased by 745 thousand square feet over that time period. This substantial decrease was impacted greatly by termination of the following leases: FAA Printing Facility in Lanham, MD and office leases for the Southwest Regional Office and at Lanham, MD. Table 2 presents the progress toward reducing annual operating costs, and shows that costs were reduced by $1.6 million for owned and direct leased Reduce the Footprint classified assets.

TABLE 1: Reduce the Footprint Progress (Square Footage)
FY 2015 Baseline to FY 2016
GSA, FAA Owned and Direct Lease Real Property
(Square Footage in Thousands)

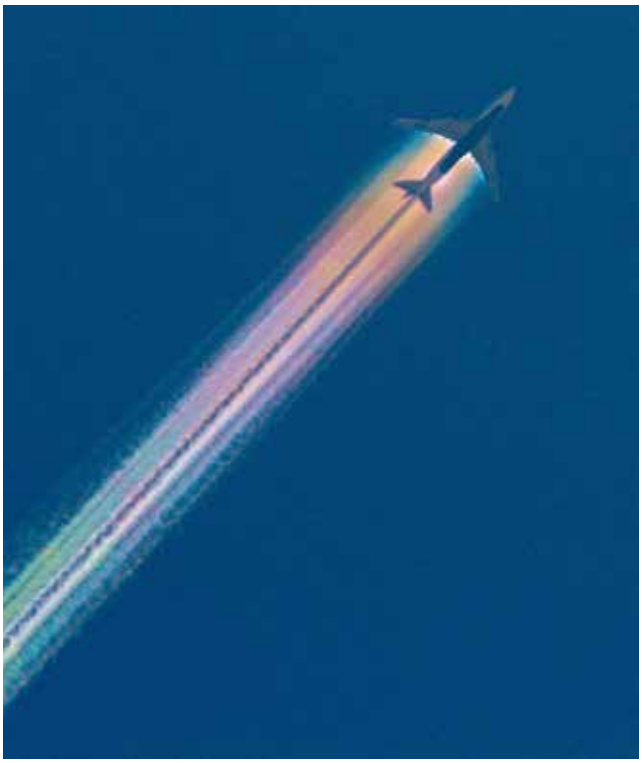
	FY 2015	FY 2016	Change
Square Footage	9,306*	8,561	(745)**

* *FY 2015 included both old and new Southwest Regional Office buildings as move was currently in progress.*
** *Includes a 168k sf reduction due to data corrections in real property system. Data cannot be corrected without affecting the Reduce the Footprint results.*

TABLE 2: Reduce the Footprint Progress (Annual Operations & Maintenance)
FY 2015 Baseline to FY 2016
Annual Operating Costs of Owned and Direct Lease Real Property of Reduce the Footprint Classified Assets
(Dollars in Thousands)

	FY 2015	FY 2016	Change
Operation and Maintenance Costs	$ 86,436*	$ 84,818	$ (1,618)

* *FY 2015 Reduce the Footprint baseline differs from FY 2015 Freeze the Footprint result due to variations in included assets.*



Condensation trail behind aircraft ascending after take-off.

GRANTS OVERSIGHT AND NEW EFFICIENCY

The Grants Oversight and New Efficiency Act requires agencies to provide a summary of the total number of federal grant and cooperative agreement awards and balances not closed out, but for which the period of performance ended more than two years prior. Following are grant recipient categories and balances which meet the current reporting criteria as of September 30, 2017.

Category	2–3 Years	>3–5 Years	>5 Years
Number of Grants/ Cooperative Agreements with Zero Dollar Balances		2	
Number of Grants/ Cooperative Agreements with Undisbursed Balances	9	11	5
Total Amount of Undisbursed Balances ***(Dollars in Thousands)***	**$4,167**	**$8,579**	**$2,055**

In FY 2017, FAA conducted an analysis of expired grants and identified three key management challenges that lead to delays in grant closeouts. These challenges include:

- Grant recipients' untimely submission of closeout documentation to the FAA.
- Disputes between grant recipients and vendors regarding allowable expenditures.
- Grant recipient has an audit or pending legal action.

FAA continues to monitor grants to ensure that recipients are providing closeout documentation in a timely manner. The monitoring includes review of progress, financial, audit and other periodic reports. FAA also continues to emphasize closing out older grants.

CIVIL MONETARY PENALTY INFLATION ADJUSTMENTS

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Unaudited

The Federal Civil Penalties Inflation Adjustment Act Improvements Act of 2015 (2015 Act), Public Law 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.

Authority	Penalty	Year of Enactment	Latest year of adjustment (via statute or regulation)	Current Penalty Level	Location for Penalty Update Details
49 U.S.C. 5123(a), subparagraph (1)	Violation of hazardous materials transportation law	1975	2017	$78,376	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 5123(a), subparagraph (2)	Violation of hazardous materials transportation law resulting in death, serious illness, severe injury, or substantial property destruction	2005	2017	$182,877	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 5123(a), subparagraph (3)	Violation of hazardous materials transportation law relating to training	2005	2017	$471-78,376	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(1)	Violation by a person other than an individual or small business concern under 49 U.S.C. 46301(a)(1)(A) or (B)	1958	2017	$32,666	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(1)	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))	1958	2017	$1,437	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(1)	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))	1958	2017	$1,437	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(3)	Violation of 49 U.S.C. 47107(b) (or any assurance made under such section) or 49 U.S.C. 47133	1958	N/A	Penalty is increased to a dollar amount more than the otherwise applicable maximum, not to exceed 3 times the amount of revenues that are used in violation of such section.	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(5)(A)	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)	2003	2017	$13,066	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(5)(B)(i)	Violation by an individual or small business concern related to the transportation of hazardous materials	2003	2017	$13,066	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)

Authority	Penalty	Year of Enactment	Latest year of adjustment (via statute or regulation)	Current Penalty Level	Location for Penalty Update Details
49 U.S.C. 46301(a)(5)(B)(ii)	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	2003	2017	$13,066	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(5)(B)(iii)	Violation by an individual or small business concern of 49 U.S.C. 44718(d), relating to limitation on construction or establishment of landfills	2003	2017	$13,066	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(a)(5)(B)(iv)	Violation by an individual or small business concern of 49 U.S.C. 44725, relating to the safe disposal of life-limited aircraft parts	2003	2017	$13,066	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46301(b)	Tampering with a smoke alarm device	1987	2017	$4,194	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46302	Knowingly providing false information about alleged violation involving the special aircraft jurisdiction of the United States	1984	2017	$22,957	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46318	Interference with cabin or flight crew	2000	2017	$34,731	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 46319	Permanent closure of an airport without providing sufficient notice	2003	2017	$13,066	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
49 U.S.C. 47531	Violation of 49 U.S.C. 47528-47530, relating to the prohibition of operating certain aircraft not complying with stage 3 noise levels	1990	N/A	See 49 U.S.C. 46301(a)(1)(A) and (a)(5), above	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)
51 U.S.C. 50917	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	1984	2017	$229,562	Federal Register: 82 Fed. Reg. 17,097 (Apr. 10, 2017) 82 Fed. Reg. 31,440 (July 7, 2017) (correction of effective date)

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. This results in the consolidation and shared use of like functions and promotes 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. These services include administrative services such as accounting, travel, duplication, multimedia, and information technology. The Franchise Fund also provides logistics and material management. Other services include acquisition, aircraft maintenance, international training, and management training. The Franchise Fund's major customers are programs in the FAA's lines of business, other 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.

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 depot-level 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) U.S. 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 Flight Program Operations. This 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. Flight Program Operations 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) 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.

Airport surface detection equipment (ASD-X) gives controllers visibility of all activity on the airfield.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FRANCHISE FUND

Condensed Information

ASSETS, LIABILITIES, AND NET POSITION

(Dollars in Thousands)

Unaudited

	As of September 30	
	2017	2016
ASSETS		
Fund balance with Treasury	$ 456,885	$ 416,346
Accounts receivable, net	10	22
Inventory and related property, net	640,739	649,113
General property, plant, and equipment, net	44,007	46,691
Other	2,080	1,916
Total assets	$ 1,143,721	$ 1,114,088
LIABILITIES		
Accounts payable	$ 21,793	$ 18,005
Advances from others	341,131	305,226
Employee related	19,015	18,731
Other	515	598
Total liabilities	382,454	342,560
NET POSITION		
Cumulative results of operations	761,267	771,528
Total net position	761,267	771,528
Total liabilities and net position	$ 1,143,721	$ 1,114,088

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FRANCHISE FUND

Condensed Information

REVENUES AND EXPENSES

(Dollars in Thousands)

Unaudited

	For the years ended September 30	
	2017	2016
Enterprise Services Center		
Revenues	$ 156,205	$ 173,134
Expenses	184,205	194,297
Profit (loss)	(28,000)	(21,163)
Corp Services		
Revenues	197	683
Expenses	(1,910)	762
Profit (loss)	2,107	(79)
Aircraft Maintenance and Engineering Group		
Revenues	55,993	59,159
Expenses	63,090	69,376
Profit (loss)	(7,097)	(10,217)
FLLI		
Revenues	9,038	8,066
Expenses	10,658	9,376
Profit (loss)	(1,620)	(1,310)
International		
Revenues	3,080	4,357
Expenses	4,282	4,806
Profit (loss)	(1,202)	(449)
FAA Logistics Center		
Revenues	284,938	259,923
Expenses	315,916	244,357
Profit (loss)	(30,978)	15,566
Acquisitions		
Revenues	3,102	5,007
Expenses	5,473	7,498
Profit (loss)	(2,371)	(2,491)
Total Consolidated		
Revenues	512,553	510,329
Expenses	581,714	530,472
Profit (loss)	$ (69,161)	$ (20,143)

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

FRANCHISE FUND

Condensed Information

FINANCING SOURCES AND NET POSITION

(Dollars in Thousands)

Unaudited

	Cumulative results of operations As of September 30	
	2017	2016
Beginning balance, net position	$ 771,528	$ 738,709
Financing sources		
Transfers-in/out without reimbursement	(841)	(6,783)
Imputed financing from costs absorbed by others	59,741	59,745
Total financing sources	58,900	52,962
Profit (loss)	(69,161)	(20,143)
Ending balance, net position	$ 761,267	$ 771,528

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 2018 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 ***https://www.oig.dot.gov/*** and on the FAA's website at ***http://www.faa.gov/about/plans_reports***.

Approximately a year ago, on November 15, 2016, the IG issued its memorandum identifying the top management and performance challenges that DOT would be facing in FY 2017. The IG's memorandum is provided below, and while it is titled "DOT's Fiscal Year 2017 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 2017 to address those challenges. The FAA provides this summary in order to present a comprehensive perspective on the FAA's FY 2017 performance activities.

Combined time-lapse photo shows lights from aircraft on approach to Washington Reagan National Airport. View is toward the north, overlooking Rosslyn, Virginia on the left and the Potomac River.

Memorandum

U.S. Department of Transportation
Office of the Secretary of Transportation
Office of Inspector General

Subject: **INFORMATION:** DOT's Fiscal Year 2017 Top Management Challenges Department of Transportation Report Number PT-2017-007

Date: November 15, 2016

From: Calvin L. Scovel III
Inspector General

Reply to Attn. of: J-1

To: The Secretary
Deputy Secretary

Safe, efficient, and innovative transportation is one of the building blocks of the U.S. economy, and essential to creating opportunities that enhance our quality of life. Every year, the Department of Transportation (DOT) invests more than $70 billion to maintain, protect, and enhance the Nation's transportation system. DOT has recently taken a number of steps toward improving transportation safety and oversight in aviation, surface transportation, hazardous materials transport, and other critical areas. Through our audits and investigations, our office supports DOT's efforts to enhance effectiveness and accountability in the Department's wide range of programs.

As always, safety remains at the forefront of DOT's mission and its highest priority. However, emerging transportation technologies pose new challenges to this mission. For example, while the Federal Aviation Administration (FAA) has increased efforts to integrate unmanned aircraft systems (UAS) into domestic airspace, the number of UAS sightings by pilots and other sources has also increased dramatically, by more than 362 percent from 2014 to 2015. Our work has found that FAA still lacks an effective risk-based oversight system to ensure UAS operators comply with all Federal regulations and requirements. DOT is also facing the emerging challenge of overseeing the safety of autonomous vehicles (i.e., driverless cars), which are already beginning to travel on U.S. roadways.

At the same time, DOT must continue to address ongoing surface transportation safety issues. We have identified a number of opportunities to improve safety, including enhancing processes for collecting and analyzing vehicle recall data and removing high-risk motor carriers and unqualified drivers from roads. In addition, the Federal Transit Administration faces challenges in determining how best to collect safety data and set safety goals, standards, and performance measures for transit

operators as it carries out its enhanced oversight role. Other key priorities for DOT include ensuring the integrity of the Nation's highways, bridges, and tunnels; strengthening guidance on compliance with railroad bridge safety standards; and better enforcing pipeline safety regulations.

Moreover, DOT must meet these safety goals while enhancing the stability and resilience of critical transportation systems. Our work demonstrates that DOT must do more to fulfill existing information technology (IT) security requirements for its 450-plus systems and undertake new strategies to mitigate increasing cybersecurity threats. Improved contingency planning is particularly critical to ensure the National Airspace System (NAS) can effectively respond to major disruptions in air traffic systems. While taking steps to increase the resilience of existing systems, DOT and FAA must also ensure that the Department's multibillion-dollar investments in programs to expand the capacity and efficiency of the NAS stay on track and address risks.

Meeting DOT's goals across all areas requires sound financial stewardship and management of its sizeable investments. As such, DOT must take advantage of all opportunities available to improve its internal controls and enhance accountability. Our work has highlighted areas where the Department can better manage its resources and increase oversight of contracts and grants to improve program performance. These include using sound management strategies for high-risk contracts, ensuring its acquisition workforce has the needed skills and financial management tools, and improving financial stewardship in areas such as cost accounting and contract closeout. DOT can also take steps to better leverage its fraud detection and prevention resources at hand, including increasing OIG referrals and harnessing data to better predict high-risk areas for fraud, waste, and abuse.

Finally, DOT faces the significant cross-modal challenge of implementing a growing list of mandated and recommended improvements to its safety, security, and financial management. For example, our work has found that the Department faces delays in fully meeting provisions of the Moving Ahead for Progress in the 21st Century Act while meeting more recent requirements established by the Fixing America's Surface Transportation Act—including establishing a new credit bureau to streamline credit and grant opportunities. At the same time, DOT will need to address new legislative requirements for aviation safety, as well as continue work on a number of mandates and recommendations that are vital to improve pipeline safety and rail transport of hazardous materials.

We remain committed to assisting DOT as it works to improve the management and execution of its programs and protect its resources. We considered several criteria in identifying DOT's top management challenges for fiscal year 2017, including their impact on safety, documented vulnerabilities, large dollar implications, and the ability

2017 Top Management Challenges, Department of Transportation

of the Department to effect change. In the enclosed report, we identify and discuss the following challenges:

- Maintaining Transportation Safety While Keeping Pace With Rapidly Evolving Technologies
- Bolstering Vehicle and Surface Transportation Safety
- Strengthening Cybersecurity Strategies To Address Increasing Threats
- Strengthening Controls To Detect and Prevent Fraud, Waste, and Abuse
- Enhancing the Capacity, Efficiency, and Resiliency of the National Airspace System
- Increasing Oversight of Critical Transportation Infrastructure
- Enhancing Oversight of Acquisition and Financial Management
- Managing Existing and New Mandates and Initiatives

We appreciate DOT's commitment to taking prompt actions in response to the issues we have identified. The final report and DOT'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 Joseph W. Comé, Principal Assistant Inspector General for Auditing and Evaluation, at (202) 366-0377.

#

cc: DOT Audit Liaison, M-1

Of the 28 management challenges identified by the Inspector General for FY 2017, DOT tasked the FAA with addressing the following ten challenges:

- **Overseeing an expanding and dynamic unmanned aircraft systems industry**
- **Maximizing benefits from personal identity verification (PIV) cards**
- **Extending security boundaries to cover all DOT information**
- **Strengthening Disadvantaged Business Enterprise (DBE) program oversight**
- **Keeping near-term NextGen investment priorities on track and addressing key risks**
- **Defining the costs and benefits of the NextGen transformational programs**
- **Enhancing redundancy and contingency plans for air traffic operations to mitigate disruptions**
- **Ensuring enough fully certified controllers at critical air traffic facilities**
- **Keeping current on new acquisition skills and financial tools**
- **Managing new safety requirements from the FAA Extension Act**

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 ten challenges. The FAA also submitted an "actions taken" report to DOT that describes the progress the FAA made throughout FY 2017 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 2017 are posted on FAA's website at ***http://www.faa.gov/about/plans_reports/*** under the DOT IG Top Management Challenges section.

Overseeing an Expanding and Dynamic Unmanned Aircraft Systems (UAS) Industry

Why Is This Issue Significant?

As new technologies evolve in the field of transportation and beyond, new safety challenges arise alongside them. Without a doubt, the growing demand for unmanned and autonomous vehicles — both in the air and on the ground — represents substantial commercial opportunities for U.S. businesses. The Federal Aviation Administration (FAA) recently forecasted 1.9 million units in potential annual sales of Unmanned Aircraft Systems (UAS) in 2016, which could increase to 4.3 million units sold annually by 2020.

Actions Taken in FY 2017:

- The FAA conducted weekly UAS Focal Point Outreach meetings with field offices in its Office of Safety to help aviation safety inspectors to stay up to date on UAS issues and guidance.
- Aviation safety inspectors completed the following UAS-related courses using the FAA's electronic Learning Management System in FY 2017:
  - Introduction to Unmanned Aircraft Systems: **758** courses completed
  - Unmanned Aircraft Systems – Initial: **689** courses completed
  - Part 107 Small Unmanned Aircraft Systems: **3,768** courses completed

  Additional course material may be developed or existing courses will be updated as UAS rulemaking progresses.
- The FAA reinforced its process for inspecting commercial UAS operators by revising FAA guidance to cover UAS risk-based surveillance. This revision was published on July 25, 2017.

Actions Remaining and Expected Completion Date:

- The FAA will continue to look for opportunities to add and enhance available UAS information. This effort will be ongoing.
- The FAA is developing a new system that will allow the agency to receive, process and issue airspace authorizations

for UAS more efficiently. The FAA started to deploy this system in October 2017.

- The FAA plans to continue the weekly UAS Focal Point Outreach meetings though the end of FY 2017 and into FY 2018.

What Are the Results or Expected Results of the Actions Taken?

These efforts, along with investigations of local accidents and incidents involving UAS, allow the FAA to continuously monitor and accumulate data on the risk level UAS pose to the national airspace in a risk-based manner that can readily be compared to other aircraft. This is how the FAA has integrated UAS surveillance into a comprehensive view of aircraft risk in the national airspace.

Maximizing Benefits from Personal Identity Verification (PIV) Cards

Why Is This Issue Significant?

The FAA has not yet established PIV access at 530 facilities, though it plans to do so by the end of fiscal year 2018. Until DOT establishes full use of PIV cards across all its Operating Administrations, it will face increased security risks and will be unable to ensure that system users and individuals who access facilities and systems are correctly identified as authorized personnel.

Actions Taken in FY 2017:

- The FAA continues to work on making 18 information systems accessible through PIV cards.
- FAA has successfully deployed PIV access at 399 facilities, and 159 facilities have been connected to the PIV Authentication Database. These actions will provide the capability for real-time access control. (Currently, the FAA is reporting 513 facilities with a security level that necessitates PIV-enabled access. The number of FAA facilities fluctuate based on closing and consolidations.)

Actions Remaining and Expected Completion Date:

- Remaining information systems are expected to be PIV enabled by September 2018.
- Remaining facilities are expected to have PIV access by September 2018.

Results or Expected Results:

The FAA's continuing efforts to deploy PIV access to facilities and information systems will enhance security, increase efficiency, reduce identity fraud, and protect personal privacy.

Extending Security Boundaries to Cover All DOT Information

Why Is This Issue Significant?

DOT's Office of the Chief Information Officer has not ensured that the Security Operations Center (SOC) has access to all departmental systems or required the Center to consider incident risk, thus limiting the Center's ability to effectively monitor, detect, and eradicate cyber incidents throughout DOT. In addition, the Office of Inspector General (OIG) recently reported that DOT's monitoring of cybersecurity incidents is ineffective and incomplete due to lack of access to FAA's systems.

Actions Taken in FY 2017:

- There are 39 major information systems in operation in the national airspace that use Internet Protocol (IP) technology.
- Monitoring these systems is a key deliverable of the National Airspace System (NAS) Cyber Operations (NCO), which serves as the FAA's focal point for cyber security activities related to the national airspace. When NCO validates that a reportable cybersecurity incident has occurred, NCO notifies the SOC in a timeframe that ensures compliance with Federal Incident Notification Guidelines.
- The NCO integrated 10 additional systems in FY 2017, increasing the number of systems monitored by NCO to a total of 23 systems.

Actions Remaining and Expected Completion Date:

- The NCO will integrate the remaining 16 systems for monitoring by the end of CY 2018.

Results or Expected Results:

Integration of the major airspace systems will allow for effective monitoring, detection and eradication of cyber incidents in the national airspace by the NCO.

Strengthening Disadvantaged Business Enterprise (DBE) Program Oversight

Why Is This Issue Significant?

The DBE program's overall effectiveness and integrity depends on sustained DOT leadership, guidance, and oversight. In the past, the OIG has recommended, among other things, that agencies develop an oversight and compliance plan. More recently they found that the FAA and airports do not provide adequate oversight and guidance to ensure DBE firms are paid promptly, there is very limited car rental participation, and there are challenges with regard to certification. Furthermore, the number of new firms doing business at the nation's largest airports has declined, and major barriers impede the success of new and existing disadvantaged firms.

Actions Taken in FY 2017:

- The FAA implemented a Comprehensive DBE Oversight and Compliance Plan, which included a substantial review of program documents and reports, training, technical assistance, complaint investigations, and airport on-site compliance reviews.
- The FAA publicized information regarding resources within DOT and the FAA that can assist small businesses seeking business opportunities at our nation's airports. The FAA included its Small Business Office in this year's Airport Minority Advisory Council conference. The FAA also posted the DOT Office of Small and Disadvantaged Business Utilization Technical Assistance Brochure on the FAA website.
- The FAA provided area-specific training at a number of conferences. Training addressed goal-setting, prompt payment, and DBE certification. Training was conducted at:
  - FAA Office of Civil Rights' National Civil Rights Training Conference for Airports
  - Unified Certification Programs offices in Texas and California
  - American Contract Compliance Association Conference
  - Airports Council International-North America's Business of Airports Conference
  - Airport Minority Advisory Council Conference
- The FAA provided training on how to properly set goals for car rental concessionaires at airports. This training was provided at the FAA Office of Civil Rights' National Civil Rights Training Conference for Airports. This training is available on the FAA website.
- Since February 2017, the FAA has assessed and documented the amount of time it takes for DBEs to be certified under the Unified Certification Program and ensured that staff have completed mandatory certification training.
- The FAA analyzed and addressed any significant or noteworthy changes in DBE participation at major airports. All Core 30 airports were required to develop a goal shortfall analysis and action plan to address the shortfall, and to submit these documents to the regional specialists for approval.
- In February 2017, the FAA issued a best practices memo to airports that provided information on identifying opportunities for new DBEs.
- In August 2017, the FAA implemented a new matchmaking feature in our web-based reporting system that matches certified DBE firms with airport business opportunities.

Actions Remaining and Expected Completion Date:

- The FAA will request that airports update their DBE programs to include mechanisms to ensure that firms are paid promptly after work is completed. The FAA expects to issue guidance in December 2017.
- The FAA will roll out a compliance dashboard feature in our web-based reporting system that will allow FAA officials to review an airport's civil rights compliance status before issuing a grant. The tool is currently being tested at several Office of Airports district offices. The FAA expects to complete its rollout in December 2017.

Results or Expected Results:

The FAA's actions will help eliminate barriers for all of those who meet DBE program requirements and wish to participate in the program, while ensuring that there is a level playing field. In addition, increased training opportunities will ensure that the DBE program is implemented more consistently at our nation's airports.

Keeping Near-Term NextGen Investment Priorities on Track and Addressing Key Risks

Why Is This Issue Significant?

The NextGen priorities are established in collaboration with FAA and industry stakeholders via the NextGen Advisory Committee (NAC). As such, there are investments from all stakeholders that are vital to the success of the priorities. The success of this effort continues to be dependent upon effective collaboration between the FAA and industry. FAA leadership has worked closely with industry leadership to lead the effort to develop plans that will result in the delivery of tangible benefits and increase the community's confidence in NextGen by deploying these four capabilities through 2019. The four capabilities are multiple runway operations, performance based navigation, improved surface operations and data sharing, and data communications. It is important to understand the severity of risks to the implementation of the four priorities in order to manage key decisions around risk management. The FAA is successfully meeting and managing near-term NextGen NAC investment priorities at a rate of 98 percent. A refined identification of risks can better help organize key risks to foster and maintain increased confidence in NextGen.

Actions Taken in FY 2017:

The FAA continues to manage risk at the program level, portfolio level, and most recently the NextGen enterprise level through standard working groups with FAA leadership and industry forums.

- The near-term NextGen priorities established in collaboration with the FAA and industry stakeholders via the NAC are included in this overall risk management framework. The FAA held three NAC meetings as planned in FY 2017. Meetings took place on October 5, 2016; February 22, 2017; and June 28, 2017.
- The FAA held monthly NextGen Integration Working Group (NIWG) status meetings throughout FY 2017. During each status meeting, the leaders discussed the risks and mitigation strategies and assigned solutions.
- In addition to regularly scheduled NAC subcommittee meetings, the FAA held calls with industry leadership and met bi-monthly with industry leadership to understand industry risk. Following the FAA's risk management process, identified risks were assigned to the appropriate program or portfolio managers for mitigation, or they were elevated to the NextGen Management Board or another higher level body for mitigation and resolution.
- The NextGen Management Board reviewed risks, mitigations and tracked the status at the direction of the FAA Deputy Administrator and Chief NextGen Officer.

Actions Remaining and Expected Completion Date:

The FAA will update the NextGen Priorities Oversight Plan in collaboration with its industry partners, to add additional risk management rigor to the collaborative NextGen Priorities process. In accordance with the NextGen Integration Working Group Oversight Plan, the FAA and industry NIWG teams brief risks quarterly at the NAC subcommittee meetings. As risks are identified and mitigated, corresponding commitment changes are reported and documented in the quarterly report to the NAC subcommittee and codified in the annual update to the Joint Implementation Plan. FAA will continue to collaborate and meet with industry regularly to identify and mitigate risks.

Results or Expected Results:

With the actions taken throughout 2017, the NextGen Priorities have accomplished 141 of 143 milestones to date, which represents a 98 percent completion rate.

Defining the Costs and Benefits of the NextGen Transformational Programs

Why Is This Issue Significant?

The FAA recognizes the importance of defining cost and benefits of transformational programs. The FAA's NextGen modernization effort consists of a broad set of programs in different stages of the development and acquisition lifecycle. These programs are designed to achieve the operational capabilities described in the "Future of the NAS" concept document.

Those NextGen program segments that have progressed to a final investment decision by the FAA's Joint Resources Council (and thus have been "baselined") have detailed, documented cost and benefit estimates. For all active FAA programs in FY 2016, aggregate variances are -2.80 percent within their original cost baselines and -5.64 percent within their original schedule baselines. For non-baselined segments, the FAA continues to follow our acquisition process to reduce risk.

Additionally, through the NextGen Business Case, the FAA used the best information available to estimate costs and benefits at an enterprise level for NextGen operational improvements described in the "Future of the NAS" through 2030.The costs and benefits in this report are segregated into the FAA Joint Resources Council baselined and non-baselined program segments.

Actions Taken in FY 2017:

- As we move forward with NextGen implementation, the FAA will continue to baseline additional NextGen program segments. The FAA approved four NextGen final investment decisions in FY 2017. The FAA now has contract cost, benefits, and schedule information for the following programs and manages the programs against their baselines:
  - En Route Automation Modernization (ERAM) Technical Refresh Segment 1
  - ERAM Sector Enhancements
  - Collaborative Air Traffic Management Technologies Work Package 4
  - NextGen Distance Measuring Equipment
- In January 2017, the FAA Joint Resources Council approved the yearly update of the National Airspace System Enterprise Architecture (NAS EA) with particular focus on the Infrastructure Roadmaps. The 2017 NextGen Implementation Plan (NGIP) has been written and is currently under review for public release.
- All of our acquisition programs follow Acquisition Management System which is in compliance with the Office of Management and Budget policy.
- The FAA published the Future of the NAS report. This report describes the future evolution of the national airspace, which is further defined in the NAS EA and NAS Segment Implementation Plan (NSIP). The report helps industry and the agency plan for the future and prioritize investments. In alignment with these plans, the annual development of the agency's Capital Investment Plan balances long-term planning with critical sustainment needs.
- This year, the FAA continued to collaborate with industry stakeholders, through the NextGen Advisory Committee (NAC), to track and monitor NextGen milestones, ensuring that NextGen implementation commitments were met. In addition, the FAA co-chaired the NAC Joint Analysis Team, which focused on reaching a common statement of fact regarding performance impacts and benefits attributed to NextGen capabilities. With emphasis on NextGen delivery, the FAA continued to update benefits estimates for NextGen's implemented capabilities based on the latest deployment information and industry collaboration outcomes.

Actions Still Remaining and Expected Completion Date:

- The actions described above are ongoing, annual activities — updating the NAS EA, NSIP, and NGIP; baselining programs through final investment decisions; and working through the NAC Joint Analysis Team to track NextGen milestones and benefits. No additional actions are required.

What Are the Results or Expected Results of the Actions Taken?

Final investment decisions, and associated cost, benefit, and schedule baselines, help to reduce the implementation risks of the overall NextGen effort by progressing the programs from pre-implementation to implementation programs. Revisions to the NAS EA, NSIP and NGIP document any program revisions required by shifting budgets and research discovery to keep planning documents current. Continued collaboration with industry, through the NAC Joint Analysis Team, helps justify to aviation stakeholders the overall investment being made in NextGen technologies and procedures.

Enhancing Redundancy and Contingency Plans for Air Traffic Operations to Mitigate Disruptions

Why Is This Issue Significant?

While FAA has begun to develop new contingency plans, which include airspace divestment for the major Center facilities, the plans are incomplete. For instance, FAA has not validated or procured the necessary hardware (i.e., switches, circuits, and cabling) needed to support the new plans. In addition, FAA has not fully developed divestment plans to manage the loss of air traffic control or identified various facilities' specific roles and responsibilities to support the new plans. As a result, it is unclear whether the new contingency plans are realistic, fully executable, or will actually mitigate the impact of future disruptions.

Actions Taken in FY 2017:

- The FAA established the Air Traffic Organization (ATO) Operational Contingency Group as a permanent office in December 2016. The Group unifies contingency and continuity operations throughout the national airspace with a focus on air traffic operations with a mission to support continuous service delivery to the flying public.
- The FAA recently began a detailed review of all En Route and Core 30 airport facility contingency plans on a rotating basis. The FAA also validated Operational Contingency Plans (OCP) in accordance with the FAA order, "Air Traffic Control Operational Contingency Plans," which was revised on May 1, 2017.
- The FAA completed surveys of the facilities and identified key system configuration data that will improve the response times in reconfiguring systems to effectively achieve an airspace divestment. The facility continuity plans address roles and responsibilities for divestment.
- The FAA convened a series of meetings with NextGen program officials to identify how NextGen capabilities can functionally enhance the resiliency and continuity strategy of NAS operations and mitigate the impact of future air traffic control disruptions. The FAA developed a list of NextGen programs that benefit contingency planning. As these new technologies are deployed, the FAA will update local facility contingency plans as applicable.

Actions Still Remaining and Expected Completion Date:

- The FAA will initiate a detailed national review of OCPs focused on areas such as the facility-specific plans for airspace divestment. The process of annual OCP reviews will be established to validate OCP execution and to ensure that technical requirements are based on current technology. This action will begin in October 2017.
- The FAA has completed demonstration test events and captured lessons learned and best practices as part of an effort to update national guidance documentation and provide templates to aid our facilities in more consistent and more operational effective contingency plans. The FAA intends to roll out the new guidance and improved templates in FY 2018.
- The FAA is in the process of validating the contingency plans to ensure that they address contingency capabilities in the current state. That activity will continue into FY 2019. Contingency plans capture what facilities can do with their current technology. In FY 2018, the FAA will collect each site's automation or communications infrastructure requirements to justify upgrades.
- The FAA will complete the first stage of divestment plans for oceanic airspace based on current technology by January 2018. The FAA is also developing a list of potential system enhancements to improve system efficiency during a divestment of oceanic airspace.
- The FAA is continuing development of the Resiliency Model and Toolset that includes the Avoidance and Mitigation Index Model, the Operational Response Index Model and has initiated discussions on the Airspace Recovery Index Model. In FY 2018, the FAA will implement a methodology for predicting the resiliency of the national airspace and efficiency impact at major air traffic control facilities. After a draft investment and prediction model toolset is built, the FAA will validate the model as part of an ongoing effort to update and improve facility contingency and resiliency plans. The roll out of those updates will begin in FY 2018.
- The FAA has completed verifying sufficient redundancy of radar data feeds to air traffic control facilities that manage airspace close to airports, and to back-up sites. This effort validated that any lack of redundant terminal radar feeds to facilities that would assume control during an airspace divestment poses very low risk and impact to the OCPs. The FAA has the capability to reroute radar data between facilities in a very short time period.
- Reducing this risk further, the FAA started expanding telecommunications capacity at FAA Centers, which will reduce the time it will take to move radio and radar telephone data lines between facilities. This effort will be completed in FY 2018.

What Are the Results or Expected Results of the Actions Taken?

The FAA's actions have improved the policy, rigor and operational fidelity of contingency plans. Additionally, the FAA has completed prototype tests and lessons learned that are benefiting OCP updates underway this year. Lastly, the increased focus and attention on reviews, metrics, policy, and technology enhancements will continue to improve overall continuity (a combination of improving service resiliency as well as contingency) and will lessen the impacts of events that affect the FAA's ability to provide air traffic control services.

Ensuring Enough Fully Certified Controllers at Critical Air Traffic Facilities

Why Is This Issue Significant?

The FAA employs nearly 14,000 air traffic controllers and is planning to hire over 5,600 more in the next five years. Although the FAA's controller staffing levels at its critical facilities are generally consistent with the agency's Controller Workforce Plan, there are unresolved issues with the validity of the plan. This was due in part to significant weaknesses with the process that FAA uses to determine the staffing ranges in its plans. Without better models, FAA will continue to face challenges in ensuring its critical facilities are well staffed.

Actions Taken in FY 2017:

- In FY 2017, the FAA exceeded its Air Traffic Controller hiring goal of 1,781, hiring a total of 1,889 Air Traffic Controllers. This represents an increase of 6.1 percent over the intended hiring goal.
- The FAA fully implemented its Priority Placement Tool to prioritize the placement of new controllers to the facilities with the greatest need. This model has allowed the FAA to place employees at facilities where they are needed most and will have the most operational impact.
- The FAA continued to use and modify a model developed by the MITRE Corporation for the movement of current controllers within the system by targeting those facilities with the greatest need, providing certified controllers from air traffic control facilities that would not be adversely impacted. This has resulted in movement of nearly 500 certified controllers to higher level facilities with the greatest need within an average of three months compared to the previous average of two years.
- The MITRE model allowed the FAA to place new controllers at facilities where they are more likely to become Certified Professional Controllers (CPCs), and move our current CPCs to higher level facilities. The projected number of CPCs increased from 86.3 percent to 93.6 percent during the same period.
- FAA continues to modify the model and target remaining facilities that have historically faced challenges with initiatives to balance system-wide controller staffing. This includes using incentives and programs that target these facilities while ensuring continued placement to all facilities, and facilitating the movement of controllers to ensure a balance of CPCs in training.

Actions Still Remaining and Expected Completion Date:

- The actions described above are ongoing, annual activities.

What Are the Results or Expected Results of the Actions Taken?

The initiatives undertaken in the last two years have demonstrated that the use of the modeling, placement of new hires, and movement of current controllers has resulted in a more balanced workforce nationwide. It has also allowed the predictable placement and movement to facilities in anticipation as opposed to in reaction to attrition.

Keeping Current on New Acquisition Skills and Financial Tools

Why Is This Issue Significant?

The Office of Federal Procurement Policy has recognized that achieving good results from contracting tools is directly linked to the skills, judgment, and capacity of the acquisition workforce. As FAA's acquisition workload changes and increases with the growing complexity of Federal programs, it will require more resources and new skills to ensure sound acquisition management and reduced program risks — an area where challenges may exist for FAA.

Actions Taken in FY 2017:

- The FAA revised its Acquisition Management System Procurement Guidance in January 2017, updating authorities and warrant requirements to better reflect FAA mission, process and personnel needs.
- Contracting Officer Warrants were reissued by FAA in March 1, 2017. The reissuance standardized the language cited on warrants, eliminated inconsistencies that may have existed on previous warrants and ensured warrant compliance with delegation standards published in Acquisition Management System.
- The *Agile Program Management Practices for the Federal Aviation Administration* was published to the FAA Acquisition System Toolset through its January 2017 update, to be used to promote the efficient delivery of capabilities through focused iteration of planning, execution, and monitoring.

- FAA hosted the Acquisition Hot Topics Training, ***Screening Information Request from a Cost/Price Perspective*** on April 4, 2017. This session provided training on how to integrate effective evaluation criteria and cost principles into solicitations to promote the receipt of quality cost proposals and successful source selections.

Actions Still Remaining and Expected Completion Date:

- No additional actions are planned.

Results or Expected Results:

Improvements resulting from these actions include increased consistency and clarity for warrant requirements and delegation standards, additional program management options where practicable to promote the efficient delivery of capabilities and better integration of cost principles into solicitations and resulting contract awards.

Managing New Safety Requirements from the FAA Extension Act

Why Is This Issue Significant?

The FAA has several ongoing initiatives to enhance aviation safety. Under the FAA Extension, Safety, and Security Act of 2016, the FAA must ensure the Agency's safety assessment system prioritizes inspections at foreign repair stations performing heavy maintenance for U.S. carriers, using risk-based oversight and data to track corrective actions. The Extension Act also requires the FAA to consider the recommendations of a Pilot Fitness Aviation Rulemaking Committee in determining whether to implement additional screening for mental health conditions. Further, the Extension Act requires the FAA to issue a rulemaking on alcohol and controlled substances testing and ensure completion of pre-employment background checks for safety-sensitive repair station employees.

Actions Taken in FY 2017:

Repair Stations

- The FAA revised its policies to assign the FAA Coordinator (in the International Field Office Branch) responsibilities in providing oversight and audit reporting of repair stations located outside of the United States. The new guidance is consistent with the aviation safety agreement and the Maintenance Annex Guidance between the FAA and the European Aviation Safety Agencies (EASA). The FAA and EASA will continue working together to identify areas in the aviation safety agreement that may need further clarification and improvements.
- On December 28, 2016, the FAA revised its policies to further expand and integrate the role of the FAA's International Field Offices in the oversight of repair stations located outside of the United States. This change provides consistency with the oversight and audit reporting requirements specified in the aviation safety agreement and the Maintenance Annex Guidance.
- The FAA developed an online briefing for its aviation safety inspectors that provides an overview of the FAA's revised guidance on the oversight and audit reporting of repair stations located outside of the United States. This training was completed on July 31, 2017.
- The FAA completed a review of the Safety Assurance System on October 30, 2016, and determined that the FAA's policy and guidance material for the system covers the risk-based oversight of repair stations located outside the U.S. The Safety Assurance System contains the tools and resources necessary to ensure it considers inspections and accounts for the frequency and seriousness of corrective actions of repair stations that conduct scheduled heavy maintenance work on commercial air carrier aircraft.

Pilot Training

- On January 4, 2017, the FAA provided guidance to inspectors responsible for oversight of commercial air carrier operations to provide them with information about the FAA's new requirements related to pilot training and qualification. This guidance included information to help inspectors encourage their assigned carriers to develop a plan to meet those new requirements, and provided Safety Assurance System custom data collection tools for inspectors to use to evaluate changes to training programs designed to meet the new requirements.

Pilot Records Database

- The FAA continues to develop regulations for the Pilot Records Database.
- Phase II of the Pilot Records Database (PRD) web application was completed ahead of schedule in June 2017.
- Phase III of the PRD web application was completed ahead of schedule in July 2017.

- In March 2017, the Office of the Inspector General closed its recommendation to develop a clearly defined and expedited schedule for the development and implementation of a Pilot Records Database, including cost estimates and project timeline.

Pilot Mental Fitness

- The Aviation Rulemaking Committee's recommendation regarding psychological testing was considered, and actions were taken in FY 2016. As a result, no further actions were required in FY 2017.

Alcohol and Controlled Substances Testing

- The FAA developed a draft regulation in December 2016 that would require foreign repair station employees who perform maintenance on commercial aircraft to be covered under a drug and alcohol testing program consistent with U.S. federal laws and state laws where the repair station is located.

Actions Still Remaining and Expected Completion Date:

Repair Stations

- The FAA and EASA continue to work together to identify areas in the aviation safety agreement between the U.S. and European Union that may need clarification and improvements. When changes are warranted, they are incorporated as needed in collaboration with EASA. The most recent revisions to the Maintenance Annex Guidance included audit reporting developments that provide foreign aviation authorities and FAA inspectors the ability to collect data for risk assessments. This activity is ongoing.

Pilot Records Database

- The FAA expects to publish its draft regulation by February 2018, pending review. The close of the public comment period would then occur in May 2018.
- The FAA completed Phase III of the PRD web application, however it has not yet deployed the application for industry use because of several delays in developing the MyAccess user self-registration system. The FAA is working to resolve these concerns. The PRD will be released for external users as soon as the MyAccess system is ready. This activity is ongoing.

Foreign Station Alcohol and Controlled Substances Testing

- The FAA will continue to develop its regulations.

What Are the Results or Expected Results of the Actions Taken?

The new enhancements will assist in prioritizing inspections and result in more consistent inspection practices that improve detection of systemic deficiencies and increase the effectiveness of repair station safety oversight performed by the FAA, EASA, and foreign aviation authorities who oversee repair stations in the European Union that perform heavy maintenance for U.S. carriers.

The FAA will continue to work closely with EASA to make improvements to the existing aviation safety agreement between the U.S., the European Union, and the foreign aviation authority with oversight responsibility of FAA repair stations located outside the U.S. These agreements are developed to allow the FAA and EASA to rely on each other's surveillance systems, minimize the duplication of efforts, increase efficiency, and conserve resources to the greatest extent possible.

GLOSSARY

Acronym	Name
AATF	Airport and Airway Trust Fund
ABST	Aircraft Beam Structural Test
ACAT	Acquisition categories
ADS-B	Automatic Dependent Surveillance-Broadcast
AFN	Finance and Management Staff Office (FAA staff office)
AIP	Airport Improvement Program
AM	Additive Manufacturing
ANG	NextGen Office (FAA staff office)
ARC	Aviation Rulemaking Committee
ARP	Airports (FAA line of business)
ARTCC	Air Route Traffic Control Center
ASEAN	Association of Southeast Asian Nations
ASH	Security and Hazardous Materials Safety (FAA line of business)
ASIAS	Aviation Safety Information Analysis and Sharing
AST	Commercial Space Transportation (FAA line of business)
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
CAA	Civil Aeronautics Administration
CAPS	COA Application Processing System
CAST	Commercial Aviation Safety Team
CATMT	Collaborative Air Traffic Management Technologies
CEAR	Certificate of Excellence in Accountability Reporting
CFO	Chief Financial Officer
CFRP	Carbon Fiber Reinforced Polymer
CLEEN	Continuous Lower Energy, Emissions, and Noise Program
CO_2	Carbon Dioxide
COE	Center of Excellence
CPC	Certified Professional Controllers
CSRS	Civil Service Retirement System
CY	Calendar year
DAC	Drone Advisory Committee
Data Comm	Data Communications
DBE	Disadvantaged Business Enterprise
Delphi	DOT's Financial Management System
DHS	Department of Homeland Security

Acronym	Name
DNL	Day-night average sound level
DOD	Department of Defense
DOL	Department of Labor
DOT	U.S. Department of Transportation
DRAA	Disaster Relief Appropriations Act
DST	Decision Support Tool
EASA	European Aviation Safety Agencies
ELT	Emergency Locator Transmitter
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
FECA	Federal Employees Compensation Act
FERS	Federal Employees' Retirement System
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
FRDA	The Fraud Reduction and Data Analytics Act of 2015
FY	Fiscal Year
GA	General Aviation
GAJSC	General Aviation Joint Steering Committee
GPS	Global Positioning System
GSA	General Services Administration
HAZMAT	Hazardous Materials
IP	Internet Protocol
IP$	Improper Payment Dollar
IP%	Improper Payment Percent
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
IRS	Internal Revenue Service
IT	Information Technology
ITD	The International Training Division
LAANC	Low Altitude Authorization and Notification Capability
LCSS	Logistics Center Support System
LIS	Logistics Inventory System

Acronym	Name
LoSS	Losses of Standard Separation
MMAC	Mike Monroney Aeronautical Center
NAC	NextGen Advisory Committee
NAC SC	NextGen Advisory Subcommittee
NAS	National Airspace System
NAS EA	National Airspace Enterprise Architecture
NCO	National Airspace System Cyber Operations
NASA	National Aeronautics and Space Administration
NESS	NAS Efficient Streamlined Services
NextGen	Next Generation Air Transportation System
NGIP	NextGen Implementation Plan
NIWG	NextGen Integration Working Group
NSIP	National Airspace System Segment Implementation Plan
NTSB	National Transportation Safety Board
NVS	National Airspace System Voice System
OCP	Operational Contingency Plans
OFM	DOT's Office of Financial Management
OIG	Office of the Inspector General
OMB	Office of Management and Budget
OPIP	Operational IP NAS Systems
OTA	Office of Tax Analysis
PAD	PIV Authentication Database
PAR	Performance and Accountability Report
Part 107	Small Unmanned Aircraft Rule
PBN	Performance Based Navigation
PFC	Passenger Facility Charge
PIV	Personal Identity Verification
PP&E	Property, Plant, and Equipment

Acronym	Name
PRD	Pilot Records Database
PRISM	Internet-based Acquisition System Integrated with Delphi
PY	Previous Year
RAE	Risk Analysis Events
RE&D	Research, Engineering, and Development
RECAT	Wake Turbulence Re-categorization
RIM	Runway Incursions Mitigations Program
SAVES	Strategic Sourcing for the Acquisition of Various Equipment and Supplies
SBGP	State Block Grant Program
SENSR	Spectrum Efficient National Surveillance Radar
SML	Structures and Materials Laboratory
SOC	Security Operations Center
SRER	System Risk Event Rate
SWIM	System Wide Information Management
TALPA	Takeoff and Landing Performance Assessment
TBD	To Be Determined
TBFM	Time Based Flow Management
Technical Center	William J. Hughes Technical Center
TFDM	Terminal Flight Data Manager
TRACON	Terminal Radar Approach Control
TSA	Transportation Security Administration
UAS	Unmanned Aircraft Systems
UASFM	Unmanned Aircraft Systems Facility Map
U.S.C.	United States Code
USSGL	U.S. Standard General Ledger
VDI	Virtual Develop Infrastructure
WJHTC	William J. Hughes Technical Center

WE WELCOME YOUR COMMENTS

Thank you for your interest in the FAA's FY 2017 Performance and Accountability Report. We welcome your comments on how we can make this report more informative for our readers.

PLEASE SEND YOUR COMMENTS TO:

MAIL: **Office of Financial Reporting and Accountability**
Federal Aviation Administration
800 Independence Avenue SW
Room 600W
Washington, DC 20591

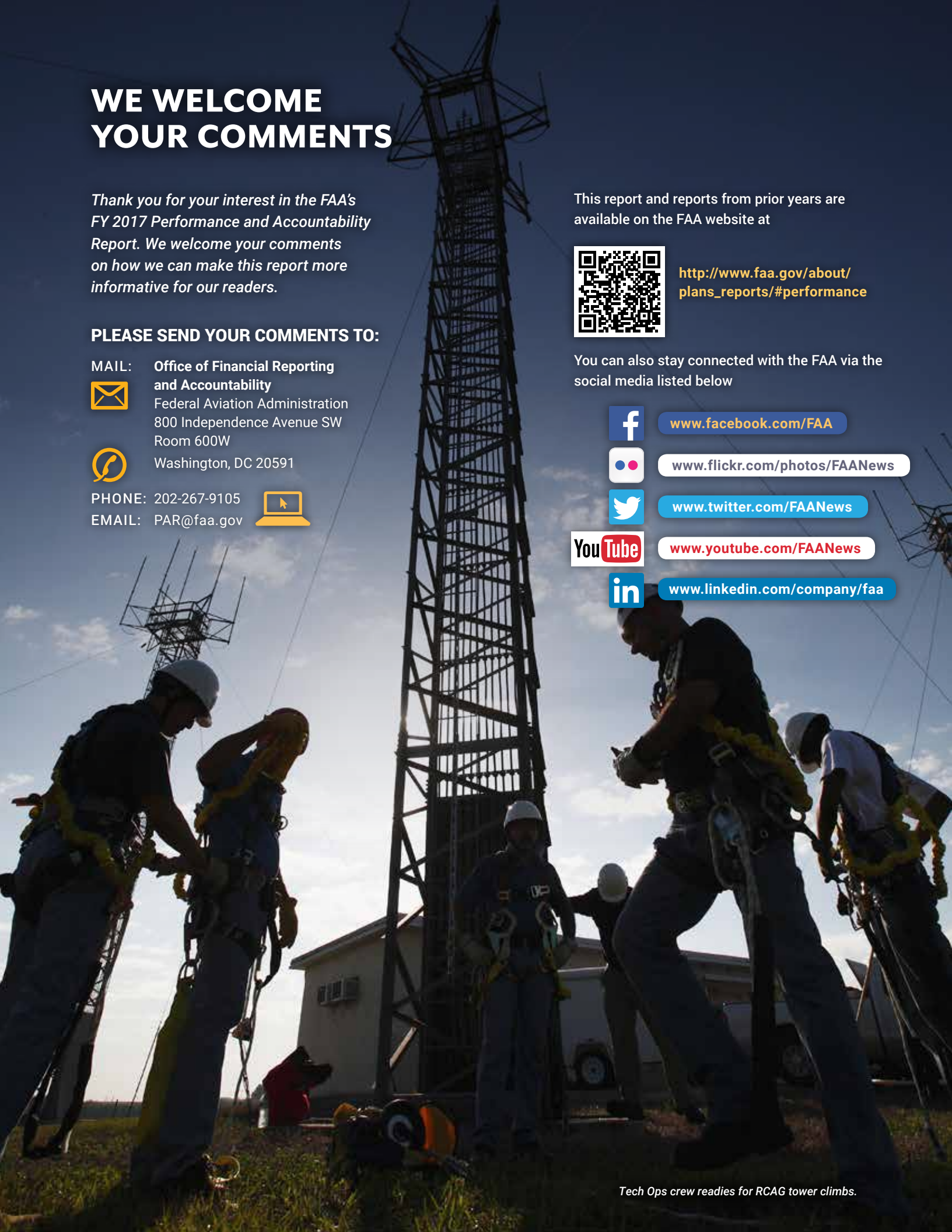
PHONE: 202-267-9105
EMAIL: PAR@faa.gov

This report and reports from prior years are available on the FAA website at

http://www.faa.gov/about/plans_reports/#performance

You can also stay connected with the FAA via the social media listed below

- www.facebook.com/FAA
- www.flickr.com/photos/FAANews
- www.twitter.com/FAANews
- www.youtube.com/FAANews
- www.linkedin.com/company/faa



Tech Ops crew readies for RCAG tower climbs.

U.S. Department of Transportation
Federal Aviation Administration

WWW.FAA.GOV

800 Independence Avenue, SW
Washington, DC 20591