



U.S. Department
of Transportation
**Federal Aviation
Administration**

FISCAL YEAR 2022

FEDERAL AVIATION ADMINISTRATION

Performance and Accountability Report

Mission, Vision, Values

OUR MISSION

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

OUR VISION

We strive to reach the next level of safety and efficiency and to demonstrate global leadership in how we safely integrate new users and technologies into our aviation system. We are accountable to the American public and our aviation stakeholders.

OUR VALUES

SAFETY IS OUR PASSION

We work so 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

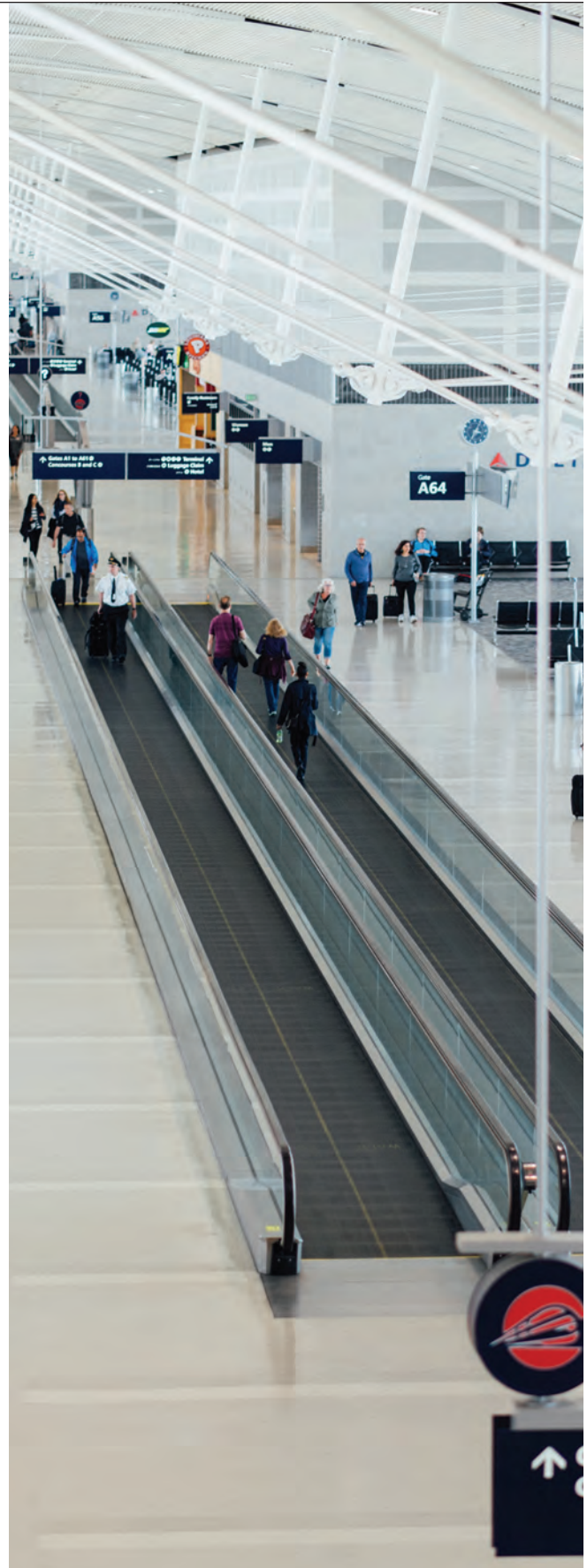
Our success depends on the respect, diversity, collaboration, and commitment of our workforce.

INNOVATION IS OUR SIGNATURE

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

Cover: View of the coastline of Lake Michigan from the air.

 **Cover Photo by Simon Maage via Unsplash.com**



View of Concourse A at Detroit Metropolitan Wayne County Airport.

 **Photo by Han-son Lu via Unsplash.com**

Contents

- 2 Snapshot of Resources
- 3 Foreword
- 4 A Message from the Administrator

8 MANAGEMENT'S DISCUSSION AND ANALYSIS

- 9 History of Modern Aviation and the Creation of the FAA
- 10 FAA Organization
- 12 Aviation Infrastructure
- 14 Achievements and Challenges
- 21 Looking Ahead
- 22 Building a Net-Zero Sustainable Aviation System by 2050
- 26 Performance Highlights
- 28 Performance at a Glance
- 31 Alignment of FAA Costs and Strategic Goals
- 32 Financial Highlights
- 38 Budgetary Integrity: FAA Resources and How They are Used
- 44 Analysis of Systems, Controls, and Legal Compliance
- 47 Management Assurances

48 PERFORMANCE RESULTS

- 49 Performance Measures Overview
- 77 Quality Assurance
- 79 Quality Financial Management

84 FINANCIAL RESULTS

- 85 A Message from the Chief Financial Officer
- 86 Office of Inspector General (OIG) Quality Control Review
- 91 Independent Auditors' Report
- 96 Management's Response to the FY 2022 Independent Auditors' Report
- 98 Financial Statements
- 102 Notes to the Financial Statements
- 136 Required Supplementary Information

142 OTHER INFORMATION

- 143 Summary of Financial Statement Audit and Management Assurances
- 144 Payment Integrity
- 146 Civil Monetary Penalty Inflation Adjustments
- 149 Grants Programs
- 150 Climate-Related Financial Risk
- 151 Agency Audit Resolution Reports
- 153 Administrative Services Franchise Fund
- 158 Summary of Inspector General's Top Management and Performance Challenges
- 168 List of Acronyms and Abbreviations

THE FAA CENTERS

- 24 The FAA William J. Hughes Technical Center
- 42 Mike Monroney Aeronautical Center

CROSSCHECK YOUR KNOWLEDGE

- 41 Engaging the Workforce of the Future
- 43 Enterprise Services Center
- 65 Data Science at the FAA
- 76 Miracles in the Air

WE WELCOME YOUR COMMENTS

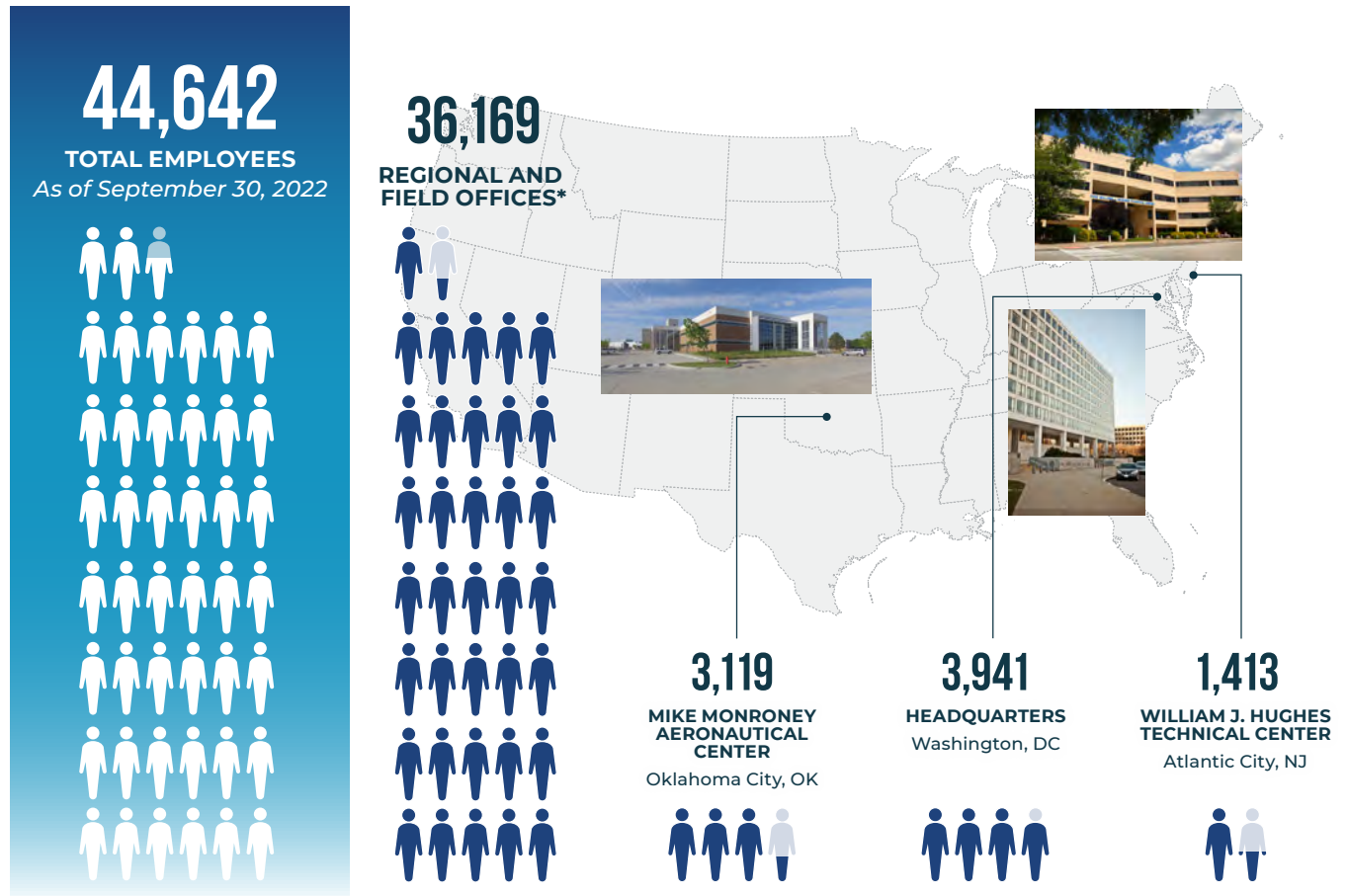
(inside back cover)

**THIS REPORT AND REPORTS FROM PRIOR YEARS
ARE AVAILABLE ON THE FAA WEBSITE.**

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

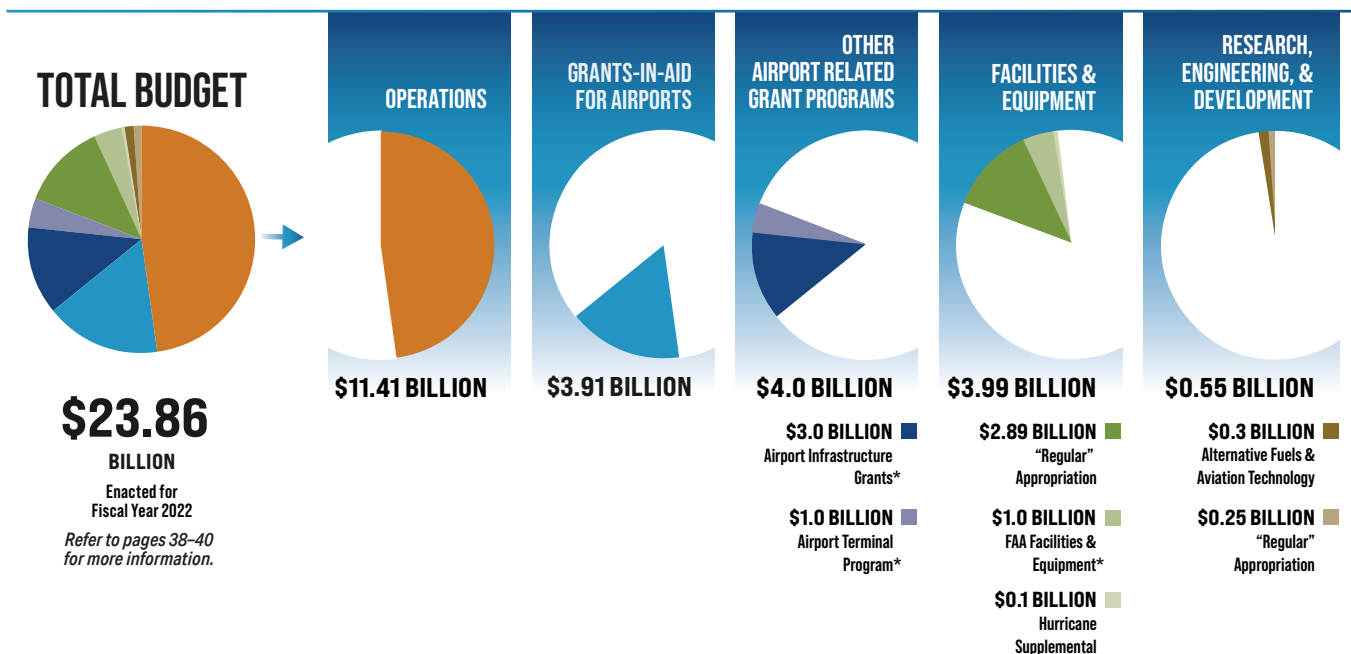


Snapshot of Resources



* Regional and field offices include 1,745 FAA employees outside the continental United States as follows: 1,071 in Alaska, 358 in Hawaii, 284 in U.S. territories, and 32 in foreign countries.

KEY: = 1,000 people



*Supplemental funds received from the Infrastructure Investment and Jobs Act, 2022 [Public Law 117-58].

Foreword

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

The FAA is committed to providing the safest, most efficient aerospace system in the world, and fulfilling its mission in a fiscally responsible and transparent manner. This commitment is ongoing, and we are proud of the recognition we have received over the years for transparent reporting of our performance and accountability. The Certificate of Excellence in Accountability Reporting (CEAR) award program was established by the AGA (formerly the Association of Government Accountants) in collaboration with the Chief Financial Officers Council and OMB to improve government accountability by streamlining reporting and improving the effectiveness of reports. Receiving the CEAR award is a significant accomplishment for a federal agency, and **the FAA is proud to have received the prestigious CEAR award 18 of the last 19 years.** We are also extremely honored to have been recognized nine times with special "best in class" awards for elements of our PAR considered the best across all of government. **For the FY 2021 PAR, the FAA received another "best in class" award, for "Cost and Performance Data Integration."** This award recognized the FAA's PAR as one that provided concise, integrated cost and strategic goal reporting, including excellent financial management insights and financial efficiency information. The FAA is honored to have received this special award.



The success of our financial stewardship is due to the diligent efforts of our employees who practice sound fiscal policies in supporting our mission, programs, and systems. We thank our people for their dedication and commitment to our mission and their transparent reporting of the important work of the agency.



A Message from the Administrator



BILLY NOLEN

***FISCAL YEAR 2022 SAW A
HUGE SURGE OF ACTIVITY
AS THE AVIATION INDUSTRY
AND THE NATION CONTINUED
ON THE ROAD TO RECOVERY.***

These last few years have tested our resolve, our flexibility, and our resiliency. I am happy to report that the FAA has shown we have an abundance of all three qualities. Fiscal Year 2022 saw a huge surge of activity as the aviation industry and the nation continued on the road to recovery. That's not to say this year has been without its challenges.

COVID-19 continues to affect the FAA. The vast majority of our workforce must be onsite to perform their duties, and their safety and well being is a priority for us. To protect them, we continue to maintain safety protocols throughout our facilities. We lifted certain restrictions in April, allowing the rest of our employees to return to the workplace. This is not a return to old ways, but a forward-looking new way of collectively fulfilling our mission.

COVID-19 also continues to impact air travel, compounding the effects of staffing shortages across the industry. We were proud to help address this problem by awarding the first set of Aviation Workforce Development Program grants. By providing these grants to academia and the aviation community, we are helping prepare a more inclusive talent pool of pilots and aviation maintenance technicians. These and future grants will inspire and recruit the next generation of aviation professionals.

We also take great pride in introducing a new generation to aviation. The FAA's Science, Technology, Engineering, and Math (STEM) Aviation and Space Education (AVSED) program continues to expand its outreach efforts. Through efforts like our Adopt-a-School program and the Airport Design Challenge, we are inspiring kids to pursue careers in aviation.

One of the most significant developments this year was the enactment of the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law (BIL). This historic opportunity ushers in the largest investment in our nation's infrastructure for generations. The law will modernize infrastructure, increase equity in transportation, help fight climate change, strengthen the supply chain, and create jobs across all modes of transportation. The FAA is excited to share in the implementation of this transformational legislation through the investment of \$25 billion in our nation's aerospace system over the next five years. The

BIL funding provides an unprecedented opportunity to kick-start the revitalization of our outdated air traffic control facilities infrastructure.

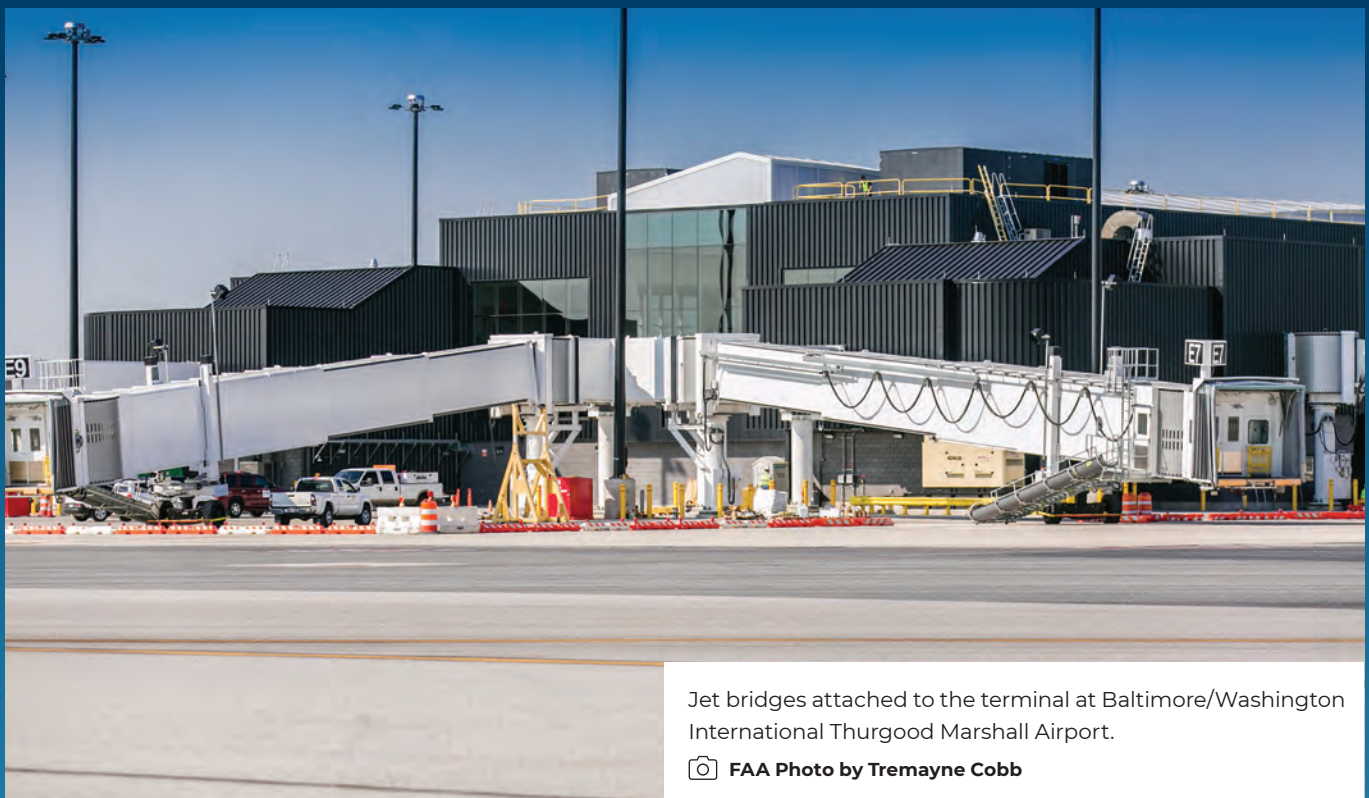
I'm proud of the progress the agency has already made in implementing this significant legislation. Last December, we announced the first \$2.9 billion in airport infrastructure grants, and in July, we announced the award of nearly \$1 billion in grants to 85 airports across the country to expand capacity at our nation's airport terminals. For more information on this once-in-a-generation program, go to: <https://www.faa.gov/bil>.

The FAA remains committed to supporting the U.S. goal to reach net-zero aviation greenhouse gas emissions by 2050. We have a long history of investing in innovation to reduce the carbon dioxide emissions of aircraft. This year we've increased our investments in sustainable aviation fuels and are eager participants in the government-wide Sustainable Aviation Fuels Grand Challenge. For more information on our contributions to the fight against climate change, go to: <https://www.faa.gov/sustainability>.

FAA Reauthorization and Aircraft Certification, Safety, and Accountability Act

The FAA Reauthorization Act of 2018, Public Law 115-254 (the Act), was signed into law on October 5, 2018. The Act is wide-ranging and provides the FAA with a host of critical new authorities and responsibilities on a broad range of aviation issues, including enhancing safety, improving infrastructure, and enabling innovation. Over the past year, the agency has continued to make significant progress in fulfilling the congressional mandates in the Act, while dealing with challenges associated with the COVID-19 global public health emergency and meeting the requirements of the 2020 Aircraft Certification, Safety, and Accountability Act.

The FAA continues to work toward meeting the rulemaking obligations outlined in the 2018 Reauthorization Act. In October 2022, the FAA issued the Flight Attendant Duty Period and Rest Requirements Final Rule. This extends the rest period to 10 hours, with no option to reduce the rest period. Also, in November 2021, the FAA issued the Notice of



Jet bridges attached to the terminal at Baltimore/Washington International Thurgood Marshall Airport.

📷 **FAA Photo by Tremayne Cobb**

...THIS AGENCY WILL CONTINUE TO MOVE FORWARD IN AVIATION SAFETY, AEROSPACE SYSTEM PERFORMANCE, AND INNOVATION.

Proposed Rulemaking (NPRM) for Medical Certification Standards for Commercial Balloon Operations. This NPRM, when finalized, would require commercial balloon operators to hold a second-class medical certificate. Upon adjudication of comments, the FAA will finalize this rule. Lastly, on August 1 the FAA issued the Secondary Flightdeck Barriers NPRM. This rule, when finalized, will require the installation of a secondary barrier on certain transport category airplanes. This secondary barrier would be required to protect the flightdeck against unauthorized intrusion when the flightdeck door is opened.

Drone integration continued to be a hot topic. In addition to almost 300 approvals for drones to conduct agricultural missions since January 2022, the FAA also accepted the first method to comply with the Remote Identification Rule for drones. The FAA also began testing various means to detect and mitigate unmanned aircraft at the William J. Hughes Technical Center. Several of these systems are currently at specific airports for further evaluation to determine the safety and efficacy of these systems near airports.

As directed by the FAA Reauthorization Act of 2018, the FAA established the Office of Spaceports as a centralized policy office and, more recently, convened a federal government working group to develop a national spaceport strategy that leverages the full network of domestic spaceports to benefit the space transportation industry and the nation as a whole. This working group is focused on the infrastructure, operations, and utilization of our nation's spaceports,

and includes federal and commercial spaceports that represent the totality of the space launch and reentry capability in the United States. The strategy will consist of three primary areas of interest: promote innovation and investment in spaceport infrastructure; establish consistency in operations and standards at the nation's spaceports; and promote cooperation and partnerships between federal and commercial spaceports.

Financial Accountability

The FAA remains committed to ensuring transparency and accountability to the public while achieving our mission. This report's performance and financial data are complete and accurate, providing a comprehensive representation of agency results. Furthermore, for the 16th consecutive year, independent auditors gave our agency an unmodified audit opinion on our financial statements. The independent auditors' report appears on page 91, while my statement of assurance appears on page 47. The entire FY 2022 Performance and Accountability Report, as well as a summary document, can be accessed online at: https://www.faa.gov/about/plans_reports/#performance.

Conclusion

The FAA has demonstrated its ability to maintain the safety of the nation's airspace system even in the face of previously unthinkable challenges. Our workforce has demonstrated the flexibility and ingenuity to adapt to challenging circumstances and a myriad of obstacles. As we invest in our nation's infrastructure, and redouble our efforts to reduce aviation's impact on the environment, this agency will continue to move forward in aviation safety, aerospace system performance, and innovation. Whatever the future holds, the FAA will be ready!



BILLY NOLEN
Acting Administrator
November 9, 2022



On April 8, 2022, the SpaceX Dragon crew capsule launched via SpaceX Falcon 9 rocket with the Axiom Mission 1 including four space flight participants onboard from Kennedy Space Center's Launch Complex 39A. The mission was a privately funded and operated human space flight mission to the International Space Station. The rocket's first stage landed on a drone ship in the Atlantic Ocean shortly after launch.

 **NonCommercial 2.0 Generic**
(CC BY-NC 2.0)

MANAGEMENT'S DISCUSSION AND ANALYSIS



The FAA Flight Program Bombardier Global 5000 supports many projects, such as 5G. See discussion of 5G starting on page 16.

 **FAA photo**

History of Modern Aviation and the Creation of the FAA

Without regulation, early aviation remained the realm of daredevils. Early pilots, male and female, pushed one another to set, then break, a host of aviation records for speed, flight duration, and aerobatics. Without navigation aids, pilots flew 200 to 500 feet above the ground so they could navigate by roads and railways. Fatal accidents were routine.

The Airmail Act of 1925 facilitated the growth of the commercial airline business. The legislation required the Post Office Department to contract with airlines to carry the mail. As a result, a number of airlines began mail delivery service. These airline operators found they could not be profitable unless they also carried passengers. The high number of accidents, however, made many potential passengers afraid to fly.

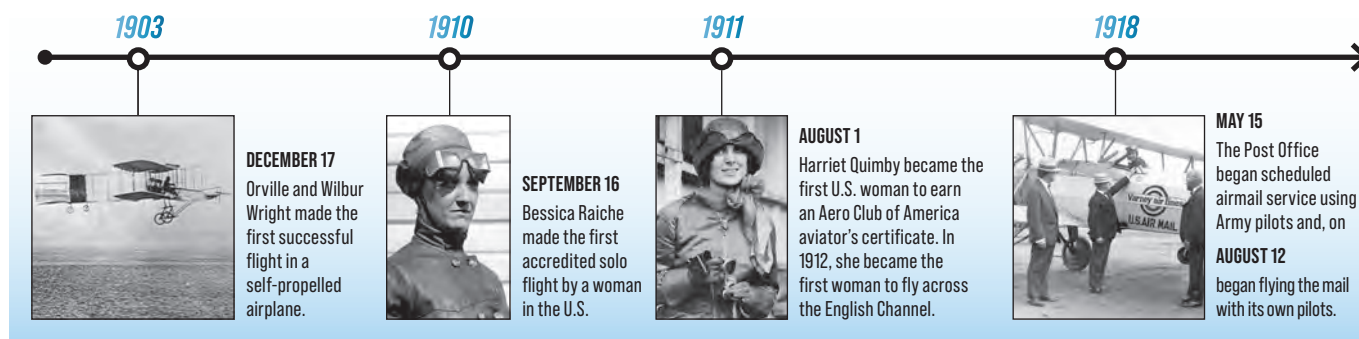
Aviation industry leaders sought federal action to improve and maintain safety standards, so the aviation industry could reach its full commercial potential. At their urging, Congress passed the Air Commerce Act of 1926. This landmark legislation established the first federal regulation of aviation by directing the Secretary of Commerce to foster air commerce, license pilots, certify aircraft, establish airways, and operate and maintain aids to air navigation. With safety regulations in place and public confidence growing, aviation quickly became a vital national resource, providing opportunities for travel, new business ventures, and jobs.

As the aviation industry grew, so too did federal responsibilities. Over time, new federal oversight areas included air traffic control and airport safety. The Federal Aviation Act of 1958 created the FAA largely as we know it today. Since then, with the continued evolution of aeronautics, the agency has addressed a wide variety of concerns, including aircraft noise, security, international cooperation, and commercial space transportation.

Aviation today remains as challenging as ever. Innovation in aeronautics and astronautics continues at a rapid pace. Commercial space activities are taking civilians into space, unmanned aircraft are taking flight and becoming important tools in commerce, and urban air mobility and advanced air mobility have joined our lexicon. The aviation industry continues to expand, and our list of partners, both national and international, is growing. As always, the FAA stands ready to tackle current and future challenges with the same deep dedication and focused energy it has shown for the last 64 years.

Starting below and continuing to page 21, we have compiled a timeline of some major accomplishments in the context of aerospace history.

MILESTONES IN AEROSPACE HISTORY



FAA Organization

The FAA fulfills its mission through five lines of business that work collaboratively with the aviation and aerospace industries, as well as other key stakeholders, to develop, operate, and maintain the national air transportation system.

- **Air Traffic Organization (ATO).** The ATO is responsible for providing safe and efficient air navigation services across 29.4 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 employees are the service providers — the air traffic controllers, technicians, pilots, engineers, program managers, and other support personnel — whose daily efforts keep aircraft moving safely and efficiently through the sky.
- **Airports (ARP).** ARP provides leadership in planning and developing a safe and efficient national airport system. ARP is responsible for all programs related to airport safety and certification inspections, and for standards associated with airport design, construction, and operation (including international harmonization of airport standards). ARP is also responsible for maintenance of the National Plan of Integrated Airport Systems and development of national-level guidance and policies on airport and system planning, environmental review and analysis, and a complex array of airport financial assistance programs. Additionally, ARP is responsible for national airport planning and environmental and social requirements, as well as establishing policies related to airport rates and charges, compliance with grant assurances, and airport privatization.
- **Aviation Safety (AVS).** AVS is responsible for the certification, production approval, and continued airworthiness of aircraft, as well as the certification of pilots, mechanics, and others in safety-related positions. AVS is also responsible for certifying and overseeing approximately 11,500 commercial air operators (including airlines) and air agencies (including maintenance and training organizations), integrating drones and other advanced aviation technologies, developing regulations, conducting aviation accident investigations, and conducting aerospace medical and human factors research.
- **Security and Hazardous Materials Safety (ASH).** ASH protects critical FAA assets, personnel, and the flying public from security risks, including criminal, terrorist, and insider threats. This is accomplished 24 hours a day through emergency preparedness and response; global aviation situational awareness; intelligence threat identification, warning, and analysis; robust regulatory investigations; and support and education for law enforcement organizations investigating FAA certificated entities. ASH collaborates within the 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. ASH helps prevent HAZMAT-related accidents or incidents aboard aircraft, using targeted, risk-based oversight, as well as education, outreach, and stakeholder engagement both domestically and internationally.
- **Commercial Space Transportation (AST).** AST ensures protection of the public, property, and the national security and foreign policy interests of the United States during commercial space launch and reentry activities. AST does this through authorizing launches and reentry operations and by licensing launch and reentry sites. AST also encourages and facilitates U.S. commercial space transportation safety, with due consideration of environmental issues.



WATCH OUR VIDEO:
WHO WE ARE AND WHAT WE DO — “FAA 101”

<https://www.youtube.com/watch?v=9KguBolHI4I>



HISTORY *(continued)*

1921



JUNE 15

Bessie Coleman became the first African American in the world to earn a pilot's license. Since the U.S. did not issue such licenses until 1927, and it was difficult for women and people of color to find flight instructors in the U.S., she took flying lessons abroad and received her license from the Fédération Aéronautique Internationale.

1926



MARCH 16

Robert H. Goddard made the first free flight of a liquid-fueled rocket in Auburn, MA.



MAY 20

President Calvin Coolidge signed the Air Commerce Act, establishing federal control over civil aviation.

1927



APRIL 6

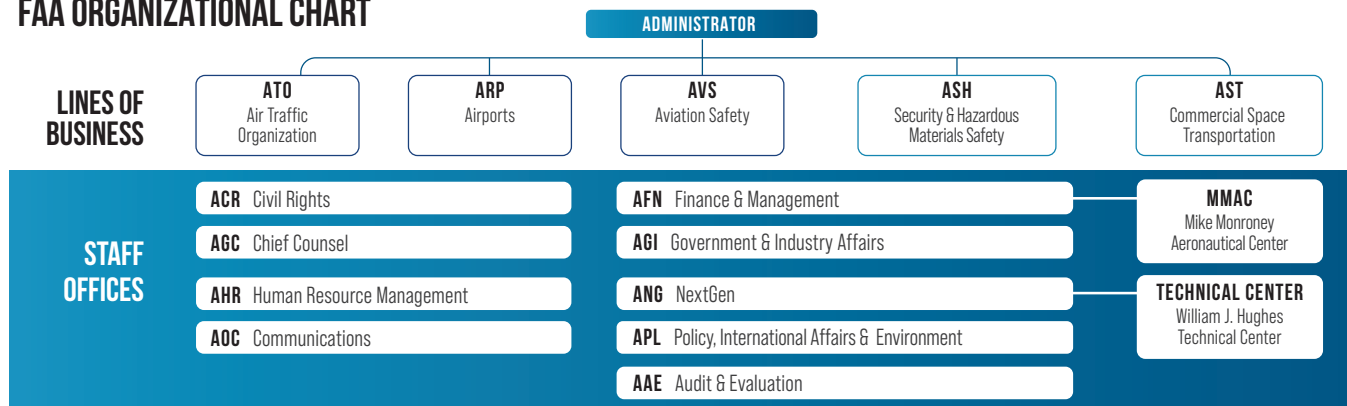
William P. MacCracken, Jr., Assistant Secretary of Commerce for Aeronautics, received Pilot License No. 1, the first such license issued by the federal government.



MAY 20-21

Charles Lindbergh made the first nonstop solo flight across the Atlantic.

FAA ORGANIZATIONAL CHART



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

- Finance and Management (AFN).** AFN functions as the FAA's shared services organization, responsible for providing common business services through a consolidated, integrated approach. AFN delivers high-quality, efficient, and reliable finance, acquisitions, contracting, information technology, property management, and technical training services across the agency. AFN helps streamline functions to ensure they are delivered as effectively and efficiently as possible.
 - The Mike Monroney Aeronautical Center (MMAC). The MMAC, part of AFN, provides unique functions in support of the FAA's mission. Services include technical training for air traffic controllers, technicians, aviation safety inspectors, and engineers; financial, information systems security, technology, and business services solutions for customers across the DOT and federal government; and facility management services for all MMAC tenants. Several non-AFN FAA lines of business have operations located at the MMAC. Additional information on the MMAC can be found on page 42.
- NextGen (ANG).** ANG provides leadership in planning and developing the Next Generation Air Transportation System (NextGen) and in managing the agency's Research and Development (R&D). 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.

- The William J. Hughes Technical Center (Technical Center). The Technical Center, part of ANG, is the nation's premier air transportation laboratory. Technical Center employees conduct research, development, test and evaluation, and sustainment of the full spectrum of aviation systems, including communications, surveillance, navigation, traffic flow management, and weather systems. The Technical Center laboratories provide a platform to identify integrated solutions for the modernization and sustainment of the national airspace system and for delivering NextGen operational capabilities. Additional information on the Technical Center can be found on page 24.

As shown in the FAA Organizational Chart above, the FAA has seven additional Staff Offices: Civil Rights; Chief Counsel; Human Resource Management; Communications; Government & Industry Affairs; Policy, International Affairs & Environment (which also includes the Office of National Engagement and Regional Administration); and Audit & Evaluation.

For more information about FAA lines of business and staff offices, please visit www.faa.gov/about/office_org.

HISTORY *(continued)*

1932



MAY 21-22
Amelia Earhart became the first woman to make a solo crossing of the Atlantic by airplane.

1935



APRIL 2
British scientist Sir Robert Watson-Watt patented the first practical radar (radio detection and ranging) system.

1936



JULY 6
Federal en route air traffic control began as the Bureau of Air Commerce took over operation of the three airway traffic control stations at Newark, Chicago, and Cleveland.

1938



JUNE 22
Willa Brown received her private pilot's license. She later became one of the first African-American women to earn a commercial pilot's license and the first African-American woman officer in the Civil Air Patrol.

Aviation Infrastructure

On November 15, 2021, the President signed the Infrastructure Investment and Jobs Act, also known as the Bipartisan Infrastructure Law (BIL). Its enactment delivered a once-in-a-generation opportunity for our nation's infrastructure. The law funds investments that modernize infrastructure, increase equity in transportation, help fight climate change, strengthen the supply chain, and create jobs across all modes of transportation. This historic and transformational legislation will provide a sizeable down payment for the FAA to address the physical condition of air traffic control facilities as well as improve the safety, reliability, and resiliency of our nation's airports.

The BIL provides the FAA with \$25 billion over five years in three buckets:

- \$5 billion for air traffic control facilities;
- \$15 billion for airport infrastructure grants; and
- \$5 billion for investments in airport terminals and airport-owned towers.

The first bucket provides \$5 billion to address the physical condition of FAA-owned air traffic control facilities. It is a down payment to reduce the backlog of refurbishment, upgrades, and replacement of critical facilities and equipment in the national airspace system. The first installment of these funds in FY 2022 covers power systems, fuel tanks, HVAC and environmental control systems, mechanical systems, radio and radar



The current air traffic control tower at Asheville Regional Airport in Asheville, NC. A grant of \$15 million has been awarded to construct a new tower. The existing 61-year-old air traffic control tower will be replaced with a new, expanded facility and the existing terminal building will be expanded and renovated. The project will enable increased terminal capacity, replace aging and obsolete infrastructure, improve airfield safety, upgrade the facility to Americans with Disabilities Act standards, and increase energy efficiency.



FAA technician working on a communication tower.

 **FAA Photo**

towers, and unstaffed buildings that house and protect critical equipment. Future appropriations of this funding will shift the focus towards the replacement of terminal air traffic control facilities, located mostly at smaller airports across the country. For more information, see: <https://www.faa.gov/bil/air-traffic-facilities>.

The second bucket provides \$15 billion for the Airport Infrastructure Grant Program, which differs slightly from the existing Airport Improvement Program, or AIP. These new grants can fund runways, taxiways, and aprons, as well as other broad efforts like terminal, intermodal, and roadway projects. On December 16, 2021, the FAA announced FY 2022 funding totaling \$2.89 billion provided under the BIL for airport infrastructure improvements. For a map showing projects across the country, see: <https://www.faa.gov/bil/airport-infrastructure>.

The third bucket provides \$5 billion for the Airport Terminal Program to make investments in airport terminals and airport-owned air traffic control towers. These grants will give consideration to projects that improve airfield safety through terminal relocation,

replacing aging facilities, improving energy efficiency, encouraging competition, and expanding access for persons with disabilities. On July 7, 2022, the FAA announced the award of nearly \$1 billion across 85 airports throughout the country. View an interactive map of the airports receiving grants and how the funds will be invested at: <https://www.faa.gov/bil/airport-terminals>.

Both the Airport Infrastructure and Airport Terminal grant programs provide enhanced funding availability for multimodal projects (airport-transit connections). These investments will provide more equitable access to the airport. For the Airport Terminal Program, the FAA will give priority to projects that increase or improve access to passengers, persons with disabilities, and historically disadvantaged populations.

Taken together, these three BIL programs represent a massive investment in our nation's infrastructure. The projects funded through these programs support the White House's sustainability and climate change goals through investments that increase resiliency and energy efficiency.

Achievements and Challenges

This year the FAA made significant progress at tackling several of its major challenges. However, much work remains to be done in order to both overcome our biggest challenges, as well as to maximize the opportunities new technologies can offer the flying public. The topics covered here, as well as throughout this document, highlight the complexity and multifaceted nature of the issues facing aviation. The following sections highlight areas where the FAA is taking significant steps to ensure our national airspace remains the safest in the world.

Aircraft Certification Reform

The FAA understands and embraces the need to promote and sustain the primacy of safety, as well as continuous and proactive management of risk throughout its workforce, across industry, and with other aviation authorities.

To meet this need, the FAA drives greater transparency, collaboration, and accountability across the regulating and regulated communities, with a primary focus on:

- Strengthening corporate safety cultures to improve safety risk management and performance through mandated and voluntary action;
- Improving data availability, accessibility, and analysis through both process and infrastructure enhancements; and
- Advancing system-level safety management through better integration of the design, production, and operational approval processes.

Further, the FAA is committed to thorough and complete implementation of the aircraft certification reform legislation (Aircraft Certification, Safety, and Accountability Act) and addressing recommendations from recent investigations (Office of the Inspector General, National Transportation Safety Board, the Indonesian National Transportation Safety Committee, etc.) and independent reviews (Joint Authorities Technical Review, Special Committee, etc.). The FAA continues to improve and refine our certification and safety oversight processes using a comprehensive approach to implementing the provisions from the Aircraft Certification, Safety, and Accountability Act and the various recommendations received from the investigations and independent reviews. In doing so we have identified the following general themes:

- Treat aircraft as complex systems, with full consideration of how all the elements in the operating system interact.
- Integrate human factors considerations more effectively throughout all aspects of the design and certification process.
- Improve the agency's oversight process by ensuring the coordinated and flexible flow of data and information.
- Focus on the workforce of the future and develop expertise to evaluate technological advances.

Since December 2020, the FAA has achieved a number of notable accomplishments, including:

- Bolstering the FAA's Organization Designation Authorization (ODA) program through various efforts, including publishing policy to prevent interference

HISTORY *(continued)*

1938



JUNE 23

President Franklin Roosevelt signed the Civil Aeronautics Act of 1938 into law, which transferred federal responsibilities for civil aviation from the Bureau of Air Commerce to a new, independent agency, the Civil Aeronautics Authority.

1941



Oscar Holmes, the first known African-American to become a federal air traffic controller, joined the Civil Aeronautics Authority.



NOVEMBER 1

The Civil Aeronautics Authority began operating airport traffic control towers and later that year began hiring and training women to be air traffic controllers.

1947



OCTOBER 14

Charles E. Yeager, U.S. Air Force, piloting the Bell X-1 rocket-propelled research aircraft at Muroc, CA, became the first pilot to break the sound barrier.

with ODA unit members and to facilitate open communication between unit members and the FAA. These efforts are part of the agency's work to fortify the FAA's ODA program in order to drive consistency and transparency with how the FAA appoints, manages, and oversees designees.

- Implementation of the Voluntary Safety Reporting Program (VSRP), allowing confidential reporting of identified safety concerns for all FAA AVS employees. The AVS VSRP emphasizes risk-based, data-driven decisions and is structured to ensure alignment and integration with other activities across the FAA. Similar to other voluntary safety reporting programs, the AVS VSRP uses an Event Review Team, which is an independent body comprised of AVS management and union representatives. This team analyzes reported safety concerns and determines, through consensus, the need for corrective actions or other outcomes.
- Issuance of the draft Flightpath Management Advisory Circular, providing guidance to operators to help pilots maintain manual flight operations skills and avoid becoming overly reliant on automation. The advisory provides a single framework for operations and training programs. The draft Advisory Circular was developed based on recommendations received from the Air Carrier Training Aviation Rulemaking Committee and includes recommended practices for flightpath management that can be incorporated into training programs and operational procedures.

The FAA is also committed to transparency, regularly briefing congressional staff, union partners, and industry stakeholders about our implementation efforts.

The FAA will continue our work to diligently implement all provisions and recommendations while also continuing to improve and refine our certification and safety oversight processes using a comprehensive approach.

Workforce Development

The aviation industry as a whole faces workforce challenges. Qualified pilots and aircraft mechanics are in short supply. These shortages were exacerbated by the COVID-19 pandemic. When commercial aviation passenger levels rebounded this year, they manifested as widespread flight cancellations and delays. Well before COVID-19, Congress anticipated these challenges and established two grant programs through section 625 of the FAA Reauthorization Act of 2018 to expand the aviation workforce. The Aircraft Pilots Workforce Development Grants program encourages students to become pilots, aerospace engineers, or unmanned aircraft systems operators. The Aviation Maintenance Technical Workers Workforce Development Grants program helps prepare tomorrow's aviation maintenance technicians. The FAA provides these grants to academia and the aviation community to help prepare a more inclusive talent pool of pilots and aviation maintenance technicians.

In FY 2022, the FAA awarded the first \$10 million in Aviation Workforce Development Grants to more than 30 educational institutions across the country. For more information on these grant recipients, see https://www.faa.gov/about/office_org/headquarters_offices/ang/grants/awd/awards. The second round of grants is underway, with another \$10 million available. The FAA published the Notice of Funding Opportunity for this installment in April 2022 and received applications in June. The FAA expects to award those grants in early FY 2023.

In addition to the Aviation Workforce Development grant programs, this year the FAA established a new prototype program to assist military veterans who hope to become commercial aircraft pilots. Known as the Veterans Pilot Training Pilot Program, the program's main goals are to recruit and enroll veterans in a program that will support their successful completion of an Air Transport Pilot certification and to provide metrics, data, and feedback on the feasibility and viability of a larger-scale program and to inform and improve the program's future implementation. In July 2022, the FAA awarded a four-year cooperative agreement to the University of North Dakota, an

HISTORY (continued)



accredited flight school, to begin this program. The FAA is committed to creating bridges to the civilian workforce for veterans returning from service and assisting their transition into new career paths that provide long-term stability through ladders of opportunity at home.

The FAA is also working to attract young talent for careers at the FAA. The FAA's Science, Technology, Engineering, and Math (STEM) Aviation and Space Education (AVSED) Program is an integral part of FAA outreach to the national education system. The program introduces students to aviation and aerospace careers and promotes STEM education through outreach events such as the Adopt-a-School program. Through this program, FAA employees volunteer to collaborate with classroom teachers to present lessons that foster curiosity about aviation. Examples of these lessons include:

- Why air traffic control is important to the safe operation of the national airspace system and how controllers use problem-solving skills to keep aircraft safe on the ground and in the air.
- How Aviation Maintenance Technicians use STEM skills, tools, and technologies in their jobs.
- How drones are used in the community, how they can be operated safely, and how various professions use drones to help with their work.

These lessons aim to show that STEM skills can translate directly to careers in the FAA. Through these kinds of workforce development programs, the FAA will ensure the pipeline for aviation professionals remains healthy, diverse, and inclusive for decades to come.

For more information on the agency's STEM AVSED activities, see page 62 and visit: <https://www.faa.gov/education>.

5G

On January 19, 2022, 5G telecommunications services launched in 46 U.S markets using frequencies in a radio spectrum known as the C-band. The C-band spectrum is adjacent to the band used by aircraft radio altimeters, which raised concerns about potentially hazardous interference by 5G transmitters. The FAA requires radio altimeters be accurate and reliable. Because the agency is charged with ensuring the safety of all aircraft equipment, the rollout of the C-band wireless network required extensive cooperation between equipment manufacturers, wireless companies, and the FAA.

Because the deployment involved changes in power levels on the frequencies near the aviation spectrum, the FAA imposed restrictions on certain safety sensitive flight operations that rely on radio altimeters. The FAA continues to work to safely reduce the effects of this disruption. The FAA firmly believes that 5G and the U.S. aviation system can co-exist, and the agency has made significant strides in support of this goal since January. Daily collaboration between experts from the FAA and the wireless companies helped refine our risk-assessment model near runways. This enabled the wireless companies to turn on the maximum number of transmitters while protecting aviation safety.

As of October 2022, the wireless companies have activated approximately 97 percent of their installed network of more than 51,000 transmitters. Key stakeholders in the aviation and wireless industries identified a process that will continue to protect commercial air travel from disruption by 5G C-band interference while also enabling wireless companies to enhance service around certain airports.

During a series of stakeholder roundtable meetings, wireless companies offered to continue voluntary



Check out our STEM AVSED YouTube playlist:

https://youtube.com/playlist?list=PL5vHkqHi51DQaQfoQS_pyHA7MTG98vr7a



HISTORY *(continued)*





5G tower in Spartanburg, SC. See discussion beginning on page 16.

 Zac Gudakov at Unsplash

mitigations for another year until July 2023. Airlines and other operators of aircraft must install filters or other enhancements as needed as soon as possible. The installation of filters and replacement units for the mainline commercial fleet (approximately 7,500 aircraft in the U.S. fleet) should be done by July 2023. After July 2023, wireless companies expect to operate their networks in urban areas with minimal restrictions.

In the long-term, the FAA expects to establish a new performance standard for altimeters in the presence of 5G C-band. That work is underway, but it will take years to develop and ultimately install the improved altimeters into the fleet. The FAA continues to use the information and lessons learned from the 5G launch to better prepare for spectrum and aircraft-equipage policies in the future. We plan to use the same framework of interaction between the FAA, original equipment manufacturers, and wireless companies as a template for engaging new entrants — a process that has already begun.

Beyond Visual Line-of-Sight (BVLOS) Operations

This fiscal year, the FAA continued to make progress towards enabling scalable Beyond Visual Line-of-Sight (BVLOS) operations¹ of Unmanned Aircraft Systems (UAS), or drones. On June 9, 2021, the FAA chartered a new Aviation Rulemaking Committee (ARC) to help the agency develop a regulatory path for routine BVLOS operations. An ARC is a group of specialists and interested stakeholders who evaluate issues and provide the FAA with information, advice, and recommendations that could result in rulemaking. The BVLOS ARC was composed of a broad selection of stakeholders representing the interests of private citizens, various levels of government, academia, information technology, and national infrastructure. The BVLOS ARC was tasked with:

¹ A BVLOS operation is one in which neither the pilot nor a visual observer can physically see the drone being operated. Operations within a pilot's line of sight can be conducted under the existing rule for small unmanned aircraft systems, part 107.

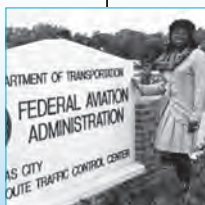
HISTORY (continued)

1967



APRIL 1
The Department of Transportation and the National Transportation Safety Board began operations.

1968



Eleanor Williams began controller training; she earned her controller certification, becoming the first African-American female air traffic controller, in 1971.

1969



JULY 20
Astronauts Neil A. Armstrong and Edwin E. Aldrin, Jr., became the first people to land on the moon, while Michael Collins remained in lunar orbit. Later in the day, Armstrong and then Aldrin became the first to walk on the lunar surface.

1971



Wally Funk became the first woman to complete the FAA's General Aviation Operations Inspector Academy course.

- Identifying safety and environmental considerations for BVLOS UAS operations, accounting for the security needs of the U.S. Government.
- Identifying societal benefits for BVLOS UAS operations.
- Recommending requirements and providing rationale for such requirements to enable BVLOS drone operations.
- Submitting a recommendation report to the FAA.

The BVLOS ARC's final report was published in March 2022. This report represents a huge milestone in laying the foundation for BVLOS operations of drones in the national airspace. The report has diverse perspectives that will inform the FAA's approach to safe drone integration and will help pave the way for routine package delivery, infrastructure inspection, and other more complex drone operations. The report can be viewed here: https://www.faa.gov/regulations_policies/rulemaking/committees/documents/media/UAS_BVLOS_ARC_FINAL_REPORT_03102022.pdf.

The FAA's next challenge is to consider these recommendations as it develops a path towards flexible performance-based regulations that enable scalable drone operations. Stakeholder outreach is an important part of this effort. To that end, the FAA held two public listening sessions with a broad segment of industry stakeholders to collect necessary feedback on the ARC report.

The industry is ready and willing to provide resources, technology, and expertise to scale BVLOS; many companies, communities, and industrial sectors have invested substantial resources in developing UAS technologies to realize these benefits. The ARC's recommendations and industry feedback are now under consideration as FAA has begun to map out a new regulatory framework to regulate drones, enhance safety, and promote sustainable transportation solutions — all while ensuring America's continued leadership in aviation innovation.

Commercial Space

Commercial rocket launches achieved new highs this year with 69 launches from several different companies. In August 2022, Blue Origin launched its sixth New Shepard suborbital launch vehicle from their West Texas launch site carrying space flight participants. Five of Blue Origin's six human spaceflight launches occurred this fiscal year, and Blue Origin anticipates an increasing launch cadence in the coming year. SpaceX continued to provide spaceflight capability to NASA astronauts and the International Space Station, launching their fourth crew mission in April and their 25th cargo resupply mission in July. Boeing continued the development of its commercial capsule and executed a second orbital demonstration flight for NASA in May 2022. Virgin Orbit launched its fifth licensed mission from the Mojave Air and Space Port in California in July 2022. Enabling this increased cadence is a worthy achievement on the part of the FAA, as well as an ongoing challenge.

The FAA continues to improve its processes to accommodate the commercial space industry's massive growth. One example of this improvement is the implementation of part 450 of Code of Federal Regulations Title 14. First published in March 2021, part 450 is a performance-based licensing structure for commercial space flight launch and reentry operations. This new regulation is a complete overhaul of the FAA licensure of commercial space launches and consolidates four prescriptive rules into one performance-based standard. With performance-based regulations, the FAA focuses on achieving results rather than trying to mandate the specific processes or technologies used to achieve those results. It allows companies to conduct multiple launches of the same vehicle, or a family of vehicles, after demonstrating how those vehicles meet established safety criteria. Additionally, part 450 licenses can be modified for new conditions instead of requiring commercial spaceflight providers to apply for an entirely new license. While this streamlines the process for applicants, it creates new challenges for the FAA as the agency must be able to quickly review the modifications

HISTORY (continued)



and make safety determinations on systems that may not conform with traditional launch and reentry standards. The FAA granted the first part 450 license to Astra in February 2022.

COVID-19

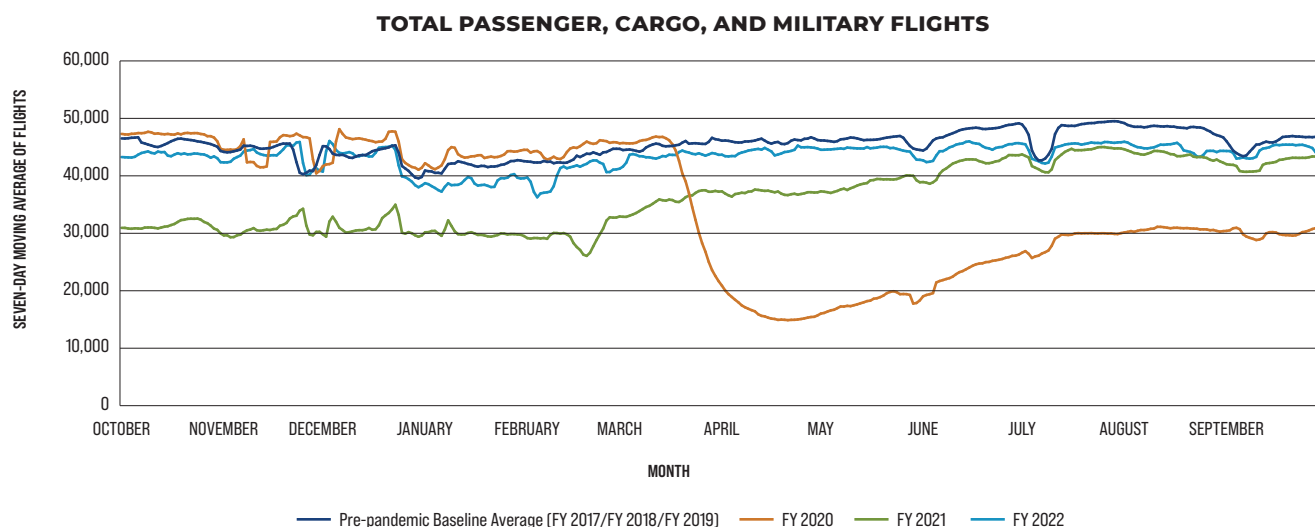
The FAA moved to a maximum telework posture during the COVID-19 pandemic, but a large number of FAA employees must always be onsite to perform their duties. Air traffic controllers, for example, must physically be at their stations to direct traffic. Still, the FAA always strives to ensure the safety of its employees, and at the height of the pandemic, to minimize contamination risk, the FAA paused in-person controller training. To further reduce the number of personnel at facilities, the FAA also paused the deployment of new systems at air traffic control facilities. These decisions

allowed the FAA to ensure continuity of operations throughout the national airspace system, even under the once unthinkable stresses the last three years have placed on the system.

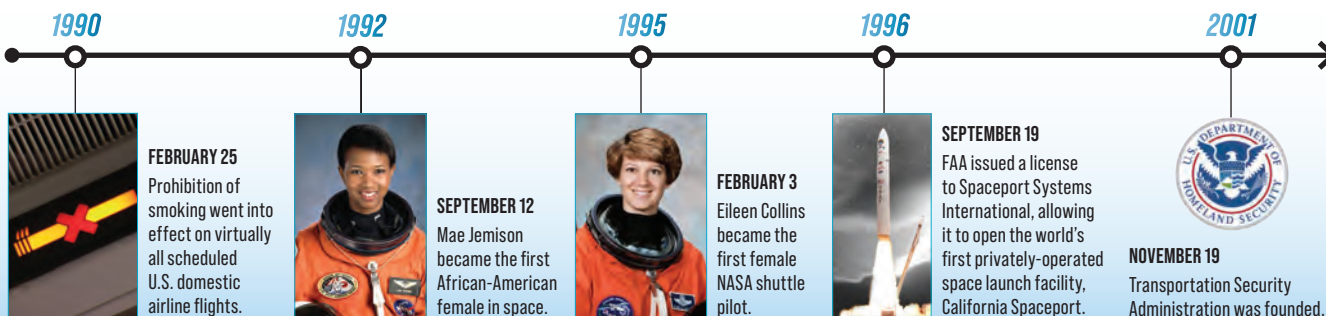
These measures, while necessary, did not come without cost. Controllers require a lengthy training program tailored to their specific facility, and the consequences of the training pause will take years to fully rectify. The pandemic caused the postponement of many new technologies, and the FAA is working diligently with industry to prioritize these new technologies for deployment as soon as conditions allow. In April 2022, FAA tasked its NextGen Advisory Committee to provide advice on industry's key priorities. The committee's feedback has helped us reassess our near-term priorities as we emerge from the COVID-19 pandemic. This invaluable feedback ensures we have the right

AIR TRAFFIC TRENDS AND THE COVID-19 PANDEMIC

THE COVID-19 PANDEMIC HAD A SIGNIFICANT IMPACT ON THE VOLUME OF AIR TRAFFIC in the United States, with the total number of flights (including passenger, cargo, and military flights) falling precipitously in the middle of FY 2020. The volume of air traffic has gradually recovered, as air traffic was slightly below pre-pandemic levels in FY 2022, as represented in the graphic by the average level over the FY 2017–2019 period.



HISTORY *(continued)*



balance between sustaining operations and investing in operationalizing NextGen.

The FAA has proven it can withstand enormous stresses thanks in no small part to the resiliency and flexibility of its workforce.

Rulemaking Portfolio

In addition to operating the largest, most complex air traffic control system in the world, the FAA is also a regulatory agency. We ensure the highest level of safety by promulgating rules that address safety, commercial space, UAS, and the environment. While the FAA has recently issued a significant number of

rules, the existing inventory of more than 60 rulemaking projects — almost double the number from a few years ago — creates a strain on the resources that support the rulemaking process.

Based on this situation, the FAA is taking actions to significantly reduce the number of rulemaking projects. This will be accomplished by concentrating efforts to publish those final rules in the rulemaking inventory. In addition, a review will be conducted on projects that have seen little or no recent movement to determine if those projects need to be withdrawn or terminated.

Related to this issue is the need to meet the FAA's public commitments regarding the projected dates when rules will publish in the Federal Register. In the past, the dates listed in the Office of Information and Regulatory Affairs' Unified Agenda have been, for the most part, consistently missed. This creates a public perception that the FAA cannot meet its obligations as a regulatory agency. To change the perception, new schedules will be developed for rules that are behind schedule. These updated schedules will be published in spring 2023. The FAA is committed to meeting these new dates and will take appropriate actions to ensure that this occurs.



PREPARING TO FLY? Visit https://www.faa.gov/travelers/prepare_fly/ before you get to the airport for travel tips, information on weather and delays, and resources for passengers with disabilities.





ALREADY AT THE AIRPORT? Visit nasstatus.faa.gov from your mobile device for up-to-date information on airport status and delays, and the latest news from the FAA.





Taxiway signage at Baltimore/Washington International Thurgood Marshall Airport. Directional arrows indicate the angles at which the taxiways intersect the current one.

 **FAA photo by Jacob Kang**

HISTORY *(continued)*



Looking Ahead

Aviation is experiencing a rapid revitalization now that the impacts of the COVID-19 pandemic are abating. The actions taken to mitigate the impact of the pandemic were dramatic and unprecedented, and the effects of these actions will be with us for years. Nevertheless, air travel is steadily recovering from reduced demand. Leisure travel has bounced back to pre-pandemic levels, and business travel continues to show strong signs of recovery. Looking further ahead, new technologies will reshape the national airspace system and make a lasting impact on the FAA and the aviation ecosystem.

During the pandemic, Congress took steps to ensure the survival of the national airspace system. Grant programs funded through COVID-19 supplemental bills ensured that airports could continue to operate even as air traffic levels plummeted. In addition, the Airport and Airway Trust Fund, which provides most of FAA's financial resources, received a one-time funding infusion to counteract the suspension of aviation tax collections during much of 2020 and the reduced tax collections in 2021. As air traffic resumed, Congress enacted the BIL to invest in the nation's infrastructure. The multiyear programs created by this law will bring a new complexity to the FAA's financial management responsibilities. The FAA must continue to exercise the highest degree of oversight of its new programs to ensure proper stewardship of taxpayer dollars.

As we bolster our existing aviation ecosystem, new entrants are changing the nation's airspace in complex and innovative ways. UAS, or drones, are regularly gaining increased capabilities. BVLOS operations that were once

a dream for drone operators are now permitted via waivers. The FAA is currently working with stakeholders to develop a regulatory path and craft rules to enable scalable BVLOS drone operations. The FAA is also laying the groundwork for integrating Advanced Air Mobility (AAM), which envisions a safe, accessible, automated, and affordable air transportation system for passengers and cargo, capable of serving previously hard-to-reach urban and rural locations.

AAM's challenges cross multiple domains: regulatory, infrastructure, technological, operational, and even societal. The FAA remains committed to applying lessons learned from drone integration into its efforts toward AAM integration. A holistic approach, one that looks simultaneously at the vehicle, operation, and airspace, will be integral to the success of AAM integration.

Commercial space operators are making significant strides in human spaceflight. Previously the domain of national governments, private companies now offer citizens the ability to escape gravity. The FAA remains committed to integrating commercial space operations into the national airspace as safely and efficiently as possible. As these operations increase in frequency, the FAA will use novel tools like the Space Data Integrator, as well as new launch and reentry licensing requirements, to minimize disruptions to air travel from space travel. For more information on the Space Data Integrator, visit: <https://www.faa.gov/newsroom/space-data-integrator-sdi-0>.

HISTORY (continued)

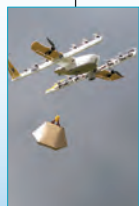
2019

APRIL 23

The FAA awarded the first air carrier certification to a drone delivery company, Wing Aviation, paving the way for the company to begin commercial package delivery and, on

OCTOBER 18

Wing Aviation and FedEx Express completed the first scheduled package delivery by drone to a house in Christiansburg, VA.



2021

APRIL 21

FAA's Remote Identification rule became effective, providing for the identification of drones in flight and the location of their control stations.

SEPTEMBER 15

SpaceX launched Inspiration4, the first spacecraft to orbit Earth with only space flight participants and no crew or professional astronauts on board.



TODAY, FLYING IS SAFER THAN ANY OTHER MODE OF TRANSPORTATION IN HISTORY. THAT'S NOT BY CHANCE. IT'S BECAUSE THE FAA HAS AND CONTINUES TO WORK CLOSELY WITH THE AVIATION COMMUNITY TO ENSURE SAFETY IS ALWAYS THE TOP CONSIDERATION.

— Acting FAA Administrator Billy Nolen

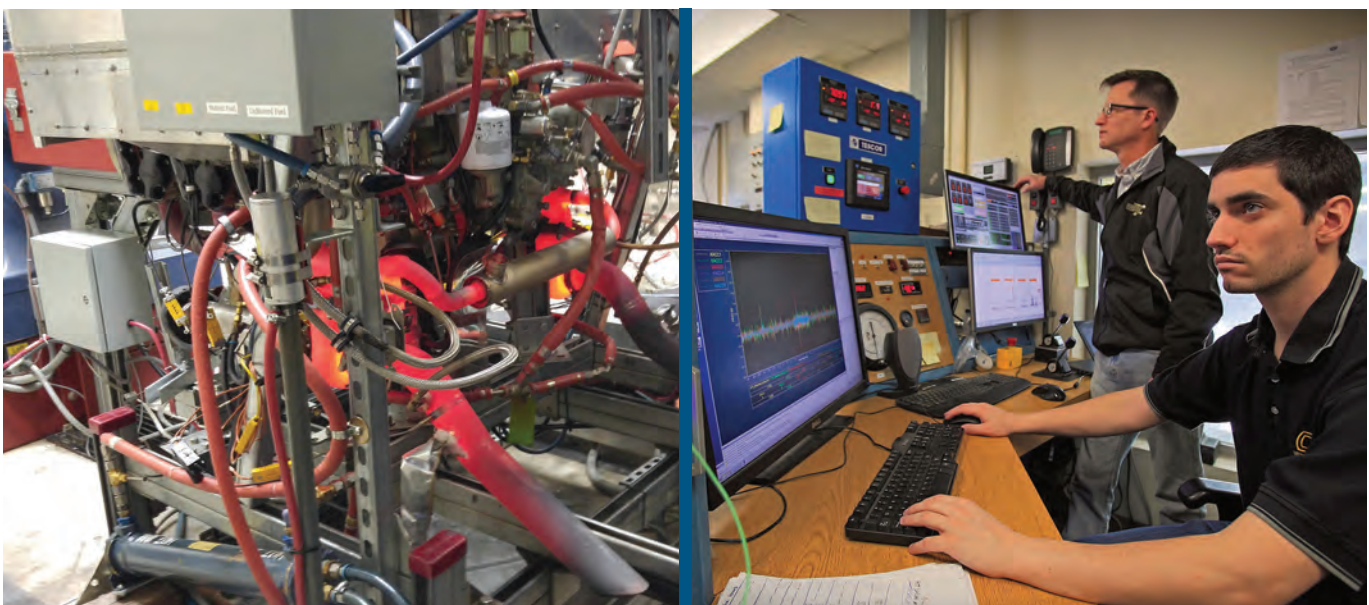
Building A Net-Zero Sustainable Aviation System By 2050

The FAA is committed to making aviation cleaner, quieter, and more sustainable. At the United Nations Climate Change Conference in November 2021, U.S. Secretary of Transportation Pete Buttigieg released the U.S. Aviation Climate Action Plan. This plan sets out to achieve net-zero greenhouse gas emissions from U.S. aviation by 2050. The plan builds on individual and sector-wide commitments announced by the United States aviation industry and highlights specific actions and policy measures to foster innovation and drive change across U.S. aviation. Air transportation is a major source of emissions, thus the DOT and the FAA will be a key part of the federal government's commitment to this ambitious action plan. For more information, find the plan here: https://www.faa.gov/sites/faa.gov/files/2021-11/Aviation_Climate_Action_Plan.pdf.

The FAA has several programs committed to realizing net-zero greenhouse emissions by 2050. The first is the creation of sustainable aviation fuels, known as SAF. Importantly, SAF can be used today without modification of existing aircraft. SAF can be made from a range of raw materials including crops, agricultural residue, and waste products. SAF produced from renewable and waste materials will have a significant impact on our effort to reduce greenhouse gas emissions. Such fuels will be critical to the aviation industry's ability to meet the net-zero emissions goal, and they have the potential to slash emissions by up to

100 percent. Relatedly, the FAA also supports research for piston aircraft to operate safely without leaded gasoline and encourages actions that minimize exposure to aircraft lead emissions.

In September 2021, the DOT and the Departments of Energy and Agriculture signed a Memorandum of Understanding to co-lead a government-wide SAF Grand Challenge to dramatically expand SAF production to three billion gallons per year by 2030 and meet 100 percent of aviation fuel needs by 2050. The FAA is a proud participant in the SAF Grand Challenge, which



Engine showing glowing hot twin turbochargers during extreme testing of alternative fuels at the William J. Hughes Technical Center's Propulsion and Airpower Engineering and Research Lab.



Rendering of the 1.5-megawatt solar array project, which will be built on the grounds of the Mike Monroney Aeronautical Center, and is projected to be completed in FY 2024.

 **Rendering by FSB Architects and Engineers.**

promises to reduce cost, enhance sustainability, and expand production and use of SAF that achieve a minimum of 50 percent reduction in lifecycle greenhouse gas emissions compared to conventional fuel. The SAF Grand Challenge and the increased production of SAF will play a critical role in a broader set of actions by the U.S. Government and the private sector to push U.S. aviation toward net-zero emissions and full decarbonization by 2050. SAF provisions in the Inflation Reduction Act, including tax incentives and grant programs, will help scale up production and use of SAF and support the goals of the SAF Grand Challenge.

The FAA is proud of several other investments in support of our long-term climate change goals. The Continuous Lower Energy, Emissions, and Noise (CLEEN) Program is the FAA's principal effort to accelerate the development of new aircraft and engine technologies that reduce noise, emissions, and fuel burn. Through the first two phases of this cost-share partnership, industry contributed \$388 million of cost-share to the CLEEN Program, far exceeding the FAA contribution of \$225 million. The FAA initiated CLEEN Phase III in 2021, and will spend more than \$125 million through 2026, matched by industry, on the development of additional aircraft technologies that reduce aviation's environmental impacts. For more information on CLEEN, visit: <https://www.faa.gov/go/cleen>.

The FAA also works in partnership with academia through the Aviation Sustainability Center (ASCENT). The university researchers in ASCENT are at the forefront of efforts to advance sustainable aviation fuels as well as support the FAA in its environmental

decision-making in the International Civil Aviation Organization (ICAO). ASCENT is examining a wide range of innovative technological and operational solutions that could help aviation reduce not only its climate impacts, but also impacts on communities due to noise and emissions that degrade air quality. For more on ASCENT, visit: <https://ascent.aero/>.

Internationally, the FAA provides leadership in developing and establishing the ICAO technology-based standards to reduce aircraft greenhouse gas emissions. Domestically, the FAA collaborates with the Environmental Protection Agency (EPA) to promulgate ICAO standards into U.S. regulations. On June 15, 2022, the FAA released for public comment a notice of proposed rulemaking to establish certification requirements for our nation's first fuel efficiency standard for civil airplanes. This rulemaking activity is based on ICAO's Airplane CO₂ Emissions standard from 2017 and will mandate U.S. airplane manufacturers to use fuel-efficient technologies in newly built airplanes. Concurrently, the FAA is leading the development of a more stringent regulatory level to ICAO's Airplane CO₂ Emissions standard, expected in 2025.

The FAA is reducing its own emissions by installing renewable energy at its facilities and purchasing carbon-pollution free electricity. In FY 2022, work continued on solar farm installations at FAA facilities in Guam and Hawaii which will increase the current 6,200 megawatt-hour of renewable electricity already produced. Other large scale solar farms are currently in planning and design at the MMAC and the Boston Consolidated Terminal Radar Approach Control Facility.

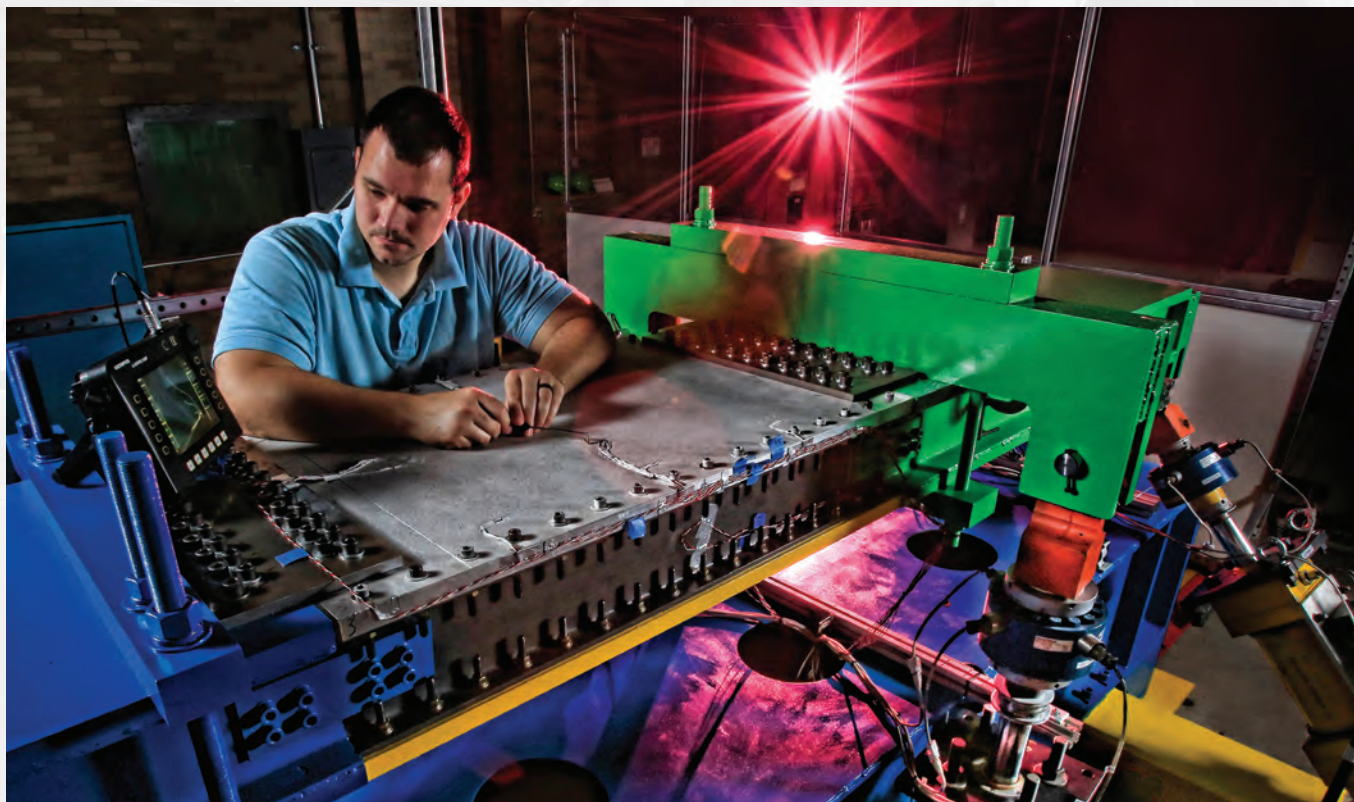
The FAA William J. Hughes Technical Center

The FAA William J. Hughes Technical Center

(Technical Center) in Atlantic City, New Jersey, is the nation's premier air transportation system laboratory. Its diverse, technical workforce and vast array of world-class laboratories provide a state-of-the-art environment that enables research, engineering, development, testing, and evaluation of advanced aviation technologies. The Technical Center's certified laboratories, facilities, and test and evaluation services provide unparalleled support for the successful implementation of FAA systems, services, and capabilities. These combined assets deliver next-generation operational capabilities that modernize the

nation's airspace system — the safest, most efficient aviation system in the world.

In FY 2022, the Technical Center brought its practiced analysis and innovation to bear on multiple industry challenges. In doing so, the Technical Center concentrated on five focus areas: (1) advancing aviation technology, (2) cultivating a qualified aviation workforce of the future, (3) partnering with government agencies and other entities, (4) capitalizing on outreach to other entities by building and sharing Technical Center capabilities, and (5) advancing the core work of the



The FAA and The Boeing Company are working jointly to investigate the safety and structural integrity associated with bonded repair technology. This testing and analysis is conducted at the Technical Center's Structures and Materials Lab using the Airframe Beam Structure Test fixture. This photograph shows inspections of repairs made to a composite wing panel.

📷 **FAA photo by Mike Gross**



An Aircraft Rescue and Firefighting Vehicle at the Technical Center performing pump pressure and water flow tests to ensure compliance with FAA standards.

📷 FAA photo

Technical Center. Noteworthy accomplishments from FY 2022 are described below.

The Technical Center continues to build on innovations implemented during the height of the COVID-19 pandemic. To ensure continuity of test services, the secure remote laboratory access has been enhanced with new higher-fidelity features to enable developers, test engineers, air traffic controllers, and pilots all across the country to work together remotely and onsite in a hybrid test environment, allowing uninterrupted development, integration, and testing of national airspace system modifications and enhancements. Consequently, test teams provided quality test and evaluation services across 79 acquisition programs delivering more than 161 test products. The Technical Center's testing teams continue to incorporate this hybrid configuration in future test designs as appropriate.

The Technical Center once again hosted the Aviation Cyber Initiative's Cyber Rodeo, a showcase of cybersecurity projects conducted and supported by organizations resident at the Technical Center. This collaborative forum brings government, industry, and academia together to advance solutions and mature technology readiness levels to mitigate risks to missions and systems within the civil-military aviation ecosystem. The event featured various presentations, workshops, and exercises. As part of the agenda, a cross-organizational team conducted a "Detect and Respond" exercise that used a remote terminal automation platform which allowed air traffic control participants to evaluate scenarios and provide observations remotely to inform cyber security mitigations.

In the early stages of the COVID-19 pandemic, airlines quickly realized they needed enhanced disinfection protocols for aircraft interiors. Each airline developed separate procedures and disinfecting agents, and

because these protocols were new, the effect of these materials on cabin interiors, specifically mechanical strength and flammability, was unknown. As a result, the Technical Center's researchers tested numerous seat surface fabrics and seatbelt webs against four different commercial disinfecting solutions. The FAA presented the testing results to the SAE International Seat Committee, a standards development committee, which updated its recommendations regarding disinfecting aircraft seats. These new recommendations ensure the measures taken to provide safety from COVID-19 and other pathogens do not reduce safety in other areas or conflict with established safety measures.

Additionally, throughout FY 2022, the Technical Center provided secure remote network access to its Research, Development, Test, and Evaluation laboratories and completed numerous network infrastructure and security initiatives. In support of the FAA's Global Leadership goal, laboratories worked with industry and international partners to enhance the capabilities of the Florida NextGen Test Bed laboratory. This lab was used to demonstrate the concept of Trajectory Based Operations using various flight scenarios across multiple airspace service providers in Asia. The demonstration supported the development of information exchange standards to enable seamless Trajectory Based Operations across numerous airspace service providers and airspace users. To learn more about Trajectory Based Operations, see: <https://youtu.be/7qaoDDnvD6w>.

Considering the advances made in composite technologies, the Technical Center investigated the safety and structural integrity of bonded repair technology applied to composite wing panels. The Technical Center's metal shop also played a key role in machining and welding large-configured wing panels to use in aircraft structural testing. The results of these tests will be used to update guidance on bonded repair size limits for aircraft.

Performance Highlights

The FAA is charged with promoting the safety and efficiency of the nation's aerospace 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 plan, annual business plans, human capital plans, annual PARs, and constant reevaluation of our efforts create a recurring cycle of planning, program execution, measurement, verification, and reporting. This cycle has created a strong link between the expenditure of our resources and our performance.

Managing Performance

We manage organizational performance through a four-step process based on best practices borrowed from 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 2022 Congressional Justification can be found at: <https://www.transportation.gov/mission/budget/faa-cj-fy-2022-estimates>.

The FAA also has a section in a DOT-prepared document that provides highlights of the FY 2022 budget request. This document can be found at: <https://www.transportation.gov/mission/budget/fiscal-year-2022-budget-highlights>.

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 2018 to streamline decision-making at the executive level. The revised model includes two groups — a Management Board and a Deputy's Meeting.

The Management Board provides agency-wide strategic direction and decision-making for critical priorities. This includes setting short and long-term agency goals, as well as making annual budget and financial decisions. The Board is the highest deliberative body in the agency and the primary forum to assist the Administrator in setting the agency's direction.

The Deputy's Meeting is the primary forum to advise and assist the Deputy Administrator in monitoring all operational activities conducted by the FAA (e.g., workforce, IT, and air traffic facilities). The Deputy's Meeting also refers significant internal issues to the Management Board as needed.

The two groups create a transparent process with clear roles for making decisions and monitoring the agency's performance; the groups clarify decisions across the FAA and clearly communicate decisions through senior leadership.

ASSESS RESULTS

This is the final, critical step in the performance management process. Using performance information, the agency seeks ways to learn from past performance and improve outcomes. Performance measures and targets support our mission to provide the nation with a safe and efficient aerospace 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 have changed. Targets are monitored monthly and reviewed on a yearly basis to ensure that we are on track to meet future challenges.

Performance Goals

The FAA has a new strategic plan, called *Flight Plan 21 for the 21st Century*, with strategic goals and initiatives (objectives) for FY 2022 through FY 2026. The FAA's strategic goals align with the DOT's strategic plan. The FAA's strategic plan describes overarching, long-term goals, as well as the actions it will take to realize those goals. In alignment with the Administrator's vision, the agency's strategic goals are Safety, People, Global Leadership, and Operational Excellence. Innovation is at the foundation of each strategic goal and leads the development of advanced aerospace capabilities that improve the safety and performance of our nation's aerospace system. The strategic plan can be found here: https://www.faa.gov/about/plans_reports/.

Each of the FAA's annual performance measures follows one of the long-term goals described in the agency's strategic plan.

- **Safety:** Oversee and operate the safest aerospace system in the world, all with a culture of continuous improvement. This year, the FAA successfully achieved all six performance measures related to Safety. For more information, please see page 50.
 - **Initiative — Expand Safety Culture:** Expand the Safety Culture Campaign across FAA and industry that integrates all aspects of Safety Culture (i.e., Just Culture, Reporting Culture, Learning Culture, Flexible Culture, and Informed Culture) to improve safety performance throughout the national airspace system.
 - **Initiative — Optimize Information to Reduce Risk:** Transform the agency's approach to assessing and managing system safety performance through enhanced access to data and analytics to inform risk-based decision-making, improve existing safety metrics, and increase system safety awareness.
 - Commercial Air Carrier Fatality Rate
 - Commercial Surface Safety Risk Index
 - Non-Commercial Surface Safety Risk Index
 - General Aviation Fatal Accident Rate
 - Commercial Space Licensed and Permitted Launch and Reentry Safety
 - Cybersecurity — Remediate 90 Percent of Critical and High Vulnerabilities
- **People:** Strengthen our current and future aviation workforce by holding ourselves accountable, developing our people, and planning for the aviation workforce of the future. This year, the FAA successfully achieved all three performance measures related to People. For more information, please see page 59.
 - **Initiative — Maximize the Benefits of Diversity, Equity, Inclusion, and Accessibility (DEIA):** Develop and implement a comprehensive strategy to ensure a more thoughtful, robust workforce environment that embraces the diverse talents of employees, ensures fair and equitable treatment, and advances broader gains in diversity, equity, inclusion, and accessibility.
 - Hiring Persons with Disabilities/Persons with Targeted Disabilities
 - Increasing Equity in STEM AVSED Outreach
 - DEIA Gender-Inclusive Policy Development
- **Global Leadership:** Advance global aviation safety, operational excellence, and innovation by leading and collaborating with aviation authorities globally. This year, the FAA successfully achieved both performance measures related to Global Leadership. For more information, please see page 66.
 - **Initiative — Global Training and Outreach:** Develop and modernize the FAA International Training program to improve the effectiveness of our technical assistance and consistently meet the needs of our international stakeholders.
 - OneFAA Approach to International Training
 - Global Leadership on Aviation and Climate Change
- **Operational Excellence:** Operate the world's most efficient aerospace system through daily execution, continuous improvement, and infrastructure investment. This year, the FAA successfully achieved all five performance measures related to Operational Excellence. For more information, please see page 69.
 - **Initiative — Optimize Mission Efficiency and Support:** Optimize efficiency and support mission requirements through daily execution, continuous improvement, planning, and investment. Effectively plan for and manage finances, procurement, information technology, and other mission support services.
 - Critical Acquisition Milestones on Schedule
 - Ensure Runway Pavement is Kept in a Safe and Serviceable Condition
 - Unmodified Audit
 - **Initiative — Improve Sustainability, Mitigate Noise, and Reduce Emissions:** Lead aviation sector efforts to improve sustainability, mitigate the effects of aviation noise, and reduce emissions.
 - Sustainability — FAA Facilities and Operations
 - Path to Net Zero Emissions by 2050

Performance at a Glance

Our FY 2022 performance is summarized in the following tables and discussed in detail in the Performance Results section starting on page 49. The measures are grouped according to the FAA's strategic goals. In FY 2022, the FAA achieved all 16 performance targets. The FAA has noted the measures for which the data provided are preliminary. A discussion of the methods used to validate the reporting performance information begins on page 77.

SAFETY

Oversee and operate the safest aerospace system in the world, all with a culture of continuous improvement.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
Commercial Air Carrier Fatality Rate* Reduce the commercial air carrier fatalities per 100 million persons on board U.S. carriers by 50 percent over 18-year period—FY 2008–2025. Target for FY 2022 is 5.2.	AVS	0.5	0.9	0.0	5.2	1.4 ¹	✓
Commercial Surface Safety Risk Index Manage the weighted surface safety risk index at or below 0.35 per million airport operations for commercial aviation.	ATO	Updated Measure for FY 2020	0.07 ²	0.10 ²	0.35	0.16 ³	✓
Non-Commercial Surface Safety Risk Index Manage the weighted surface safety risk index at or below 0.60 per million airport operations for non-commercial aviation.	ATO	Updated Measure for FY 2020	0.41 ²	0.40 ²	0.60	0.25 ³	✓
General Aviation Fatal Accident Rate* Reduce the general aviation fatal accident rate to no more than 0.89 fatal accidents per 100,000 flight hours by 2028. FY 2022 Target: 0.95.	AVS	0.95	0.91	0.73	0.95	0.86 ⁴	✓
Commercial Space Licensed and Permitted Launch and Reentry Safety Ensure there are no fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.	AST	0	0	0	0	0	✓
Remediate 90% of Critical and High Vulnerabilities To comply with Department of Homeland Security (DHS) Binding Operational Directive (BOD) 19-02, remediate 90% of critical and high vulnerabilities detected on internet-accessible systems or complete the required remediation plan with the concurrence of the Cybersecurity Steering Committee.	AFN	Updated Measure for FY 2022	Updated Measure for FY 2022	Updated Measure for FY 2022	90%	97%	✓

* This performance measure supports a DOT Agency Priority Goal.

✓ Target met ✗ Target not met

1 Preliminary estimate. National Transportation Safety Board will confirm in March 2023. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.

2 Metric restated to reflect a data source addition that improves the accuracy of results.

3 Preliminary estimate until the final result becomes available in March 2023.

4 Preliminary estimate until the final result becomes available in December 2022. We do not expect any change in the final result to be significant enough to alter our year-end status of achieving the target.

PEOPLE

Strengthen our current and future aviation workforce by holding ourselves accountable, developing our people and planning for the aviation workforce of the future.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
Hiring Persons with Disabilities/Persons with Targeted Disabilities The FAA's Office of Civil Rights will lead collaboration between all lines of business and staff offices to increase the representation of persons with disabilities/persons with targeted disabilities in the FAA workforce by 1% each year for the next three years.	ACR	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet all three targets	Met all targets	✓
STEM AVSED Equity Accountability Develop methods to ensure that all students, including those in underrepresented and/or underserved populations, have access to events and learning activities aimed at introducing them to aerospace concepts and career pathways.	APL	Updated Measure for FY 2022	Updated Measure for FY 2022	Updated Measure for FY 2022	Meet all five targets	Met all targets	✓
DEIA Gender-Inclusive Policy Development To ensure a diverse, equitable, and inclusive environment, adopt a gender-neutral language policy to be implemented across the agency.	APL/ACR	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet both targets	Met all targets	✓

✓ Target met ✗ Target not met

GLOBAL LEADERSHIP

Advance global aviation safety, operational excellence, and innovation by leading and collaborating with aviation authorities globally.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
OneFAA Approach to International Training Design, develop and deliver internal coordination processes to ensure and sustain a consistent, corporate approach to international training.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Develop internal processes and procedures	Developed internal processes and procedures	✓
Global Leadership on Aviation and Climate Change Demonstrate renewed global leadership on climate change through international engagement, action at the International Civil Aviation Organization, and preparation of a U.S. Aviation Climate Action Plan.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Publish Action Plan	Action Plan published	✓

✓ Target met ✗ Target not met

OPERATIONAL EXCELLENCE

Operate the world's most efficient aerospace system through daily execution, continuous improvement, and infrastructure investment.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
Critical Acquisition Milestones on Schedule 90% of the critical acquisition milestones are achieved by their scheduled due dates.	AFN	97.5%	97%	93%	90%	96%	✓
Ensure runway pavement is kept in a safe and serviceable condition* Maintain eligible runway pavement in Excellent, Good, or Fair condition (based on visual inspections) for 93% of the paved runways in the National Plan of Integrated Airport Systems.	ARP	97.9%	97.9%	97%	93%	97.6%	✓
Sustainability – FAA Facilities and Operations Demonstrate leadership on climate and sustainability by increasing the energy efficiency of FAA facilities and reduce the overall carbon footprint of the FAA.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet all three targets	Met all targets	✓
Unmodified Audit Opinion Obtain an unmodified audit opinion on the FAA's FY 2022 financial statements identified by external independent auditors.	AFN	Updated Measure for FY 2020	Unmodified audit opinion	Unmodified audit opinion	Unmodified audit opinion	Unmodified audit opinion	✓
Path to Net Zero Emissions by 2050 Reduce CO ₂ emissions from domestic aviation, as defined in the U.S. Aviation Climate Action Plan.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet all targets	Met all targets	✓

* This performance measure supports a DOT Agency Priority Goal.

✓ Target met ✗ Target not met

Last year, our Operational Excellence strategic goal area included a measure for Major System Investments. That measure is not reported in FY 2022 because it was not selected as a DOT goal. Instead, Critical Acquisition Milestones on Schedule was selected to measure schedule performance.

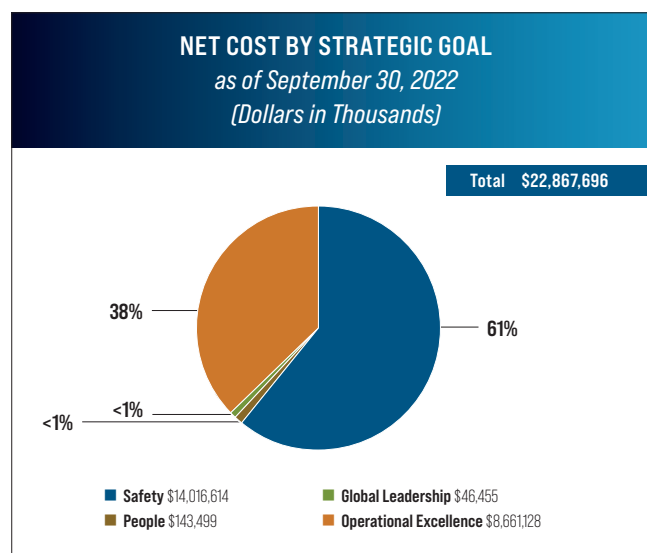
Alignment of FAA Costs and Strategic Goals

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 goals. At the beginning of each project, the FAA determines the degree to which the project will contribute to one or more of the strategic goals. The FAA then allocates actual project costs to the strategic goals 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 goal.

The FAA's total net cost of \$22.9 billion was allocated to its four strategic goals, as described below and as shown in the *Net Cost by Strategic Goal* chart on this page, and in Note 14 of the financial statements.

Safety. A little over \$14.0 billion, or approximately 61 percent of total net cost, was devoted to further enhance the outstanding safety record of the nation's airspace.

- The Air Traffic Organization (ATO) spent approximately \$10.9 billion, largely to maintain the safe separation of aircraft in the air and on the ground.
- The Office of Airports (ARP) provided approximately \$1.4 billion for projects to preserve or enhance safety. Of the \$1.4 billion, airport grant costs from COVID-19 funds amounted to approximately \$47 million.
- The Aviation Safety (AVS) Organization spent just under \$1.8 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) line of business spent approximately \$114 million on its programs to ensure critical infrastructure protection, emergency operations, contingency planning, and the safe transportation of hazardous materials in air commerce.
- The Office of Commercial Space Transportation (AST) spent a little over \$31 million in support of the agency's safety goal.



- Collectively, the FAA staff offices and other programs spent about \$51 million to further support the agency's safety goal which was offset by revenues of \$165 million primarily from overflight user fees, along with revenues from reimbursable agreements.

People. As a whole, the FAA committed approximately \$143 million to strengthen the agency's ability to fulfill its safety, operational excellence, and global leadership goals through a highly diverse, engaged, and skilled workforce.

Global Leadership. Approximately \$46 million was used to help the U.S. reassert its global influence in aviation safety and leadership reputation around the globe by becoming the gold standard in safety again.

Operational Excellence. A little over \$8.6 billion, or about 38 percent of total net costs, was assigned to invest in better technologies that enable efficiencies, while concurrently sustaining the existing infrastructure of the national airspace system.

- The ATO spent a little under \$2 billion, largely to finance its facilities and equipment projects.
- ARP also provided approximately \$6.5 billion to build or reconstruct core airfield infrastructure projects involving runways and taxiways, and sustain the operational excellence of U.S. airports during the COVID-19 pandemic. Of the \$6.5 billion, airport grant costs from COVID-19 funds amounted to approximately \$4.2 billion.

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 2022 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 Office of Management and Budget (OMB) Bulletin No. 22-01, *Audit Requirements for Federal Financial Statements*. The Department of Transportation's (DOT) 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 public accounting firm, to audit the FAA's FY 2022 financial statements.

KPMG LLP has rendered an unmodified audit opinion on the FAA's FY 2022 financial statements.

UNDERSTANDING THE FINANCIAL STATEMENTS

The FAA's Consolidated Balance Sheets, Statements of Net Cost, Changes in Net Position, and Combined Statements of Budgetary Resources have been prepared to report the financial position and results of operations of FAA, pursuant to the requirements of the Chief Financial Officers Act of 1990 and the Government Management Reform Act of 1994. A brief description of (a) the nature of each financial statement and its relevance to FAA, (b) significant fluctuations from FY 2021 to FY 2022, and (c) certain significant balances, where necessary, to help clarify their link to the FAA's operations follows the sections describing the Infrastructure Investment and Jobs Act and Continued Financial Impact of COVID-19.

Infrastructure Investment and Jobs Act

The Infrastructure Investment and Jobs Act (IIJA) (Public Law 117-58), also known as the Bipartisan Infrastructure Law, provides additional grant funding,

up to \$3 billion per year through FY 2026, for airport infrastructure projects as defined under the existing Airport Improvement Grant and Passenger Facility Charge criteria. The money can be invested in runways, taxiways, safety and sustainability projects, as well as terminal, airport-transit connections and roadway projects. For FY 2022, \$2.9 billion has been made available to U.S. airports throughout the nation.

The IIJA also provides additional grant funding, up to \$1 billion per year through FY 2026, for airport terminal development projects to address the aging infrastructure at the nation's airports. For FY 2022, \$969 million has been made available to U.S. airports throughout the nation.

The IIJA also provides additional facilities and equipment funding, up to \$1 billion per year through FY 2026, to be used for a broad range of facilities and equipment projects which includes, for example, replacing terminal and en route air traffic control facilities and improving air route traffic control center and combined control facility buildings. These funds remain available until expended.

Continued Financial Impact of COVID-19

While there was no new funding related to COVID-19 in FY 2022, the FAA continued to obligate and spend the funds remaining from the FY 2021 and FY 2020 COVID-19 related appropriations. A brief description of this COVID-19 funding is provided below. Also, Note 20 on page 133 provides more detailed information on the status of the remaining COVID-19 funding.

The American Rescue Plan Act of 2021 (ARPA) provided an additional \$8 billion in general fund appropriations for Relief for Airports to be allocated to sponsors of airports to prevent, prepare for and respond to coronavirus. Specifically, \$6.6 billion could be used for operational expenses and debt service, \$800 million could be used for rent and airport concessions, and the remaining \$600 million could be used to fund up to 100% of the federal share of any airport development grant awarded in FY 2020 or FY 2021. ARPA funds remain available for obligation through September 30, 2024. As of September 30, 2022, less than one percent of these funds remain unobligated.

The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (CRRSAA), provided an additional \$2 billion in general fund appropriations for Grants-in-Aid for Airports to prevent, prepare for,

and respond to COVID-19. Airport grants issued with CRRSAA funds could be used for operational expenses and debt service. CRRSAA funds remained available for obligation through September 30, 2022. As of September 30, 2022, less than one percent of these funds remain unobligated.

The Coronavirus Aid, Relief, and Economic Security (CARES) Act in FY 2020 provided an additional \$10 billion in general fund appropriations for Grants-in-Aid for Airports to prevent, prepare for, and respond to the COVID-19 pandemic. The CARES Act also suspended the collection of almost all aviation excise taxes through the first quarter of FY 2021. CARES Act funds remain available until expended. As of September 30, 2022, approximately one percent of these funds remain unobligated.

Due to the CARES Act suspension of the collection of almost all aviation excise taxes through December 31, 2020, the Continuing Appropriations Act, 2021 and Other Extensions Act (Public Law 116-159), included a \$14 billion general fund transfer to the Airport and Airway Trust Fund (AATF) in FY 2021 in order to shore up the AATF to ensure funding stability for federal aviation programs. This general fund transfer to the AATF is also referred to as a cash infusion.

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

The FAA's assets are the resources available to pay liabilities or satisfy future service needs. The following table presents a comparison of key asset measures as of September 30, 2022 and 2021.

	2022		2021		Increase/ (Decrease)
		Percent		Percent	
(Dollars in Thousands)					
Assets					
Fund balance with Treasury	\$ 17,227,884	40	\$ 13,196,463	30	\$ 4,031,421
Investments, net	13,211,744	31	18,189,656	41	(4,977,912)
General property, plant and equipment, net	11,545,951	27	11,670,008	27	(124,057)
Other assets	1,042,949	2	948,135	2	94,814
Total assets	\$ 43,028,528	100	\$ 44,004,262	100	\$ (975,734)

Fund balance with Treasury consists of funding available through the Department of Treasury accounts from which the FAA is authorized to make expenditures to pay liabilities. Its balance is made up of undisbursed amounts from general fund appropriations and AATF drawdown transfers along with passenger ticket and other excise taxes deposited to the AATF but not yet invested.

Fund balance with Treasury represents 40 percent of the FAA's current period assets and ended the year at \$17.2 billion compared to \$13.2 billion in FY 2021. The increase of \$4.0 billion is primarily due to a \$5.0 billion general fund appropriation for IIJA of which only \$45 million has been disbursed, and \$3.9 billion remains available to U.S. airports as of September 30, 2022. Also, there were increases in the AATF and the Operations ending account balances of \$2.6 billion and \$1.1 billion, respectively. The overall increases of \$8.7 billion were offset by a decrease of \$4.9 billion in the COVID-19 related appropriations. Finally, while \$6.7 billion remains of the total \$20 billion of COVID-19 funding and is included in the fund balance with Treasury as of September 30, 2022, only \$195.4 million is unobligated.

At \$13.2 billion, *Investments, net* represent 31 percent of the FAA's current period assets and are comprised of AATF investments and Aviation Insurance Program investments. The AATF investments as of September 30, 2022 are \$10.8 billion 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 net excise tax revenue, interest, and refunds of \$11.5 billion in FY 2022 were offset by AATF drawdowns of \$14.0 billion and a year end uninvested balance difference of \$2.6 billion, resulting in a comparative net decrease in the AATF investment balance of \$5.1 billion.

The investment balances also include the Aviation Insurance Program investments. These investments are redeemed, as needed, to finance the FAA's daily operations to the extent authorized by the U.S. Congress, and to pay potential insurance claims. The Aviation Insurance Program investment balance increased by \$122 million to \$2.4 billion as a late maturing security, uninvested at the end of FY 2021, was reinvested in FY 2022.

At \$11.5 billion, *General property, plant, and equipment, net* (PP&E) represents 27 percent of the FAA's assets as of September 30, 2022, 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 \$124 million in the total composition of PP&E, as retirements, disposals, revaluations, and depreciation exceeded purchases of equipment and additions to construction in progress through the normal course of business.

LIABILITIES

Liabilities are probable and measurable future outflows of resources arising from past transactions or events. The following table presents a comparison of key liability measures as of September 30, 2022 and 2021.

(Dollars in Thousands)	2022		2021		Increase/ (Decrease)
		Percent		Percent	
Liabilities					
Accrued grant liabilities	\$ 6,640,832	65	\$ 7,230,444	67	\$ (589,612)
Federal employee benefits payable	1,246,691	12	1,328,131	12	(81,440)
Environmental and disposal liabilities	783,215	8	752,148	7	31,067
Accounts payable	469,367	4	451,630	4	17,737
Other liabilities	1,154,222	11	1,120,505	10	33,717
Total liabilities	\$ 10,294,327	100	\$ 10,882,858	100	\$ (588,531)

The FAA's *Accrued grant liabilities* are estimated amounts incurred, but not yet claimed, by Airport Improvement Program grant recipients and represent 65 percent of liabilities. *Accrued grant liabilities* decreased by \$590 million to \$6.6 billion as of September 30, 2022. The decrease is primarily comprised of a decrease of year-end grants payable accruals totaling \$724 million for ARPA, CRRSAA, and the CARES Act, offset by an increase of \$134 million of the accrued grants payable liability for the existing non-COVID-19 related grants programs.

At \$1.2 billion, *Federal employee benefits payable* represent 12 percent of the FAA's current year liabilities and primarily consists of \$678 million for the actuarial FECA liability and \$505 million for unfunded leave liabilities. The actuarial FECA liability is the FAA's expected liability for death, disability, and medical costs for approved workers' compensation cases, plus a component for claims incurred but not yet reported. 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 and disposal liabilities represent 8 percent of the FAA's total liabilities and increased slightly by \$31 million to \$783 million as of September 30, 2022 compared to \$752 million a year earlier. *Environmental and disposal liabilities* include a component for remediation of known contaminated sites that increased by \$52 million on a comparative basis. The other component of environmental liabilities includes the estimated costs for future facility decommissioning. This component's costs decreased by a total of \$21 million on a comparative basis.

Accounts payable represents 4 percent of liabilities and increased slightly by \$18 million to \$469 million. Accounts payable are the amounts the FAA owes to other entities for unpaid goods and services received.

At \$ 1.2 billion, *Other liabilities* represent 11 percent of the FAA's total liabilities. These liabilities increased slightly by \$34 million year over year and are comprised mainly of \$336 million in advances from others and deferred revenue, \$143 million in Federal Employee's Compensation Act payable, \$500 million in accrued payroll and benefits, \$59 million in legal claims liability, and \$39 million in capital lease liability.

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, 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 in Note 1C (page 103), 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.

The following table presents a comparison of FAA's net costs by line of business for the years ended September 30, 2022 and 2021.

<i>(Dollars in Thousands)</i>	2022	Percent	2021	Percent	Increase/ (Decrease)
Net costs					
Air Traffic Organization	\$ 12,960,814	57	\$ 12,459,208	48	\$ 501,606
Airports	7,856,851	34	11,225,978	44	(3,369,127)
Aviation Safety	1,810,704	8	1,730,971	7	79,733
Security and Hazardous Materials Safety	129,917	< 1	134,149	< 1	(4,232)
Commercial Space Transportation	39,405	< 1	34,186	< 1	5,219
Non-line of business programs	70,005	< 1	137,639	< 1	(67,634)
Total net cost	\$ 22,867,696	100	\$ 25,722,131	100	\$ (2,854,435)

With a net cost of \$12.9 billion, the *Air Traffic Organization* is the FAA's largest line of business, comprising 57 percent of total net costs. The Air Traffic Organization's net costs increased by \$502 million, on a comparative basis, primarily from increases in costs for contractor services, labor, employee benefits, and equipment offset by a decrease in the cost for material and supplies.

The *Airports* line of business net cost decreased significantly from \$11.2 billion to \$7.9 billion for the fiscal year ended September 30, 2022, and represents 34 percent of the FAA's total net costs. Airports' net costs are comprised primarily of grants, referred to as Stewardship Investments, from the Airport

Improvement Program. The Stewardship Investments are made to airport authorities, local and state governments, and metropolitan planning authorities for airport facilities throughout the United States and its territories. In FY 2022, the grant expenses for CARES, CRRSAA, and ARPA accounted for 92 percent or \$3.1 billion of *Airports* overall decrease in net costs as these three programs began to wind down.

At \$1.8 billion, the net cost for *Aviation Safety* represents 8 percent of the FAA's total net costs, while *Security and Hazardous Materials Safety*, *Commercial Space Transportation*, and *non-line of business programs* 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 following table presents a comparison of key measures of net position for the years ended September 30, 2022 and 2021.

<i>(Dollars in Thousands)</i>	2022	2021	Percent Change	Increase/ (Decrease)
Changes in net position				
Unexpended appropriations, ending	\$ 7,927,839	\$ 5,555,123	43	\$ 2,372,716
Cumulative results of operations, ending	24,806,362	27,566,281	-10	(2,759,919)
Net position	\$ 32,734,201	\$ 33,121,404	-1	\$ (387,203)

Unexpended appropriations increased from \$5.6 billion to \$7.9 billion. The \$2.3 billion increase is comprised mostly from appropriations received of \$11.0 billion offset by appropriations used of \$8.6 billion. The appropriations received are primarily comprised of general fund appropriations of \$5.0 billion for Operations, \$5.0 billion from IJJA, and \$554 million for Grants-in-Aid for Airports. The appropriations used are primarily comprised of \$4.5 billion used for Operations and \$4.0 billion used for ARPA grants.

The *Net Change* in FAA's *Cumulative results of operations* for the fiscal year ended September 30, 2022, was a decrease of \$2.8 billion from \$27.6 billion to \$24.8 billion. The \$2.8 billion decrease is comprised primarily of \$8.6 billion in appropriations used and \$11.5 billion in non-exchange revenue offset by a net cost of \$22.9 billion. The appropriations used are discussed above in *Unexpended appropriations*. The non-exchange revenue is almost entirely from the aviation excise tax collections and interest earned on AATF investments.

Statement of Budgetary Resources

The Statement of Budgetary Resources provides information on the budgetary resources available to the FAA and the status of those budgetary resources. The following table presents a comparison of key budgetary resource measures for the years ended September 30, 2022 and 2021.

(Dollars in Thousands)

Budgetary resources

Total budgetary resources

New obligations and upward adjustments

Agency outlays, net

	2022	2021	Percent Change	Increase/ (Decrease)
Total budgetary resources	\$ 41,049,546	\$ 62,380,658	-34	\$ (21,331,112)
New obligations and upward adjustments	\$ 30,275,337	\$ 52,810,501	-43	\$ (22,535,164)
Agency outlays, net	\$ 23,061,456	\$ 23,003,059	0	\$ 58,397

The FAA's *Total budgetary resources* consist of new budget authority and unobligated balances of budget authority provided in previous years. New budget authority consists of the enacted budget, as well as other funding sources made available which are not provided through the enactment of annual appropriations. This also includes expenditure transfers of resources between federal fund types, which reflect the resources in both the enacted account and the program account to which they are transferred.

Total budgetary resources for the fiscal year ended September 30, 2022 were \$41.0 billion, of which \$31.0 billion of new budget authority comes from appropriations, contract authority, and offsetting collections. The appropriations of \$20.5 billion include the annual funding for Operations, Facilities and Equipment, Research, Engineering and Development, and Grants-in-Aid to Airports totaling \$15.1 billion. There are additional supplemental appropriations of \$5.0 billion for Facilities & Equipment (\$1 billion), Airport Infrastructure Grants (\$3 billion), and Airport Terminal Program Grants (\$1 billion); \$297 million for establishing Alternative Fuel and Low-Emission Aviation Technology grant programs; and \$100 million for necessary expenses related to the consequences of Hurricane Ida. Contract authority remained constant at \$3.4 billion. Spending authority from offsetting collections decreased by \$4.1 billion to \$7.2 billion which reflects the reduction in the amount derived from AATF for Operations.

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. *New obligations and upward adjustments* decreased \$22.5 billion from \$52.8 billion to \$30.3 billion. The decrease is mainly from the reduction in expenditure transfers between FAA accounts (described below) of \$14.0 billion for the AATF cash infusion and \$4.0 billion for CRRSAA reported in FY 2021. Additionally, there is a comparative decrease in obligations of \$4.1 billion from the reduction of spending authority from offsetting collections in the amount derived from AATF for Operations.

Outlays, net reflects the actual cash disbursed by the Treasury for the FAA's obligations net of offsetting collections. *Agency outlays, net* is the sum of *Outlays, net* less *Distributed offsetting receipts*. The FAA typically has significant comparable offsetting collections each year and immaterial amounts of distributed offsetting receipts. However, in FY 2021, budgetary concepts required the \$14.0 billion for the AATF cash infusion, the \$2.0 billion for CRRSAA, and the \$400 million for the supplemental appropriation for Grants-in-Aid for Airports to be reported both as outlays and as distributed offsetting receipts. While the net effect is zero for *Agency outlays, net*, this \$16.4 billion is reflected in the *Outlays, net* total and the *Distributed offsetting receipts* total on the face of the Statement of Budgetary Resources for FY 2021. In FY 2022, *Agency outlays, net* increased slightly from \$23.0 billion to \$23.1 billion.

EXPENDITURE TRANSFERS BETWEEN FAA ACCOUNTS

Budgetary concepts require that appropriations derived from the AATF for a general fund program be transferred through an intermediary trust fund program account. The appropriated amount is transferred, as needed to fund current period disbursements, from the AATF to a trust fund program account, then transferred from the trust fund program account to the general fund program account.

The following is an illustrative example that shows the effect of these transfers on budgetary resources.

<i>(Dollars in Thousands)</i>	Trust Fund Account	General Fund Account
Appropriations	\$ 6,414,100	\$ -
Spending authority from offsetting collections	-	6,414,100
Total budgetary resources	<u>\$ 6,414,100</u>	<u>\$ 6,414,100</u>
New obligations and upward adjustments		
Expenditure transfers - paid	\$ 7,434,100	\$ -
Expenditure transfers - payable	(1,020,000)	-
Apportioned, unexpired accounts	-	6,414,100
Total budgetary resources	<u>\$ 6,414,100</u>	<u>\$ 6,414,100</u>
Outlays, net		
Expenditure transfers - paid	\$ 7,434,100	\$ -
Expenditure transfers - collected	-	(7,434,100)
Agency outlays, net	<u>\$ 7,434,100</u>	<u>\$ (7,434,100)</u>

Similarly, budgetary concepts require that general fund appropriations for trust fund programs be deposited to a general fund payment account, apportioned, then transferred to an available trust fund receipt account, fully expending the appropriation. The transfer-in to the available trust fund receipt account is then recorded as an appropriated receipt, apportioned, and available for obligation.

There were no expenditure transfers from general fund accounts to trust fund accounts in FY 2022, but there were expenditure transfers in FY 2021.

The following is an illustrative example that shows the effect of these transfers on budgetary resources.

<i>(Dollars in Thousands)</i>	General Fund Account	Trust Fund Account
Appropriations		
General fund appropriations realized	\$ 16,400,000	\$ -
Appropriated receipts	-	16,400,000
Total budgetary resources	<u>\$ 16,400,000</u>	<u>\$ 16,400,000</u>
New obligations and upward adjustments		
Expenditure transfers	\$ 16,400,000	\$ -
Apportioned, unexpired accounts	-	16,400,000
Total budgetary resources	<u>\$ 16,400,000</u>	<u>\$ 16,400,000</u>
Outlays, net	\$ 16,400,000	\$ -
Distributed offsetting receipts	-	(16,400,000)
Agency outlays, net	<u>\$ 16,400,000</u>	<u>\$ (16,400,000)</u>

Other Matters**EXCISE TAX REVENUE**

The FAA's September 30, 2022 financial statements reflect excise taxes certified by the IRS through March 31, 2022, and excise taxes allocated by the Office of Tax Analysis for the period April 1, 2022 through September 30, 2022. Actual excise tax collections for the quarters ended June 30, 2022 and September 30, 2022 will not be available from the IRS until after the statements are released. Excise taxes are recognized by the FAA when certified by the IRS and transferred to the FAA through a Treasury Warrant issued by the U.S. Treasury. Refer to Note 1D (pages 103-104) and Note 1W (page 108) accompanying FAA's consolidated financial statements for information on the FAA's policy for recognizing excise tax revenue, which is in accordance with generally accepted accounting principles.

LIMITATIONS OF THE FINANCIAL STATEMENTS

The principal financial statements are prepared to report the financial position, financial condition, and results of operations, consistent with the requirements of 31 U.S.C. 3515(b). The statements are prepared from records of Federal entities in accordance with Federal generally accepted accounting principles (GAAP) and the formats prescribed by OMB. Reports used to monitor and control budgetary resources are prepared from the same records. Users of the statements are advised that the statements are for a component of the U.S. Government.

Budgetary Integrity: FAA Resources and How They Are Used

The following discussion of **FAA's Resources and How They Are Used** is graphically shown and simplified on page 39.

The FAA is financed by two primary SOURCES OF FUNDING...

The FAA receives budget authority to obligate and expend funds from both the General Fund of the U.S. Treasury and the Airport and Airway Trust Fund (AATF). Created by the Airport and Airway Revenue Act of 1970,

the AATF pays for investments in the airport and airway system and a majority of the FAA's operating costs. Aviation excise taxes, which include taxes on domestic passenger tickets, freight way bills, 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. Funds are withdrawn from the AATF as needed to meet cash disbursement needs.

In FY 2022, the AATF paid for approximately 70 percent of the FAA's enacted budget authority provided by the Consolidated Appropriations Act, 2022 (Public Law 117-103), with the remaining funds coming from the General Fund of the U.S. Treasury. In addition to the funding provided in this act, the FAA received supplemental funds from three other public laws: (a) the Infrastructure Investment and Jobs Act, 2022 (IIJA) (Public Law 117-58), also known as the Bipartisan Infrastructure Law, enacted in November 2021; (b) the Extending Government Funding and Delivering Emergency Assistance Act, 2022 (Emergency Assistance Act) (Public Law 117-43) enacted in September 2021; and (c) the Inflation Reduction Act (IRA) (Public Law 117-169) enacted in August 2022. IIJA provided the FAA with \$25 billion in advanced appropriations from the General Fund (\$5 billion per year over the five-year period FY 2022–2026) to rebuild the country's critical infrastructure. FAA's IIJA funding is appropriated into three budget accounts: \$3 billion annually for Airport Infrastructure Grants, \$1 billion annually for Airport Terminal Program, and \$1 billion annually for Facilities and Equipment (F&E). The Emergency Assistance Act provided F&E with \$100 million in supplemental funding from the General Fund to repair damage caused by Hurricane Ida. The IRA provided Research, Engineering, and

Development (RE&D) with \$297 million in supplemental funding from the General Fund for the establishment of a grant program supporting the development of sustainable aviation fuels and technologies. While these supplemental appropriations increased the total amount of funding provided to the FAA, because they were derived from the General Fund they reduced the AATF share of the FAA's total budget to just 54 percent for FY 2022.

The pie charts on page 2 summarize the budget enacted by Congress for the FAA. The total FY 2022 enacted budget of \$23.86 billion was a decrease of \$4.1 billion (14.7 percent) from the FY 2021 enacted level, which included \$10 billion in supplemental appropriations from the General Fund to help the nation's airports contend with the financial impacts of COVID-19. Absent the supplemental funding from both fiscal years, the FY 2022 FAA budget was an increase of \$495 million (2.8 percent) over the FY 2021 enacted level.

The FAA requests and receives its funding in four primary accounts:

...which are appropriated to BUDGET ACCOUNTS...

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

The largest account, Operations, is supported by both the General Fund and the AATF. In FY 2022, the AATF supported 56.2 percent of the funding for the Operations account. This is low by historical standards and reflects the reduced aviation tax collections in FY 2021–2022 caused by lower aviation activity during the COVID-19 pandemic. In addition to the “regular” appropriation from the AATF, in FY 2022 the F&E account received supplemental General Fund money from the IIJA and Emergency Assistance Act, making that account 72.5 percent funded by the AATF. This year, in addition to the “regular” appropriation from the AATF, the RE&D account received supplemental General Fund money from the IRA, making the account 45.6 percent funded by the AATF. Since FY 2018 the Grants-in-Aid for Airports program has received funding from both the AATF and the General Fund. This year the AATF covered 85.8 percent of the Grants-in-Aid for Airports funding.

through programs supporting NextGen. F&E received \$2.89 billion from the AATF in FY 2022, a decrease of 4 percent from the FY 2021 level, however it is an increase of 32 percent if the \$1 billion IJIA and the \$100 million hurricane relief supplemental funding is included.

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 more environmentally-conscious global air transportation system. The RE&D account received \$248.5 million from the AATF in FY 2022, an increase of about 25 percent above the FY 2021 level, however it is an increase of 175 percent if the \$297 million in IRA supplemental funding is included.

Grants-in-Aid for Airports. This account funds the Airport Improvement Program (AIP), through which the FAA awards 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 account also supports airport related research and the administrative costs of the FAA's Office of Airports. FY 2022 funding for the account was \$3.9 billion, with \$554.2 million of that total coming from the General Fund. This is an increase of about 4 percent above the FY 2021 level.

Relief for Airports. The FAA established this account in FY 2021 for the \$8 billion provided in ARPA from the General Fund to help the nation's airports contend with the financial impacts of COVID-19.

AIG. The FAA established this account in FY 2022 for the \$15 billion provided by IJIA from the General Fund for airport projects that increase safety and expand capacity (\$3 billion per year over the five-year period FY 2022–2026).

ATP. The FAA established this account in FY 2022 for the \$5 billion provided by IJIA from the General Fund to replace aging terminals and airport-owned towers, increase terminal energy efficiency and accessibility, and other related projects (\$1 billion per year over the five-year period FY 2022–2026).

Other Budgetary Resources. In addition to the primary funding resources appropriated by Congress, the FAA also receives budgetary resources from revolving funds and user fees. Revolving funds are accounts established by law to finance a continuing cycle of operations with receipts derived from such operations. These funds are usually available in their entirety for their intended use without further action by Congress. User fees are specific charges for the purchase or use of government goods or services. The "other funds" described below

are not part of the enacted budget, but do provide another source of budgetary resources.

Aviation Insurance Revolving Fund. The Aviation Insurance Revolving Fund 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. This non-premium insurance authority is authorized through September 30, 2023.

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, multimedia, information technology, logistics and material management, aircraft maintenance, international training, and management training.

Aviation Overflight User Fees. Aviation Overflight User Fees is a fund whose receipts come from charges to operators of aircraft that fly in U.S. controlled airspace, but neither take off nor land here. Under current law, the receipts are transferred to the Office of the Secretary of Transportation and used to support air service at certain locations under the Essential Air Service program.

...to support the
**FAA LINES OF
BUSINESS**
and
**NON LINE OF
BUSINESS
PROGRAMS...**

...to achieve the
agency's
**STRATEGIC
GOALS**

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

Funds appropriated to the FAA's budget accounts as described above, are used by FAA's lines of business and non-line of business programs to support achievement of the agency's strategic goals of Safety, People, Global Leadership, and Operational Excellence. FAA's lines of

business are described in the FAA Organization section on pages 10–11. The net costs of the FAA's lines of business and non-line of business programs to accomplish the agency's mission and achieve its strategic goals are reported in the FAA's audited Consolidated Statement of Net Cost on page 99, and Net Cost by Program and Strategic Goal in Note 14 on page 125. The FAA's four strategic goals, and the performance measures that underlie those goals, are discussed in detail in the Performance Results section beginning on page 49.

Engaging the Workforce of the Future

Some of our most profound, soaring passions take first flight in the early experiences of our youth. Ask today's aerospace engineers, pilots, or mechanics, and many can tell you what inspired them to pursue careers in aviation. Some found they had a natural ability to fix things, to take them apart then put them back together. Others became hooked on math or science. Their superheroes were Neil DeGrasse Tyson or Jane Goodall or Stephen Hawking. Others could identify aircraft by only the low hums they heard just over the horizon. They were curious about the principles of flight and the mysterious forces that kept these improbable machines in the sky.

Early exposure to STEM AVSED prepares students to enter careers in the aviation and aerospace industries and creates a pipeline for the workforce of tomorrow. STEM AVSED programs create opportunities for young people to consider careers as pilots, air traffic controllers, maintenance technicians, drone operators, and engineers, and also open doors for potential cybersecurity specialists, data analysts, program managers, and other professionals who play an essential role in the nation's airspace system.

The FAA's STEM AVSED program places a priority on ensuring outreach is conducted in such a way as to reach as diverse an audience of students as possible and ensure that any student, regardless of background, race, geographic location, or socioeconomic status, has access to learning about aerospace concepts and careers. Throughout FY 2022, the FAA's STEM AVSED program provided outreach to students of all ages and backgrounds through various programs and activities, a few of which are highlighted below.

The FAA partnered with 12 elementary schools to present lessons about aerospace careers through our Adopt-a-School program. Special emphasis was placed on reaching underserved and underrepresented communities where student populations were primarily minorities, where the majority of the students participated in free or reduced lunch programs, or where the school was located in a rural area. In this first nation-wide version of the program, the FAA reached more than 940 fourth and fifth grade students.



ACE Camp students try on emergency flotation devices while Civil Aerospace Medical Institute representatives discuss the importance of listening to a flight attendant's safety briefing when traveling on a commercial aircraft.

 **FAA photo**

The Technical Center, with the support of the National Institute of Aerospace, hosted a Smart Connected Aviation Student Competition, in which undergraduate and graduate students designed, built, and tested smart technology to improve transportation experiences and the efficiency of the national aviation ecosystem. Read more about the Challenge at <https://faachallenge.nianet.org/>.

Across the country, the FAA partnered with academic and industry partners in hosting Aviation Career Education (ACE) Camps aimed at giving students indepth exposure to aerospace careers. For instance, the MMAC partnered with the Metro Technology Centers' Aviation Career Campus to host an ACE Camp that introduced aviation careers to more than 50 students who participated in a variety of activities, including witnessing a hot air balloon demonstration, experiencing Airbus and Boeing 737 simulators, and touring an airport. Information about this and other ACE Academy activities can be found at <https://www.faa.gov/newsroom/aviation-education-takes-summer-ace-academies>.

Additionally, this year FAA reimagined our Minority Serving Institutions Intern Program. Significant improvements to the program included placing interns in an 11-month program — rather than for only a single semester as was the case previously; giving managers the option to request interns based on the intern's area of study (STEM/Aviation or Business/Social Science); posting vacancies on USAJOBS to reach a wider applicant pool; and bringing interns onboard as temporary Federal employees rather than as contractors. Information about this and other student programs can be found at <https://www.faa.gov/jobs/students>.

Mike Monroney Aeronautical Center

In 2022, the Mike Monroney Aeronautical Center (MMAC) continued to respond to the COVID-19 crisis while simultaneously supporting a diverse customer base, including more than 35 federal agencies, in addition to the FAA. The MMAC delivers unique agency functions including, but not limited to: technical training; centralized supply chain management and field site services such as maintenance, repair, overhaul, and distribution; financial management shared services and information technology support across government; aviation medical and human factors research; and registration of the nation's civil aircraft and certification of airmen. Notable FY 2022 accomplishments include:

- Achieved more than \$35 million in cost savings and avoidance by implementing streamlined processes and other cost-saving measures.
- ISO-9001 re-certification audit — MMAC Management was again rated as Outstanding.

MMAC Facility Management provided facility-related services and maintenance for MMAC's 136 buildings and 3.6 million square feet of industrial, administrative, and laboratory space. FY 2022 Facility Management accomplishments include:

- Led the MMAC COVID-19 response team. This included tracking more than 1,800 total cases and completing more than 400 Level 3 cleanings. The team was the winner of two FAA-level awards for their accomplishments.
- Achieved more than \$600,000 cost avoidance in energy costs.
- Completed 82 construction projects across the MMAC.
- Led the FAA sustainable building program and added a new building in 2022. MMAC now has 16 of the 24 certified sustainable buildings in the FAA.
- Awarded the contract to construct a 1.5-megawatt solar array project, which will generate four percent of MMAC's annual electric usage. See rendering of this project on page 23.
- Will soon award a contract to install 26 electric vehicle charging stations supporting presidential goals for 100 percent zero-emission vehicles.

The FAA Academy supported and delivered technical and career training to the FAA workforce to maintain and safely operate the nation's airspace system. In FY 2022, the FAA Academy:



WHETHER IT'S TRAINING, I.T. AND FINANCIAL SERVICES, MAINTENANCE and support, human factors and medical research, or flight inspections, there's a lot going on at the MMAC. Find out more by watching "At the Center" at:

<https://www.faa.gov/tv/?mediaId=1604>



- Recorded more than 40,000 course technical training completions.
- Achieved more than \$1.7 million cost avoidance through virtualization of the Air Traffic Basics training course.
- Developed a training schedule to accommodate a projected increase in Air Traffic new hire training during FY 2023.
- Supported International Aviation Safety through development of international safety related training by:
 - Developing an International Aerodrome/Airport Inspection Course.
 - Developing an International Safety Management System course for recurrent training.
- Obtained national accreditation through the Council on Occupational Education, certifying the FAA Academy provides quality instruction in career and technical education.

The Enterprise Services Center (see also page 43) delivered financial and technology-shared services to more than 35 federal agencies, processing millions of financial transactions. FY 2022 accomplishments include:

- Achieved more than \$2.5 million in savings for the FAA through centralized management of FAA cellular services.
- Processed more than \$71.4 billion in disbursements authorized under the Coronavirus Aid, Relief, and Economic Security Act, the Consolidated Appropriations Act of 2021, and the American Rescue Plan Act of 2021.
- Processed more than \$473 million in direct disbursements to eligible recipients under the DOT Aviation Manufacturing Jobs Protection Program.
- Processed more than \$61.2 billion in grant payments for the DOT, with 100 percent on time.
- Processed 104,672 travel vouchers across DOT, with more than 99 percent on time.
- Distributed 36,000 accounts receivable invoices totaling \$9.8 billion.
- Processed 970,979 receipts totaling \$7.78 billion.

Enterprise Services Center

The FAA's Enterprise Services Center (ESC), an MMAC organization in Oklahoma City (see additional discussion of ESC services on pages 42 and 153–154), is a federal shared service provider responsible for delivering financial management services and information systems support for more than 35 different federal agencies in addition to the FAA. Major accomplishments in FY 2022 include:

- The ESC operates the FAA's online job application system, the Automated Vacancy Information Access Tool for Online Referral. In 2022, the FAA heightened its efforts to address current and future staffing needs for Air Traffic Controllers, a critical occupation, by promoting a “no experience” vacancy announcement for Air Traffic Controllers. A total of 57,956 applications were submitted through the system. This was a 375% increase over the previous year and a new record for the agency.
- The National Wireless Program (NWP) manages all wireless devices used by the FAA. In May 2022, the NWP received an urgent request for support from FAA personnel in Puerto Rico reporting issues with the FirstNet cellular signal at a critical Puerto Rico radar site. This site is critical to air traffic control and surveillance for multiple agencies, and wireless communications are crucial to the site's safe operation. However, the building housing the radar had been modified to withstand hurricanes, which negatively impacted the wireless signal. In collaboration with AT&T and FirstNet, NWP mobilized resources to install new equipment capable of receiving the signal in the fortified conditions. The team also provided a mobile communication unit to facilitate emergency communication during any additional adverse weather events.
- The General Services Administration (GSA) launched the GSA Shared Services Satisfaction Survey to gather feedback on customer experience



Screens at the ESC Customer Service Center, displaying real-time phone system statistics to help monitor volume and workload.

 FAA photo

and customer satisfaction with federal shared services. The survey assessed satisfaction in overall services and pricing; business and IT systems; communications; compliance; performance and service level agreements; and support and help desk. The survey also assessed various functions of financial management services. ESC received exceptional feedback, scoring higher than all other shared service providers in all categories.

- The ESC deployed 10 Robotic Process Automation (RPA) processes in FY 2022. RPA allows ESC employees to focus on higher-value work while automated processes take care of routine and repetitive tasks. RPA improves accuracy, audit compliance, data quality, business efficiency, cost savings, and cost avoidance. With 33 prospective automations and another 7 in some stage of process evaluation, development, or testing, the ESC is working to create a robust automation pipeline that delivers new capabilities at a predictable pace.

Analysis of Systems, Controls, and Legal Compliance

Risk management, internal controls, and legal compliance are vital to the integrity of the FAA's finances, operations, and objectives. In the section below, we outline some of the important tools the FAA uses to mitigate risk, assure compliance across the agency, and report the results of our risk assessments. First, we provide a summary of the FAA's financial management systems strategy, the systems critical for financial reporting, and our recent and forthcoming improvements to those critical systems. Next, we explain management's responsibilities for internal control and conformance with financial systems requirements, and our actions to evaluate the effectiveness of such controls and conformance. These controls and assessments form the basis for our management assurance statement provided on page 47. Finally, we describe the FAA's approach to enterprise risk management which more broadly encompasses both financial and operational controls.

Financial Management Systems Strategy and Actions

FINANCIAL MANAGEMENT SYSTEMS STRATEGY

The FAA's financial management systems strategy is based on a framework called the Federal Enterprise Architecture. This framework is recognized across the federal government as the best practice for aligning business and technology resources to achieve strategic outcomes. Our financial management systems strategy is divided into five categories: Business, Applications, Data, Information, and Services. A summary of each is provided below:

Business. The FAA has centralized management of financial information to optimize efficiency, transparency, and consistency. Efficiency is achieved by minimizing the number of systems containing financial information. This information must be accurate, readily available, and relatively easy to review. The key outcome to centralization and transparency is consistency.

Applications. The number of applications used for financial analysis and reporting must be minimized to retain the reliability and consistency of financial information necessary for informed business decisions.

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

Information. The FAA financial data "warehouse" provides consistency of reporting while maintaining each organization's ability to meet individual core mission business reporting requirements.

Services. Financial information services deliver shared operations and the infrastructure for the FAA's multiple financial systems.

SYSTEMS CRITICAL TO FINANCIAL MANAGEMENT, IMPROVEMENTS, AND ACTIONS

The FAA partners with the DOT to consolidate and modernize financial management systems and streamline processes and financial reports. Maintaining fewer systems enables 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. The summary below describes 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 our core financial accounting system. It is an Oracle web-based financial management system integrated with the Procurement Information System for Management (PRISM). Delphi, a DOT-wide system, supports the FAA's business objectives which include reducing program exposure to various sources of risk; automating, streamlining, and standardizing financial and business processes; and providing accurate financial results. Delphi undergoes continuous updates to improve functionality. The following are some highlights of Delphi's features and benefits:

- One system and one set of books shared by all FAA regions, centers, and headquarters.
- Ability to share and extract information and data from a common source.
- Financial statements produced directly from the system provide accurate and timely information available to management for decision-making.

- Provides flexibility for program and accounting managers to report financial information.
- Project accounting provides clear lines of responsibility and accountability that improves FAA's ability to measure program effectiveness.
- Cost and lifecycle asset valuations are accurate and consistent.

Acquisition. PRISM is an internet-based system of procurement processing for the agency. PRISM supports the entire procurement lifecycle for generating and maintaining procurement documentation and contractor award information. PRISM interfaces with Delphi using a modern service-oriented architecture implemented in 2021. A service-oriented architecture is a set of web services that efficiently passes or receives data through multiple applications. It allows individual web services to be easily discoverable and can be easily adapted to future changes and upgrades. In 2023, PRISM will undergo an upgrade to improve user interactions with the system.

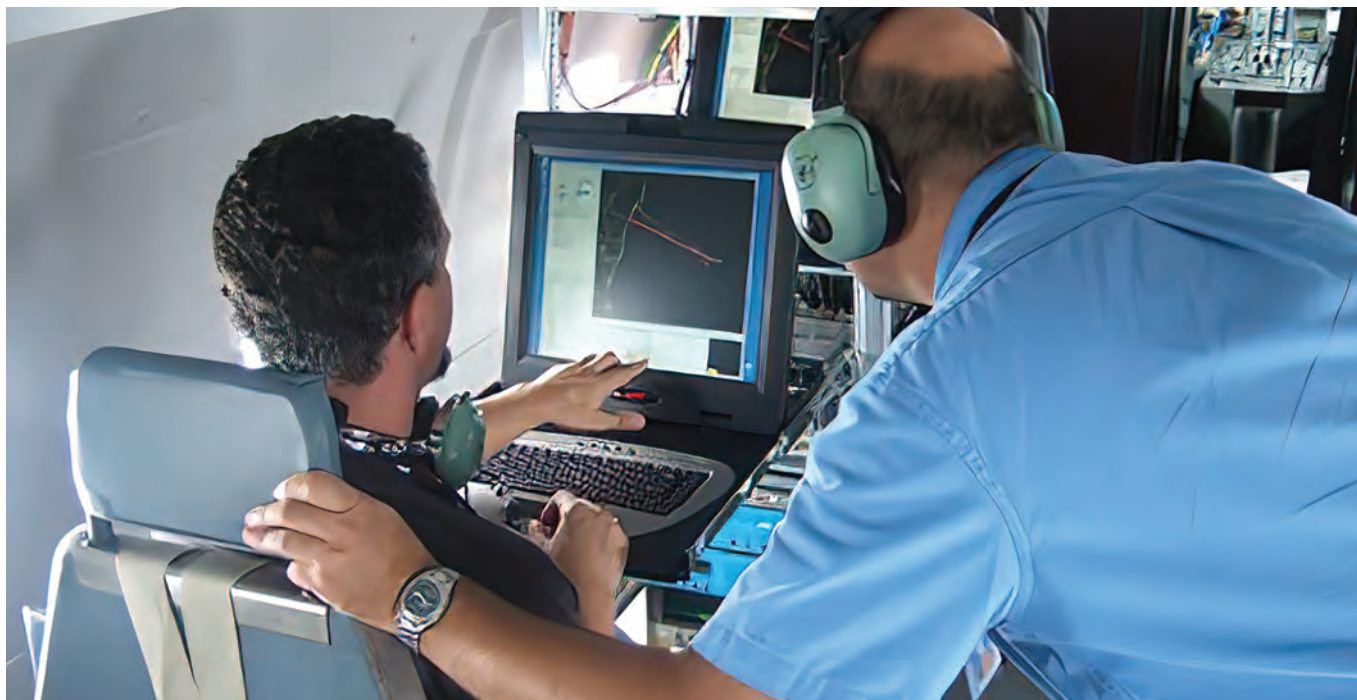
Travel. E2 Solutions is the travel management system used by all DOT organizations and many other federal agencies. This system provides the FAA with end-to-end travel approval, booking, and expense management capabilities. E2 Solutions was modernized in 2021 to

synchronize reservation and ticket data and add new system validation rules to ensure that reimbursements are compliant with financial policy.

Management Control Highlights

FINANCIAL MANAGEMENT INTEGRITY: CONTROLS, COMPLIANCE, AND CHALLENGES

On November 9, 2022, the Acting FAA Administrator reported to the Secretary of Transportation an unmodified statement of assurance under the Federal Managers' Financial Integrity Act (FMFIA) of 1982. Every year, program managers in the FAA's lines of business and staff offices assess the vulnerability of their programs. Based on 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 non-conformance. Identified weaknesses deemed material are consolidated in a Statement of Assurance signed by the Administrator and sent to the DOT Secretary. This FAA response becomes a part of the DOT Statement of Assurance sent to the President.



FAA Flight Program crewmembers work with spectrum and industry engineers on the agency aircraft used for the 5G research, development, test, and evaluation support flights in Van Nuys, CA. The FAA took steps to ensure radio signals from new 5G carriers operating within the C-band (3.7-3.98 gigahertz) would not interfere with aircraft altimeters, and this was a perfect opportunity for Spectrum Engineering Services Group to collect spectrum analyzer data. See further discussion of 5G starting on page 16.

FAA also reports to DOT compliance with the Federal Financial Management Improvement Act (FFMIA) of 1996. The FFMIA requires an assessment of adherence to financial management system requirements, accounting standards, and U.S. Standard General Ledger transaction-level reporting. For FY 2022, FAA is reporting overall substantial compliance.

ENTERPRISE RISK MANAGEMENT AT THE FAA

OMB Circular A-123 is the detailed guidance for management's responsibility for reporting and internal controls. Initially the guidance focused on internal controls over financial reporting, but the OMB has expanded its scope to consider financial and operational controls over the past few years.

The FAA collaborated with the DOT to discuss the best approach to incorporate risk management into FAA's longstanding risk-based business architecture. As a mature risk-based entity whose mission is to provide the safest and most efficient aerospace system in the world, the FAA has a longstanding performance committee to monitor agency strategic goals. This committee provides monthly progress reports on the status of these strategic goals to the Administrator.

Using the performance committee structure and existing strategic goals, FAA developed a specific enterprise risk management implementation plan for OMB Circular A-123 that identified a governance approach and a Chief Risk Officer. Each year, with approval from our Enterprise Risk Management Board and our Chief Risk Officer, FAA

prepares and submits a risk profile document to the DOT for inclusion in the department-level risk profile that is submitted to OMB. A risk profile examines the nature and level of threats faced by an organization and the effectiveness of controls in place to manage those risks. In its FY 2022 risk profile document, the FAA aligned its risks with the DOT's top risk areas, which pertain to integrating innovations safely while reducing transportation fatalities and injuries, infrastructure/state of good repair, cybersecurity, disaster preparedness, climate resistant infrastructure, equity, hazardous materials, organizational excellence, and human capital. The FAA's overarching approach to enterprise risk management also includes risk assessments that focus our robust internal controls testing and validate compliance with laws and regulations; consideration of risk areas highlighted through assessments and audits, including those conducted by the Office of Inspector General (OIG); and self-assessments conducted by all FAA lines of business and staff offices. Additional details regarding top management challenges identified by the OIG can be found in the Other Information section of this report on page 158.

As the nation continues to manage COVID-19 and its associated uncertainty, the FAA remains attentive to this challenge when identifying and prioritizing enterprise risks. The FAA continues to strengthen its risk management and reporting process through comprehensive collaboration with various stakeholders, to more effectively identify key risks and opportunities, develop risk responses, and implement timely mitigation actions.



Technicians raise a new glide slope tower at Miami International Airport in July 2022 after an MD-82 jet veered off the runway and destroyed the equipment on June 21. The glide slope guides aircraft vertically toward the runway touchdown point. The team rebuilt the entire glide slope in record time – 35 days. Read more at <https://medium.com/faa/rebuilding-in-record-time-180dd435557c>.

 FAA photo

Management Assurances

Federal Managers' Financial Integrity Act and Federal Financial Management Improvement Act Assurance Statement

Fiscal Year 2022

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 of 1982*. 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 OMB Circular No. A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*.

The FAA's assessments considered the effectiveness of internal control over operations, financial reporting (which 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, 2022. No material weaknesses were found in the design or operation of internal control over financial reporting.

The FAA also assessed its financial management systems' conformance with financial system requirements, in accordance with the requirements of OMB Circular No. A-123 Appendix D, *Compliance with the Federal Financial Management Improvement Act of 1996*. 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.



BILLY NOLEN
Acting Administrator
November 9, 2022

PERFORMANCE RESULTS



A commercial aircraft takes off into the clouds at sunset.

📷 **FAA photo by Jon Ross**

Performance Measures Overview

In this section, the FAA discusses its achievements in addressing its 16 performance measures.

The FAA has a new strategic plan, called *Flight Plan 21 for the 21st Century*, with strategic goals and objectives for FY 2022 through FY 2026. The FAA's strategic goals align with the DOT's strategic plan. The FAA's strategic plan describes overarching, long-term goals that the FAA aims to achieve, as well as the actions it will take to realize those goals. The strategic plan can be found here: https://www.faa.gov/about/plans_reports/.

The long-term goals described in the strategic plan inform the annual measures included in this PAR. While some measures were also published in last year's report, several have been revised, and others are new measures. Each of the annual measures aligns with a specific strategic goal:

- **Safety:** Oversee and operate the safest aerospace system in the world, all with a culture of continuous improvement.
- **People:** Strengthen our current and future aviation workforce by holding ourselves accountable, developing our people, and planning for the aviation workforce of the future.
- **Global Leadership:** Advance global aviation safety, operational excellence, and innovation by leading and collaborating with aviation authorities globally.

- **Operational Excellence:** Operate the world's most efficient aerospace system through daily execution, continuous improvement, and infrastructure investment.

In the pages that follow, the FAA provides the FY 2022 performance targets; a discussion of our FY 2022 performance; and, where beneficial, up to five years of historical trend data to provide additional context on long-running metrics. We have also prepared a graph of performance measures when appropriate.

In FY 2022, the FAA met all 16 of its performance measures. The FAA has noted the measures for which the data provided are preliminary.

Although some of this year's results were significantly better than the targets, the FAA did not change the targets to reflect the prior year's results. Annual performance is subject to greater variability than long-term performance. Over time, short-term trends tend to balance out, and the long-term view provides a more accurate picture of agency performance. Moreover, some annual targets use data acquired over a multiyear period. The targets used in this section have been set to measure the FAA's performance in meeting long-term goals.

We also include a discussion on page 77 of how our performance data is verified and deemed complete and reliable.

SAFETY

Oversee and operate the safest aerospace system in the world, all with a culture of continuous improvement.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
Commercial Air Carrier Fatality Rate* Reduce the commercial air carrier fatalities per 100 million persons on board U.S. carriers by 50 percent over 18-year period – FY 2008–2025. Target for FY 2022 is 5.2.	AVS	0.5	0.9	0.0	5.2	1.4 ¹	✓
Commercial Surface Safety Risk Index Manage the weighted surface safety risk index at or below 0.35 per million airport operations for commercial aviation.	ATO	Updated Measure for FY 2020	0.07 ²	0.10 ²	0.35	0.16 ³	✓
Non-Commercial Surface Safety Risk Index Manage the weighted surface safety risk index at or below 0.60 per million airport operations for non-commercial aviation.	ATO	Updated Measure for FY 2020	0.41 ²	0.40 ²	0.60	0.25 ³	✓
General Aviation Fatal Accident Rate* Reduce the general aviation fatal accident rate to no more than 0.89 fatal accidents per 100,000 flight hours by 2028. FY 2022 Target: 0.95.	AVS	0.95	0.91	0.73	0.95	0.86 ⁴	✓
Commercial Space Licensed and Permitted Launch and Reentry Safety Ensure there are no fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.	AST	0	0	0	0	0	✓
Remediate 90% of Critical and High Vulnerabilities To comply with Department of Homeland Security (DHS) Binding Operational Directive (BOD) 19-02, remediate 90% of critical and high vulnerabilities detected on internet-accessible systems or complete the required remediation plan with the concurrence of the Cybersecurity Steering Committee.	AFN	Updated Measure for FY 2022	Updated Measure for FY 2022	Updated Measure for FY 2022	90%	97%	✓

* This performance measure supports a DOT Agency Priority Goal.

✓ Target met ✗ Target not met

1 Preliminary estimate. National Transportation Safety Board will confirm in March 2023. We do not expect any change in the result to be significant enough to alter our year-end status of achieving the target.

2 Metric restated to reflect a data source addition that improves the accuracy of results.

3 Preliminary estimate until the final result becomes available in March 2023.

4 Preliminary estimate until the final result becomes available in December 2022. 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 U.S. carriers by 50 percent over 18-year period — FY 2008–2025.

FY 2022 Target	No more than 5.2 fatalities per 100 million persons on board (this equates to approximately 35 fatalities).
FY 2022 Result	1.4 fatalities per 100 million persons on board (this is a preliminary estimate until the final result can be confirmed by the National Transportation Safety Board in March 2023).
Public Benefit	As fatal air carrier accidents have declined in terms of average fatalities per accident, this metric reflects FAA's commitment to making air travel even safer.

The commercial air carrier fatality rate metric includes scheduled and non-scheduled flights of U.S. passenger and cargo carriers but excludes on-demand (i.e., air taxi) service and general aviation. Accidents involving passengers, crew, personnel, and the uninvolved public are all included.

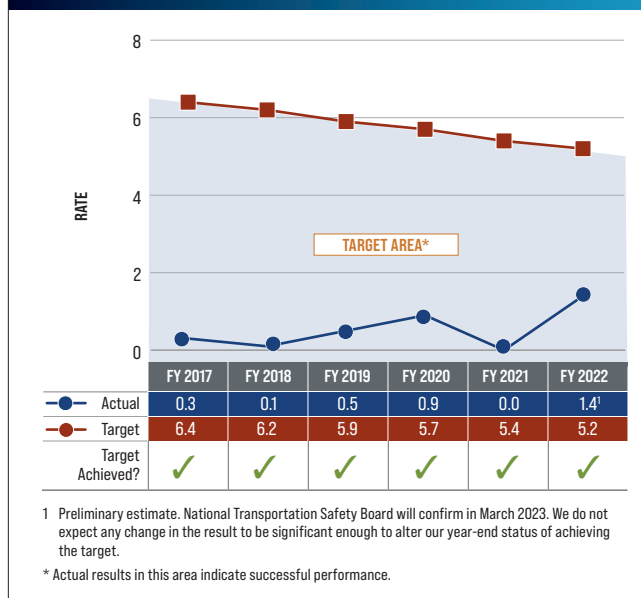
Since the target measures fatalities per persons on board, the safety level is unaffected by the number of flights in the air. Our target rate this year was 5.2 fatalities per 100 million persons on board which equates to approximately 35 fatalities. To put this number into perspective, 2.9 million passengers fly in and out of U.S. airports daily. This low target rate means the FAA has a goal of zero catastrophic commercial aviation accidents with significant loss of life. Additionally, although incidents still occur, advances in aviation have made these rare events more survivable, contributing to our success in meeting our Commercial Air Carrier Fatality Rate target.

In the long term, the FAA aims to reduce the number of fatalities in commercial aviation by 50 percent by 2025. This equates to 4.4 fatalities per 100 million persons on board from a baseline of 8.9 fatalities that was established in the period from 1997 to 2006. The FAA's annual targets were calculated to reflect a linear reduction over 18 years from 2008 to 2025.

With a rate of only 1.4 fatalities per 100 million persons on board, the FAA significantly surpassed its target of 5.2 per 100 million. Aviation is one of the safest forms of transportation, and the FAA strives every year to maintain this distinction. Our success is attributable in part to the FAA's establishment of safety-critical regulations and to our mandate that air carriers implement safety management systems. The Commercial Aviation Safety Team (CAST), a government-industry partnership established in 1997, has also been critical in reducing fatality risk in commercial aviation.

COMMERCIAL AIR CARRIER FATALITY RATE

Fatalities per 100 million persons on board



SAFETY MANAGEMENT SYSTEMS

Our commercial safety record indicates that Safety Management Systems (SMS) are valuable tools to address system hazards that contribute to accidents or incidents. An effective SMS provides processes to continuously identify hazards and mitigate associated risks before they lead to an accident or incident. For this reason, the FAA continues to work with aviation industry stakeholders to ensure continuous improvement of SMS within their operations and in the nation's airspace.

An SMS requires an organization to examine its operations and the decisions around those operations. It allows an organization to adapt to change, increasing complexity, and limited resources. An SMS also promotes the continuous improvement of safety through specific procedures such as employee reports and data collection which can be used to predict hazards. Organizations then use this information to analyze, assess, and control risk. Part of the SMS

process also includes the monitoring of controls and review of the SMS itself for effectiveness. An SMS helps organizations comply with existing regulations and predict needs for future action by sharing knowledge and information. Finally, an SMS includes requirements that will enhance the safety attitudes of an organization by improving the safety culture of leadership, management, and employees. All these changes are designed to help an organization incorporate safety in three forms of thinking — reactive, proactive, and predictive. With systems like these in place, the FAA and the aviation industry work together proactively and continuously to improve aviation safety by preventing accidents and reducing incidents.

The FAA issued regulations in 2015 requiring all air carriers conducting operations under Federal Aviation Regulation part 121 (regularly scheduled air carriers) to develop and implement an SMS. We have since worked closely with these carriers to assist these efforts, resulting in 100 percent compliance as of March 8, 2018. New regulations to expand the SMS requirements for air carriers operating under parts 21, 91, 135, and 145¹ are currently under development. The FAA aims to publish a Notice of Proposed Rulemaking for these regulations in the fall of 2023.

COMMERCIAL AVIATION SAFETY TEAM (CAST)

The FAA's success in commercial aviation safety is due in large part to industry and government investment in life-saving safety enhancements implemented in U.S. commercial air travel. The 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 apply interventions to address fatality risks. The work of the CAST, along with new aircraft regulations and other activities, continues to have a positive impact on reducing the fatality risk for commercial aviation in the United States.

The CAST has developed more than 100 safety enhancements to date. The latest 26 enhancements were based on non-accident data, demonstrating the program's progression from reactive safety enhancements to proactive risk mitigation. The CAST has developed an integrated, data-driven strategy to reduce commercial aviation fatality risk in the United States. To learn more about the CAST, please visit: www.cast-safety.org.

REGULATIONS

On June 10, 2021, the FAA published the Pilot Records Database final rule in the Federal Register and the rule became effective on August 9, 2021. This rule establishes an electronic database that facilitates the sharing of pilot records among air carriers and other operators. The final rule also regulates the use of the Pilot Records Database. The FAA portal for manually reporting pilot records became active in June 2022, and additional architecture to support bulk uploading and electronic importation of pilot records, as opposed to a manual web form, is in development and will be available in early FY 2023.

The FAA is currently developing several other regulations designed to enhance aviation safety. These rules cover a broad variety of topics, including increasing commercial cockpit protection, flight attendant rest requirements, and improving aircraft system safety certification methods.

¹ Part 21 governs certification procedures, part 91 governs the operation of private aircraft, part 135 governs on-demand air carriers, and part 145 governs repair stations

Commercial and Non-Commercial Surface Safety

FY 2022 Target	Commercial:	Manage the weighted surface safety risk index at or below 0.35 per million airport operations for commercial aviation.
	Non-Commercial:	Manage the weighted surface safety risk index at or below 0.60 per million airport operations for non-commercial aviation.
FY 2022 Result	Commercial:	0.16 <i>(Preliminary estimate until the final becomes available in March 2023).</i>
	Non-Commercial:	0.25 <i>(Preliminary estimate until the final becomes available in March 2023).</i>
Public Benefit	The Surface Safety Metric represents the potential for fatal accidents on the runway or taxiway surface. A reduction in the Surface Safety Metric score is an indication of overall safety performance improvements for the flying public in the surface environment.	

The Surface Safety Risk Index measures the overall safety performance of the national airspace in the runway environment. Surface accidents and incidents include aircraft collisions with vehicles, pedestrians, or other aircraft; runway excursions (the inadvertent exit of an aircraft from the runway surface); runway incursions (the incorrect presence of an aircraft, vehicle, or pedestrian on a surface designated for landing or takeoff); and all taxiway incidents. Operations are defined as total takeoffs and landings. Commercial operations are considered those operating under Federal Aviation Regulations parts 121, 129, and 135;¹ all other operation types are considered non-commercial.

Commercial and non-commercial metrics are both based on a risk index score calculated by applying a score to each surface event based on its strength of association with a fatality, with a fatal injury having a score of 1.0. The total of all scores is then divided by total operations. In FY 2022, the Surface Safety risk indices remained well below target for both the commercial and non-commercial metrics. This is a direct result of the collaborative efforts of the FAA, the aviation industry, and labor organizations.

The FAA has made considerable progress in improving runway safety at U.S. airports over the past 15 years by working with the aviation community on education, training, and airfield improvements such as improved marking and lighting. In July 2015, the FAA initiated the Runway Incursion Mitigation (RIM) program to address runway and taxiway intersections with high incidences of runway incursions. As of September 2022, there are 131 RIM locations at 85 airports.

Airports use a combination of strategies to improve these intersections, such as changes to the airport geometry, lighting, signage, markings, and operational procedures. These strategies reduce the likelihood of pilot confusion and have a direct impact on reducing runway incursions. To date, the RIM program completed mitigations at 86 out of the 131 RIM locations. These mitigations have reduced runway incursions by an average of 83 percent at RIM locations. The monitoring of mitigated RIM locations continues over time to determine if mitigation efforts were successful and if additional mitigation is necessary.

The FAA has also worked to alleviate the impacts of runway excursions by improving runway safety areas (RSAs) at commercial service airports. An RSA is a paved or graded surface around the runway, as much as 500 feet wide and extending as far as 1,000 feet beyond the end of the runway. The RSA enhances the safety of aircraft that undershoot, overrun, or veer off the runway, and provides greater accessibility for Aircraft Rescue and Fire Fighting equipment during such incidents. This extension significantly reduced the severity of a 2013 accident when a Boeing 777 landed short of the runway at San Francisco International Airport. Although the aircraft sustained severe damage, the vast majority of those on board survived, and many were able to walk away.

In some cases, land is not available at the end of a runway to achieve the full standard RSA. For this reason, the FAA has worked with various airports to install Engineered Material Arresting Systems (EMAS) that use crushable material beyond the landing surface to stop an aircraft that overruns the runway. The aircraft's tires sink into the lightweight material, and the aircraft

¹ Part 121 governs regularly scheduled air carriers, part 129 governs foreign air carriers, and part 135 governs on-demand air carriers.

decelerates quickly. Currently, EMAS is installed at the end of 118 runways at 70 U.S. airports. To date, there have been 19 incidents where EMAS has safely stopped overrunning aircraft with a total of 421 crew and passengers aboard those flights. One of the most recent incidents involved a business jet with seven passengers and two crew landing at the Reading Regional Airport in Pennsylvania. The aircraft overran the end of the runway and came to a stop in the EMAS off the end of the runway. There were no injuries, and the aircraft sustained only minor damage.

To continue to refine methods that reduce runway incidents, in August 2022 the FAA convened a

symposium with representatives from across a broad spectrum of the aviation industry to discuss how to improve runway safety. Participants included airlines, pilot associations, airport representatives, and air traffic controllers. Stakeholders provided insights and information from their respective points of view to help develop better runway safety practices. The consensus was that improving collaboration and information sharing between stakeholders was the key to reducing surface safety incidents.

To learn more about runway safety, please visit: https://www.faa.gov/airports/runway_safety/ and https://www.faa.gov/airports/engineering/incursions_excursions.



Just before touchdown at Chickasha Municipal Airport in Chickasha, OK.

📷 **FAA photo by Bryan Dahlvang**

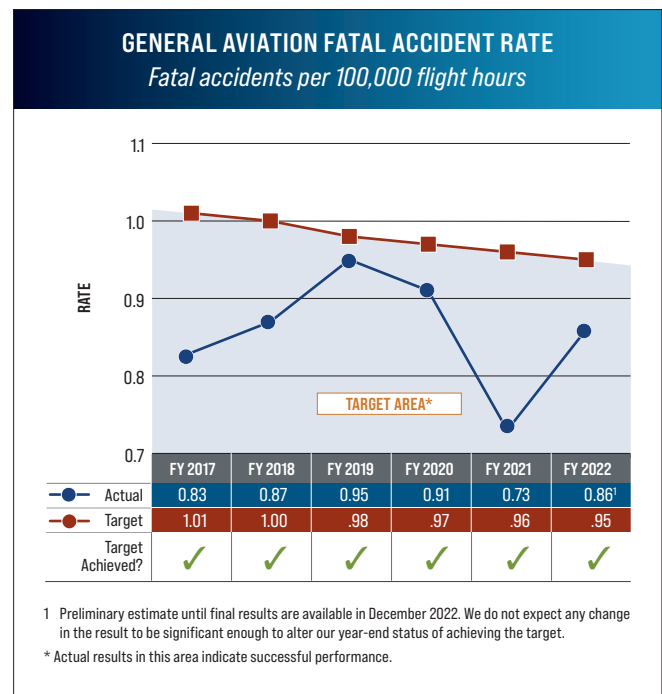
General Aviation (GA) Fatal Accident Rate

Reduce the GA fatal accident rate to no more than 0.89 fatal accidents per 100,000 flight hours by FY 2028.	
FY 2022 Target	No more than 0.95 fatal accidents per 100,000 flight hours in FY 2022.
FY 2022 Result	0.86 (Preliminary estimate until the final result can be confirmed in December 2022).
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. The data is used for safety enhancements in in-flight procedures, mechanical and technological improvements in aircraft, pilot education, and flight hazard research.

The United States has the most vibrant GA community in the world, with more than 200,000 active aircraft, including amateur-built aircraft, rotorcraft, balloons, and highly sophisticated turbojets. The FAA is continuously working with the greater GA community and industry to reduce the number of general aviation fatalities.

In FY 2022, the FAA achieved its goal of not exceeding a rate of 0.95 fatal accidents per 100,000 flight hours. Since GA traffic volume fluctuates, the FAA and the GA community have agreed that a GA fatal accident rate, rather than the number of fatal accidents, more accurately reflects the level of system safety. Using this metric allows for an accurate comparison of GA safety across fiscal years, geographic jurisdictions, and varying aviation traffic levels.

In FY 2022, the FAA continued to work with the General Aviation Joint Safety Committee (GAJSC) on improving general aviation safety. The GAJSC, formed by the FAA and industry, uses a non-regulatory, proactive, and data-driven strategy to improve safety. The GAJSC has developed 46 safety enhancements aimed at addressing the top causes of fatal accidents. Of this total, 30 have been completed and 16 are underway. The enhancements address engine failures, situations in which flight crews are unable to maintain control of an aircraft in flight, and controlled flight into terrain (unintentional collisions with the ground, a mountain, or a body of water). The safety enhancements include technological improvement; improved education and training for both pilots and mechanics; increased awareness of issues related to medications; and outreach on a range of topics aimed at preventing loss of control, controlled flight into terrain, and accidents related to engine failures. The GAJSC working group completed their analysis on the topic of controlled flight into terrain. The next GAJSC study is currently looking into data on mechanical failures not related to engine failures.



The GAJSC worked with the GA operators and the community to record risks, lessons learned, and mitigations developed during the COVID-19 pandemic. The resulting document reflects the unprecedented open and transparent exchange of information between the FAA and industry to ensure safety remains the top priority.

As part of its strategy to reduce accidents, the GAJSC regularly reaches out to the general aviation community to educate pilots and other stakeholders on the benefits of sharing safety data through the Aviation Safety Information Analysis and Sharing (ASIAS) program. This is a continuous effort with data submitted by the aviation community to ASIAS. The data is confidential, de-identified, and not used for enforcement purposes. The goal is to assist the GA community in reducing the number of fatal accidents by looking for systematic risks that could lead to fatal accidents.

The U.S. Helicopter Safety Team (USHST) is another collaborative effort between the FAA and industry that has approved and initiated 16 safety enhancements related to helicopter safety. Initially, the USHST approved and initiated work on 21 safety enhancements, but several had areas of significant overlap that could be completed through combined efforts. This resulted in a reduction in the overall count of enhancements from 21 to 16 during FY 2021. Of the remaining 16, 8 have been completed and are currently in the outreach phase. The remaining enhancements are expected to be completed in the next three to five years.

The USHST holds a meeting every two months where industry leaders and educators collaborate with the rotorcraft industry to drive the helicopter fatal accident rate towards zero. The FAA works directly with industry to support USHST safety enhancements designed to reduce the most prevalent risks that contribute to fatal helicopter accidents.

The top three occurrence categories for helicopter fatal accidents are (1) loss of control in flight, (2) unintended flight into adverse weather conditions, and (3) low altitude operations where the helicopter strikes an object. More than 50 percent of helicopter fatal accidents occur in one of these three occurrence categories, so the USHST continues to focus on these categories. The latest public outreach is a commercial video titled "56 Seconds to Live." This video leverages

what was learned through data analysis to address unintended flights into adverse weather conditions.

To spread safety awareness throughout the general aviation community, the national FAA Safety Team (FAASTeam) conducts live safety seminars and webinars throughout the fiscal year. The FAASTeam is comprised of mostly volunteer representatives who are experts in particular fields, such as maintenance or piloting, who help promote safety outreach to the general aviation public, and provide training and resources specific to their specialties and regions with the support of FAASTeam program managers.

On a bi-weekly basis, the FAASTeam, in collaboration with the FAA's UAS Integration Office, presents webinars to the Flight Standards Offices focusing on relevant UAS topics. These webinars ensure that the Flight Standards Offices have the knowledge necessary to address UAS concerns in the national airspace. The team provided an additional 44 live webinars in FY 2022. In response to numerous requests received via the FAA website as well as from internal and external stakeholders, the FAASTeam issued approximately 470 notices and offered almost 3,000 seminars and webinars through distribution of more than 33 million email invitations. The FAASTeam sent 591,257 messages to 42,249,800 recipients through email distribution.



IT'S BETTER TO 'KNOW BEFORE YOU GO' — FAA's *From the Flight Deck* video series shows actual approach and taxi footage from more than 100 airports across the United States to assist pilots in navigating complex taxiway and runway configurations ahead of actual flight operations. For more information, watch the trailer at:

<https://www.youtube.com/watch?v=FCfONL2r7C4>



Visit <https://www.faa.gov/go/FromTheFlightDeck> for an interactive map of available locations.

Commercial Space Licensed and Permitted Launch and Reentry Safety

FY 2022 Target	Ensure there are no fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities.
FY 2022 Result	No fatalities to the uninvolved public.
Public Benefit	The FAA's oversight of commercial space launch industry activities has resulted in no loss of life to the uninvolved public or public property damage while maintaining a robust entrepreneurial environment fostering significant innovations and economic opportunities for the American public.

In FY 2022, there were 74 licensed and permitted commercial space launches and reentries. The FAA continued its perfect record of ensuring zero fatalities, serious injuries, or significant property damage to the uninvolved public during licensed or permitted space launch and reentry activities. Throughout its involvement in commercial space activities, the FAA has licensed or permitted more than 520 launches and reentries, and has issued 7 active Safety Element Approvals. Safety Element Approvals are issued by the FAA when a component, process, service, or qualified person has been evaluated for safety suitability and found qualified and within acceptable risk standards when supporting or conducting a space activity. Once approved, a component, service, or person does not need reevaluation for every licensed activity. The FAA also oversees 14 launch or reentry sites (spaceports).

The commercial space industry continues to grow at a tremendous pace. Since 2012, the FAA's licensing workload has increased more than 1,000 percent while FAA staffing associated with licenses and permits has increased by only about 57 percent. In FY 2021, there were 64 licensed launches and reentries; that number increased to 74 in FY 2022.

To safely accommodate this increase in commercial space operations, in March 2021, the FAA published new safety regulations governing commercial space launch and reentry licensing. These regulations, called part 450 Launch and Reentry Licensing Requirements, represent a complete overhaul of the FAA's licensure of commercial space launches. The requirements consolidate four prescriptive rules into one performance-based standard. With performance-based regulations, the FAA focuses on achieving results rather than trying to mandate specific processes or technologies used to achieve those results. To facilitate the implementation of the new regulation, this year the FAA published three supporting Advisory Circulars which provide concise, technically accurate information to help the aerospace industry comply with and adapt to the new guidelines.

In addition to the growth in the number of commercial space operations, the complexity of the missions seeking FAA approval continues to change dramatically. This

year, the Office of Commercial Space Transportation continued preparation for a dynamic, rapidly maturing set of future missions which include orbital and suborbital space tourism, interplanetary travel, space-based internet services, commercial space stations, and innovative new designs for traditional launch systems.

In 2022, private space companies continued to expand commercial space transportation activities:

- On August 4, Blue Origin completed its fifth rocket launch for the fiscal year. The rockets, all New Shepard suborbital launch vehicles, launched from Blue Origin's West Texas launch site and each carried multiple space flight participants. Blue Origin anticipates an increasing launch cadence in the coming year.
- SpaceX continued to provide spaceflight capability to National Aeronautics and Space Administration (NASA) astronauts and the International Space Station, launching its 25th cargo resupply mission in July and its 4th crew mission in April. This capability eliminates U.S. dependence on high-cost Russian transportation to the International Space Station. SpaceX also continued the development of a reusable super-heavy lift launch system, known as the Starship. This system is designed to be the world's most powerful rocket. Composed of two separating rocket stages, the Starship will be fully reusable and capable of launching between 100-150 tons to low earth orbit (250 tons if the rocket is not intended for reuse). SpaceX has already conducted multiple suborbital tests of the Starship vehicle from their Boca Chica, Texas launch site.
- Boeing continued the development of its commercial capsule and executed a second orbital demonstration flight for NASA in May 2022.
- Virgin Orbit launched its fifth licensed mission from the Mojave Air and Space Port in California in July 2022. Virgin Orbit has applied for a license modification to conduct its first commercial launch from a proposed spaceport in Cornwall, United Kingdom later this year.

To view the FAA's commercial space transportation activities, please visit: www.faa.gov/space/.

Remediate 90% of Critical and High Vulnerabilities

FY 2022 Target	To comply with Department of Homeland Security (DHS) Binding Operational Directive (BOD) 19-02, remediate 90% of critical and high vulnerabilities detected on internet-accessible systems or complete the required remediation plan with the concurrence of the Cybersecurity Steering Committee.
FY 2022 Result	Remediated 169 out of 175 (97%) vulnerabilities detected within required timeframes as outlined in the DHS BOD 19-02 timeframes.
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.

The FAA plays a crucial role in safeguarding cybersecurity through the management of the national airspace and other mission-critical systems for air transportation. Assuring the security of FAA information systems — both operational and administrative — reduces the risk of safety-related data breaches and potential threat damage. Our national airspace system is a critical part of the national infrastructure and a key resource for which a cyber-attack could have catastrophic economic and national defense impacts, compromising the safety of the flying public and the international community.

As the FAA continues to increase the deployment of internet-accessible systems, it is more critical than ever to rapidly remediate vulnerabilities that might otherwise allow malicious actors to compromise federal networks through exploitable, external-facing systems. In accordance with the DHS BOD 19-02, DHS provides notification to the FAA of all critical and high internet-accessible vulnerabilities. Based on the industry-standard Common Vulnerability Scoring System, high vulnerabilities are those that receive a score between 7.0 and 9.0, while critical vulnerabilities receive a score greater than 9.0, with a score of 10 being the maximum. High vulnerabilities must be remediated within 30 calendar days of initial detection, while critical vulnerabilities must be remediated within 15 calendar days of initial detection.

The FAA prioritizes vulnerabilities in high-value assets, which are systems and services that have been deemed so critical that the loss of access to the system or the corruption of data within the system would have a serious impact on the organization's ability to perform its mission. High-value assets are based on the FAA's Federal Information Security Management Act reportable system inventory.

This performance target is a percentage that is calculated by comparing the total number of critical and high vulnerabilities identified on internet-accessible high-value assets that are addressed within the required timeframes to the total number of critical and high vulnerabilities identified on the

internet-accessible high-value assets. The target this year increased to a 90 percent success rate from the 80 percent targeted in FY 2021. The FAA increased the metric to 90 percent to drive responsiveness towards the compliance of DHS BOD 19-02 and to improve our cyber hygiene practices and processes at the agency. This is essential as the latency between the discovery of a vulnerability and an attack that leverages that same vulnerability has decreased significantly. Thus, the FAA's ability to remediate and mitigate internet-accessible vulnerabilities quickly is paramount to defending our nation's critical infrastructure from a cybersecurity threat and drives the agency's goal to continuously improve the function of vulnerability management aligned to the DOT's overall goal of Safety.

In FY 2022, the FAA addressed 169 of the 175 critical and high vulnerabilities (97 percent) identified on internet-accessible high-value assets within 15 or 30 days from initial detection, thus exceeding the 90 percent target.

The Security Operations Center's (SOC) 24-hour/365 days-a-year operation is the central reporting point for all cyber events occurring within the FAA and DOT. The SOC detects threats, attacks, and weaknesses across all FAA operating environments.

The FAA continues to enhance its external detection and protection mechanisms by deploying web application firewalls, cloud-based security access brokers, and critical scanning services to identify and remediate vulnerabilities in a timely manner. In addition, the deployment of new capabilities identified in Executive Order 14028, Improving the Nation's Cybersecurity, will further bolster the security posture of the FAA by increasing visibility and enhancing the SOC detection and response capabilities. To strengthen the U.S. civil aviation security posture, the FAA is leading an effort with private and public aviation entities to identify cybersecurity risks and develop mitigation strategies across the aviation ecosystem. This effort enables the FAA and its stakeholders across the U.S. Government (including the DHS and the Department of Defense), industry, and international partners to identify cybersecurity vulnerabilities and prevent cyber-attacks that could disrupt the safe and efficient operation of air travel.

PEOPLE

Strengthen our current and future aviation workforce by holding ourselves accountable, developing our people and planning for the aviation workforce of the future.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
Hiring Persons with Disabilities/Persons with Targeted Disabilities The FAA's Office of Civil Rights will lead collaboration between all lines of business and staff offices to increase the representation of persons with disabilities/persons with targeted disabilities in the FAA workforce by 1% each year for the next three years.	ACR	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet all three targets	Met all targets	✓
STEM AVSED Equity Accountability Develop methods to ensure that all students, including those in underrepresented and/or underserved populations, have access to events and learning activities aimed at introducing them to aerospace concepts and career pathways.	APL	Updated Measure for FY 2022	Updated Measure for FY 2022	Updated Measure for FY 2022	Meet all five targets	Met all targets	✓
DEIA Gender-Inclusive Policy Development To ensure a diverse, equitable, and inclusive environment, adopt a gender-neutral language policy to be implemented across the agency.	APL/ACR	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet both targets	Met all targets	✓

✓ Target met ✗ Target not met



Controller in the Austin, TX air traffic control tower.

FAA photo

Hiring Persons with Disabilities/Persons with Targeted Disabilities

The FAA's Office of Civil Rights will lead collaboration between all lines of business and staff offices to increase the representation of persons with disabilities/persons with targeted disabilities in the FAA workforce by 1% each year for the next three years.

FY 2022 Target	Target 1:	Each line of business/staff office will increase persons with disabilities/persons with targeted disabilities awareness and accountability by issuing a memorandum directing their managers to promote the 1% goal. Due April 30, 2022.
	Target 2:	In collaboration with all lines of business/staff offices, FAA's Office of Civil Rights National People with Disabilities Program Manager will host four agency-wide information sessions for hiring managers on effective ways to hire people with disabilities. Due August 31, 2022.
	Target 3:	Each line of business/staff office will report their progress towards the 1% goal during the bi-monthly meetings of the Equal Employment Opportunity/Diversity and Inclusion Action Committee. Due August 31, 2022.
FY 2022 Result	Target 1:	Lines of business/staff offices distributed the memorandum on April 30, 2022.
	Target 2:	Hosted four agency-wide information sessions.
	Target 3:	Reporting on progress towards the 1% goal at the bi-monthly Equal Employment Opportunity/Diversity and Inclusion Action Committee meetings began on May 16, 2022.
		Additionally, the FAA met the 15% persons with disabilities and 1% persons with targeted disabilities hiring goals for FY 2022. FY 2022 persons with disabilities actual hiring result is 15.87% and persons with targeted disabilities actual hiring result is 1.95%.
Public Benefit		This effort will benefit the public by increasing our hiring of people with disabilities who currently have an unemployment rate of 9.1% as compared to people without disabilities who have an unemployment rate of 4.2%.

The FAA should mirror the nation it serves, so the agency must ensure its hiring practices accommodate the breadth of the American public. To this end, reaching people with disabilities is an essential component of the FAA's Diversity, Equity, Inclusion, and Accessibility (DEIA) objectives. The FAA continues to focus on its recruitment, hiring, advancement, and retention of persons with disabilities to increase employment of this underrepresented group. DEIA allows for an inclusive workspace where a person with a disability can make use of their knowledge, skills, and abilities to contribute to the FAA's mission.

Persons with disabilities refers to individuals with physical or mental impairments that substantially limit one or more major life activities. The federal government designates some serious health conditions as targeted disabilities. Persons with targeted disabilities are individuals whose disabilities the federal government has identified for special consideration in recruitment and hiring. The targeted disabilities are:

- hearing (total deafness in both ears)
- vision (blind)
- missing extremities
- partial paralysis

- complete paralysis
- epilepsy
- severe intellectual disability
- psychiatric disability
- dwarfism

People in these disability categories are especially underrepresented in the federal government. For this reason, they are the only categories that permit affirmative hiring with federal government-wide hiring goals.

To achieve these goals, the FAA conducts significant targeted outreach to potential candidates. In June 2022, the FAA's Office of Civil Rights held its second annual DEIA Symposium. More than 2,000 federal employees from the FAA, DOT, and other federal agencies, located throughout the United States and abroad, registered for the symposium. This year's symposium once again included virtual booths, a popular feature that simulates the look and feel of an in-person conference by allowing participants to browse various booths. This year's 10 booth vendors received more than 880 booth visits by symposium participants. Feedback on the virtual booths was overwhelmingly positive. The symposium also

featured eight training sessions discussing diversity, equity, generational communication, accessibility, biases, neurodiversity, toxic work environments, and intersectionality.

The FAA also conducted internal outreach. First, the FAA circulated an internal memorandum directing managers to promote the hiring goal. Then, to highlight the agency's commitment to the hiring goal, the FAA hosted four agency-wide information sessions for hiring managers on effective ways to hire people with disabilities and targeted disabilities. Tools such as our direct hire authority are critical to meeting our hiring goals, and hiring managers must be aware of these tools for the FAA to make effective use of them.

In addition to outreach, the FAA strives to ensure as many jobs as possible within the FAA are available

to people with disabilities. The FAA created a task force to develop an inclusive application process to ensure that people with disabilities are provided the same opportunities as all other applicants for Air Traffic Control Specialist positions. The task force also developed an on-the-job training program for candidates at several facilities. The program immerses candidates in all aspects and functions of an Air Traffic Control Specialist through participation in a 12-month internship at selected Air Route Traffic Control facilities.

The FAA remains committed to this essential part of our DEIA objectives, and the agency is proud to have met our goal of increasing the representation of people with disabilities and targeted disabilities in the FAA workforce by one percent.

Science, Technology, Engineering, and Math (STEM) Aviation and Space Education (AVSED) Equity Accountability

Develop methods to ensure that all students, including those in underrepresented and/or underserved populations, have access to events and learning activities aimed at introducing them to aerospace concepts and career pathways.

FY 2022 Target	Target 1: Define and identify planned FAA organizationally-sponsored outreach that should be targeted for initial STEM AVSED equitable outreach assessment.
	Target 2: Create and begin to implement equity assessment criteria to be used when planning STEM AVSED outreach events.
	Target 3: Conduct training with FAA staff on how to use STEM AVSED equity assessment and ensure initial implementation.
	Target 4: Identify appropriate IT platform to house STEM AVSED equity assessment, allowing for broader implementation in FY 2023.
	Target 5: Provide a summary of STEM AVSED equity assessment results from FY 2022 activities to STEM AVSED Executive Board and the Administrator/Deputy Administrator.
FY 2022 Result	Target 1: Sub-committee under STEM AVSED Steering Committee identified planned organizationally-sponsored outreach to be targeted.
	Target 2: Sub-committee under STEM AVSED Steering Committee created the equity assessment tool. The assessment tool has received leadership approval from the Office of Policy, International Affairs, & Environment and the Office of Civil Rights.
	Target 3: The team created a webinar and a training guide to train the FAA staff on how to use the assessment. Training was completed on 3/30.
	Target 4: Sub-committee under the STEM AVSED Steering Committee identified the CEATS program as the IT platform for broader implementation.
	Target 5: Summary of results were provided at the end of FY22 based on FY22 activities to the Administrator and the Executive Board.
Public Benefit	The FAA's STEM AVSED program has been in existence for decades but had atrophied in recent years. With the renewed focus on aviation workforce issues and projected shortages in critical professions such as pilots and aviation mechanics, the FAA STEM AVSED Steering Committee and Executive Board are committed to addressing workforce issues through the STEM AVSED program. The aerospace industry as a whole has traditionally suffered, and continues to suffer, from a lack of diversity. Recognizing the value of diversity, one of the four main goals of the FAA's STEM AVSED strategic plan is STEM For Every Student, which aims to "create opportunities for students of all backgrounds to learn about and pursue aerospace careers." The equity assessment tool will help ensure that access is provided for all kids at large events. This aligns with our strategy goal of STEM for every student.

The 2020 Census once again highlighted the U.S. population's increasing diversity. The nation's aerospace workforce, however, has not kept pace with this diversity, showing little change over the past 40 years. Over that timeframe, for instance, women have consistently made up less than 10 percent of the aerospace workforce. In fact, there has been little shift in any key demographic that reflects the changes in the U.S. population as a whole. The data is clear: the aerospace industry lacks diversity, especially among those traditionally underrepresented in our industry.

In response to this challenge, the STEM AVSED program has developed a standardized way to focus on reaching underserved and underrepresented populations. Our new Equity Assessment Tool allows the FAA to assess equity as a selection criterion for STEM AVSED events hosted and attended by FAA representatives. The equity tool is used as a decision-making tool to help the FAA determine the best use of resources for STEM AVSED outreach.

For FY 2022, there were several FAA-sponsored activities chosen to pilot the use of the Equity Assessment Tool. These included: Aviation Safety's Bi-Annual Career Symposium, FAA's participation in YMCA's Annual Thingamajig event, and several Aviation Career Education (ACE) camps. The STEM AVSED team recognizes that the FAA hosts and sponsors many other events. As the equity tool matures, the team aims to continue implementing the tool for future outreach activities.

In response to workforce shortages across the industry, the FAA also committed to a priority focus on outreach to students. This included the creation of a corporate STEM AVSED Strategy. One of the main goals of the strategy is "STEM for every student." This goal helps the FAA reach several objectives within the strategy, including:

1. Develop methods to ensure the largest number of students possible have access to aerospace events and learning activities.

2. Increase cultural competency, awareness, and literacy within the FAA workforce engaged in STEM AVSED outreach.

This performance metric is measured by the completion of the five targets within the corporate short-term incentive. In addition to developing the Equity Assessment Tool,

training employees on its use and testing it on events in FY 2022, the FAA has also identified an IT platform which will embed the use of the equity tool into event reporting in future years. Lastly, the team finalized a report of the results of the use of the tool in FY 2022 and provided the report to FAA leadership by September 30, 2022.

DEIA Gender-Inclusive Policy Development

To ensure a diverse, equitable, and inclusive environment, adopt a gender-neutral language policy to be implemented across the agency.

FY 2022 Target	Target 1: Conduct research to identify gender-specific terminology used in FAA policies and programs. Identify alternate terms to be used that align with diverse, equitable, and inclusive practices.
	Target 2: Working in collaboration with all lines of business/staff offices, refine draft order to utilize gender-neutral language references as appropriate in agency documents.
FY 2022 Result	Target 1: Conducted review of more than 3,000 public-facing documents.
	Target 2: Order drafted to be published in FY 2023.
Public Benefit	This performance measure is designed to improve the work environment of the FAA. The agency will be better suited to serve the public interest, and better positioned to attract talent and grow with the rapidly evolving aerospace industry.

The aerospace field has changed significantly over the past century, but much of aviation's language remains rooted in the past. Some of the words are outright problematic. Terms such as "airmen" and "unmanned," for instance, inherently exclude more than half of our population. If any employee or industry partner feels excluded or marginalized because of the language we use, the work of the agency suffers, and opportunities are lost. This problem was highlighted by the Equal Employment Opportunity Action Committee Federal Women's Program Workgroup, the Drone Advisory Committee, the Women in Aviation committee, as well as a cohort of our own summer interns.

To lead the aerospace industry into the next century, the FAA must actively promote diversity, equity, inclusion, and accessibility (DEIA) values. The words and language we use in all communications, both internally and with external stakeholders, must fulfill this objective. Updating the language we use in our programs and daily interactions is a critical step toward making gender equality a reality.

To accomplish this, the FAA first reviewed similar efforts undertaken by other entities. The American Psychological Association, for example, has issued inclusive language guidelines focused on diversity, equity, and inclusion. The European Union and North Atlantic Treaty Organization have issued guidance on gender-neutral language, and NASA has issued guidelines on how to manage gender transition in the workplace. All of these inform the FAA process.

The best resource for this effort comes from the diversity of people participating in the FAA's own

Inclusive Language Working Group. The working group's mission is to develop a draft order and implementation plan for the adoption of inclusive language across the agency. This working group, which includes approximately 30 staff and management members from various offices, brings a wealth of experience and perspective to this effort.

In addition, the FAA Working Group reviewed external documents to identify exclusive non-inclusive language. They have found more than 120 exclusionary terms in nearly 3,000 public-facing documents. This information will feed a "checklist" whereby the agency can measure progress towards full adoption of inclusive language.

In preparation for drafting an inclusive language order, the FAA held two public meetings. On November 5, 2021, the FAA held the Gender Inclusive Summit. In addition to FAA participants, the symposium included representatives from NASA, the U.S. Secret Service, the Fire Department of the City of New York, the Department of Defense, United Airlines, and Los Angeles World Airways. The FAA's second public meeting titled "Words Matter: Creating Inclusive Language in Aerospace" was held on March 23, 2022.

Following these public meetings, the FAA's Office of Civil Rights worked with lines of business and staff offices across the FAA to develop an inclusive language draft order. While the previously issued policy statement focused on gender-inclusive language, this order seeks to broaden the application of inclusive language beyond gender-specific terms. The draft order went into agency-wide coordination on September 14, 2022 and is targeted for finalization by the end of the calendar year.

Data Science at the FAA

Scientists, aviation experts, and decision-makers work hard to predict and plan for changes big and small in the nation's airspace. They craft the policies and regulations that continue to steer aviation toward a safer, stronger, greener future. They make meticulous evaluations of new technologies and new ideas. And much of their work relies on access to reliable data.

To this end, the FAA launched an agency-wide Enterprise Information Management (EIM) initiative dedicated to managing data to improve efficiency, reduce costs, promote transparency, and enable business insight. The EIM Data Platform, the FAA's cloud-based implementation of the EIM concept, offers data and information management services and big data processing across the agency. The platform's core services — data storage, cataloging, and access — support the platform's analytic, visualization, and presentation services. The platform's advanced analyses make it a powerful, flexible tool for interpreting large quantities of data, helping steer the agency toward improvements in FAA operations and the nation's aerospace system. As a platform — rather than a single application — the EIM Data Platform can be used by a multitude of FAA projects. These projects can plug into the platform much like your home can plug into an existing public utility grid. There is no need to rebuild the set of information management/data services each time from the ground up.

For example, if an airport wants to expand a runway, under the National Environmental Policy Act it must complete a rigorous, comprehensive environmental study before ever breaking ground. Before EIM, the airport might need to gather and analyze its own data from scratch. But with EIM, because the FAA tracks every flight in the United States and records operational, positional, performance, and environmental data down to the specific aircraft and engine, the airport can leverage validated information curated specifically for environmental analyses to ease the burden of data collection and analysis. The regular availability of FAA data will save stakeholders time and money doing work that FAA already does on a consistent, recurring

schedule. It will allow the FAA to spend more time on decision-making and less time on process.

This year the FAA created a new Data Science 1560 job occupational series to recruit and hire data scientists and data science professionals. These professionals identify methods, processes, algorithms, tools, and systems to extract and interpret findings from varied structured and unstructured data sets. The FAA places data science professionals throughout the organization, not, as one might think, just within the Office of Information Technology. In addition to analyzing data for environmental use cases, data scientists are helping the FAA identify safety risks and other issues by mining and integrating numerous data sources; leveraging artificial intelligence to identify related issues based on common data elements across oversight functions, such as aircraft, part numbers, and facilities; and using artificial intelligence to extract meaning from text to classify and explore trends and patterns in safety event reports from aircraft operators.



GLOBAL LEADERSHIP

Advance global aviation safety, operational excellence, and innovation by leading and collaborating with aviation authorities globally.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
OneFAA Approach to International Training Design, develop and deliver internal coordination processes to ensure and sustain a consistent, corporate approach to international training.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Develop internal processes and procedures	Developed internal processes and procedures	✓
Global Leadership on Aviation and Climate Change Demonstrate renewed global leadership on climate change through international engagement, action at the International Civil Aviation Organization, and preparation of a U.S. Aviation Climate Action Plan.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Publish Action Plan	Action Plan published	✓

✓ Target met ✗ Target not met

OneFAA Approach to International Training

FY 2022 Target	Design, develop and deliver internal coordination processes to ensure and sustain a consistent, corporate approach to international training.
FY 2022 Result	The FAA developed an International Training Process Improvement Strategy that ensures a corporate approach to international training and outreach. Under this strategy, the FAA developed an Export Control Guidance document that ensures the consistent application of export control requirements across the FAA. The result of this work will ensure a corporate approach to the development of international procedures that align with the FAA's international strategy and provide consistent outreach and training activities to our global partners.
Public Benefit	This target promotes the efficient use of government resources and promotes safety of international travel by establishing a uniform, consistent standard for FAA outreach and training activities around the globe. The export control guidance document ensures compliance with U.S. legislation that controls access to specific types of technology and their associated data to prevent the disclosure or transfer of sensitive information to a foreign national and to protect U.S. economic interests.

Global Outreach and Training (GOaT) is a key initiative supporting the Global Leadership Pillar in the FAA's Flight Plan 21. GOaT aligns all FAA international training efforts and creates an enterprise-level strategy for international training. One of GOaT's mandates is to ensure that international training and outreach are provided in a consistent manner with a corporate approach.

To support this mandate, the Flight Plan 21 GOaT initiative team, comprised of cross-agency participants, developed an FAA International Training Process Improvement Strategy that aligns with the FAA's International Strategy and streamlines international outreach and training coordination with fellow Civil Aviation Authorities. This holistic strategy streamlines FAA international outreach and training by:

- explaining how our work supports international strategy
- identifying enterprise-level procedures
- outlining the procedural requirements for the development, approval, and promulgation of outreach and training products.

The FAA's International Training Process Improvement Strategy provides a framework for the identification and development of new procedures.

The FAA currently maintains a total training portfolio of more than 1,000 FAA courses and workshops offered

through multiple delivery points, processes, and pricing structures. The Flight Plan 21 GOaT initiative team reviewed this portfolio and identified a need for corporate processes and procedures that provide a consistent approach for outreach and training. The procedures included in the FAA International Training Process Improvement Strategy reflect extensive research conducted by the GOaT cross-agency team over the course of a year. The team's first process introduced a common export control guidance document that ensures export control requirements for outreach and training will be consistently applied across the FAA. Additional processes and improvements are planned for FY 2023. This continued work ensures a corporate approach to the development of international procedures that aligns with the FAA's international strategy and provides consistent outreach and training to our global partners.

The FAA International Training Process Improvement Strategy is vetted through the Flight Plan 21 GOaT initiative team for consensus. As the Flight Plan 21 GOaT team continues to develop FAA international training processes, the FAA continues to monitor progress and verify the development, vetting, and promulgation of these processes across the agency. As these processes go into effect, the FAA will continue to collaborate across the agency and review outreach and training products to ensure that corporate processes remain intact through the outreach and training lifecycle.

Global Leadership on Aviation and Climate Change

Demonstrate renewed global leadership on climate change through international engagement, action at the International Civil Aviation Organization, and preparation of a U.S. Aviation Climate Action Plan.

FY 2022 Target	Incorporate interagency feedback received on the draft United States Aviation Climate Action Plan and brief leadership in the Department of Transportation. Publish a revised United States Aviation Climate Action Plan.
FY 2022 Result	The revised Action Plan was published publicly and provided compiled actions that could enable the sector to reach net-zero greenhouse gas emissions by 2050.
Public Benefit	The public is increasingly concerned about the climate crisis. Aviation is seen as an industry that is a significant polluter and there is often little public information available on what the industry is doing to address the crisis. The benefit of a publicly available Aviation Climate Action Plan is to provide an outline of actions being taken as well as an accurate assessment of aviation's role in contributing to and addressing the climate crisis.

In 2010, the International Civil Aviation Organization (ICAO) launched the State Action Plan initiative. This initiative enables all ICAO Member States to establish a long-term strategy on climate change for the international aviation sector, involving all interested parties at a national level. Through the initiative, ICAO Member States define specific actions their government or industry can take to enable the reduction of CO₂ emissions from the civil aviation industry. ICAO Member States are encouraged to update State Action Plans every three years to regularly track progress and adjust actions as appropriate.

The United States submitted its first State Action Plan in calendar year 2012 and submitted a revision in 2015. The United States did not submit a revised State Action Plan in 2018. In calendar year 2021, the FAA decided to update its State Action Plan, with an updated title of "Aviation Climate Action Plan."

The FAA developed the Aviation Climate Action Plan based on consultation with other federal agencies alongside analyses conducted using the FAA's internal data. Given the six-year break since the previous update, the FAA sought to use the Aviation Climate Action Plan to gather data and, based on that data, establish a long-term climate goal for the United States aviation sector. To this end, the FAA compiled information on the activities of various agencies (including the Department

of Energy, Department of Agriculture, EPA, NASA, and others) to reduce aviation's climate impacts. The FAA's Office of Environment and Energy assessed these activities and compared them with forecasted growth of the aviation sector.

With an eye toward ambitious climate action, the Aviation Climate Action Plan compiled actions that, based on FAA analyses, could enable the sector to reach net-zero greenhouse gas emissions by 2050.

Secretary of Transportation Pete Buttigieg formally announced the final Aviation Climate Action Plan at the 26th Conference of the Parties of the United Nations Framework Convention on Climate Change held in Glasgow, Scotland, in November 2021. The Aviation Climate Action Plan was made publicly available on the FAA website that day: <https://www.faa.gov/sustainability/aviation-climate-action-plan>.

The document was formally submitted to ICAO in February 2022 and is publicly available on the ICAO website at: https://www.icao.int/environmental-protection/Lists/States_Action_Plans/Attachments/89/US%20Aviation%20Climate%20Action%20Plan%20-%20November%202021.pdf.

OPERATIONAL EXCELLENCE

Operate the world's most efficient aerospace system through daily execution, continuous improvement, and infrastructure investment.

Performance Measure	Lead	FY 2019 Results	FY 2020 Results	FY 2021 Results	FY 2022 Target	FY 2022 Results	FY 2022 Status
Critical Acquisition Milestones on Schedule 90% of the critical acquisition milestones are achieved by their scheduled due dates.	AFN	97.5%	97%	93%	90%	96%	✓
Ensure runway pavement is kept in a safe and serviceable condition* Maintain eligible runway pavement in Excellent, Good, or Fair condition (based on visual inspections) for 93% of the paved runways in the National Plan of Integrated Airport Systems.	ARP	97.9%	97.9%	97%	93%	97.6%	✓
Sustainability – FAA Facilities and Operations Demonstrate leadership on climate and sustainability by increasing the energy efficiency of FAA facilities and reduce the overall carbon footprint of the FAA.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet all three targets	Met all targets	✓
Unmodified Audit Opinion Obtain an unmodified audit opinion on the FAA's FY 2022 financial statements identified by external independent auditors.	AFN	Updated Measure for FY 2020	Unmodified audit opinion	Unmodified audit opinion	Unmodified audit opinion	Unmodified audit opinion	✓
Path to Net Zero Emissions by 2050 Reduce CO ₂ emissions from domestic aviation, as defined in the U.S. Aviation Climate Action Plan.	APL	New Measure for FY 2022	New Measure for FY 2022	New Measure for FY 2022	Meet all targets	Met all targets	✓

* This performance measure supports a DOT Agency Priority Goal.

✓ Target met

✗ Target not met

Last year, our Operational Excellence strategic goal area included a measure for Major System Investments. That measure is not reported in FY 2022 because it was not selected as a DOT goal. Instead, Critical Acquisition Milestones on Schedule was selected to measure schedule performance.



Boeing 737 about to take on fuel at Ronald Reagan Washington National Airport.

FAA photo by Jon Ross

Critical Acquisition Milestones on Schedule

FY 2022 Target	Ninety percent of the critical acquisition milestones are achieved by their scheduled due dates.
FY 2022 Result	96 percent of the critical acquisition milestones were achieved by their scheduled due dates.
Public Benefit	The FAA's ability to keep acquisitions within specific schedule dates demonstrates the agency's commitment and accountability to meet key schedule commitments. These commitments also indicate the FAA's ability to manage programs that will allow for a timely transition of NextGen programs. The transition involves acquiring numerous systems to support precision satellite navigation, digital, networked communications, integrated weather information, layered adaptive security, and more.

The purpose of the Critical Acquisition Milestones on Schedule measure is to encourage programs to stay on schedule, identify projected schedule variances early, and take corrective actions. Keeping acquisitions within specific schedule goals demonstrates the agency's commitment and accountability to meet key schedule commitments. These commitments also indicate the FAA's ability to manage programs that will allow for a timely transition to NextGen technologies. The transition involves acquiring numerous systems to support precision satellite navigation, digital networked communications, integrated weather information, layered adaptive security, and more.

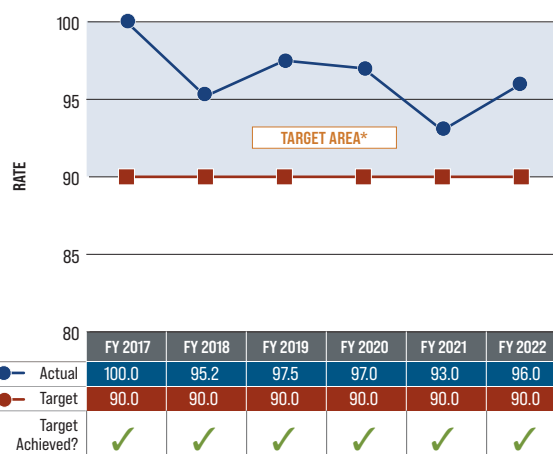
The FAA uses established criteria to select which programs and milestones to include in this performance measure. These criteria include programs with an approved Acquisition Program Baseline or Execution Plan, programs with active Facilities & Equipment funding, or programs determined to be strategically important or that require special management attention. Milestones reflect a measurable accomplishment, delivery, or key event.

Performance against this target is based on a program's projected milestone target date established at the beginning of the fiscal year. The calculation for this target is measured by dividing the total number of milestones for the fiscal year that were completed on or before their target due dates by the total number of milestones planned, resulting in the percentage of milestones completed by their target due date. At least 90 percent of the total number of milestones must be met on or before the target due date established at the beginning of the fiscal year to meet this performance target.

In FY 2022, 91 of 95 (96%) of critical acquisition milestones met their target due date, thus allowing FAA to accomplish the overall goal. Four milestones missed their target due date, including:

CRITICAL ACQUISITION MILESTONES ON SCHEDULE

Ninety percent of the critical acquisition milestones are achieved by their scheduled due dates.



* Actual results in this area indicate successful performance.

1. Wind and Wave Evacuation Survival Facility: Site demolition, excavation, and grading complete. Completed late due to a delay in the City of Oklahoma approval of the required construction permits.
2. Configuration Management Automation Phase 1: Completed late due to required changes related to a security mandate and rework of software.
3. Mobile Asset Sustainment: Design and fabricate two medium mobile air traffic control towers. Late due to material shortages and a redesign of the prototype.
4. Mobile Asset Sustainment: Procure and fabricate one large mobile air traffic control tower. Late due to unexpected price inflation of materials impacting negotiations with the vendor and contract award.

Ensure Runway Pavement is Kept in a Safe and Serviceable Condition

FY 2022 Target	Maintain eligible runway pavement in Excellent, Good, or Fair condition (based on visual inspections) for 93% of the paved runways in the National Plan of Integrated Airport Systems.
FY 2022 Result	97.6 percent of runway pavements at NPIAS airports maintained in Excellent, Good, or Fair condition.
Public Benefit	Maintaining runways in a good state of repair ensures passengers can safely and efficiently traverse the national airspace system.

Significantly deteriorated runway pavement can cause damage to aircraft equipment, compromise safety, and lead to higher rehabilitation costs. For this reason, the FAA strives to maintain 93 percent of the paved runways at National Plan of Integrated Airports System (NPIAS) airports in at least a Fair condition. For FY 2022, FAA accomplished this goal by maintaining 97.6 percent of runway pavements in Excellent, Good, or Fair condition.

Periodic maintenance of runways, particularly resurfacing, is a cost-effective way to delay the need for major runway rehabilitation. The FAA funds a broad range of capital infrastructure development at most airports within the NPIAS; however, airports are generally responsible for funding periodic and ongoing maintenance. More significant rehabilitation, resurfacing, or reconstruction projects may receive funding from a variety of sources, including Airport Improvement Program (AIP) grants, Passenger Facility Charge revenues, airport revenues, and other funding

sources. Approximately 72 percent of AIP grants go towards pavement-related projects, representing a significant investment in the nation's infrastructure. With the addition of the Bipartisan Infrastructure Law's new grant programs, this investment will grow in the coming years. For more information about these new grant programs, see here: <https://www.faa.gov/bil>.

Maintaining a cost-effective network of runways requires a balance of accurate reporting of runway pavement conditions and funding for repairs. The FAA focuses on optimizing life-cycle costs and extending pavement life, thereby reducing unnecessary costs and delays at any given airport and across the national airspace system. For some runways, the most cost-effective approach is to monitor pavement condition and maintain safety through periodic maintenance, while planning for more significant reconstruction that will eventually be needed. This allows for a staggered maintenance schedule that prevents flight delays caused by too many runways simultaneously out-of-service across the national airspace system. This approach also keeps the demand for federal funding in proportion with the budget for such funding. By maintaining 93 percent of eligible runway pavement in Excellent, Good, or Fair condition, the FAA creates the conditions to sustain this balanced approach. This percentage has not changed from the previous year, and the FAA has had continued success maintaining this percentage or higher.

The FAA achieves this goal by meeting with the airport sponsor to review projects on the Airport Capital Improvement Plan and Airport Layout Plan to ensure that funding for runway maintenance is available and that maintenance proceeds in a manner that minimizes disruption to operations. The FAA is also exploring measures to modify guidance to allow pavement construction to be more cost-effective without forfeiting durability.



The National Airport Pavement Test Facility, located at the Technical Center, provides high quality, accelerated test data from rigid and flexible pavements subjected to simulated aircraft traffic.

 **FAA photo**

Sustainability — FAA Facilities and Operations

Demonstrate leadership on climate and sustainability by increasing the energy efficiency of FAA facilities and reduce the overall carbon footprint of the FAA.

FY 2022 Target	Target 1: Include all new construction/modernization projects impacting more than 25,000 square feet at FAA facilities in the Sustainability Report and Implementation Plan.
	Target 2: Designate at least two FAA facilities and 42,000 square feet as Sustainable Federal Buildings.
	Target 3: Assess five FAA facilities for “ISO 50001 Ready” certification pursuant to the Energy Act of 2020.
FY 2022 Result	Met all targets. FAA increased the energy efficiency of facilities and reduced the overall carbon footprint.
Public Benefit	The federal government is the largest purchaser of energy in the United States. All agencies are charged with reducing energy and water consumption in order to make these resources more available for the general public.

The White House has prioritized sustainability and resiliency for federal agencies to prepare for and help combat climate change. The FAA has responded to this directive by naming sustainability of agency facilities and operations as one of its priorities in FY 2022. The targets included in this goal incorporate just a few of the new sustainability-related requirements from the Energy Act of 2020 and Executive Order 14057, Catalyzing Clean Energy Industries and Jobs through Federal Sustainability. By meeting all these targets, the FAA demonstrates leadership in aviation sustainability, commitment to the administration’s priorities, and compliance with legal mandates.

Target 1 was achieved when the FAA submitted input to the Annual DOT Sustainability Plan. The plan outlines the DOT’s progress toward meeting the requirements, also incorporating important information on forthcoming initiatives. The FAA included all new buildings (entering the design phase in FY 2022) in its contribution to the plan, meeting the target and ensuring leadership awareness of upcoming facilities and the relevant sustainability requirements outlined in Executive Order 14057.

Target 2 was achieved with the completion of two new facilities: the Charlotte Air Traffic Control Tower

and Building 229 (Screening Facility Building) at the Mike Monroney Aeronautical Center. Both facilities are certified to adhere to the Guiding Principles for Sustainable Federal Buildings. The buildings are certified when FAA engineers complete an indepth analysis into the building’s design and performance, as per the Council on Environmental Quality instructions. The certification includes ensuring the building meets the six principles outlined by Council, which include sustainable design and operation practices such as optimizing energy performance and conserving water. The two facilities added 57,000 gross square feet to the FAA’s portfolio of sustainable buildings.

Target 3 was achieved when five FAA facilities completed assessments to establish formal energy management systems. These assessments were part of a collaborative energy management systems training program initiated by the FAA’s Office of Environment and Energy and the Department of Energy’s Federal Energy Management Program. The Energy Act of 2020 and Executive Order 14057 require agencies to consider the use of an energy management system to better manage energy consumption and meet the various sustainability requirements placed upon the government.



TODAY THERE ARE MORE THAN 500 AIR TRAFFIC CONTROL TOWERS in our national airspace system. While the FAA builds towers at the minimum height required to ensure visibility for air traffic controllers, towers keep getting taller because airports keep getting bigger and busier!

Here are the current top five tallest towers in our system:

1. **Atlanta Tower:** 398 feet · 2. **Charlotte Tower:** 370 feet · 3. **Las Vegas Tower:** 362.8 feet · 4. **Indianapolis Tower:** 349.5 feet · 5. **Orlando Tower:** 345 feet

Dozens of new towers will be built in the coming years under the new Sustainable Tower Design Initiative. Read more about the initiative here:

<https://www.faa.gov/tower-design>



Unmodified Audit Opinion

FY 2022 Target	Obtain an unmodified audit opinion on the FAA's FY 2022 financial statements identified by external independent auditors.
FY 2022 Result	Unmodified audit opinion on the agency's financial statements.
Public Benefit	The public benefits by being assured, confirmed by independent auditors, that the consolidated financial statements of the FAA are presented fairly in all material respects.

The unmodified audit opinion target is a critical indicator of the financial condition of the FAA because it independently assesses the fair presentation of the agency's financial statements. In connection with that process, the unmodified audit opinion considers the internal controls over financial reporting and compliance with laws and regulations that could have a material impact on the financial statements.

In FY 2022, the FAA achieved this target by receiving 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 generally accepted accounting principles. Achieving this measure is a signal to the public and Congress that

the agency is transparent and accountable in its use of taxpayer resources. It requires every FAA organization to be responsible for following accounting policy by entering accurate and timely source data into the accounting system.

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

Path to Net Zero Greenhouse Gas Emissions by 2050

Reduce CO₂ emissions from domestic aviation, as defined in the U.S. Aviation Climate Action Plan.

FY 2022 Target	Target 1:	Quantify projected CO ₂ emissions reduction through 2050 from Continuous Lower Energy, Emissions, and Noise (CLEEN) Program's aircraft technology development efforts.
	Target 2:	Update tracking of volumes of sustainable aviation fuel (SAF) used in the United States during calendar year 2021 to understand progress in the use of these lower lifecycle emissions fuels.
	Target 3:	Quantify the annual CO ₂ emissions from civil aviation operations in the National Airspace System for the calendar year, taking into account the volume of SAF used, the level of fuel-efficient technologies employed in the flying fleet, and operational improvements.
FY 2022 Result	Target 1:	Completed. The FAA worked with Georgia Institute of Technology through the Aviation Sustainability Center of Excellence to model and assess the benefits of aircraft technologies developed under the CLEEN Program. CLEEN Phase I (2010-2015) and Phase II (2016-2020) technologies are projected to reduce CO ₂ emissions by 404 million metric tonnes ¹ through 2050.
	Target 2:	Completed. The FAA worked with stakeholders across the government and industry to monitor and report SAF use on an annual basis. In calendar year 2021, SAF use totaled just over 5 million gallons.
	Target 3:	Completed ahead of schedule. For calendar year 2021, total CO ₂ emissions by civilian operations was 173,538,919 metric tonnes.
Public Benefit	Today's commercial jet aircraft are over 70% more efficient than early commercial jet aircraft. However, there is concern over aviation's impact on the environment and public health. Aviation is currently viewed as a relatively small contributor to emissions that have the potential to influence air quality and global climate. CO ₂ is the primary greenhouse gas emitted through human activities, and it is directly related to the fuel burned during the aircraft's operation. As air traffic grows, this contribution will increase unless there are improvements in fuel-efficient technologies, optimized air traffic operations, and the use of SAF.	

¹ A "tonne" is a metric measure and correct in this instance. It is different than a ton.

The U.S. Aviation Climate Action Plan established a goal of net-zero emissions for U.S. aviation by 2050. Through collaboration between the U.S. aviation, agriculture, and energy industries, this goal is achievable and will result in considerable progress in addressing aviation's climate impact. As part of this effort, the FAA will drive innovation in aviation technologies, further streamline operations, and spur a massive increase in SAF deployment.

Per analysis in support of the U.S. Aviation Climate Action Plan, sustainable aviation fuels and new aircraft technologies are the two largest levers at hand to influence future CO₂ emissions from aviation. As a result, the targets under this metric focus on FAA strategies to deploy these solutions.

The CLEEN Program partners with industry to develop new aircraft technologies which reduce fuel burn, emissions, and noise. The program uses parallel modeling and simulation efforts to forecast the environmental benefits of technologies introduced into the national airspace system. CLEEN's technology development efforts employ a phased approach. Each phase lasts five years and focuses on a suite of environmental technologies.

Through a grant from the Center of Excellence for Alternative Jet Fuels and Environment and in collaboration with Georgia Institute of Technology, the

FAA models each CLEEN-funded technology and its physics-based effects on aircraft and engine design and environmental performance. Georgia Institute of Technology then projects the application of each technology onto future aircraft designs, considers how these technologies may enter the fleet, and calculates the resulting change in overall CO₂ emissions through 2050.

This process models multiple scenarios in which CLEEN technologies are used (or not used) to reduce CO₂ emissions from domestic aviation and international departures. A comparison of these scenarios can help inform the FAA's understanding of CLEEN technologies' benefits.

In FY 2022, this simulation and analysis yielded results for the CO₂ emissions reductions from CLEEN Phase I and II technology development conducted from 2010 through 2020. CLEEN Phase I and II technologies are projected to reduce CO₂ emissions by 404 million metric tonnes through 2050.

The FAA is also focused on supporting the development and deployment of SAF through testing, coordination, and analysis. SAFs have lower CO₂ emissions than conventional petroleum-derived jet fuels even after including total carbon produced from feedstock extraction, fuel processing, transportation, and use. Thus, SAFs contribute to the U.S. climate goal for aviation.

Historically, the FAA has estimated SAF use based on voluntarily reported data from Airlines for America, the Defense Logistics Agency Energy, manufacturers, business aviation, and others. In 2019, the FAA began incorporating data reported by the EPA. The EPA administers the U.S. Renewable Fuel Standard which mandates renewable fuel blending in the U.S. transportation fuel supply. Under the U.S. Renewable Fuel Standard, SAFs are eligible for renewable identification numbers which are issued to track the use of sustainable fuels. These renewable identification numbers provide additional data on SAF production and use in the U.S. SAF use for calendar year 2021 was more than 5 million gallons, based on data from the above sources.

The SAF Grand Challenge outlines a comprehensive government-wide strategy for scaling up new technologies to produce SAF on a commercial scale. The SAF Grand Challenge is the result of a multi-agency Memorandum of Understanding that attempts to reduce the cost, enhance the sustainability, and expand the production and use of SAF. The SAF Grand Challenge marks a starting point on the road to meeting a goal of 3 billion gallons of SAF production by 2030 and 35 billion gallons by 2050. The SAF Grand

Challenge Roadmap was released in September 2022. You can find it here: <https://www.energy.gov/sites/default/files/2022-09/beto-saf-gc-roadmap-report-sept-2022.pdf>.

The FAA also monitors improvements in aircraft and engine technology, developments in sustainable aviation fuels, operational procedures, and enhancements in the airspace transportation system by measuring and tracking the overall fuel consumption of domestic aircraft operations. The annual amount of fuel consumed relates directly to aviation CO₂ emissions.

Jet fuel consumption depends heavily upon commercial airline operating procedures and day-to-day operational conditions. This includes the condition of the airline's operating fleet and route assignments, air traffic conditions, weather, airport operating status, congestion in the system, and any disruptions that introduce delays in scheduled flights. The FAA continues to provide scientific understanding and support the development of new technologies, fuels, and operations with industry and academia. This cooperation supports NextGen and its environmental goals that will allow for sustainable growth, aiming to meet our net-zero emission target by 2050.



Twin 10,000 gallon tanks used for alternative fuel testing at the William J. Hughes Technical Center's Propulsion and Airpower Engineering and Research Lab.

 FAA photo

Miracles in the Air:

True Stories of Air Traffic Control

At noon on Tuesday, May 10, 2022, the pilot of a Cessna 208 flying to Florida from the Bahamas told his two passengers he wasn't feeling well. He fell against the controls, putting the aircraft into a nosedive and sharp turn. The passengers had no flying experience, and what unfolded thereafter was truly remarkable.

One of the passengers jumped into action. He pulled the aircraft out of the nosedive and called Fort Pierce Tower at Treasure Coast International Airport in Florida to let them know the pilot was incapacitated, and that he had no flying experience.

A controller at Fort Pierce Tower received the radio call and asked the passenger the location of the plane, but the passenger did not know the plane's position. With assistance from an operational supervisor, the controller calmly instructed the man to fly straight ahead and to start a gradual descent, allowing time for air traffic control to locate the aircraft. The plane was located over the Atlantic Ocean off the coast of Florida, near Boca Raton.

Airplane communications were transitioned to Palm Beach air traffic control, where a controller, who was also a certified flight instructor with experience piloting Cessna aircraft, rushed in from his break to offer clear, short directions on how to fly. The entire air traffic control team at Palm Beach Tower stepped in to provide



Air Traffic Manager Ryan Warren (left) and controller Robert Morgan (center) show the passenger (far right) printouts of the Cessna 208 flight deck they used to help him land safely after this unusual in-flight emergency on May 10, 2022.

 **FAA photo**

support. The team halted departures at Palm Beach International Airport. Controllers contacted adjacent control facilities to put aircraft into holding patterns and to advise on expected delays due to the ongoing emergency. Tower controllers dispatched emergency responders and moved vehicles and aircraft away from the runway to prepare for the passenger's attempt to land.

The controller guided the passenger to Palm Beach International Airport because it had a longer runway, was less congested, and had adequate radio coverage. The controller walked the passenger through turns, specific aircraft settings, and, finally, how to land. He made sure the passenger had the Palm Beach runway in sight and guided the passenger through a long, stable final approach. Once the aircraft was over the runway, the controller explained how to keep the nose barely off the ground until the main gear touchdown. The passenger did not know how to stop the plane, so the controller provided instructions on how to brake and adjust the levers. The aircraft successfully landed at 12:27 p.m. First responders were there to assist the original pilot. Neither passenger had any injuries.

For more of FAA's coverage of this event:

- Read our article: <https://medium.com/faa/miracle-in-the-air-air-traffic-controllers-guide-passenger-to-land-plane-safely-27362004f07c>
- Listen to our podcast: https://www.faa.gov/podcasts/the_air_up_there/?file=2022-06-24-005.mp3&permalink
- Watch a short video: <https://youtu.be/ctxm6uzo-Vw>

 **HEAR MORE TRUE STORIES** of air traffic controllers guiding safe landings on FAA's YouTube channel:



"We're putting it down in the trees."

<https://www.youtube.com/watch?v=795VrtP4vvU&feature=youtu.be>

"Mayday, Mayday, Mayday!" <https://www.youtube.com/watch?v=gPITDRxRZHg>



"Descending through the soup is so disorienting." <https://www.youtube.com/watch?v=sh8f3jYjnfI>

Quality Assurance

Verification and Validation of Performance Information

The FAA employs strong management controls to ensure the accuracy, completeness, and timely reporting of performance data. The FAA's robust governance structure provides oversight for the agency's performance management framework. Senior representatives from each line of business and staff office convene monthly to guide the formulation of the agency's performance goals and to review performance data. This ensures performance reporting adheres to the highest standards and indicates the importance the FAA places on data-centric decision-making.

The FAA's verification and validation process, which includes rigorous internal and external reviews, assures stakeholder confidence in its performance results. Performance data is independently verified by the DOT. 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 and the Bureau of Transportation Statistics. Data for these measures are not considered final until the National Transportation Safety Board 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. Once performance metrics are established, the FAA conducts an annual exercise to outline each metric's data sources, identify any potential statistical issues, and establish a definition of success. Where the criteria for targets have changed, the changes are noted and explained. Any potential issues with the completeness and reliability of performance data are identified and addressed through this exercise. This vigorous attention to detail engenders a high level of confidence from all interested parties, internal and external, in the accuracy of both the performance measures and the results the FAA publishes.

Use of Data and Evidence in FAA Decision-Making

Safety is at the core of the FAA's mission and our top priority. While the United States has the safest air transportation system in the world, aviation is complex and dynamic, and air travel will always include risks. To mitigate these risks and improve the safety of air transportation, the FAA continually monitors data to identify safety trends and conducts discrete evaluations on threats to aircraft and aviation that include fire, extreme weather, aircraft icing, lithium batteries, cyber threats, bird strikes, and more. The data and evidence that the FAA collects from this continuous monitoring, feedback mechanisms from aviation partners, and testing of new technologies and protocols are critical to informing the agency's decisions on regulations, guidelines, policies, and air traffic control procedures.

Weather is a contributing factor in 35 percent of general aviation accidents, and 75 percent of those mishaps involve fatalities. Without weather information, pilots are unable to make informed decisions, which leads to aviation accidents and flight interruptions.

Weather camera images from FAA and non-FAA (e.g., state DOT) owned weather camera systems are used to enhance situational awareness and are made available free to the aviation community on a public website, <https://weathercams.faa.gov/>. Along with other weather products, weather camera images become a powerful "go-or-no-go" decision tool. Implementation of the FAA weather camera service across the state of Alaska resulted in an 85 percent reduction in weather-related accidents and a 69 percent reduction in weather-related flight interruptions.

Currently, 234 cameras are installed across Alaska and Hawaii. The FAA plans to expand its coverage to include the installation of weather cameras at 330 additional locations across Alaska and the continental United States. There are two major investment decisions related to which locations receive weather cameras. The first investment analysis readiness decision was made in FY 2022, and the final investment decision will be made in FY 2023. The weather camera implementation schedule will be determined following the final decision. To determine the locations that will benefit from weather camera services, the FAA will conduct foundational research to analyze accident data to determine risk areas for weather-related accidents. The FAA will also analyze route data to determine

common mountain pass routes that might benefit from weather camera services. Input from stakeholder groups (pilot organizations, operators, Flight Service, and others) will be collected to validate and refine the analysis. Prioritization of locations will be completed by conducting a cost-benefit analysis for each potential location. Benefits that will be considered include reductions in accident rates and efficiency savings resulting from a reduction in flight interruptions.

Continuous Monitoring of Data

COMMERCIAL AND GENERAL AVIATION

The FAA continually monitors aviation data to identify trends, make informed decisions, and address problems before they result in an accident. This effort is continuous and requires vigilance to maintain safety.

The FAA's Aviation Safety Information Analysis and Sharing (ASIAS) program gathers data from across government and industry, including data from the FAA; members of the general aviation community; commercial airlines; corporate and business aviation operators; universities; aviation manufacturers; and maintenance, repair, and overhaul organizations. Participants in ASIAS provide data voluntarily. They share this information with the FAA — often involving potential safety problems — in a non-punitive environment wherein all proprietary information is protected.

The FAA participates in two groups that monitor ASIAS data and other data. The Commercial Aviation Safety Team (CAST) brings together representatives from government, pilot and air traffic controller associations, airlines, airports, and aviation manufacturers to identify the top safety concerns in commercial aviation and implement interventions. The General Aviation Joint Safety Committee (GAJSC) includes industry stakeholders such as pilot organizations, flight instructors, mechanics, builders, and manufacturers. Both groups issue voluntary safety enhancements that, along with new aircraft technology, regulations, and other safety activities, have substantially reduced aviation fatalities.

The FAA evaluates the effectiveness of its safety efforts, including the safety enhancements issued by the

CAST and the GAJSC, by setting performance goals and monitoring results. For example, the fatality risk for commercial aviation in the United States fell by 83 percent from 1998 to 2008. The FAA aims to reduce the U.S. commercial fatality risk by another 50 percent from 2010 to 2025. These types of gains are possible thanks to the significant collaboration between FAA and industry. This performance goal and the work of the CAST are discussed in more detail on pages 51–52. In addition, the FAA aims to reduce the general aviation fatality rate by 10 percent from 2019 to 2028, with a target of no more than 0.89 fatal accidents per 100,000 flight hours by 2028. The work of the GAJSC is discussed in more detail on page 55.

DRONE SAFETY TEAM (DST)

In 2016, the FAA created the UAS Team in response to the increased number and complexity of Unmanned Aircraft Systems, or drones, in operation in the national airspace. The goal of the safety team, modeled after the CAST and the GAJSC, is to ensure the safe operations of drones in the national airspace system through data-driven safety enhancements and collaboration among members of the drone industry. Recently, the name of the Unmanned Aircraft Safety Team was changed to the Drone Safety Team (DST) by those very members.

The UAS industry is new, and many small UAS companies do not yet have internal safety teams. Unlike well-established airline manufacturers and operators, these small companies have limited resources to measure, train for, anticipate, and simulate risks to their UAS or others in the sky or on the ground, even as they recognize the importance of safety. Still, with limited data to draw from, the DST identified several UAS safety issues, including loss of control, injury, and lack of a safety culture. DST formed new groups to examine each of these issues. Each group will create a list of safety enhancements and evaluate how effective these enhancements are at mitigating risk. With a limited number of accidents, flight data analysis will be crucial to determining root causes of accidents. DST is also developing a governance structure for its team and a data collection strategy. DST is committed to promoting safety through participation in the FAA-sponsored Drone Safety Day and by educating the UAS community on the use of the Aviation Safety Reporting System, which was updated this year for drone operators to be able to anonymously report safety incidents.



WHETHER IT IS PROMOTING THE SUPER BOWL, A DRONE DEMONSTRATION AT AN AIR SHOW, OR A DRONE RACING EVENT AT THE WORLD GAMES, drones are making their way into aviation events all over the world. Drones can fly in formation to create amazing light shows, provide security, revolutionize live video coverage, and even serve as the main event. The use of drones in events is a marvelous spectacle to watch, but the work behind the scenes gets little attention. Read more at:

<https://medium.com/faa/drones-at-air-shows-and-other-aviation-events-d53471eb721e>



Quality Financial Management

Financial Analysis and Oversight to Inform Decision-Making

When many people think of the FAA, they think of our air traffic controllers, aviation safety inspectors, engineers, or others in roles directly connected to the achievement of the FAA's mission to provide the safest, most efficient aerospace system in the world. But achieving our mission also requires a tremendous amount of analysis and oversight by our financial analyst professionals who work diligently behind the scenes to inform financial decision-making and ensure the agency is a responsible steward of the taxpayers' money. This section highlights a selection of these activities.

INVESTMENT ANALYSIS

The automated systems required to operate our nation's airspace are complex, expensive to develop, and critical to achieving our safety mission. These systems integrate unmanned aircraft into our airspace, support the transition of surveillance from ground-based to satellite-based radar, and help modernize communication between air traffic controllers and pilots from voice to data.



Training occurring at the Mike Monroney Aeronautical Center in Oklahoma City, OK.

 **FAA photo**

The Joint Resources Council (JRC) is the agency's senior investment review board. The JRC makes executive-level resource decisions, including authorization and funding for investment programs, to ensure funding goes to investments with the highest potential to contribute to the FAA's strategic and performance goals. Before going to the JRC, every program undergoes a rigorous evaluation by the FAA Office of Finance and Management and the NextGen, Aviation Safety, Information Technology, and Air Traffic Organization offices. In these evaluations, the FAA considers many factors such as costs, user benefits, implementation timeline, and risks. In FY 2022, these organizations conducted reviews for 27 separate capital investment decisions by the JRC to ensure that cost, schedule, and benefits estimates were accurate, complete, and well-documented. These decisions encompass more than \$4.6 billion in agency capital investments. See page 70 for a discussion of the FAA's Critical Acquisition Milestones on Schedule performance goal.

PROCUREMENT INVESTMENT REVIEWS

The FAA relies on outside companies to provide certain contract services and systems, equipment, software, hardware, and other products in order to run the nation's airspace system and its mission support activities.

The FAA has a robust set of internal controls over contract procurements. As part of its internal controls, the Office of Finance and Management reviews procurement plans to ensure they include clearly defined requirements and performance risks and that safeguards are put into place to mitigate those risks. In addition, it ensures that measurable outcomes are documented; and that proposed contracts reflect cost/pricing model incentives and disincentives that, if implemented, would help optimize contractor performance.

In FY 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. To ensure fiscal responsibility as part of the agency's overall set of procurement controls and processes, the CFO has pre-solicitation approval authority over each of these proposed procurement actions. To inform the CFO's decision, the Office

of Financial Services analyzes costs, performance, schedule, and procurement-related risks, and makes risk-reduction recommendations. An additional benefit of these reviews is that time-consuming rework and contract reconciliations have decreased, which helps the FAA meet its procurement milestones and satisfy its business needs more efficiently and effectively. These controls also help uphold the FAA's procurement decisions when they are reviewed by internal and external auditors.

Since this process of robust investment reviews over procurements began in FY 2005, the Office of Finance and Management has evaluated 1,039 procurement packages with an estimated total value of more than \$152.6 billion, improving the agency's ability to better define program requirements, more accurately estimate costs, and substantiate those cost estimates. In FY 2022, the Office of Finance and Management reviewed 55 procurement packages for proposed investments, each with estimated values of \$10 million or more, to support CFO decisions on about \$6.8 billion of procurements.

INFORMATION TECHNOLOGY

To better coordinate FAA's information technology (IT) investments, any IT-related spending more than \$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 IT Shared Services Committee, chaired by the Chief Information Officer, serves as a forum to discuss and ensure effective, secure, and cost-efficient use of IT resources across the agency.

CONFERENCES

In FY 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. This oversight continues today in concert with additional actions taken by the FAA to strengthen policies and controls over conference spending. In FY 2010, for example, the level of approval was elevated to the Administrator, and in FY 2012 it was elevated to the Deputy Secretary of the DOT.

Reflecting strengthened internal controls for conference spending across government, in FY 2017, the Office of Management and Budget issued Memorandum M-17-26, raising the dollar threshold of conferences requiring Deputy Secretary approval to \$500,000. However, to ensure continued strong fiscal responsibility, the FAA Administrator also reviews all conferences proposed to be held by the agency costing more than \$20,000.

COST CONTROL PROGRAM

The FAA's strategic plan includes an objective to improve the financial management of the agency while delivering quality customer service. Each fiscal year, FAA lines of business and staff offices determine annual savings estimates for cost-saving activities. The target is set at 90 percent of the total cost-savings estimate for the fiscal year for all activities included in the program. In FY 2022, the Cost Control Program met its target for the year. Monthly, the FAA tracks and reports the actual cost savings for the activities included in the program. The FAA's efforts in this area are described below:

FY 2022 COST CONTROL PROGRAM RESULT

(Dollars in Thousands)

Activity	FY 2022 Savings Estimate	Actual FY 2022 Savings	FY 2022 Savings as a Percent of Estimate
SAVES	\$62,659	\$104,924	167%
Administrative Space Reduction	\$7,942	\$7,942	100%
Information Technology Services License Right-Sizing	\$2,592	\$1,434	55%
National Wireless Program	\$2,500	\$2,809	112%
Workers' Compensation	\$2,500	\$7,127	285%
Virtualization of Air Traffic Basic Course	\$1,200	\$1,780	148%
DOT e-Learning Management System	\$536	\$554	103%
Total	\$79,929	\$126,570	158%
Target	\$71,935		176%

How activities are selected for the Cost Control

Program: For an activity to be included in the Cost Control Program, the savings must be measurable. Activities must produce legitimate cost savings and not simply shift costs to other time periods or other FAA lines of business, and the cost savings must be measured net of any implementation costs or offsetting impacts to other organizations or activities. Activities must meet the following:

- The reduction in costs must be measurable and able to be accurately estimated.
- Estimates must be based on accepted industry standards and able to withstand an audit by an external organization; estimates are also validated by the FAA's Office of Finance and Management.

- Cost savings must reflect a reduction in the total costs incurred by the FAA and not simply a shifting of costs from one fiscal year to another.
- Cost savings should represent a genuinely more efficient way of conducting operations and should not simply be the result of a natural cycle in costs.
- Cost control activities that represent a permanent shift in the composition of the workforce should not have associated decreases in the level of services the organization provides.

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 2022, the SAVES contracts achieved \$104.9 million in cost savings and total savings of \$690.7 million since program implementation began in FY 2006. About 99 percent of FY 2022 savings were generated by IT hardware and software.

Administrative Space Reduction: The FAA is implementing and managing programs that drive the efficient and economical use of its 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. In FY 2022, the FAA saved \$7.9 million.

Information Technology Services License Right-Sizing: Licenses for installations of Microsoft Project and Visio that had not been used for at least 90 days were uninstalled, leading to a cost avoidance of \$1.4 million for the FAA in FY 2022.

National Wireless Program: This program manages the ever-growing, mobile-connected workforce. Cost savings are achieved by analyzing usage and determining the most cost-effective plans for individual users and by leveraging the volume of inventory to obtain volume-pricing discounts. FY 2022 savings for this activity were \$2.8 million.

Workers' Compensation: The FAA works with the Department of Labor (DOL) to develop case management strategies with a focus on returning injured employees to work earlier, reducing lost production, and reducing the cost of workers' compensation. To achieve these strategies, the FAA undertakes many efforts, including:

- Electronic filing of injury and illness claims, which expedites receipt of the claim at the DOL and authorization for medical treatment.
- Early intervention actions on disability claims, including initiating contact with the injured worker to discuss their responsibility to return to duty when medically able.
- Requesting and analyzing contemporaneous medical documentation to determine work capacity.
- Collaborating with supervisors across various DOT agencies to facilitate return to work by providing light duty assignments when appropriate.
- Conducting ongoing reviews of long-term claims and maintaining a collaborative partnership with claims staff at DOL.

The FAA has saved \$185.8 million in workers' compensation claims since FY 2005. Due to the FAA's success in this area, the DOT gave the FAA centralized responsibility for managing workers' compensation claims DOT-wide. In FY 2022, the FAA saved the DOT \$7.1 million in workers' compensation costs. Cost avoidance is estimated 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. Short-term calculations are based on regulatory standards and DOL standards.¹
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 DOL—computed as compensation payments avoided over the course of one full calendar year from the date of injury.

Virtualization of Air Traffic Basics Course: The Air Traffic Basics course taught at the FAA Academy is designed for newly hired air traffic control specialists and covers basic subjects prerequisite to option-specific skill training. The FAA Academy reduced costs by expanding the course virtually and achieved cost avoidance of more than \$1.7 million through reduced student travel in FY 2022.

DOT e-Learning Management System: The FAA extended its online learning system to all other DOT

¹ Office of Personnel Management regulations provide disabled employees with job retention rights if they return to work within one year from the commencement of their disability. DOL uses an internal goal of having disabled employees return to work within one year.

agencies, covering an additional 10,500 employees and about 500 more courses. Due to this consolidation effort that resulted in fixed cost sharing, the FAA was able to save \$553,767 in FY 2022.

Efficiency

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

Air Traffic Organization Cost-per-Operation. This cost-based metric provides a broad historical 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 compares it with our international counterparts. The most recent Cost-per-Operation data available is for the fiscal years ending September 30, 2020 and 2021:

Air Traffic Organization Cost-per-Operation

	2020	2021
\$	107.80	\$ 103.00

In FY 2021, the Air Traffic Organization Cost-per-Operation decreased by 4.45 percent over FY 2020. This was driven by a 7.1 percent increase in traffic with only a 2.3 percent increase in the Air Traffic Organization costs.

Data for this metric is not yet available for the full fiscal year ending September 30, 2022; however, listed below is a comparison of the Air Traffic Organization Cost-per-Operation Results for the first three quarters of FY 2021 and FY 2022, ending June 30 of each year:

Air Traffic Organization Cost-per-Operation

	2021 Q3	2022 Q3
\$	106.90	\$ 94.66

For the most recent partial period available (the first three quarters of FY 2022) the Air Traffic Organization Cost-per-Operation decreased by 11.45 percent over the same period a year earlier. This was driven by an 18.6 percent increase in traffic with only a 5.1 percent increase in the Air Traffic Organization costs. Note that this metric is the average cost-per-air traffic operation. Therefore, when the number of operations increases at a greater rate than cost, the metric decreases for a given period. Conversely, if cost increases at a greater rate than the number of operations, the metric increases for a given period.

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, 2020 and 2021:

Overhead Rates

	2020	2021
	28.5%	28.0%

This is a composite overhead rate of all 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 human resource needs to regulate and support future launch and reentry operations.

Regulatory Cost-per-Launch/Reentry

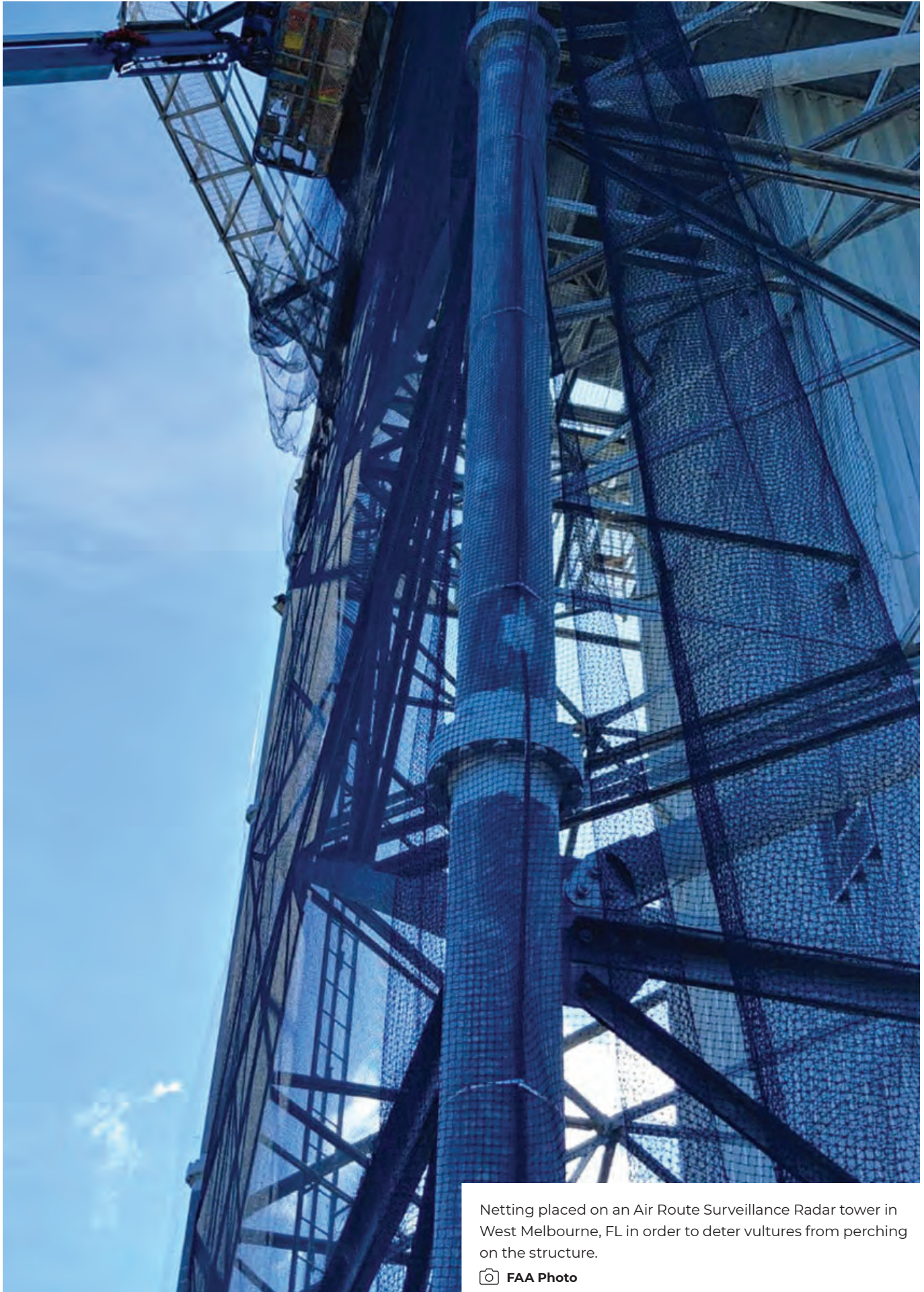
	2020	2021
\$	528,319	\$ 304,980

In FY 2021, Regulatory Cost-per-Launch/Reentry saw a decrease of 42.3 percent over FY 2020, which was driven by two factors: 31 more launches/reentries, together with only a slight increase in labor cost to support the expanding mission of the Office of Commercial Space Transportation (AST).

Regulatory Cost-per-Launch/Reentry

	2021 Q3	2022 Q3
\$	271,258	\$ 322,518

For the most recent partial period available (the first three quarters of FY 2022), Regulatory Cost-per-Launch/Reentry is 18.9 percent higher than it was in FY 2021 Q3. At this point in the fiscal year, AST has completed the same number of launch/reentries as the prior year. The increase is driven by an increase in labor costs as AST grows to meet its expanding mission.



Netting placed on an Air Route Surveillance Radar tower in West Melbourne, FL in order to deter vultures from perching on the structure.

 **FAA Photo**

FINANCIAL RESULTS



View from a Cessna general aviation aircraft.

📷 Photo by Noah Silliman via [Unsplash.com](https://unsplash.com)

A Message from the Chief Financial Officer



DAVID RICKARD

Safety is our number one mission.

It is our steady beacon — our guiding light. And strong fiscal performance, even while taking on significant new challenges, is one of the imperatives to keeping the FAA pointed not just in the right direction — but along a path that is consistent with our commitment to the American taxpayer.

Over recent years, the FAA has taken on significant new programs and substantial new levels of funding. Two years ago, the Coronavirus Aid, Relief, and Economic Security (CARES) Act provided \$10 billion in grants to airports to help offset lost operating revenues due to the COVID-19 pandemic. Last year, the Coronavirus Response and Relief Supplemental Appropriations Act (CRRSAA) and the American Rescue Plan Act provided another \$10 billion for FAA grants to help the nation's airports contend with the financial impacts of COVID-19. This year, the enactment of the Bipartisan Infrastructure Law (BIL), formally known as the Infrastructure Investment and Jobs Act, provides a \$25 billion investment in our airspace system over the next five years. This funding will help the FAA address the physical condition of air traffic control facilities and improve the safety and efficiency of our nation's airports.

Judicious administration of these significant new programs brings about significant new challenges. New funding must be managed and directed appropriately into the new programs. Policy and guidance materials must be written and assimilated. Grants and investments must be awarded and disbursed with appropriate oversight. And as we embark on the most ambitious multiyear physical infrastructure renewal in the FAA's history (through the BIL), we must also keep a close eye on inflation. Materials, labor, and other construction costs have increased in recent years at historical rates. We must closely monitor these changes and contend with their potential to reduce

the effectiveness of our financial resources, especially in the out-years.

We are proud of our agency's culture and commitment to safety, and we are proud of the role our agency's exceptional financial management plays in supporting our safety mission. This year, we achieved another unmodified audit opinion on our financial statements, a testament to our fiscal responsibility. Our stewardship of CRRSAA payments scored a preliminary result of "not susceptible to improper payments," defined as an error rate less than one percent — evidence that even amid significant new financial programs and responsibilities, we have maintained strong payment integrity. Also, the AGA (formerly the Association of Government Accountants) awarded the FAA our 18th Certificate of Excellence in Accountability Reporting (CEAR) award and our 9th special Best-in-Class award for a specific element of our Performance and Accountability Report considered to be best across all of government. Our newest award was for "Cost and Performance Data Integration," recognizing our report as one that provided concise, integrated cost and strategic goal reporting, including excellent financial management insights and financial efficiency information.

Consistently achieving financial excellence is a challenge we take very seriously. Every day our dedicated staff work to improve the soundness of our policies and the efficiency of our processes to adopt new and expanding programs in a fiscally responsible manner. That is our commitment to every American taxpayer — and it is an important aspect of what continues to make FAA a world-class organization.

DAVID RICKARD
Chief Financial Officer
November 9, 2022

Office of Inspector General (OIG) Quality Control Review

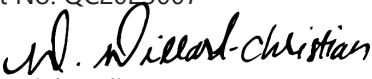


U. S. Department of Transportation
Office of Inspector General

Memorandum

Date: November 14, 2022

Subject: ACTION: Quality Control Review of the Independent Auditor's Report on the Federal Aviation Administration's Audited Consolidated Financial Statements for Fiscal Years 2022 and 2021 | Report No. QC2023007

From: Dormayne "Dory" Dillard-Christian 
Assistant Inspector General for Financial Audits

To: Federal Aviation Administrator

I respectfully submit the results of our quality control review (QCR) of the independent auditor's report on the Federal Aviation Administration's (FAA) audited consolidated financial statements for fiscal years 2022 and 2021.

We contracted with the independent public accounting firm KPMG, LLP to audit FAA's consolidated financial statements as of and for the fiscal years ended September 30, 2022, and September 30, 2021; provide an opinion on those financial statements; report on internal control over financial reporting; and report on compliance with laws and other matters. The contract required the audit to be performed in accordance with U.S. generally accepted Government auditing standards; Office of Management and Budget audit guidance; and the Government Accountability Office's and Council of the Inspectors General on Integrity and Efficiency's *Financial Audit Manual*.¹

We appreciate the cooperation and assistance of FAA's representatives and KPMG. If you have any questions about this report, please contact me or Ingrid Harris, Program Director.

cc: The Secretary
DOT Audit Liaison, M-1
FAA Audit Liaison, AAE-001

¹ *Financial Audit Manual*, Volume 1 (GAO-22-105894), June 2022; Volume 2 (GAO-22-105895), June 2022; Volume 3, (GAO-21-105127), June 2022.

Independent Auditor's Report

In its audit report, dated November 09, 2022, KPMG states that

- FAA's consolidated financial statements² (see attachment 3) were fairly presented, in all material respects, in accordance with U.S. generally accepted accounting principles;
- it found one significant deficiency³ in internal control over financial reporting that it did not consider to be a material weakness;⁴ and
- there were no instances of reportable noncompliance with provisions of laws tested, or reportable other matters.

KPMG made two recommendations (see attachment 1).

Significant Deficiency

Weaknesses in general information technology controls. KPMG identified general information technology control deficiencies at the application level within the procurement system related to access controls. Specifically, controls were not operating effectively over termination of access and the periodic review of access.

Recommendations

To help strengthen FAA's general information technology controls, KPMG recommended that FAA management design and implement:

1. Procedures to consistently and timely perform and document user account access reviews as required by standards for effective internal control systems and/or internal policy.

² The consolidated financial statements are included in FAA's Performance and Accountability Report. For FAA's full Performance and Accountability Report, which includes these statements, related notes, and required supplementary information, go to https://www.faa.gov/about/plans_reports/#performance.

³ A significant deficiency is a deficiency, or a combination of deficiencies, in internal control over financial reporting that is less severe than a material weakness but important enough to merit attention by those charged with governance. 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.

⁴ A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, 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.

2. Procedures to consistently and timely notify account administrators of separations as required by internal policy.

Quality Control Review

We performed a QCR of KPMG's report, and related documentation, and inquired of the firm's representatives. Our review, as differentiated from an audit of the financial statements in accordance with U.S. generally accepted Government auditing standards, was not intended to enable us to express, and we do not express, an opinion on FAA's financial statements or conclusions about the effectiveness of internal control over financial reporting, or compliance with laws, or other matters. KPMG is responsible for its report and the conclusions expressed therein.

Our QCR disclosed no instances in which KPMG did not comply, in all material respects, with U.S. generally accepted Government auditing standards.

Agency Comments and OIG Response

KPMG provided FAA with its draft report on November 8, 2022, and received FAA's response, dated November 9, 2022 (see attachment 2).

FAA concurred with KPMG's two recommendations. FAA also committed to developing a corrective action plan to address the deficiencies by December 31, 2022.

We agree with KPMG's recommendations and are not making any additional recommendations.

Actions Required

We consider both of KPMG's recommendations open and unresolved pending receipt of the corrective action plan.

Exhibit. List of Acronyms

DOT	Department of Transportation
FAA	Federal Aviation Administration
OIG	Office of Inspector General
QCR	quality control review

This page is intentionally left blank.

Independent Auditors' Report



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

Independent Auditors' Report

Acting Administrator, Federal Aviation Administration, and
Inspector General, United States Department of Transportation, Federal Aviation Administration:

Report on the Audit of the Consolidated Financial Statements

Opinion

We have audited the consolidated financial statements of United States Department of Transportation, Federal Aviation Administration (FAA), which comprise the consolidated balance sheets as of September 30, 2022 and 2021, 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.

In our opinion, the accompanying consolidated financial statements present fairly, in all material respects, the financial position of the FAA as of September 30, 2022 and 2021, 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.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America (GAAS), the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States, and Office of Management and Budget (OMB) Bulletin No. 22-01 *Audit Requirements for Federal Financial Statements*. Our responsibilities under those standards and OMB Bulletin No. 22-01 are further described in the Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report. We are required to be independent of the FAA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter - 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 consolidated financial statements. Such information is not a required part of the 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.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with U.S. generally accepted accounting principles, and for 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' Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and OMB Bulletin No. 22-01 will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and OMB Bulletin No. 22-01, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit 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 FAA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Required Supplementary Information

U.S. generally accepted accounting principles require that the information in the Management's Discussion and Analysis and Required Supplementary Information sections be presented to supplement the basic consolidated financial statements. Such information is the responsibility of management and, 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 GAAS, 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

Management is responsible for the other information included in the Performance and Accountability Report. The other information comprises the Snapshot of Resources, Foreword, Messages from the Administrator and the Chief Financial Officer, Performance Results and Other Information sections, as listed in the Table of Contents of the Performance and Accountability Report but does not include the consolidated financial



statements and our auditors' report thereon. Our opinion on the consolidated financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the consolidated financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Report on 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, 2022, we considered the FAA's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the consolidated financial statements, but not for the purpose of expressing an opinion on the effectiveness of the FAA's internal control. Accordingly, we do not express an opinion on the effectiveness of the FAA's internal control. We did not test all internal controls relevant to operating objectives as broadly defined by the *Federal Managers' Financial Integrity Act of 1982*.

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

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies and therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. We identified certain deficiencies in internal control, described in the accompanying exhibit as item 2022-1, that we consider to be a significant deficiency.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the FAA's consolidated financial statements as of and for the year ended September 30, 2022 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 financial statements. 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. 22-01.

FAA's Response to Findings

Government Auditing Standards requires the auditor to perform limited procedures on the FAA's response to the findings identified in our audit and described and presented in the section *Management's Response to the Independent Auditor's Report*. The FAA's response was not subjected to the other auditing procedures applied in the audit of the consolidated financial statements and, accordingly, we express no opinion on the response.

**Purpose of the Reporting Required by *Government Auditing Standards***

The purpose of the communication described in the Report on Internal Control Over Financial Reporting and the Report on Compliance and Other Matters sections is solely to describe the scope of our testing of internal control and compliance and the results 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.

A handwritten signature in black ink that reads 'KPMG LLP'.

Washington, DC
November 9, 2022

**Federal Aviation Administration
Independent Auditors' Report
Internal Control Over Financial Reporting**

**EXHIBIT I
SIGNIFICANT DEFICIENCY**

2022 - 01: Weaknesses in General Information Technology Controls

Background

The Federal Aviation Administration (FAA) utilizes a procurement system to record and track requisitions, purchase orders, and contracts and to compile amounts recorded in its financial statements.

Criteria

The U.S. Government Accountability Office (GAO) *Standards for Internal Control in the Federal Government* (Green Book), sets the standards for an effective internal control system and provides an overall framework for designing, implementing, and operating effective internal control systems. The standards require entities to design appropriate types of control activities to include limiting access to resources and records to authorized individuals, and to periodically compare resources with the recorded accountability to help reduce the risk of errors, fraud, misuse, or unauthorized alteration. In addition, management should communicate quality information down and across reporting lines to enable personnel to perform key roles in achieving objectives, addressing risks, and supporting the internal control system. In these communications, management assigns the internal control responsibilities for key roles. In addition, the FAA Information Security and Privacy Program & Policy dated December 23, 2016 defines FAA's policies and controls that must be implemented for each FAA information technology system.

Condition

Control deficiencies exist at the application level within the procurement system related to access controls as listed below:

- Controls were not operating effectively over termination of access.
- Monitoring controls were not operating effectively over the periodic review of access.

Cause

Management has not consistently implemented procedures to ensure compliance with standards for effective internal control systems and/or internal policy.

Effect

User accounts with inappropriate access may result in unauthorized use, disclosure, or modification of system data.

Recommendations

We recommend that FAA management design and implement:

1. Procedures to consistently and timely perform and document user account access reviews as required by standards for effective internal control systems and/or internal policy.
2. Procedures to consistently and timely notify account administrators of separations as required by internal policy.

U.S. Department of Transportation Federal Aviation Administration

Management's Response to the FY 2022 Independent Auditors' Report

U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Financial Services

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

November 9, 2022

Mr. James Gould
KPMG LLP
1801 K Street, NW, Suite 1200
Washington, DC 20006

Dear Mr. Gould,

We have received your Independent Auditors' Report related to the Federal Aviation Administration's fiscal years 2022 and 2021 consolidated financial statements and offer the following response.

We appreciate working with you in support of the audit and are pleased to receive an unmodified audit result with no material weaknesses. The Federal Aviation Administration values the audit as an essential component of our fiscal responsibilities and we take that responsibility very seriously—from the highest levels of leadership and throughout the entire agency.

We concur with the finding and recommendations in your report that more timely and documented user account access reviews are needed, as well as more consistent and timely notification of user separations. We will provide our corrective action plan to the Office of Inspector General by December 31, 2022. The corrective actions have already included, and will continue to include but not be limited to, strengthening controls over user recertification, better communication of separations to ensure timely removal of system access, and adoption of robotics process automation where appropriate for greater efficiency and consistency in these processes. I will monitor implementation of the plan throughout the corrective action process.

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

Sincerely,

David Rickard
Chief Financial Officer



This page is intentionally left blank.

Financial Statements

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION CONSOLIDATED BALANCE SHEETS

As of September 30, 2022 and 2021
(Dollars in Thousands)

	2022	2021
Assets		
Intragovernmental		
Fund balance with Treasury (Note 2)	\$ 17,227,884	\$ 13,196,463
Investments, net (Note 3)	13,211,744	18,189,656
Accounts receivable, net (Note 4)	24,930	12,372
Advances and prepayments	135,404	94,101
Total intragovernmental	30,599,962	31,492,592
Other than intragovernmental/with the public		
Accounts receivable, net (Note 4)	45,917	30,308
Inventory and related property, net (Note 5)	834,759	810,664
General property, plant, and equipment, net (Note 6)	11,545,951	11,670,008
Advances and prepayments	1,939	690
Total other than intragovernmental/with the public	12,428,566	12,511,670
Total assets	\$ 43,028,528	\$ 44,004,262
Liabilities		
Intragovernmental		
Accounts payable	\$ 12,124	\$ 9,833
Advances from others and deferred revenue	221,347	206,838
Other liabilities (Note 10)	322,400	313,200
Total intragovernmental	555,871	529,871
Other than intragovernmental/with the public		
Accounts payable	457,243	441,797
Federal employee benefits payable (Note 7)	1,246,691	1,328,131
Environmental and disposal liabilities (Note 9)	783,215	752,148
Advances from others and deferred revenue	131,986	152,613
Other liabilities		
Accrued grant liabilities	6,640,832	7,230,444
Other (Note 10)	478,489	447,854
Total other than intragovernmental/with the public	9,738,456	10,352,987
Total liabilities	\$ 10,294,327	\$ 10,882,858
Commitments and contingencies (Note 12)		
Net position		
Unexpended appropriations - funds from dedicated collections (consolidated) (Note 13)	\$ 1,255,980	\$ 716,250
Unexpended appropriations - funds from other than dedicated collections (consolidated)	6,671,859	4,838,873
Total unexpended appropriations (consolidated)	7,927,839	5,555,123
Cumulative results of operations - funds from dedicated collections (consolidated) (Note 13)	15,838,992	17,645,310
Cumulative results of operations - funds from other than dedicated collections (consolidated)	8,967,370	9,920,971
Total cumulative results of operations (consolidated)	24,806,362	27,566,281
Total net position	32,734,201	33,121,404
Total liabilities and net position	\$ 43,028,528	\$ 44,004,262

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, 2022 and 2021
(Dollars in Thousands)

Line of business programs (Note 14)	2022	2021
Air Traffic Organization		
Gross program costs	\$ 13,326,871	\$ 12,816,633
Less earned revenues	(366,057)	(357,425)
Net costs	12,960,814	12,459,208
Airports		
Gross program costs	7,856,851	11,225,978
Net costs	7,856,851	11,225,978
Aviation Safety		
Gross program costs	1,819,190	1,737,993
Less earned revenues	(8,486)	(7,022)
Net costs	1,810,704	1,730,971
Security and Hazardous Materials Safety		
Gross program costs	154,278	149,892
Less earned revenues	(24,361)	(15,743)
Net costs	129,917	134,149
Commercial Space Transportation		
Gross program costs	39,405	34,186
Net costs	39,405	34,186
Non-line of business programs		
Gross program costs	266,678	277,631
Less earned revenues	(196,673)	(139,992)
Net costs	70,005	137,639
Net cost of operations		
Total gross program costs	23,463,273	26,242,313
Less earned revenues	(595,577)	(520,182)
Total net cost	<u>\$ 22,867,696</u>	<u>\$ 25,722,131</u>

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, 2022 and 2021
(Dollars in Thousands)

	2022			2021		
	Funds from dedicated collections (consolidated) (Note 13)	Funds from other than dedicated collections (consolidated)	Consolidated total	Funds from dedicated collections (consolidated) (Note 13)	Funds from other than dedicated collections (consolidated)	Consolidated total
Unexpended appropriations						
Beginning balances	\$ 716,250	\$ 4,838,873	\$ 5,555,123	\$ 432,928	\$ –	\$ 432,928
Appropriations received (Note 16)	5,000,000	5,951,180	10,951,180	482,500	24,409,000	24,891,500
Appropriations transferred-in/out	–	(2,000)	(2,000)	–	–	–
Other adjustments	(24)	–	(24)	(50,235)	–	(50,235)
Appropriations used	(4,460,246)	(4,116,194)	(8,576,440)	(148,943)	(19,570,127)	(19,719,070)
Net change in unexpended appropriations	539,730	1,832,986	2,372,716	283,322	4,838,873	5,122,195
Total unexpended appropriations - ending	<u>\$ 1,255,980</u>	<u>\$ 6,671,859</u>	<u>\$ 7,927,839</u>	<u>\$ 716,250</u>	<u>\$ 4,838,873</u>	<u>\$ 5,555,123</u>
Cumulative results of operations						
Beginning balances	\$ 17,645,310	\$ 9,920,971	\$ 27,566,281	\$ 14,194,593	\$ 10,682,622	\$ 24,877,215
Appropriations used	4,460,246	4,116,194	8,576,440	148,943	19,570,127	19,719,070
Non-exchange revenue – excise taxes and other	11,537,748	–	11,537,748	8,466,804	–	8,466,804
Transfers-in/out without reimbursement	(1,639,247)	1,188,858	(450,389)	12,939,495	(13,134,060)	(194,565)
Donations and forfeitures of property	–	24,868	24,868	–	25,703	25,703
Imputed financing (Note 15)	407,877	11,233	419,110	383,923	10,262	394,185
Net cost of operations	16,572,942	6,294,754	22,867,696	18,488,448	7,233,683	25,722,131
Net change in cumulative results of operations	(1,806,318)	(953,601)	(2,759,919)	3,450,717	(761,651)	2,689,066
Cumulative results of operations - ending	<u>\$ 15,838,992</u>	<u>\$ 8,967,370</u>	<u>\$ 24,806,362</u>	<u>\$ 17,645,310</u>	<u>\$ 9,920,971</u>	<u>\$ 27,566,281</u>
Net position	<u>\$ 17,094,972</u>	<u>\$ 15,639,229</u>	<u>\$ 32,734,201</u>	<u>\$ 18,361,560</u>	<u>\$ 14,759,844</u>	<u>\$ 33,121,404</u>

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, 2022 and 2021
(Dollars in Thousands)

	2022	2021
Budgetary resources (Note 16)		
Unobligated balance from prior year budget authority, net	\$ 10,024,552	\$ 6,775,933
Appropriations	20,505,993	41,032,106
Contract authority	3,350,000	3,350,000
Spending authority from offsetting collections	7,169,001	11,222,619
Total budgetary resources	\$ 41,049,546	\$ 62,380,658
Status of budgetary resources		
New obligations and upward adjustments	\$ 30,275,337	\$ 52,810,501
Unobligated balance, end of year		
Apportioned, unexpired accounts	7,937,515	7,114,408
Unapportioned, unexpired accounts	2,675,069	2,329,956
Unexpired unobligated balance, end of year	10,612,584	9,444,364
Expired unobligated balance, end of year	161,625	125,793
Unobligated balance, end of year (total)	10,774,209	9,570,157
Total budgetary resources	\$ 41,049,546	\$ 62,380,658
Outlays, net		
Outlays, net (total)	\$ 23,071,125	\$ 39,421,662
Distributed offsetting receipts	(9,669)	(16,418,603)
Agency outlays, net	\$ 23,061,456	\$ 23,003,059

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

Notes to the Financial Statements

Note 1. Summary of Significant Accounting Policies

A. Reporting Entity

The reporting entity is a component of the U.S. Government. For this reason, some of the assets and liabilities reported by the entity may be eliminated for government-wide reporting because they are offset by assets and liabilities of another U.S. Government entity. These financial statements should be read with the realization that they are for a component of the U.S. Government.

Created in 1958, the FAA is a component of the Department of Transportation (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 aviation community, the FAA is responsive to the dynamic nature of customer needs, economic conditions, and environmental concerns.

The U.S. Congress annually enacts appropriations to permit the FAA to incur obligations for specified purposes. The FAA is accountable for amounts made available per appropriations laws, from the Airport and Airway Trust Fund (AATF), revolving funds, a special fund, and the General Fund. The FAA recognizes budgetary resources as assets when authorized by congressional action and apportioned by the Office of Management and Budget (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 consolidated and combined financial statements present the accounts of all funds that have been

established and maintained to account for the resources under the FAA's control. The FAA has rights and ownership of all assets reported in these financial statements. The FAA does not possess any non-entity assets.

The reporting entity is comprised of the FAA's lines of business and staff offices.

The FAA is the sponsor of the Center for Advanced Aviation System Development (CAASD), a Federally Funded Research and Development Center (FFRDC). CAASD is a disclosure entity, which is not a consolidated entity. While the FAA's financial statements include its spending for studies it contracts with CAASD, the financial statements of the FAA do not include the financial results or position of CAASD. Additional information on FAA's relationship with CAASD is presented in Note 19.

B. 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 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 OMB Circular A-136, as revised, *Financial Reporting Requirements*, and the DOT and the FAA significant accounting policies, the latter of which are summarized in this note. The statements are subjected to audit, as required by OMB Bulletin 22-01, *Audit Requirements for Federal Financial Statements*.

All material intra-agency activity has 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 A-136, as revised, *Financial Reporting Requirements*. Funds from dedicated collections and funds from other than dedicated collections, presented separately in the balance sheets and statements of changes in net position, are presented on a consolidated basis. Intra-agency activity between funds from dedicated collections and funds from other than dedicated collections are eliminated within the consolidated total.

Accounting standards require all reporting entities to disclose that accounting standards allow certain presentations and disclosures to be modified, if needed, to prevent the disclosure of classified information.

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

C. Basis of Accounting

The financial statements are prepared in accordance with all applicable accounting principles and standards developed and issued by the Federal Accounting Standards Advisory Board, which is recognized by the American Institute of Certified Public Accountants as the entity to establish generally accepted accounting principles for the federal government. The Federal Financial Management Improvement Act of 1996 requires the FAA to comply substantially with (1) federal financial management systems requirements, (2) applicable federal accounting standards, and (3) the United States Standard General Ledger requirements at the transaction level.

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.

D. Revenues and Other Financing Sources

As a component of the U.S. Government-wide reporting entity, the FAA is subject to the federal budget process, which involves appropriations that are provided annually and appropriations that are provided on a permanent basis. The financial transactions that are supported by budgetary resources, which include appropriations, are generally the same transactions reflected in entity and the U.S. Government-wide financial reports.

The FAA's budgetary resources reflect past congressional action and enable the entity to incur budgetary obligations, but they do not reflect assets to the U.S. Government as a whole. Budgetary obligations are legal obligations for goods, services, or amounts to be paid based on statutory provisions. After budgetary obligations are incurred, the U.S. Treasury will make disbursements to liquidate the budgetary obligations and finance those disbursements in the same way it finances all disbursements, using some combination of receipts, other inflows, and borrowing from the public (if there is a budget deficit).

The U.S. 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, and the public.

The AATF is sustained by excise taxes that the Internal Revenue Service (IRS) collects from airway system users. Excise taxes collected are initially deposited to the General Fund of the U.S. Government. 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. 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 Coronavirus Aid, Relief, and Economic Security (CARES) Act, Public Law 116-136, suspended the collection of almost all aviation excise taxes from March 28, 2020 through December 31, 2020.

The FAA's September 30, 2022 financial statements reflect excise taxes certified by the IRS through March 31, 2022, and excise taxes allocated by the Office of Tax Analysis for the period April 1, 2022 through September 30, 2022, in compliance with Statement of Federal Financial Accounting Standards Number 7, *Accounting for Revenue and Other Financing Sources*. Actual excise tax collections for the quarters ended June 30, 2022 and September 30, 2022 will not be available from the IRS until after the statements are released. 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 13.

Interest on investments is recognized as revenue on an accrual basis, and classified as exchange or nonexchange depending on the predominant source of funds upon which the interest payment is based.

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.

Goods and services are received from other federal entities at no cost or at a cost less than the full cost to the providing federal entity. Consistent with accounting

standards, certain costs of the providing entity that are not fully reimbursed by the FAA are recognized as imputed cost (in the Statement of Net Cost), and are offset by imputed financing (in the Statement of Changes in Net Position). Such imputed costs and revenues relate to business-type activities, employee benefits, and claims to be settled by the Treasury Judgment Fund. However, unreimbursed costs of goods and services other than those identified above are not included in our financial statements.

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 with the U.S. 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.

Fund balance with Treasury is an asset of the FAA and a liability of the General Fund of the U.S. Government. Similarly, investments in U.S. Government securities that are held by dedicated collections accounts are assets of the FAA and liabilities of the General Fund of the U.S. Government. In both cases, the amounts represent commitments by the government to provide resources for particular programs, but they do not represent net assets to the government as a whole.

When the FAA seeks to use fund balance with Treasury or investments in U.S. Government securities to liquidate budgetary obligations, Treasury will finance the disbursements in the same way it finances all other disbursements, using some combination of receipts, other inflows, and borrowing from the public (if there is a budget deficit).

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 generally the result of the provision of goods and services to other federal agencies. Accounts receivable from the public include, for example, aviation user fees, fines and penalties, reimbursements from employees, and services performed for foreign governments. Accounts receivable are presented net of an allowance for loss on uncollectible amounts, which is based on historical collection experience or an analysis of the individual receivables.

I. Inventory

Within the FAA's Administrative Services Franchise Fund (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 Mike Monroney Aeronautical Center in Oklahoma City, Oklahoma. 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 moving average cost flow method. The moving average cost flow method is an inventory costing method used in conjunction with a perpetual inventory system. A weighted average cost per unit is recomputed after every purchase. Goods sold are costed at the most recent moving average cost.

The FAA has an exchange and repair program where the FAA field locations exchange non-operational components with the Franchise Fund for operational components. The non-operational repairable components are classified as "held for repair" and valued using the direct method. Under the direct method, inventory held for repair is valued at the same value as a serviceable item less the estimated repair costs.

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. Raw materials are valued using historical cost, applying the moving average cost flow method. The repairable components, reported as work in progress, are valued at the same value as a serviceable item less the estimated repair

costs at the time of transfer from the “held for repair” account to the work in progress account. When the refurbishing process is complete, the inventory components are reclassified to “held for sale.”

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 latest acquisition cost. Operating materials and supplies are expensed using the consumption method of accounting. Under the consumption method, goods are recognized as assets upon acquisition and are expensed as they are consumed.

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, and 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 General Services Administration (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 the U.S. 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. Liabilities not requiring budgetary resources include custodial liabilities which are collections on behalf of other federal entities or funds, such as the General Fund of the U.S. Government. Custodial liabilities are liquidated when the collections are transferred to the owner. 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. Federal Employees' Compensation Act

The Federal Employees' Compensation Act (FECA) (Public Law 103-3) provides income and medical cost protection to covered federal civilian employees injured

on the job, to employees who have incurred work-related occupational diseases, and to beneficiaries of employees whose deaths are attributable to job-related injuries or occupational diseases.

The FECA program is administered by the Department of Labor (DOL), which pays valid claims and subsequently seeks reimbursement from the FAA for these paid claims. The FECA liability consists of two elements. The first element, accrued FECA liability, is based on workers' compensation claims paid by DOL but not yet reimbursed by the FAA. The FAA reimburses DOL for claims as funds are appropriated for this purpose. In general, there is a two-year period between payment by DOL and reimbursement to DOL by the FAA. As a result, the FAA recognizes an intragovernmental liability for the claims paid by DOL and not yet reimbursed by the FAA.

The second element, actuarial FECA liability, is the estimated liability for future benefit payments. The actuarial FECA liability includes the expected liability for death, disability, medical, and miscellaneous costs for approved compensation cases, plus a component for incurred but unreported claims. DOL determines the actuarial FECA liability annually, as of September 30, using an actuarial method that considers historical benefit payment patterns, wage inflation factors, medical inflation factors, and other variables. The projected annual benefit payments are discounted to present value using the OMB economic assumptions for 10-year Treasury notes and bonds. 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. The actuarial FECA liability is not covered by budgetary resources and will require future funding.

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 seven percent of their pay and are beneficiaries of the FAA's matching contribution program, equal to seven 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 one percent of pay and matches any employee contribution up to an additional four 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 Office of Personnel Management's (OPM) cost factors and is the difference between the FAA's and the employee's 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) allowance for doubtful accounts receivable; (d) allowances for operating materials and supplies; (e) allocations of common costs to construction in progress; (f) the allocation of an average cost of like property, plant, and equipment within a program,

commonly referred to as unit costing; and (g) accrued benefits and benefits payable.

U. Environmental and Disposal 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 and disposal liabilities: environmental remediation, and environmental 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.

The liability for 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 12) 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 “Imputed Financing” 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, AATF
- Facilities and Equipment, AATF
- Research, Engineering, and Development, AATF
- 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, Grants-in-Aid for Airports, Facilities and Equipment, and Research, Engineering and Development. 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. Government 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.

Similarly, while the Grants-in-Aid for Airports account is typically funded through transfers from the AATF, it was also supplemented by funding from the General Fund of the U.S. Government as a result of the CARES Act. Because the funding from general fund appropriations is expected to be temporary and the predominant source of funding historically comes from the AATF, Grants-in-Aid for Airports 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 “funds from other than dedicated collections” 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 13.

X. Reclassifications

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

Note 2. Fund Balance with Treasury

Status of fund balance with Treasury balances as of September 30, 2022 and 2021 were:

(Dollars in Thousands)

Status of fund balance with Treasury

	2022	2021
Unobligated balance		
Available	\$ 7,937,515	\$ 7,114,408
Not available	2,836,694	2,455,749
Obligated balance not yet disbursed	18,352,011	18,804,450
Investments and contract authority supporting obligated and unobligated balances	(11,901,189)	(15,182,111)
Non-budgetary fund balance with Treasury	2,853	3,967
Total	\$ 17,227,884	\$ 13,196,463

Unobligated budgetary account balances are also reflected on the Statement of Budgetary Resources. Certain unobligated balances may be restricted to future use and are not available for current use. For additional information, see Legal Arrangements Affecting the Use of Unobligated Balances in Note 16.

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 U.S. Government. While amounts appropriated from the General Fund of the U.S. Government 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 that 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. Only the investment and contract authority balances that support the obligated and unobligated balances are presented in this note. Whereas, the investment balances presented in Note 3 also include amounts invested from receipts that are unavailable for obligation upon collection, and therefore do not support the obligated and unobligated balances.

As of September 30, 2022 and 2021, the unused funds in expired appropriations that were returned to Treasury at the end of the fiscal year were \$25 thousand and \$50.2 million, respectively. These balances are excluded from amounts reported as fund balance with Treasury.

Note 3. Investments, Net

As of September 30, 2022 and 2021, the FAA's investment balances were as follows:

(Dollars in Thousands)

2022					
Intragovernmental securities	Cost	Unamortized Premium/ (Amortized Discount)	Interest Receivable	Investments (Net)	Market/Fair Value
Nonmarketable par value	\$ 10,818,211	\$ -	\$ 30,694	\$ 10,848,905	\$ 10,818,211
Nonmarketable market-based	2,366,184	(13,813)	10,468	2,362,839	2,323,933
Total intragovernmental securities	<u>\$ 13,184,395</u>	<u>\$ (13,813)</u>	<u>\$ 41,162</u>	<u>\$ 13,211,744</u>	<u>\$ 13,142,144</u>

(Dollars in Thousands)

2021					
Intragovernmental securities	Cost	Unamortized Premium/ (Amortized Discount)	Interest Receivable	Investments (Net)	Market/Fair Value
Nonmarketable par value	\$ 15,901,898	\$ -	\$ 47,043	\$ 15,948,941	\$ 15,901,898
Nonmarketable market-based	2,217,198	13,213	10,304	2,240,715	2,240,042
Total intragovernmental securities	<u>\$ 18,119,096</u>	<u>\$ 13,213</u>	<u>\$ 57,347</u>	<u>\$ 18,189,656</u>	<u>\$ 18,141,940</u>

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 the U.S. Congress. As of September 30, 2022 and 2021, \$10.8 billion and \$15.9 billion were invested respectively in U.S. Treasury Certificates of Indebtedness. Nonmarketable par value Treasury securities are special series debt securities that the U.S. Treasury issues to federal entities at face value (par value). The securities are redeemed at face value on demand; thus investing entities recover the full amounts invested plus interest. Investments as of September 30, 2022, mature on various dates through June 30, 2023, and investments as of September 30, 2021, matured on various dates through June 30, 2022. 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 2022 and FY 2021 was 1.63 percent and 1.38 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, 2022, these nonmarketable, market-based securities have maturity dates ranging from October 15, 2022 to May 15, 2024 and have an average rate of return of approximately

1.48 percent. As of September 30, 2021, these nonmarketable, market-based securities had maturity dates ranging from January 15, 2022 to January 31, 2023 and had an average rate of return of approximately 1.40 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.

The FAA does not have any investment in non-federal securities.

Note 4. Accounts Receivable, Net

Accounts receivable 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, 2022 and 2021, accounts receivable were:

(Dollars in Thousands)

Intragovernmental

Accounts receivable, gross

Allowance for uncollectible amounts

Total intragovernmental

Other than intragovernmental/with the public

Accounts receivable, gross

Allowance for uncollectible amounts

Total other than intragovernmental/with the public

Total accounts receivable, net

	2022	2021
	\$ 26,184	\$ 13,523
	(1,254)	(1,151)
	24,930	12,372
	60,440	45,252
	(14,523)	(14,944)
	45,917	30,308
	\$ 70,847	\$ 42,680

Note 5. Inventory and Related Property, Net

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 Mike Monroney Aeronautical Center in Oklahoma City, Oklahoma. 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 \$5.0 million in fiscal year 2022 and \$6.2 million in fiscal year 2021.

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, 2022 and 2021, inventory and related property balances were:

(Dollars in Thousands)

Inventory

Held for sale
Held for repair
Raw materials and work in progress
Inventory total

Operating materials and supplies

Held for use
Held for repair
Excess, obsolete, and unserviceable
Operating materials and supplies total
Total inventory and related property

2022		
Cost	Allowance	Net
\$ 269,172	\$ -	\$ 269,172
449,742	-	449,742
35,798	-	35,798
754,712	-	754,712
55,173	-	55,173
47,318	(23,659)	23,659
3,269	(2,054)	1,215
105,760	(25,713)	80,047
\$ 860,472	\$ (25,713)	\$ 834,759

(Dollars in Thousands)

Inventory

Held for sale
Held for repair
Raw materials and work in progress
Inventory total

Operating materials and supplies

Held for use
Held for repair
Excess, obsolete, and unserviceable
Operating materials and supplies total
Total inventory and related property

2021		
Cost	Allowance	Net
\$ 263,246	\$ -	\$ 263,246
433,515	-	433,515
38,539	-	38,539
735,300	-	735,300
49,850	-	49,850
48,599	(24,299)	24,300
2,849	(1,635)	1,214
101,298	(25,934)	75,364
\$ 836,598	\$ (25,934)	\$ 810,664

Note 6. General Property, Plant, and Equipment, Net

General property, plant, and equipment balances as of September 30, 2022 and 2021 were:

(Dollars in Thousands)

Class of fixed asset	2022		
	Acquisition value	Accumulated depreciation	Net book value
Real property, including land	\$ 7,095,298	\$ (4,230,243)	\$ 2,865,055
Personal property	18,586,415	(14,393,563)	4,192,852
Internal use software	3,935,885	(2,977,076)	958,809
Internal use software in development	1,469,179	-	1,469,179
Assets under capital lease (Note 11)	90,111	(54,295)	35,816
Construction in progress	2,024,240	-	2,024,240
Total property, plant, and equipment	\$ 33,201,128	\$ (21,655,177)	\$ 11,545,951

(Dollars in Thousands)

Class of fixed asset	2021		
	Acquisition value	Accumulated depreciation	Net book value
Real property, including land	\$ 6,906,994	\$ (4,047,003)	\$ 2,859,991
Personal property	18,642,947	(14,050,068)	4,592,879
Internal use software	3,760,750	(2,713,304)	1,047,446
Internal use software in development	1,284,383	-	1,284,383
Assets under capital lease (Note 11)	94,988	(55,605)	39,383
Construction in progress	1,845,926	-	1,845,926
Total property, plant, and equipment	\$ 32,535,988	\$ (20,865,980)	\$ 11,670,008

The changes to the general property, plant, and equipment balance for the fiscal years ended September 30, 2022 and September 30, 2021 were:

(Dollars in Thousands)

	2022	2021
Balance beginning of the year	\$ 11,670,008	\$ 11,917,696
Capitalized acquisitions	1,507,253	1,182,409
Dispositions	(36,913)	(1,081)
Revaluations	(320,083)	(156,837)
Depreciation expense	(1,301,682)	(1,313,052)
Transfers-in/out without reimbursement	2,500	15,170
Donations	24,868	25,703
Balance at end of year	\$ 11,545,951	\$ 11,670,008

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. Federal Employee Benefits Payable

Federal employee benefits payable as of September 30, 2022 and 2021 were:

(Dollars in Thousands)

Other than intragovernmental/with the public

	2022	2021
Actuarial FECA liability (Note 8)	\$ 678,350	\$ 713,087
Unfunded leave (Note 8)		
Annual leave	485,377	532,958
Compensatory leave and credit hours	19,867	20,343
Unfunded leave total	505,244	553,301
Other unfunded employment related liability (Note 8)		
Sick leave buyback option for eligible employees	47,829	47,888
Employer contributions payable		
Thrift Savings Plan	15,268	13,855
Total federal employee benefits payable	\$ 1,246,691	\$ 1,328,131

The actuarial FECA liability is the estimated liability for future benefit payments and includes 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 for accrued unfunded leave includes annual and other types of vested leave such as compensatory leave and credit hours.

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.

The Thrift Savings Plan is a tax-deferred retirement savings and investment plan available to federal employees.

Note 8. Liabilities not Covered by Budgetary Resources

Liabilities not covered by budgetary resources require future congressional action, whereas liabilities covered by budgetary resources reflect prior congressional action. Regardless of when the congressional action occurs, when the liabilities are liquidated, Treasury will finance the liquidation in the same way that it finances all other disbursements, using some combination of receipts, other inflows, and borrowing from the public (if there is a budget deficit). Liabilities not requiring budgetary resources include custodial liabilities which are collections on behalf of other federal entities or funds, such as the General Fund of the U.S. Government. Custodial liabilities are liquidated when the collections are transferred to the owner. The following table shows liabilities not covered by budgetary resources as of September 30, 2022 and 2021.

(Dollars in Thousands)

	2022	2021
Intragovernmental		
Other liabilities (Note 10)		
Federal Employees' Compensation Act payable	\$ 142,720	\$ 147,477
Other unfunded employment related liabilities	25,286	28,878
Total intragovernmental	168,006	176,355
Other than intragovernmental/with the public		
Federal employee benefits payable		
FECA actuarial	678,350	713,087
Unfunded leave	505,244	553,301
Other unfunded employment related liability	47,829	47,888
Environmental and disposal liabilities (Notes 9 and 12)	783,215	752,148
Other liabilities		
Capital lease liability (Notes 10 and 11)	39,044	45,344
Contingent liabilities (Notes 10 and 12)		
Legal claims	58,595	52,009
Warranty contingencies	515	515
Liability for non-fiduciary deposit funds and undeposited collections (Note 10)	486	189
Other liabilities without related budgetary obligations (Note 10)	13,078	13,078
Total other than intragovernmental/with the public	2,126,356	2,177,559
Total liabilities not covered by budgetary resources	\$ 2,294,362	\$ 2,353,914
Total liabilities not covered by budgetary resources	\$ 2,294,362	\$ 2,353,914
Total liabilities covered by budgetary resources	7,978,510	8,510,340
Total liabilities not requiring budgetary resources	21,455	18,604
Total liabilities	\$ 10,294,327	\$ 10,882,858

Note 9. Environmental and Disposal Liabilities

The FAA's environmental and disposal liabilities as of September 30, 2022 and 2021 were:

(Dollars in Thousands)

	2022	2021
Environmental remediation	\$ 328,360	\$ 276,341
Environmental cleanup and decommissioning	454,855	475,807
Total environmental and disposal liabilities	<u>\$ 783,215</u>	<u>\$ 752,148</u>

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 12.

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

Note 10. Other Liabilities

As of September 30, 2022, the FAA's other liabilities were:

(Dollars in Thousands)

Intragovernmental

Accrued payroll & benefits payable to other agencies

Liabilities covered by budgetary resources

Federal Employees' Compensation Act payable

Other unfunded employment related liabilities

Liabilities not covered by budgetary resources

Custodial liabilities

Liabilities not requiring budgetary resources

Intragovernmental total

Other than intragovernmental/with the public

Accrued funded payroll and leave

Liabilities covered by budgetary resources

Capital lease liability (Notes 8 and 11)

Contingent liabilities

Legal claims

Warranty contingencies

Liability for non-fiduciary deposit funds and undeposited collections

Other liabilities without related budgetary obligations

Liabilities not covered by budgetary resources

Other than intragovernmental/with the public total

Total other liabilities

2022		
Non-current liabilities	Current liabilities	Total
\$ -	\$ 132,939	\$ 132,939
-	132,939	132,939
77,999	64,721	142,720
-	25,286	25,286
77,999	90,007	168,006
-	21,455	21,455
-	21,455	21,455
77,999	244,401	322,400
-	366,771	366,771
-	366,771	366,771
31,006	8,038	39,044
-	58,595	58,595
-	515	515
-	486	486
-	13,078	13,078
31,006	80,712	111,718
31,006	447,483	478,489
\$ 109,005	\$ 691,884	\$ 800,889

As of September 30, 2021, the FAA's other liabilities were:

(Dollars in Thousands)

Intragovernmental

Accrued payroll & benefits payable to other agencies

Liabilities covered by budgetary resources

Federal Employees' Compensation Act payable

Other unfunded employment related liabilities

Liabilities not covered by budgetary resources

Custodial liabilities

Liabilities not requiring budgetary resources

Intragovernmental total

Other than intragovernmental/with the public

Accrued funded payroll and leave

Liabilities covered by budgetary resources

Capital lease liability (Notes 8 and 11)

Contingent liabilities

Legal claims

Warranty contingencies

Liability for non-fiduciary deposit funds and

undeposited collections

Other liabilities without related budgetary obligations

Liabilities not covered by budgetary resources

Other than intragovernmental/with the public total

Total other liabilities

2021		
Non-current liabilities	Current liabilities	Total
\$ -	\$ 118,241	\$ 118,241
-	118,241	118,241
79,727	67,750	147,477
-	28,878	28,878
79,727	96,628	176,355
-	18,604	18,604
-	18,604	18,604
79,727	233,473	313,200
-	336,719	336,719
-	336,719	336,719
37,285	8,059	45,344
-	52,009	52,009
-	515	515
-	189	189
-	13,078	13,078
37,285	73,850	111,135
37,285	410,569	447,854
\$ 117,012	\$ 644,042	\$ 761,054

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 insurance, health insurance, retirement benefits, and Social Security. These benefits also include FAA contributions payable for the Federal Insurance Contributions Act taxes, which are composed of the old-age, survivors, and disability insurance taxes, also known as Social Security taxes, and the hospital insurance tax, also known as Medicare tax.

An unfunded liability is recorded for the actual cost of workers' compensation benefits to be reimbursed to the DOL, pursuant to the FECA. Reimbursement to the DOL occurs approximately two years subsequent to the actual disbursement. Budgetary resources for this intragovernmental liability are made available to the FAA as part of its annual appropriation from the U.S. Congress in the year in which the reimbursement takes place. The FAA's accrued liability as of September 30, 2022, includes workers' compensation benefits paid by DOL during the periods July 1, 2020 through June

30, 2022, and accrued liabilities for the quarter July 1, 2022 through September 30, 2022. The FAA's accrued liability as of September 30, 2021, included workers' compensation benefits paid by the DOL during the period July 1, 2019 through June 30, 2021, and accrued liabilities for the quarter July 1, 2021 through September 30, 2021.

The FAA estimated that 100 percent of its \$58.6 million and \$52.0 million legal claims liabilities as of September 30, 2022 and 2021, respectively, would be paid from the permanent appropriation for judgments, awards, and compromise settlements (Judgment Fund) administered by the Department of Treasury.

Total liabilities not covered by budgetary resources are presented in Note 8.

Note 11. Leases

Entity as Lessee

The FAA is the lessee for both capital and operating leases.

Capital Leases

Following is a summary of the FAA's assets under capital lease as of September 30, 2022 and 2021:

<i>(Dollars in Thousands)</i>	2022	2021
Non-Federal		
Land, buildings, and machinery	\$ 90,111	\$ 94,988
Accumulated depreciation	(54,295)	(55,605)
Non-Federal assets under capital lease, net	35,816	39,383
Total assets under capital lease, net	\$ 35,816	\$ 39,383

As of September 30, 2022, the FAA's future payments due on assets under capital lease were:

<i>(Dollars in Thousands)</i>	
Future payments due by fiscal year	
<i>(Liabilities not covered by budgetary or other resources)</i>	
Year 1 (FY 2023)	\$ 8,038
Year 2 (FY 2024)	7,891
Year 3 (FY 2025)	7,238
Year 4 (FY 2026)	6,701
Year 5 (FY 2027)	3,714
After 5 Years	11,179
Total future payments	44,761
Less: Imputed interest	(5,717)
Net capital lease liability	\$ 39,044

As of September 30, 2022, all future payments due on assets under capital lease were non-federal.

The FAA's capital lease payments are authorized to be funded annually as codified in the 49 U.S.C. 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. The lease terms for capital leases expire at various dates through FY 2039.

Operating Leases

The FAA has operating leases for real property, aircraft, and telecommunications equipment. Future operating lease payments due as of September 30, 2022, were:

(Dollars in Thousands)

Fiscal year	Federal	Non-Federal	Total
Year 1 (FY 2023)	\$ 116,163	\$ 79,537	\$ 195,700
Year 2 (FY 2024)	109,501	51,946	161,447
Year 3 (FY 2025)	99,383	32,046	131,429
Year 4 (FY 2026)	92,338	26,783	119,121
Year 5 (FY 2027)	89,343	22,993	112,336
After 5 Years	318,055	72,935	390,990
Total future operating lease payments	\$ 824,783	\$ 286,240	\$ 1,111,023

Operating lease expense incurred during the year ended September 30, 2022 was \$200.3 million, of which \$120.4 million was federal and \$79.9 million was non-federal. Operating lease expense incurred during the year ended September 30, 2021 was \$197.9 million, of which \$107.8 million was federal and \$90.1 million was non-federal.

Federal operating leases include General Services Administration leases that have a short termination privilege; however, the FAA intends to remain in the lease. In addition, General Service Administration operating leases are inclusive of other costs such as utilities, taxes, and janitorial services.

The operating lease amounts due after five years do not include estimated payments for leases with annual renewal options. The lease terms for operating leases expire at various dates through FY 2043. Estimates of the lease termination dates are subjective, and any projection of future lease payments would be arbitrary.

Note 12. Commitments, Contingencies, and Other Disclosures

Continuing Resolution and Reauthorization.

Effective October 1, 2022, the FAA is operating under a continuing resolution, Public Law 117-180, for its FY 2023 appropriation and many of its programmatic and financing authorities. The continuing resolution will be in effect through December 16, 2022, unless superseded by enactment of specified appropriations legislation and includes a provision that allows the FAA to continue spending at FY 2022 rates.

In addition, the passage of the FAA Reauthorization Act of 2018, Public Law 115-254, authorizes the FAA's programmatic and financing authorities, the Airport Improvement Program contract authority, and the authority to collect and deposit excise taxes into and make expenditures from the AATF. The new authority expires on September 30, 2023.

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. However, the CARES Act provided funding for the FAA to pay a federal share of the costs for grants awarded under Public Law 116-94, Further Consolidated Appropriations Act, 2020, to 100 percent. Similarly, the American Rescue Plan Act of 2021 provided funding for the FAA to pay a federal share of 100 percent of the costs for any grant awarded in fiscal years 2021 or 2020, for an airport development project.

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, 2022, the FAA had open letters of intent extending through FY 2031 totaling \$1.7 billion. As of September 30, 2022, the FAA had obligated \$1.4 billion of this total amount, leaving \$256 million unobligated.

As of September 30, 2021, the FAA had open letters of intent extending through FY 2026 totaling \$1.2 billion. As of September 30, 2021, the FAA had obligated \$1.0 billion of this total amount, leaving \$209 million unobligated.

Aviation Insurance Program. The FAA provides non-premium war risk insurance for certain U.S. Government contracted operations as permitted by 49 U.S.C. 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.

Contingencies. The FAA has the following contingencies as of September 30, 2022 and 2021:

- **Legal Contingencies.** The FAA's legal contingencies include asserted and pending legal claims. An accrued liability is recognized for legal claims where the loss is probable and the amount can be reasonably estimated. For pending legal claims where the loss is reasonably possible, a liability is not recognized; however, the estimated range of loss is disclosed in the table below. 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 Contingencies.** The FAA's environmental contingencies include environmental remediation, and environmental clean-up and decommissioning. The nature of these contingencies is described in Note 1U. An accrued liability is recognized for environmental contingencies where the loss is probable and the amount can be reasonably estimated. For environmental contingencies where the loss is reasonably possible, a liability is not recognized; however, the estimated range of loss is disclosed in the table below. The 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.

- **Warranty Contingencies.** The FAA's logistics center issues parts to customers with a 90-day warranty, that are replaced free of charge if warranty conditions are met. An accrued liability is

recognized for warranty contingencies where the loss is probable and the amount can be reasonably estimated. The loss contingency is estimated based on historical averages of parts that failed and the warranty claims were approved. A loss contingency is not estimated for warranty claims that are reasonably possible of loss.

The following table shows the loss contingencies as of September 30, 2022 and 2021:

(Dollars in Thousands)	2022			2021		
	Accrued liabilities	Estimated range of loss		Accrued liabilities	Estimated range of loss	
		Lower end	Upper end		Lower end	Upper end
Legal contingencies:						
Probable	\$ 58,595	\$ 58,595	\$ 58,595	\$ 52,009	\$ 52,009	\$ 52,009
Reasonably possible	N/A	\$ 74,872	\$ 74,872	N/A	\$ 76,583	\$ 76,583
Environmental contingencies:						
Probable	\$ 783,215	\$ 783,215	\$ 783,215	\$ 752,148	\$ 752,148	\$ 752,148
Reasonably possible	N/A	\$ 126,863	\$ 126,863	N/A	\$ 108,607	\$ 108,607
Warranty contingencies:						
Probable	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515	\$ 515
Reasonably possible	N/A	\$ –	\$ –	N/A	\$ –	\$ –

Note 13. Funds from Dedicated Collections

Funds from dedicated collections are those that are financed by specifically identified revenues and financing sources that 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 123–124 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 the Operations-AATF, Grants-in-Aid for Airports, Facilities and Equipment, and Research, Engineering and Development funds. The "All other funds from dedicated collections" classification also includes the Operations-General Fund, which is funded primarily through transfers from Operations-AATF but is additionally supplemented by the General Fund of the U.S. Government through annual appropriations. However, since the Operations account is funded primarily 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.

Grants-in-Aid for Airports is funded primarily through transfers from the AATF, but also received funding in FY 2020 from the General Fund of the U.S. Government as a result of the Coronavirus Aid, Relief, and Economic Security (CARES) Act, Public Law 116-136. Because the funding from general fund appropriations is expected to be temporary and the predominant source of funding historically comes from the AATF, Grants-in-Aid for Airports is presented as funds from dedicated collections.

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.

This note is presented on both a combined and consolidated basis. The combined presentation does

not eliminate intra-entity balances or transactions between funds from dedicated collections held by the entity. Similarly, the combined presentation does not eliminate intra-entity balances or transactions with funds from other than dedicated collections, such as the FAA's Franchise Fund. The consolidated presentation eliminates intra-entity balances or transactions between the FAA's funds from dedicated collections.

Airport and Airway Trust Fund

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

The Airport and Airway Revenue 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 on a quarterly basis.

As discussed in Note 1D, FY 2022 excise tax revenue includes amounts certified as actual by the IRS for the first two quarters of the year and amounts allocated by the Office of Tax Analysis for the last two quarters of the year.

All Other Funds from Dedicated Collections

- The Aviation Insurance Program had investments of \$2.4 billion and revenues of \$23.0 million for the period ended September 30, 2022 compared to \$2.2 billion and \$14.8 million, respectively, for the period ended September 30, 2021. The Aviation Insurance Program is also discussed in Notes 1G and 12.
- 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 \$105.9 million and \$43.9 million for the periods ended September 30, 2022 and 2021, respectively.

The FAA's funds from dedicated collections as of and for the year ended September 30, 2022, consist of the following:

(Dollars in Thousands)

Balance Sheet

Assets

Intragovernmental

Fund balance with Treasury	\$ 766,693	\$ 3,870,539	\$ 4,637,232	\$ -	\$ 4,637,232
Investments, net	10,848,905	2,362,839	13,211,744	-	13,211,744
Accounts receivable, net	-	6,217,029	6,217,029	(6,191,880)	25,149
Advances and prepayments	-	236,736	236,736	-	236,736
Total intragovernmental	11,615,598	12,687,143	24,302,741	(6,191,880)	18,110,861

Other than intragovernmental/with the public

Accounts receivable, net	-	23,931	23,931	-	23,931
General property, plant, and equipment, net	-	3,407,080	3,407,080	-	3,407,080
Advances and prepayments	-	1,940	1,940	-	1,940
Total other than intragovernmental/with the public	-	3,432,951	3,432,951	-	3,432,951

Total assets

	\$ 11,615,598	\$ 16,120,094	\$ 27,735,692	\$ (6,191,880)	\$ 21,543,812
--	----------------------	----------------------	----------------------	-----------------------	----------------------

Liabilities

Intragovernmental

Accounts payable	\$ 6,190,380	\$ 13,528	\$ 6,203,908	\$ (6,191,880)	\$ 12,028
Advances from others and deferred revenue	-	26,465	26,465	-	26,465
Other liabilities	-	296,896	296,896	-	296,896
Total intragovernmental liabilities	6,190,380	336,889	6,527,269	(6,191,880)	335,389

Other than intragovernmental/with the public

Accounts payable	-	413,957	413,957	-	413,957
Federal employee benefits payable	-	1,244,278	1,244,278	-	1,244,278
Advances from others and deferred revenue	-	130,517	130,517	-	130,517
Other liabilities	-	-	-	-	-

Accrued grant liabilities	-	1,943,932	1,943,932	-	1,943,932
Other	-	380,767	380,767	-	380,767
Total other than intragovernmental/with the public	-	4,113,451	4,113,451	-	4,113,451

Total liabilities

	\$ 6,190,380	\$ 4,450,340	\$ 10,640,720	\$ (6,191,880)	\$ 4,448,840
--	---------------------	---------------------	----------------------	-----------------------	---------------------

Net position

Unexpended appropriations	\$ -	\$ 1,255,980	\$ 1,255,980	\$ -	\$ 1,255,980
Cumulative results of operations	5,425,218	10,413,774	15,838,992	-	15,838,992

Total liabilities and net position

	\$ 11,615,598	\$ 16,120,094	\$ 27,735,692	\$ (6,191,880)	\$ 21,543,812
--	----------------------	----------------------	----------------------	-----------------------	----------------------

Statement of net cost

Gross program costs	\$ -	\$ 16,938,113	\$ 16,938,113	\$ -	\$ 16,938,113
Less earned revenues	-	(365,171)	(365,171)	-	(365,171)

Net cost of operations

	\$ -	\$ 16,572,942	\$ 16,572,942	\$ -	\$ 16,572,942
--	-------------	----------------------	----------------------	-------------	----------------------

Statement of changes in net position

Unexpended appropriations

Beginning balances	\$ -	\$ 716,250	\$ 716,250	\$ -	\$ 716,250
Appropriations received	-	5,000,000	5,000,000	-	5,000,000
Other adjustments	-	[24]	[24]	-	[24]
Appropriations used	-	(4,460,246)	(4,460,246)	-	(4,460,246)
Net change in unexpended appropriations	-	539,730	539,730	-	539,730
Total unexpended appropriations - ending	\$ -	\$ 1,255,980	\$ 1,255,980	\$ -	\$ 1,255,980

Cumulative results of operations

Beginning balances	\$ 7,114,547	\$ 10,530,763	\$ 17,645,310	\$ -	\$ 17,645,310
Appropriations used	-	4,460,246	4,460,246	-	4,460,246
Intragovernmental non-exchange revenue	11,533,025	-	11,533,025	-	11,533,025
Other than intragovernmental non-exchange revenue	-	4,723	4,723	-	4,723
Transfers-in/out without reimbursement	(13,222,354)	11,583,107	(1,639,247)	-	(1,639,247)
Imputed financing	-	407,877	407,877	-	407,877
Net cost of operations	-	16,572,942	16,572,942	-	16,572,942
Net change in cumulative results of operations	(1,689,329)	(116,989)	(1,806,318)	-	(1,806,318)
Cumulative results of operations - ending	\$ 5,425,218	\$ 10,413,774	\$ 15,838,992	\$ -	\$ 15,838,992

Net position end of period

	\$ 5,425,218	\$ 11,669,754	\$ 17,094,972	\$ -	\$ 17,094,972
--	---------------------	----------------------	----------------------	-------------	----------------------

The FAA's funds from dedicated collections as of and for the year ended September 30, 2021, consist of the following:

(Dollars in Thousands)

	2021				
	AATF	All other funds from dedicated collections	Total funds from dedicated collections (combined)	Eliminations between funds from dedicated collections	Total funds from dedicated collections (consolidated)
Balance Sheet					
Assets					
Intragovernmental					
Fund balance with Treasury	\$ (1,868,836)	\$ 4,286,618	\$ 2,417,782	\$ -	\$ 2,417,782
Investments, net	15,948,941	2,240,715	18,189,656	-	18,189,656
Accounts receivable, net	-	7,999,529	7,999,529	(7,987,058)	12,471
Advances and prepayments	-	208,005	208,005	-	208,005
Total intragovernmental	14,080,105	14,734,867	28,814,972	(7,987,058)	20,827,914
Other than intragovernmental/with the public					
Accounts receivable, net	-	11,543	11,543	-	11,543
General property, plant, and equipment, net	-	3,067,049	3,067,049	-	3,067,049
Advances and prepayments	-	679	679	-	679
Total other than intragovernmental/with the public	-	3,079,271	3,079,271	-	3,079,271
Total assets	\$ 14,080,105	\$ 17,814,138	\$ 31,894,243	\$ (7,987,058)	\$ 23,907,185
Liabilities					
Intragovernmental					
Accounts payable	\$ 6,965,558	\$ 1,031,247	\$ 7,996,805	\$ (7,987,058)	\$ 9,747
Advances from others and deferred revenue	-	26,046	26,046	-	26,046
Other liabilities	-	291,427	291,427	-	291,427
Total intragovernmental liabilities	6,965,558	1,348,720	8,314,278	(7,987,058)	327,220
Other than intragovernmental/with the public					
Accounts payable	-	415,008	415,008	-	415,008
Federal employee benefits payable	-	1,327,835	1,327,835	-	1,327,835
Advances from others and deferred revenue	-	149,298	149,298	-	149,298
Other liabilities	-	-	-	-	-
Accrued grant liabilities	-	2,975,926	2,975,926	-	2,975,926
Other	-	350,338	350,338	-	350,338
Total other than intragovernmental/with the public	-	5,218,405	5,218,405	-	5,218,405
Total liabilities	\$ 6,965,558	\$ 6,567,125	\$ 13,532,683	\$ (7,987,058)	\$ 5,545,625
Net position					
Unexpended appropriations	\$ -	\$ 716,250	\$ 716,250	\$ -	\$ 716,250
Cumulative results of operations	7,114,547	10,530,763	17,645,310	-	17,645,310
Total liabilities and net position	\$ 14,080,105	\$ 17,814,138	\$ 31,894,243	\$ (7,987,058)	\$ 23,907,185
Statement of net cost					
Gross program costs	\$ -	\$ 18,781,077	\$ 18,781,077	\$ -	\$ 18,781,077
Less earned revenues	(1)	(292,628)	(292,629)	-	(292,629)
Net cost of operations	\$ (1)	\$ 18,488,449	\$ 18,488,448	\$ -	\$ 18,488,448
Statement of changes in net position					
Unexpended appropriations					
Beginning balances	\$ -	\$ 432,928	\$ 432,928	\$ -	\$ 432,928
Appropriations received	-	482,500	482,500	-	482,500
Other adjustments	-	(50,235)	(50,235)	-	(50,235)
Appropriations used	-	(148,943)	(148,943)	-	(148,943)
Net change in unexpended appropriations	-	283,322	283,322	-	283,322
Total unexpended appropriations - ending	\$ -	\$ 716,250	\$ 716,250	\$ -	\$ 716,250
Cumulative results of operations					
Beginning balances	\$ 1,842,196	\$ 12,352,397	\$ 14,194,593	\$ -	\$ 14,194,593
Appropriations used	-	148,943	148,943	-	148,943
Intragovernmental non-exchange revenue	8,463,962	-	8,463,962	-	8,463,962
Other than intragovernmental non-exchange revenue	-	2,842	2,842	-	2,842
Transfers-in/out without reimbursement	(3,191,612)	16,131,107	12,939,495	-	12,939,495
Imputed financing	-	383,923	383,923	-	383,923
Net cost of operations	(1)	18,488,449	18,488,448	-	18,488,448
Net change in cumulative results of operations	5,272,351	(1,821,634)	3,450,717	-	3,450,717
Cumulative results of operations - ending	\$ 7,114,547	\$ 10,530,763	\$ 17,645,310	\$ -	\$ 17,645,310
Net position end of period	\$ 7,114,547	\$ 11,247,013	\$ 18,361,560	\$ -	\$ 18,361,560

Note Disclosures Related to the Statement of Net Cost

Note 14. Net Cost by Program and Strategic Goal

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 Mike Monroney Aeronautical Center, aviation overflight user fees, and other programs.

The following is the net cost of operations by strategic goal for the years ended September 30, 2022 and 2021:

(Dollars in Thousands)

		For the Year Ended September 30, 2022				
		Strategic Goals				
	Safety	People	Global Leadership	Operational Excellence	Total	
Line of business programs						
Air Traffic Organization	\$ 10,867,178	\$ 96,623	\$ 2,671	\$ 1,994,342	\$ 12,960,814	
Airports	1,366,138	1,559	2	6,489,152	7,856,851	
Aviation Safety	1,751,930	20,113	33,329	5,332	1,810,704	
Security and Hazardous Materials Safety	114,329	938	1,221	13,429	129,917	
Commercial Space Transportation	31,425	2,869	285	4,826	39,405	
Non-line of business programs	(114,386)	21,397	8,947	154,047	70,005	
Net cost	<u>\$ 14,016,614</u>	<u>\$ 143,499</u>	<u>\$ 46,455</u>	<u>\$ 8,661,128</u>	<u>\$ 22,867,696</u>	

(Dollars in Thousands)

		For the Year Ended September 30, 2021				
		Strategic Goals				
	Safety	People	Global Leadership	Operational Excellence	Total	
Line of business programs						
Air Traffic Organization	\$ 10,496,156	\$ 93,338	\$ 2,432	\$ 1,867,282	\$ 12,459,208	
Airports	4,627,245	1,703	3	6,597,027	11,225,978	
Aviation Safety	1,675,746	21,432	28,590	5,203	1,730,971	
Security and Hazardous Materials Safety	121,475	825	706	11,143	134,149	
Commercial Space Transportation	25,545	2,745	222	5,674	34,186	
Non-line of business programs	(32,738)	27,310	6,786	136,281	137,639	
Net cost	<u>\$ 16,913,429</u>	<u>\$ 147,353</u>	<u>\$ 38,739</u>	<u>\$ 8,622,610</u>	<u>\$ 25,722,131</u>	

Note 15. Inter-Entity Costs

The FAA receives certain goods and services from other federal entities at no cost or at a cost less than the full cost to the providing federal entity. Consistent with accounting standards, only certain costs of the providing entity that are not fully reimbursed by the FAA are recognized as imputed costs (in the Statement of Net Cost) and are offset by imputed financing sources (in the Statement of Changes in Net Position). Each of these costs are listed below. However, unreimbursed costs of goods and services other than those listed below are not included in our financial statements.

- The Office of Personnel Management (OPM) provides pension and post-retirement benefits to employees upon retirement from federal service. The imputed cost recognized by the FAA is based on the annual Benefits Administration Letter issued by the OPM, which provides actuarial cost factors for accrued pension and post-retirement benefit expenses for current employees. The amount recognized represents the difference between employer and employee contributions and the total cost of the benefit.

- The U.S. Treasury's Judgment Fund provides payments for settlements of lawsuits or court assessments against the FAA.
- The Department of Homeland Security's Continuous Diagnostic and Mitigation program provides hardware, software, and services in support of the government-wide focus on heightened cyber security.
- The Department of Labor provides workers' compensation and medical benefit payments to federal employees for COVID-19 claims under ARPA.

For the fiscal years ended September 30, 2022 and 2021, imputed costs were as follows:

<i>(Dollars in Thousands)</i>	2022	2021
Office of Personnel Management	\$ 411,007	\$ 390,809
Treasury Judgment Fund	7,766	3,376
Department of Homeland Security	32	-
Department of Labor	305	-
Total imputed costs	<u>\$ 419,110</u>	<u>\$ 394,185</u>

Note 16. Statement of Budgetary Resources Disclosures

Budgetary Terms

The purpose of federal budgetary accounting is to control, monitor, and report on funds made available to federal agencies by law and help ensure compliance with the law.

The following budget terms are commonly used:

- **Appropriations** are a provision of law (not necessarily in an appropriations act) authorizing the expenditure of funds for a given purpose. Usually, but not always, an appropriation provides budget authority.
- **Budgetary resources** are amounts available to incur obligations in a given year. Budgetary resources consist of new budget authority and unobligated balances of budget authority provided in previous years.
- **Offsetting collections** are payments to the government that, by law, are credited directly to expenditure accounts and deducted from gross budget authority and outlays of the expenditure account, rather than added to receipts. Usually, offsetting collections are authorized to be spent for the purposes of the account without further action by Congress. They usually result from business-like transactions with the public, including payments from the public in exchange for goods and services, reimbursements for damages, and gifts or donations of money to the government and from intragovernmental transactions with other government accounts. The authority to spend offsetting collections is a form of budget authority.
- **Offsetting receipts** are payments to the government that are credited to offsetting receipt accounts and deducted from gross budget authority and outlays, rather than added to receipts. Usually they are deducted at the level of the agency and sub function, but in some cases they are deducted at the level of the government as a whole. They are not authorized to be credited to expenditure accounts. The legislation that authorizes the offsetting receipts may earmark them for a specific purpose and either appropriate them for expenditure for that purpose or require them to be appropriated in annual appropriations acts before they can be spent. Like offsetting collections, they usually result from business-like transactions with the public, including payments from the public in exchange for goods and services, reimbursements for damages, and gifts or donations of money to the government, and from intragovernmental transactions with other government accounts.
- **Obligations** are binding agreements that will result in outlays, immediately or in the future. Budgetary resources must be available before obligations can be incurred legally.
- **Outlays** are payments to liquidate an obligation (other than the repayment of debt principal or other disbursements that are “means of financing” transactions). Outlays generally are equal to cash disbursements but also are recorded for cash-equivalent transactions, such as the issuance of debentures to pay insurance claims, and in a few cases are recorded on an accrual basis such as interest on public issues of the public debt. Outlays are the measure of Government spending.
- **Distributed offsetting receipts** are amounts that an agency collects from the public or from other U.S. Government agencies that are used to offset or reduce an agency’s budget outlays. Agency outlays are measured on both a gross and net basis, with net outlays being reduced by offsetting receipts (and other amounts).

Unobligated Balance from Prior Year Budget Authority, Net

The unobligated balance from prior year budget authority is presented net of transfers, recoveries from prior year obligations, and balances withdrawn for cancelled authority. As a result, the amount will not equal the prior year unobligated balance, end of year total. As of September 30, 2022 and 2021, the unobligated balances from prior year budget authority, net of adjustments were:

(Dollars in Thousands)

	2022	2021
Unobligated balance, brought forward from prior year	\$ 9,570,157	\$ 6,355,669
Adjustments to budgetary resources made during current year		
Transferred to other accounts	-	(13,950)
Adjustments to unobligated balance brought forward	(774)	174
Recoveries of prior year obligations	488,327	516,387
Balances withdrawn to Treasury	(24)	(50,235)
Balances withdrawn to the AATF	(33,134)	(32,112)
Unobligated balance from prior year budget authority, net	<u>\$ 10,024,552</u>	<u>\$ 6,775,933</u>

Appropriations

Appropriations, 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, 2022 and 2021:

(Dollars in Thousands)

	2022	2021
Combined Statement of Budgetary Resources - appropriations	\$ 20,505,993	\$ 41,032,106
Less appropriations transferred-in/out	2,000	-
Less amounts made available to FAA from AATF dedicated collections	(9,555,487)	(13,732,000)
Less other appropriated receipts and budgetary adjustments	(1,326)	(2,408,606)
Consolidated Statement of Changes in Net Position - appropriations received	<u>\$ 10,951,180</u>	<u>\$ 24,891,500</u>

Available Contract Authority

Contract authority, as reported on the Combined Statement of Budgetary Resources, is the amount permitted by law to enter into contracts or incur obligations. Throughout the fiscal year, the contract authority is liquidated by appropriation. As of September 30, 2022 and 2021, the remaining contract authority available was \$1.8 million and \$2.9 million, respectively.

Undelivered Orders

As of September 30, 2022 and 2021, the amount of budgetary resources obligated for undelivered orders were:

(Dollars in Thousands)

	2022			2021		
	Federal	Non-Federal	Total	Federal	Non-Federal	Total
Obligations, unpaid	\$ 199,354	\$ 10,696,593	\$ 10,895,947	\$ 184,878	\$ 10,629,304	\$ 10,814,182
Obligations, prepaid/advanced	249,838	2,147	251,985	208,677	755	209,432
Total	<u>\$ 449,192</u>	<u>\$ 10,698,740</u>	<u>\$ 11,147,932</u>	<u>\$ 393,555</u>	<u>\$ 10,630,059</u>	<u>\$ 11,023,614</u>

Legal Arrangements Affecting the Use of Unobligated Balances

Unobligated balances remain legally available for obligation when the funds are apportioned by the 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. Unobligated balances of expired accounts are not available to fund new obligations, but 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 not available for obligation until authorized, for example, in the event of a major air carrier loss caused by a war risk occurrence.

Statement of Budgetary Resources vs. the Budget of the U.S. Government

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

(Dollars in Millions)

	For the Year Ended September 30, 2021			
	Budgetary Resources	New Obligations and Upward Adjustments	Distributed Offsetting Receipts	Net Outlays
FAA Combined Statement of Budgetary Resources	\$ 62,381	\$ 52,811	\$ (16,419)	\$ 39,422
Items included in the Combined Statement of Budgetary Resources, but excluded from the President's budget:				
Expired Funds	(167)	-	-	-
Other	(3)	2	-	1
Budget of the United States Government	<u>\$ 62,211</u>	<u>\$ 52,813</u>	<u>\$ (16,419)</u>	<u>\$ 39,423</u>

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

The Budget of the U.S. Government is available on the OMB's web site. The budgetary resources, new obligations, upward adjustments, and net outlay amounts are from the "Detailed Budget Estimates by Agency" found in the Appendix of the Budget. The distributed offsetting receipts amount is from the "Federal Budget by Agency and Account" found in the Analytical Perspectives of the Budget. The actual amounts for FY 2021 are presented in the FY 2023 Budget. The actual amounts for FY 2022 will be presented in the FY 2024 Budget, which occurs after the issuance of these financial statements. The OMB is expected to publish this information early in calendar year 2023.

The primary difference between the Combined Statement of Budgetary Resources and the Budget of the U.S. Government is that budgetary resources available from funds with expired authority are not included in the Budget of the U.S. Government. Other differences are due to rounding.

Note Disclosures Not Pertaining to a Specific Statement

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, 2022 and 2021:

(Dollars in Thousands)

	2022	2021
Custodial revenue		
Sources of cash collections:		
Fines, penalties, and forfeitures	\$ 4,915	\$ 30,770
Unclaimed money and property	2	46
General fund proprietary interest	18	12
Miscellaneous recoveries and refunds	7,898	9,400
Total cash collections	12,833	40,228
Accrual adjustment	2,851	2,684
Total custodial revenue	15,684	42,912
Disposition of collections		
Transferred to others (by recipient):		
Treasury (general fund)	12,833	40,228
Amounts yet to be transferred	2,851	2,684
Total disposition of collections	15,684	42,912
Net custodial activity	\$ -	\$ -

FINANCIAL RESULTS

Note 18. Reconciliation of Net Cost to Net Outlays

Budgetary and financial accounting information differ. Budgetary accounting is used for planning and control purposes and relates to both the receipt and use of cash, as well as reporting the federal deficit. Financial accounting is intended to provide a picture of the government’s financial operations and financial position so it presents information on an accrual basis. The accrual basis includes information about costs arising from the consumption of assets and the incurrence of liabilities.

The reconciliation of net outlays, presented on a budgetary basis, and the net cost, presented on an accrual basis, provides an explanation of the relationship between budgetary and financial accounting information. The reconciliation serves not only to identify costs paid for in the past and those that will be paid in the future, but also to assure integrity between budgetary and financial accounting.

The analysis below illustrates this reconciliation by listing the key differences between net cost and net outlays.

- The acquisition of capital assets results in outlays, but does not result in costs. Rather, the costs are

recognized over the useful lives of the assets as depreciation expense. To reconcile this difference, depreciation is a component of net operating cost but not part of net outlays; and the acquisition of capital assets is a component of net outlays, but not part of net operating cost.

- Special fund receipts, such as aviation overflight user fees, are collected from specific sources that are earmarked by law for a specific purpose and require an appropriation to be expended. The exchange revenue from these receipts is included in the net cost of operations, but there is no corresponding net outlay.

Although some differences presented in the reconciliation relate to amounts reported in the balance sheet and statement of net position, amounts may not agree. Certain financial activities do not result in net operating cost, nor net outlays, and are therefore excluded from the reconciliation. For example, the purchase of investments results in a change in assets on the balance sheet but does not result in net operating cost nor net outlays.

The following is a reconciliation of net cost to net outlays as of September 30, 2022:

(Dollars in Thousands)

	2022		
	Intragovernmental	Other than intragovernmental/ with the public	Total
Net operating cost	\$ 2,885,129	\$ 19,982,567	\$ 22,867,696
Components of net operating cost not part of net outlays			
Property, plant, and equipment depreciation expense	–	(1,301,682)	(1,301,682)
Property, plant, and equipment disposals and revaluations	(13,294)	(343,702)	(356,996)
Cost of goods sold	44	(62,075)	(62,031)
Inventory and related property disposals and revaluations	–	21,089	21,089
Increase/(decrease) in assets:			
Accounts receivable, net	12,558	12,370	24,928
Investments, net	(7,759)	–	(7,759)
Advances and prepayments	41,303	1,249	42,552
Other assets	–	–	–
(Increase)/decrease in liabilities:			
Accounts payable	(2,282)	(16,302)	(18,584)
Federal employee benefits payable	–	81,440	81,440
Environmental and disposal liabilities	–	(31,067)	(31,067)
Advances from others and deferred revenue	(14,509)	18,856	4,347
Other liabilities			
Accrued grant liabilities	–	589,612	589,612
Other	(6,099)	(29,708)	(35,807)
Financing sources:			
Imputed cost	(419,110)	–	(419,110)
Total components of net operating cost not part of net outlays	(409,148)	(1,059,920)	(1,469,068)
Components of net outlays not part of net operating cost			
Acquisition of capital assets	51,505	1,455,748	1,507,253
Acquisition of inventory and related property	–	65,037	65,037
Financing sources:			
Transfers-in/out without reimbursement	8,964	–	8,964
Total components of net outlays not part of net operating cost	60,469	1,520,785	1,581,254
Miscellaneous items			
Special fund receipts	93,925	–	93,925
Deposit funds and miscellaneous receipts	–	(7,628)	(7,628)
Other	1,692	(6,415)	(4,723)
Total miscellaneous items	95,617	(14,043)	81,574
Net outlays	\$ 2,632,067	\$ 20,429,389	\$ 23,061,456
Related amounts on the Statement of Budgetary Resources			
Outlays, net (total)			23,071,125
Distributed offsetting receipts			(9,669)
Agency outlays, net			\$ 23,061,456

The following is a reconciliation of net cost to net outlays as of September 30, 2021:

(Dollars in Thousands)

	2021		
	Intragovernmental	Other than intragovernmental/ with the public	Total
Net operating cost	\$ 2,744,521	\$ 22,977,610	\$ 25,722,131
Components of net operating cost not part of net outlays			
Property, plant, and equipment depreciation expense	–	(1,313,052)	(1,313,052)
Property, plant, and equipment disposals and revaluations	–	(157,918)	(157,918)
Cost of goods sold	159	(67,126)	(66,967)
Inventory and related property disposals and revaluations	–	13,216	13,216
Increase/(decrease) in assets:			
Accounts receivable, net	(4,377)	(2,132)	(6,509)
Investments, net	(4,272)	–	(4,272)
Advances and prepayments	5,153	(264)	4,889
Other assets	–	(27)	(27)
(Increase)/decrease in liabilities:			
Accounts payable	19,642	(31,195)	(11,553)
Federal employee benefits payable	–	15,513	15,513
Environmental and disposal liabilities	–	(6,608)	(6,608)
Advances from others and deferred revenue	310	39,147	39,457
Other liabilities			
Accrued grant liabilities	–	(2,069,384)	(2,069,384)
Other	(4,050)	(30,810)	(34,860)
Financing sources:			
Imputed cost	(394,185)	–	(394,185)
Total components of net operating cost not part of net outlays	(381,620)	(3,610,640)	(3,992,260)
Components of net outlays not part of net operating cost			
Acquisition of capital assets	50,263	1,132,146	1,182,409
Acquisition of inventory and related property	24,307	28,940	53,247
Financing sources:			
Transfers-in/out without reimbursement	13,758	–	13,758
Total components of net outlays not part of net operating cost	88,328	1,161,086	1,249,414
Miscellaneous items			
Special fund receipts	36,050	–	36,050
Deposit funds and miscellaneous receipts	–	(9,435)	(9,435)
Other	1,888	(4,729)	(2,841)
Total miscellaneous items	37,938	(14,164)	23,774
Net outlays	\$ 2,489,167	\$ 20,513,892	\$ 23,003,059
Related amounts on the Statement of Budgetary Resources			
Outlays, net (total)			39,421,662
Distributed offsetting receipts			(16,418,603)
Agency outlays, net			\$ 23,003,059

Note 19. Disclosure Entities

The Center for Advanced Aviation System Development (CAASD) is a Federally Funded Research and Development Center (FFRDC) sponsored by the FAA. FFRDCs are nonprofit entities that are sponsored and funded by the U.S. Government to meet special long-term research or development needs. CAASD serves the public interest by providing essential research to advance the safety, security, effectiveness, and efficiency of aviation and transportation in the United States and around the world.

The administrator of CAASD is The MITRE Corporation (MITRE). MITRE is a not-for-profit organization that operates multiple FFRDCs including CAASD. MITRE is a “public interest company” having no commercial interests. The absence of commercial conflicts of interest is essential to maintaining independence and objectivity.

As the sponsor of CAASD, the FAA has a long-term relationship with MITRE. The nature of this relationship is for the FAA to provide sufficient physical and financial resources in support of CAASD's innovative research and development that in turn supports the accomplishment of the FAA's mission. The FAA's relationship with MITRE, for the operation of CAASD, presents no financial or non-financial risk, and there is no expectation of benefits based on this relationship, other than the results of the independent research and development. Although MITRE is the administrator of CAASD, MITRE itself is not considered to be a disclosure entity of the FAA.

For the periods ended September 30, 2022 and 2021, the FAA had new obligations of \$151 million and \$173 million, respectively, in support of its sponsorship agreement with MITRE for the operation of CAASD.

Note 20. COVID-19 Activity

The Coronavirus Aid, Relief, and Economic Security (CARES) Act, Public Law 116-136, provided \$10 billion in general fund appropriations for Grants-in-Aid for Airports to prevent, prepare for, and respond to the COVID-19 pandemic. In addition, of the amounts previously made available from the AATF for operations in the Bipartisan Budget Act of 2018 (Public Law 115-123), up to \$25 million may be repurposed to prevent, prepare for, and respond to the COVID-19 pandemic. Airport grants issued with CARES Act funds can be used for airport capital expenditures and airport operating expenses such as payroll, utilities, and debt services.

The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (CRRSAA), Public Law 116-260, provided an additional \$2 billion in general fund appropriations for Grants-in-Aid for Airports to prevent, prepare for, and respond to coronavirus. Airport grants issued with CRRSAA funds can be used for operational costs and debt service but not for capital expenditures.

The American Rescue Plan Act of 2021 (ARPA), Public Law 117-2, provided an additional \$8 billion in general fund appropriations under Relief for Airports, a new program account, to be allocated to sponsors of airports to prevent, prepare for, and respond to coronavirus. Airport grants issued with ARPA funds can be used for operating expenses, debt service payments, the federal share of airport development projects, and

airport concessions. In addition, ARPA established an emergency FAA employee leave fund and appropriated \$9 million from the general fund for the use of paid leave by any FAA employee who is unable to work due to circumstances related to COVID-19.

Because Grants-in-Aid for Airports is a trust fund program account, budgetary concepts require that general fund appropriations (i.e., \$10 billion from the CARES Act and \$2 billion from CRRSAA) be deposited to a general fund payment account, apportioned, then transferred to an available trust fund receipt account, fully expending the appropriation. The transfer-in to the available trust fund receipt account is then recorded as an appropriated receipt, apportioned, and available for obligation.

Because Relief for Airports was established as a general fund program account, the general fund appropriation is deposited, apportioned, and expended out of the same budgetary program account.

The classification of funds from dedicated collections is made by individual fund. In situations where there is a mixed source of funding, the classification is based on the predominant source of funding.

This note is presented on a combined basis. The combined presentation does not eliminate intra-entity balances or transactions.

The FAA's COVID-19 activity as of and for the year ended September 30, 2022, consist of the following:

(Dollars in Thousands)

Balance Sheet

Assets

Fund balance with Treasury (Note 2)

Accounts receivable, net (Note 4)

Advances and prepayments

Total assets

Liabilities and net position

Accounts payable

Federal employee benefits payable (Note 7)

Other liabilities

Accrued grant liabilities

Other (Note 10)

Unexpended appropriations

Cumulative results of operations

Total liabilities and net position

Statement of net cost

Gross program costs

Total net cost

Statement of changes in net position

Unexpended appropriations

Beginning balances

Appropriations received (Note 16)

Appropriations used

Total unexpended appropriations

Cumulative results of operations

Beginning balances

Appropriations used

Transfers-in/out without reimbursement

Imputed financing (Note 15)

Net cost of operations

Net change in cumulative results of operations

Cumulative results of operations

Total net position

Combined statements of budgetary resources

Budgetary resources (Note 16)

Unobligated balance from prior year budget authority, net

Appropriations

Total budgetary resources

Status of budgetary resources

New obligations and upward adjustments

Unobligated balance, end of year

Total budgetary resources

Outlays, net

Outlays, net (total)

Distributed offsetting receipts

Agency outlays, net

	2022		
	Funds from dedicated collections	Funds from other than dedicated collections	Total
Balance Sheet			
Assets			
Fund balance with Treasury (Note 2)	\$ 1,226,716	\$ 5,484,206	\$ 6,710,922
Accounts receivable, net (Note 4)	-	-	-
Advances and prepayments	949	-	949
Total assets	\$ 1,227,665	\$ 5,484,206	\$ 6,711,871
Liabilities and net position			
Accounts payable	\$ 1,224	\$ 3,136	\$ 4,360
Federal employee benefits payable (Note 7)	43	62	105
Other liabilities			
Accrued grant liabilities	1,032,782	4,681,956	5,714,738
Other (Note 10)	22	52	74
Unexpended appropriations	-	798,074	798,074
Cumulative results of operations	193,594	926	194,520
Total liabilities and net position	\$ 1,227,665	\$ 5,484,206	\$ 6,711,871
Statement of net cost			
Gross program costs	\$ 174,779	\$ 4,040,866	\$ 4,215,645
Total net cost	\$ 174,779	\$ 4,040,866	\$ 4,215,645
Statement of changes in net position			
Unexpended appropriations			
Beginning balances	\$ -	\$ 4,838,873	\$ 4,838,873
Appropriations received (Note 16)	-	-	-
Appropriations used	-	(4,040,799)	(4,040,799)
Total unexpended appropriations	\$ -	\$ 798,074	\$ 798,074
Cumulative results of operations			
Beginning balances	\$ 368,363	\$ 966	\$ 369,329
Appropriations used	-	4,040,799	4,040,799
Transfers-in/out without reimbursement	(1)	-	(1)
Imputed financing (Note 15)	11	27	38
Net cost of operations	174,779	4,040,866	4,215,645
Net change in cumulative results of operations	(174,769)	(40)	(174,809)
Cumulative results of operations	\$ 193,594	\$ 926	\$ 194,520
Total net position	\$ 193,594	\$ 799,000	\$ 992,594
Combined statements of budgetary resources			
Budgetary resources (Note 16)			
Unobligated balance from prior year budget authority, net	\$ 324,355	\$ 3,670,089	\$ 3,994,444
Appropriations	-	-	-
Total budgetary resources	\$ 324,355	\$ 3,670,089	\$ 3,994,444
Status of budgetary resources			
New obligations and upward adjustments	\$ 199,819	\$ 3,599,254	\$ 3,799,073
Unobligated balance, end of year	124,536	70,835	195,371
Total budgetary resources	\$ 324,355	\$ 3,670,089	\$ 3,994,444
Outlays, net			
Outlays, net (total)	\$ 1,324,033	\$ 3,610,396	\$ 4,934,429
Distributed offsetting receipts	-	-	-
Agency outlays, net	\$ 1,324,033	\$ 3,610,396	\$ 4,934,429

The FAA's COVID-19 activity as of and for the year ended September 30, 2021, consist of the following:

	2021		
	Funds from dedicated collections	Funds from other than dedicated collections	Total
<i>(Dollars in Thousands)</i>			
Balance Sheet			
Assets			
Fund balance with Treasury (Note 2)	\$ 2,550,749	\$ 9,094,602	\$ 11,645,351
Accounts receivable, net (Note 4)	82	-	82
Advances and prepayments	2,030	-	2,030
Total assets	\$ 2,552,861	\$ 9,094,602	\$ 11,647,463
Liabilities and net position			
Accounts payable	\$ (59)	\$ 245	\$ 186
Federal employee benefits payable (Note 7)	52	-	52
Other liabilities			
Accrued grant liabilities	2,184,474	4,254,518	6,438,992
Other (Note 10)	31	-	31
Unexpended appropriations	-	4,838,873	4,838,873
Cumulative results of operations	368,363	966	369,329
Total liabilities and net position	\$ 2,552,861	\$ 9,094,602	\$ 11,647,463
Statement of net cost			
Gross program costs	\$ 2,135,346	\$ 5,165,161	\$ 7,300,507
Total net cost	\$ 2,135,346	\$ 5,165,161	\$ 7,300,507
Statement of changes in net position			
Unexpended appropriations			
Beginning balances	\$ -	\$ -	\$ -
Appropriations received (Note 16)	-	10,009,000	10,009,000
Appropriations used	-	(5,170,127)	(5,170,127)
Total unexpended appropriations	\$ -	\$ 4,838,873	\$ 4,838,873
Cumulative results of operations			
Beginning balances	\$ 2,503,690	\$ -	\$ 2,503,690
Appropriations used	-	5,170,127	5,170,127
Transfers-in/out without reimbursement	(1)	(4,000)	(4,001)
Imputed financing (Note 15)	20	-	20
Net cost of operations	2,135,346	5,165,161	7,300,507
Net change in cumulative results of operations	(2,135,327)	966	(2,134,361)
Cumulative results of operations	\$ 368,363	\$ 966	\$ 369,329
Total net position	\$ 368,363	\$ 4,839,839	\$ 5,208,202
Combined statements of budgetary resources			
Budgetary resources (Note 16)			
Unobligated balance from prior year budget authority, net	\$ 725,172	\$ -	\$ 725,172
Appropriations	-	12,009,000	12,009,000
Total budgetary resources	\$ 725,172	\$ 12,009,000	\$ 12,734,172
Status of budgetary resources			
New obligations and upward adjustments	\$ 513,099	\$ 8,340,531	\$ 8,853,630
Unobligated balance, end of year	212,073	3,668,469	3,880,542
Total budgetary resources	\$ 725,172	\$ 12,009,000	\$ 12,734,172
Outlays, net			
Outlays, net (total)	\$ 4,318,204	\$ 2,914,398	\$ 7,232,602
Distributed offsetting receipts	-	(2,000,000)	(2,000,000)
Agency outlays, net	\$ 4,318,204	\$ 914,398	\$ 5,232,602

Required Supplementary Information

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION DEFERRED MAINTENANCE AND REPAIRS

As of September 30, 2022

(Dollars in Thousands)
Unaudited

Category	Description	Facility condition is <	Cost to return to acceptable condition	
			Beginning balance	Ending balance
Staffed Facilities				
Tier 1	ARTCCs, ATCT/TRACONs at major airports	95%	\$ 473,526	\$ 576,161
Tier 2	WJHTC and MMAC	95%	67,250	64,116
Tier 3	ATCT/TRACONs at all non-major airports	90%	76,663	79,453
Unstaffed Facilities				
Tier 1	Long range radars	95%	81,801	83,919
Other	Unstaffed infrastructure and fuel storage tanks	N/A	1,025,714	1,142,178
Total			\$ 1,724,954	\$ 1,945,827

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.

The 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. 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.

The 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 Tier 1 and Tier 2 facilities to 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 air traffic facilities, both staffed and unstaffed, 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 total deferred maintenance for FY 2022 is roughly \$1.95 billion, which is about \$220 million more than FY 2021. The increases reflect inflation and supply chain issues. Details of staffed and unstaffed deferred maintenance are provided below.

Staffed Facilities

There are a total of 146 Tier 1 and Tier 2 staffed facilities maintained by the FAA. These staffed facilities include ARTCCs, and ATCT/TRACONs at major airports. By the end of FY 2022, 127 of the 146 staffed facilities have a Facility Condition Index score below 95%, totaling \$576 million in deferred maintenance.

There are a total of 318 Tier 3 and Tier 4 staffed facilities maintained by the FAA. These staffed facilities include ATCT/TRACONs at all non-major airports. Of the 318 staffed facilities, 80 were inspected during FY 2022 and 54 were identified to have a Facility Condition Index score below 90%. The staffed facilities contribute \$79 million in deferred maintenance.

The WJHTC and MMAC owned and leased facilities that have a Facility Condition Index score below 95% contribute a total of \$64 million in deferred maintenance.

Unstaffed Facilities

There are a total of 161 Tier 1 unstaffed facilities which are long range radars. Of the 161 long range radars, 136 have a Facility Condition Index score below 95%, totaling \$84 million in deferred maintenance.

The unstaffed infrastructure and fuel storage tanks include the commissioned buildings and towers only at locations that are not planned to be decommissioned at any time in the future and fuel storage tank backlog at unstaffed facilities. In FY 2022, unstaffed infrastructure accounts for \$1.03 billion in deferred maintenance and fuel storage tanks account for \$113 million in deferred maintenance, a total of approximately \$1.1 billion.

Schedule of Budgetary Resources by Major Fund Type

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
SCHEDULE OF BUDGETARY RESOURCES BY MAJOR FUND TYPE
 For the year ended September 30, 2022
(Dollars in Thousands)
Unaudited

	Grants-in-Aid for Airports	Other Airport Related Grant Programs	Facilities & Equipment	Research, Engineering, & Development	Aviation Insurance Revolving	Franchise Fund	Operations	Expenditure Transfers between FAA Accounts	Other Funds	Combined Total
Budgetary resources										
Unobligated balance from prior year budget authority, net	\$ 1,004,489	\$ 3,660,729	\$ 2,347,355	\$ 158,017	\$ 2,316,058	\$ 234,684	\$ 280,232	\$ -	\$ 22,988	\$ 10,024,552
Appropriations	554,180	3,998,000	3,992,887	545,519	-	-	5,000,000	6,414,100	1,307	20,505,993
Contract authority	3,350,000	-	-	-	-	-	-	-	-	3,350,000
Spending authority from offsetting collections	1,263	-	67,606	12,198	30,707	493,891	6,563,336	-	-	7,169,001
Total budgetary resources	\$ 4,909,932	\$ 7,658,729	\$ 6,407,848	\$ 715,734	\$ 2,346,765	\$ 728,575	\$ 11,843,568	\$ 6,414,100	\$ 24,295	\$ 41,049,546
Status of budgetary resources										
New obligations and upward adjustments	\$ 4,122,887	\$ 4,027,286	\$ 3,346,831	\$ 216,193	\$ 1,429	\$ 544,649	\$ 11,598,317	\$ 6,414,100	\$ 3,645	\$ 30,275,337
Unobligated balance, end of year										
Apportioned, unexpired accounts	738,677	3,631,443	2,977,656	195,973	20,174	183,926	174,158	-	15,508	7,937,515
Unapportioned, unexpired accounts	37,985	-	9,543	297,000	2,325,162	-	237	-	5,142	2,675,069
Unexpired unobligated balance, end of year	776,662	3,631,443	2,987,199	492,973	2,345,336	183,926	174,395	-	20,650	10,612,584
Expired unobligated balance, end of year	10,383	-	73,818	6,568	-	-	70,856	-	-	161,625
Unobligated balance, end of year (total)	787,045	3,631,443	3,061,017	499,541	2,345,336	183,926	245,251	-	20,650	10,774,209
Total budgetary resources	\$ 4,909,932	\$ 7,658,729	\$ 6,407,848	\$ 715,734	\$ 2,346,765	\$ 728,575	\$ 11,843,568	\$ 6,414,100	\$ 24,295	\$ 41,049,546
Outlays, net										
Outlays, net (total)	\$ 5,745,880	\$ 2,692,614	\$ 3,095,845	\$ 197,487	\$ (29,706)	\$ 6,207	\$ 3,926,886	\$ 7,434,100	\$ 1,812	\$ 23,071,125
Distributed offsetting receipts	-	-	-	-	-	-	-	-	(9,669)	(9,669)
Agency outlays, net	\$ 5,745,880	\$ 2,692,614	\$ 3,095,845	\$ 197,487	\$ (29,706)	\$ 6,207	\$ 3,926,886	\$ 7,434,100	\$ (7,857)	\$ 23,061,456

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
SCHEDULE OF BUDGETARY RESOURCES BY MAJOR FUND TYPE

For the year ended September 30, 2021

(Dollars in Thousands)

Unaudited

	Grants-in-Aid for Airports	Other Airport Related Grant Programs	Facilities & Equipment	Research, Engineering, & Development	Aviation Insurance Revolving	Franchise Fund	Operations	Expenditure Transfers between FAA Accounts	Other Funds	Combined Total
Budgetary resources										
Unobligated balance from prior year budget authority, net	\$ 1,347,545	\$ -	\$ 2,343,575	\$ 179,432	\$ 2,300,692	\$ 264,600	\$ 332,950	\$ -	\$ 7,139	\$ 6,775,933
Appropriations	2,400,000	8,000,000	3,015,000	198,000	-	-	482,500	26,919,000	17,606	41,032,106
Contract authority	3,350,000	-	-	-	-	-	-	-	-	3,350,000
Spending authority from offsetting collections	38	-	59,872	8,165	18,943	470,389	10,665,212	-	-	11,222,619
Total budgetary resources	\$ 7,097,583	\$ 8,000,000	\$ 5,418,447	\$ 385,597	\$ 2,319,635	\$ 734,989	\$ 11,480,662	\$ 26,919,000	\$ 24,745	\$ 62,380,658
Status of budgetary resources										
New obligations and upward adjustments	\$ 6,388,557	\$ 4,340,869	\$ 3,125,054	\$ 230,330	\$ 3,640	\$ 520,755	\$ 11,280,539	\$ 26,919,000	\$ 1,757	\$ 52,810,501
Unobligated balance, end of year										
Apportioned, unexpired accounts	687,255	3,659,131	2,211,709	149,812	17,680	214,150	160,289	-	14,382	7,114,408
Unapportioned, unexpired accounts	19,462	-	443	-	2,298,315	84	3,046	-	8,606	2,329,956
Unexpired unobligated balance, end of year	706,717	3,659,131	2,212,152	149,812	2,315,995	214,234	163,335	-	22,988	9,444,364
Expired unobligated balance, end of year	2,309	-	81,241	5,455	-	-	36,788	-	-	125,793
Unobligated balance, end of year (total)	709,026	3,659,131	2,293,393	155,267	2,315,995	214,234	200,123	-	22,988	9,570,157
Total budgetary resources	\$ 7,097,583	\$ 8,000,000	\$ 5,418,447	\$ 385,597	\$ 2,319,635	\$ 734,989	\$ 11,480,662	\$ 26,919,000	\$ 24,745	\$ 62,380,658
Outlays, net										
Outlays, net (total)	\$ 8,835,285	\$ 332,979	\$ 2,761,309	\$ 159,041	\$ (15,613)	\$ 1,015	\$ 673,385	\$ 26,672,000	\$ 2,261	\$ 39,421,662
Distributed offsetting receipts	-	-	-	-	-	-	-	(16,400,000)	(18,603)	(16,418,603)
Agency outlays, net	\$ 8,835,285	\$ 332,979	\$ 2,761,309	\$ 159,041	\$ (15,613)	\$ 1,015	\$ 673,385	\$ 10,272,000	\$ (16,342)	\$ 23,003,059

Land

(Unaudited)

The FAA acquires land and permanent land rights when there is an operational requirement in support of the FAA's mission to provide the safest most efficient aerospace system in the world. This includes land to provide space for FAA facilities and equipment, such as navigational aids and communication systems that are location specific, meaning there is nowhere else the equipment can be placed that will provide the service required. Permanent land rights include utility and access easements.

On June 7, 1987, Washington Dulles International and Washington National Airports were transferred to the Metropolitan Washington Airports Authority under a 50-year lease authorized by the Metropolitan Washington Airports Act of 1986, Title VI of Public Law 99-500. All property was transferred to the Metropolitan Washington Airports Authority, and the Federal government holds title to the lease. In 2003, the Secretary of Transportation approved a 30-year extension of the lease agreement. This land is therefore categorized as commercial use land.

To acquire land, the FAA must comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, also known as the

Uniform Relocation Act (URA). Provisions of the URA are mandatory and provide minimum real property acquisition policies for appraisal, negotiation, and property possession standards and requirements. Title 49 Code of Federal Regulations Part 24 (49 CFR 24), Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs, promulgates rules to implement the Uniform Relocation Act.

It is policy of the FAA to purchase real property interests that are in the best interest of the FAA and at fair and reasonable prices. A lease versus purchase analysis must be completed for all prospective real property land acquisitions. All lease versus purchase analyses must take into consideration the anticipated term to satisfy the FAA's needs. The lease versus purchase analysis is used to determine the most cost-effective acquisition strategy.

It is also FAA policy to identify and evaluate environmental conditions prior to the acquisition or disposal of land to inform decision-making and minimize potential environmental liabilities.

As of September 30, 2022 and 2021, the estimated acreage for land and permanent land rights (presented in actual acreage), by predominant use, were:

	2022	2021
Land and permanent land rights		
Operational	68,036	69,331
Commercial	11,802	11,802
Total land and permanent land rights	79,838	81,133

There was approximately 971 and 968 acres of land and permanent land rights held for disposal as of September 30, 2022 and 2021, respectively.



Air traffic control tower at
Hartsfield-Jackson Atlanta
International Airport in Atlanta, GA.

📷 **FAA Photo**

OTHER INFORMATION



Aerial view of Las Vegas, NV from the cockpit of a Robinson R44 Raven II.

📷 Photo by Colton Kresser via Pixabay.com

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 2022 audit.

TABLE 1: Summary of Financial Statement Audit					
Audit Opinion	Unmodified				
Restatement	No				
Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Ending Balance
Total Material Weaknesses	0	0	0	0	0

Management Assurances Summary

Table 2 is a summary of management assurances for FY 2022 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 of 1982 (FMFIA). The last portion of Table 2 summarizes the FAA's compliance with the Federal Financial Management Improvement Act of 1996 (FFMIA).

TABLE 2: Summary of Management Assurances						
Effectiveness of Internal Control over Financial Reporting (FMFIA § 2)						
Statement of Assurance	Unmodified					
Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Reassessed	Ending Balance
Total Material Weaknesses	0	0	0	0	0	0

Effectiveness of Internal Control over Operations (FMFIA § 2)						
Statement of Assurance	Unmodified					
Material Weaknesses	Beginning Balance	New	Resolved	Consolidated	Reassessed	Ending Balance
Total Material Weaknesses	0	0	0	0	0	0

Conformance with Federal Financial Management System Requirements (FMFIA § 4)						
Statement of Assurance	Federal Systems conform to financial management system requirements					
Non-Conformances	Beginning Balance	New	Resolved	Consolidated	Reassessed	Ending Balance
Total non-conformances	0	0	0	0	0	0

Conformance with Federal Financial Management System Requirements (FMFIA § 4)		
Non-Conformances	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. U.S. Standard General Ledger at Transaction Level	No lack of compliance noted	No lack of compliance noted

Payment Integrity

The Payment Integrity Information Act of 2019 (PIIA) requires agencies to identify programs and activities susceptible to significant improper payments. The purpose of the PIIA is to improve efforts to identify, prevent, reduce, and recover government-wide improper payments. Specifically, the PIIA requires agencies to identify and estimate their improper payments, conduct payment recovery audits, reuse recovered improper payments, and report compliance actions.

Under the PIIA, agencies must assess all programs and financial activities in order to identify those that are most susceptible to improper payments. This risk assessment allows agencies to identify and focus on areas that have the potential for significant improper payments.

The Office of Management and Budget (OMB) Circular A-123, Appendix C, *Requirements for Payment Integrity Improvement* (M-21-19), dated March 5, 2021, provides guidance on the implementation of PIIA. 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 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 because of insufficient or lack of documentation, this payment must also be considered an improper payment.

The OMB defines significant improper payments as those payments exceeding both \$10 million and 1.5 percent of total program payments, or those payments exceeding \$100 million. The FAA's FY 2022 PIIA review did not identify any programs or activities with a potential for significant improper payments as determined by the OMB.

On March 19, 2021, the OMB issued a memorandum, *Promoting Public Trust in the Federal Government*

through Effective Implementation of the American Rescue Plan Act and Stewardship of the Taxpayer Resources (M-21-20), that requires agencies to work with the Pandemic Response Accountability Committee and agencies' inspectors general to strengthen payment integrity. The goal of collaborating is to minimize the risk of waste, fraud, and abuse, and to improve the overall award and administration of financial assistance programs with an increased focus on human-centered programs and services designed to achieve more equitable results.

On March 30, 2018, the OMB issued a memorandum, *Implementation of Internal Controls and Grant Expenditures for the Disaster-Related Appropriations* (M-18-14), 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 PIIA. For more detailed information on payment integrity efforts, see the DOT reporting at <https://www.paymentaccuracy.gov/>.

Federal Aviation Administration Process

The FAA's process for complying with PIIA and OMB Circular A-123, Appendix C, consists of the following steps:

1. Review programs 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 the occurrence of future improper payments.

For FY 2022 reporting, the Office of Inspector General (OIG) conducted an audit to assess the FAA's policies for awarding and overseeing Coronavirus Aid, Relief, and Economic Security (CARES) Act grants. (For more information, see the OIG Report: *FAA Quickly Awarded*

CARES Act Funds but Can Enhance Its Oversight Approach to Promote Effective Stewardship at <https://www.oig.dot.gov/library-item/39017>). The OIG requested improvements to the FAA's oversight process, and we are working to adopt these recommendations. Additionally, we completed risk assessments for Coronavirus Response and Relief Supplemental Appropriations Act and Grants-in-Aid for Airports programs. The preliminary results of this quantitative assessment showed that improper payments did not exceed the statutory thresholds, thus the program is not considered susceptible to significant improper payments.

Actions Taken to Address Auditor Recovery Recommendations

The DOT performed a department-wide recapture audit, which included the FAA's programs and activities, and it worked with the FAA's Enterprise Services Center to initiate recovery of any FAA overpayments and to identify payment process weaknesses. External auditors do not perform this work, and we have no corrective actions to address.

Since the overpayments identified in FY 2022 were of immaterial amounts, DOT determined that it was not cost-effective to report them individually by DOT agency (i.e., FAA). Instead, DOT will report results at the department level in the DOT's FY 2022 Agency Financial Report by November 15, 2022.



A Piper Cherokee in the hangar at Chandler Municipal Airport in Chandler, AZ.

 City of Chandler

Civil Monetary Penalty Inflation Adjustments

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Unaudited

The Federal Civil Penalties Inflation Adjustment Act of 2015, 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.

Statutory Authority	Penalty	Year of Enactment	Latest year of adjustment (via statute or regulation)	Current Maximum Penalty or Penalty Range	Location for Penalty Update Details
49 U.S.C. 5123(a)(1)	Violation of hazardous materials transportation law	1975	2022	\$89,678	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 5123(a)(2)	Violation of hazardous materials transportation law resulting in death, serious illness, severe injury, or substantial property destruction	2005	2022	\$209,249	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 5123(a)(3)	Violation of hazardous materials transportation law relating to training	2005	2022	\$540-\$89,678	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 44704(d)(3)	Knowing presentation of a nonconforming aircraft for issuance of an initial airworthiness certificate by a production certificate holder	2020	2022	\$1,062,220	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 44704(e)(4)	Knowing failure by an applicant for or holder of a type of certificate to submit safety critical information or include certain such information in an airplane flight manual or flight crew operating manual	2020	2022	\$1,062,220	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 44704(e)(5)	Knowing false statement by an airline transport pilot certificate holder with respect to the submission of certain safety critical information	2020	2022	See entries for 49 U.S.C. 46301(a)(1) and (a)(5).	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 44742	Interference by a supervisory employee of an organization designation authorization (ODA) holder that manufactures a transport category airplane with an ODA unit member's performance of authorized functions	2020	2022	See entries for 49 U.S.C. 46301(a)(1).	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 44802 note	Operation of an unmanned aircraft or unmanned aircraft system equipped or armed with a dangerous weapon	2018	2022	\$27,344	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$37,377	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$1,644	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)

Continued on next page.

Statutory Authority	Penalty	Year of Enactment	Latest year of adjustment (via statute or regulation)	Current Maximum Penalty or Penalty Range	Location for Penalty Update Details
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	2022	\$1,664	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	Increase above otherwise applicable maximum amount not to exceed 3 times the amount of revenues that are used in violation of such section.	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$14,950	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$14,950	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$14,950	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$14,950	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
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	2022	\$14,950	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 46301 note	Individual who aims the beam of a laser pointer at an aircraft in the airspace jurisdiction of the United States, or at the flight path of such an aircraft	2016	2022	\$28,605	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 46301(b)	Tampering with a smoke alarm device	1987	2022	\$4,799	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 46302	Knowingly providing false information about alleged violation involving the special aircraft jurisdiction of the United States	1984	2022	\$26,066	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 46318	Physical or sexual assault or threat to physically or sexually assault crewmember or other individual on an aircraft, or action that poses an imminent threat to the safety of the aircraft or individuals on board	2000	2022	\$39,247	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 46319	Permanent closure of an airport without providing sufficient notice	2003	2022	\$14,950 per day	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
49 U.S.C. 46320	Operating an unmanned aircraft and in so doing knowingly or recklessly interfering with a wildfire suppression, law enforcement, or emergency response effort	2016	2022	\$22,884	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)

Continued on next page.

Statutory Authority	Penalty	Year of Enactment	Latest year of adjustment (via statute or regulation)	Current Maximum Penalty or Penalty Range	Location for Penalty Update Details
49 U.S.C. 47531	Violation of 49 U.S.C. 47528-47530 or 47534, relating to the prohibition of operating certain aircraft not complying with stage 3 noise levels	1990	N/A	See entries for 49 U.S.C. 46301(a)(1) and (a)(5)	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)
51 U.S.C. 50917 (c)	Violation of 51 U.S.C. 50901-50923, a regulation issued under these statutes, or any term or condition of a license or permit issued or transferred under these statutes.	1984	2022	\$262,666	Federal Register; 87 Fed. Reg. 15,839 (March 21, 2022)

Grants Programs

The following is 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 has elapsed by two years or more prior to September 30, 2022 (i.e., on or before September 30, 2020).

Category	2-3 Years	4-5 Years	>5 Years
Number of Grants/Cooperative Agreements with Zero Dollar Balances	46	1	8
Number of Grants/Cooperative Agreements with Undisbursed Balances	23	8	8
Total Amount of Undisbursed Balances (Dollars in Thousands)	\$9,656	\$14	\$179

In FY 2022, the FAA continued to review expired grants and made significant progress closing out grants. There are three key management challenges that lead to delays in grant closeouts. These challenges include:

- Grant recipient has an audit or pending legal action.
- Grant recipients' untimely submission of closeout documentation to the FAA.
- Grants officer training for new FAA personnel.

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



The Inouye Solar Telescope, colocated with the FAA Communications Facility, in Haleakala National Park in Maui, HI.

📷 Photo by Tremayne Cobb

Climate-Related Financial Risk

Environmental impacts, such as those resulting from climate change, can have potentially profound impacts on the assets and infrastructure supporting the nation's airspace system. Executive Order 14008, *Tackling the Climate Crisis at Home and Abroad*, requires agencies to assess their critical facilities and assets for vulnerabilities from the expected impacts of climate change. The executive order also charges the federal government to bolster resiliency and reduce disruptions to national supply chains, including the national airspace system.

The FAA collaborated with the Office of the Secretary of Transportation and the U.S. DOT Volpe Center to develop the Climate Hazard Evaluation and Risk tool which allows all DOT operating administrations to assess their facilities with publically available data and present accurate risks to management along with recommended mitigation techniques. The tool was available for FAA to begin assessing high-priority facilities late in FY 2022.

In FY 2022, FAA was appropriated an additional \$100 million in Facilities and Equipment funds for necessary expenses related to the impacts of Hurricane Ida. This includes maintenance and repairs to FAA facilities along the hurricane path that aim to reduce future risks from climate change. This follows over \$32 million of funding in response to Hurricanes Harvey and Nate (2017).

Climate change can also have potentially profound impacts on airports. The FAA recognizes that it may need to make investments for airports exposed to flooding and other risks. Permafrost collapse in Alaska has already led to an airport relocation, with other relocations being planned. Certain runways, taxiways, aprons, and other airport infrastructure may need

to be rebuilt, replaced, or relocated. For example, as temperatures rise, certain aircraft may require reduced payload to safely takeoff with available runway length. The FAA continues to assess these risks and is working with airports to address and mitigate these risks through infrastructure grants and through its sustainability program. More broadly, in FY 2022, FAA continued to work with the Volpe Center, airports, and airport associations to develop a resilience framework to assist FAA and airport operators to better incorporate resilience analysis and prioritization into airport project planning and funding. This program will:

- Execute case studies to identify best practices and gaps in current resiliency and infrastructure planning processes.
- Develop a resilience analysis framework that will assist airports and their consultants with conducting repeatable and effective resilience assessments.
- Address framework criteria — over varying timescales and scenarios — for projected impacts on pavement, drainage, and electrical systems performance.
- Assist FAA with prioritizing resiliency investments.

While climate change presents some degree of risk to FAA's assets, program costs, and financial position, such matters are not reflected in the FAA's financial statements because they do not meet the accounting standards for recognition of liabilities.

For additional information on climate-related risk, see the DOT's Climate Action Plan for Resilience, <https://www.transportation.gov/sustainability/climate/dot-climate-action-plan-resilience>.

Agency Audit Resolution Reports

OIG

FAA management is mindful of the statutory requirements included in the Inspector General Act, as amended; OMB Circular A-50, *Audit Follow-up*; and OMB Circular A-123, *Management's Responsibility for Enterprise Risk Management and Internal Control*. Management has a responsibility to complete actions, in a timely manner, on audit recommendations where the FAA has reached agreement with the DOT OIG. Management must make a decision¹ regarding audit recommendations within a six-month period after the issuance of the audit report and implement a management decision within one year, to the extent practicable.

On October 1, 2021, the FAA had a beginning balance of 190 audit recommendations. During FY 2022, the DOT OIG issued a total of 44 audit recommendations — three in questioned/unsupported cost, and 41 (non-financial) procedural recommendations. During FY 2022, the FAA closed 59 recommendations, which left 175 recommendations open at the end of the fiscal year. Of

the number closed, 54 were procedural or non-monetary and three were questioned/unsupported costs, which represented \$360 million in disallowed costs; however, \$0 was recoverable. As of September 30, 2022, the FAA has no recommendations over six months old without a management decision, and three recommendations had a management decision more than a year old.

The tables below show that the FAA made management decisions to act on three audit recommendations with management efficiencies² and planned recoveries³ that totaled more than \$360 million. In addition, the FAA completed final action for three monetary audit recommendations that represented \$3.7 million in cost savings.

¹ A "management decision" is the evaluation of a recommendation by management and a decision upon an appropriate course of action.

² "Management efficiencies" relate to monetary recommendations that could allow the agency to use funds more efficiently. The recommendation can include (a) savings from such items as reprogramming or the recapture of unliquidated obligations; (b) more efficient contract negotiations; or (c) the reduction or elimination of payments, costs, or expenses the agency would incur. This term has the same meaning as "funds put to better use."

³ "Planned recoveries" relate to collections of disallowed costs.

Management Action on Recommendations that Funds be Put to Better Use

	Recommendations	Dollar Value (Dollars in Thousands)
Management decisions:		
Beginning balance on October 1, 2021	7	\$ 5,205,916
Management decisions during the fiscal year	-	-
Total management decisions made	7	5,205,916
Final actions:		
Recommendations implemented	2	\$ 4,917,300
Recommendations not implemented	-	-
Total final actions	2	4,917,300
Ending balance on September 30, 2022 ¹	5	\$ 288,616

Management Action on Audit Recommendations with Disallowed Costs

	Recommendations	Dollar Value (Dollars in Thousands)
Management decisions:		
Beginning balance on October 1, 2021	4	\$ 12,498
Management decisions during the fiscal year	3	360,353
Total management decisions made	7	372,851
Final actions:		
Collections/offsets	-	\$ 3,712
Allowable cost	-	356,641
Total final actions ²	3	360,353
Ending balance on September 30, 2022 ¹	4	\$ 12,498

Note: The data in these tables do not include procedural (non-monetary) audit recommendations.

¹ "Ending balance September 30, 2022" equals "Total management decisions made" less "Total final actions."

² An audit recommendation can involve multiple recovery types (collections/offset, other recovery, write-offs).

Government Accountability Office (GAO)

On October 1, 2021, the FAA had a beginning balance of 72 open audit recommendations. During FY 2022, the FAA closed 20 recommendations and GAO issued a total of 4 new recommendations. As of September 30, 2022, GAO had 26 audits underway within the FAA.



Astra Venture Class Launch Services Demonstration 2 on February 10, 2022 out of Cape Canaveral Space Force Station.

📷 [Astra Space/NASASpaceFlight.com](https://www.astraspace.com/)

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 has grown from \$18 million in 1997 to nearly \$500 million in annual revenues in FY 2022, with over \$1 billion in assets. The Franchise Fund is comprised of several service providers, through which it offers a number of services. These services include administrative services such as accounting, travel, duplication, multimedia, and information technology. Other services include logistics and materiel management, aircraft maintenance, management training, international aviation training, and acquisition support. The Franchise Fund's major customers are programs within the FAA's lines of business, other 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 (MMAC) in Oklahoma City, Oklahoma. The ESC is a full service financial management provider and designated by the OMB as one of four legacy shared service providers to provide financial management services and information systems security services to federal agencies. OMB memorandum M-19-16, *Centralized Mission Support Capabilities for the Federal Government*, established a process for designating agencies as Quality Services Management Offices and directs legacy designated providers, such as the ESC, to propose a joint business case with the Quality Services Management Office designated for financial management to accept any new customers, expand services to existing customers, or make investments in technology or services for these functions.

There are two major components of the ESC — financial services and information services. The efficiencies and economies of scale created by this integration make the ESC an attractive option to government customers seeking a provider of financial management services.

- **Financial Services** — Offers cost-effective ways to integrate and manage accounting needs, from transaction processing to financial statements, to reporting and analysis. ESC Financial Services helps with regulatory compliance, achieving clean audits, and keeping projects on-time.
- **Information Services** — Provides a wide array of platforms to manage information. Offers support in: Application Services, Help Desk Services, Data Center Services, Information System Security, Media Solutions, Office Automation Support, Project Management, National Wireless Program, and Telecommunication Services.

The DOT was the first cabinet level department to consolidate their entire financial operations, using DELPHI as the system, and ESC as the service provider. In FY 2022, ESC integrated the OPM onto the DELPHI financial system. As a result, ESC is currently the only Federal financial service provider to manage financial operations for two cabinet level agencies.

The FAA Logistics Center is also located at the MMAC and provides comprehensive logistics support and a 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. The FAA Logistics Center operates the FAA's only distribution center. Services include materiel management (e.g., provisioning, cataloging, acquisition, inventory management, inventory supply), reliable and cost-effective repair of 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.

Flight Program Operations is also based at the MMAC. This service provider offers total aircraft support, including maintenance, quality assurance, and overall program management, for the FAA's uniquely equipped flight inspection aircraft fleet. Flight Program Operations offers preventative services, aircraft repair, overhaul, and modification services, 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 provides non-technical training in support of the FAA mission. This Institute designs and delivers face-to-face instructor-led training at centralized and field locations, virtual instructor-led training, web based training, and mobile access. The curriculum of the FAA Leadership and Learning Institute emphasizes workforce development by providing FAA employees with tools to proactively address challenges, share knowledge, and collaborate to meet the mission of the FAA.

The International Training Division (ITD), an element of the FAA Academy, is located at the MMAC. ITD 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 whose mission is to support the acquisition requirements of the other Franchise Fund service providers.

Corporate Services is the Franchise Fund's program management activity that coordinates and supports the Franchise Fund's operations.

Inter-Entity Cost

The FAA provides general and administrative support services, such as managerial, facilities, and security services, to the Franchise Fund that support the Franchise Fund's business-type operations. Because these support services are provided to the Franchise Fund at no cost, the Franchise Fund in turn provides services to the FAA at a price less than full cost. The difference between the full cost and the costs billed to the FAA is the overhead rate that the Franchise Fund uses to recover these general and administrative costs, as appropriate, from non-FAA customers.

The estimated cost of the FAA general and administrative support services were \$47 million in fiscal year 2022 and \$55 million in fiscal year 2021.

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ADMINISTRATIVE SERVICES FRANCHISE FUND
COMBINED BALANCE SHEETS

As of September 30, 2022 and 2021

(Dollars in Thousands)

Unaudited

Assets	2022	2021
Intragovernmental		
Fund balance with Treasury	\$ 393,188	\$ 399,395
Advances and prepayments	1,078	748
Total intragovernmental	394,266	400,143
Other than intragovernmental/with the public		
Accounts receivable, net	30	29
Inventory and related property, net	750,147	730,419
General property, plant, and equipment, net	12,374	12,871
Total other than intragovernmental/with the public	762,551	743,319
Total assets	\$ 1,156,817	\$ 1,143,462
Liabilities		
Intragovernmental		
Accounts payable	\$ 258	\$ 95
Advances from others and deferred revenue	308,193	294,549
Other liabilities	3,478	3,166
Total intragovernmental	311,929	297,810
Other than intragovernmental/with the public		
Accounts payable	21,313	25,697
Federal employee benefits payable	328	289
Advances from others and deferred revenue	259	335
Other liabilities	20,500	19,612
Total other than intragovernmental/with the public	42,400	45,933
Total liabilities	\$ 354,329	\$ 343,743
Net position		
Cumulative results of operations	\$ 802,488	\$ 799,719
Total net position	802,488	799,719
Total liabilities and net position	\$ 1,156,817	\$ 1,143,462

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ADMINISTRATIVE SERVICES FRANCHISE FUND
CONSOLIDATED STATEMENTS OF NET COST

For the Years Ended September 30, 2022 and 2021

(Dollars in Thousands)

Unaudited

	2022							
	Enterprise Services Center	Corporate Services	Flight Program Operations	FAA Leadership & Learning Institute	International Training	Acquisitions	FAA Logistics Center	Total
Gross costs								
Operating cost	\$ 152,132	\$ (183)	\$ 55,973	\$ 6,174	\$ 2,304	\$ 5,077	\$ 280,835	\$ 502,312
Imputed cost (OPM)	4,910	60	932	54	-	237	4,239	10,432
Less earned revenues								
Operating revenue	144,532	-	55,766	5,783	2,056	3,791	276,434	488,362
Operating profit/(loss) before gains/(losses)	\$ (12,510)	\$ 123	\$ (1,139)	\$ (445)	\$ (248)	\$ (1,523)	\$ (8,640)	\$ (24,382)
Net gains/(losses)	-	-	-	-	-	-	16,723	16,723
Total profit/(loss)	<u>\$ (12,510)</u>	<u>\$ 123</u>	<u>\$ (1,139)</u>	<u>\$ (445)</u>	<u>\$ (248)</u>	<u>\$ (1,523)</u>	<u>\$ 8,083</u>	<u>\$ (7,659)</u>

	2021							
	Enterprise Services Center	Corporate Services	Flight Program Operations	FAA Leadership & Learning Institute	International Training	Acquisitions	FAA Logistics Center	Total
Gross costs								
Operating cost	\$ 162,109	\$ (310)	\$ 54,715	\$ 6,264	\$ 850	\$ 4,574	\$ 268,868	\$ 497,070
Imputed cost (OPM)	4,734	72	959	63	-	220	4,213	10,261
Less earned revenues								
Operating revenue	155,288	-	53,767	6,078	700	3,706	271,006	490,545
Operating profit/(loss) before gains/(losses)	\$ (11,555)	\$ 238	\$ (1,907)	\$ (249)	\$ (150)	\$ (1,088)	\$ (2,075)	\$ (16,786)
Net gains/(losses)	-	-	-	-	-	-	14,173	14,173
Total profit/(loss)	<u>\$ (11,555)</u>	<u>\$ 238</u>	<u>\$ (1,907)</u>	<u>\$ (249)</u>	<u>\$ (150)</u>	<u>\$ (1,088)</u>	<u>\$ 12,098</u>	<u>\$ (2,613)</u>

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
ADMINISTRATIVE SERVICES FRANCHISE FUND
COMBINED STATEMENTS OF CHANGES IN NET POSITION
For the Years Ended September 30, 2022 and 2021
(Dollars in Thousands)
Unaudited

	2022	2021
Cumulative results of operations		
Beginning balances	\$ 799,719	\$ 792,073
Transfers-in/out without reimbursement	(4)	(2)
Imputed financing	10,432	10,261
Profit/(loss)	(7,659)	(2,613)
Net change in cumulative results of operations	2,769	7,646
Cumulative results of operations - ending	<u>\$ 802,488</u>	<u>\$ 799,719</u>
Net position	<u>\$ 802,488</u>	<u>\$ 799,719</u>

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 DOT IG's report, issued early each fiscal year, highlights urgent issues facing the entire DOT, of which FAA is one component organization.

DOT's FY 2023 Top Management Challenges report

On November 2, 2022 — seven days before publication of this FAA FY 2022 PAR — the DOT IG issued its forward looking report identifying the top management and performance challenge areas that DOT would be facing in FY 2023. The IG's finalized report is 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.

DOT assigned the FAA responsibility for addressing five of the challenge areas from within the IG's forward-looking FY 2023 report. Next year, FAA's PAR will summarize the FAA's FY 2023 actions and accomplishments toward addressing these challenges, as well as what remains for FY 2024 and beyond for each key challenge.

DOT's FY 2022 Top Management Challenges report

In this FY 2022 PAR, we present a summary of the agency's accomplishments and actions taken in FY 2022 toward the challenges applicable to FY 2022, which the DOT IG published on October 27, 2021. The IG's FY 2022 memorandum is provided next, and while it is titled "DOT's Fiscal Year 2022 Top Management Challenges," the report addresses both management and performance challenges for the entire department. The pages immediately following contain a summary prepared by the FAA of the challenges specifically applicable to the FAA and the actions it took during FY 2022 to address those FAA-specific challenges. The FAA provides this summary in order to present a comprehensive perspective on the FAA's FY 2022 performance activities and accomplishments towards the challenges that were communicated at the beginning of the fiscal year, and what remains for FY 2023 and beyond.



U.S. Department of Transportation
Office of Inspector General

Memorandum

Date: October 27, 2021

Subject: INFORMATION: DOT's Fiscal Year 2022 Top Management Challenges
Report No. PT2022007

From: Eric J. Soskin 
Inspector General

To: The Secretary
Deputy Secretary

Transportation plays a fundamental role in the lives of every American, connecting us to our communities, our jobs, and each other. As such, the Department of Transportation's (DOT) mission is to create the safest, most efficient, and modern transportation system in the world, one which boosts our economic productivity and global competitiveness and enhances our quality of life.

The Office of Inspector General (OIG) supports the Department's mission by conducting audits and investigations to identify needed improvements to the management and execution of transportation programs. Each year, as required by law, we report on DOT's top management challenges to aid the Department in meeting its strategic priorities across various program areas. These priorities include keeping travelers safe, engaging with emerging technologies, and maintaining and improving America's infrastructure.

As it works to meet these priorities, DOT continues to face the extraordinary challenge of responding to the global pandemic of Coronavirus Disease 2019 (COVID-19). COVID-19 brought unprecedented impacts to the transportation industry that continue to play out across our Nation's economy, workforce, and lives. In particular, the Department has received more than \$106 billion in funding for COVID-19 relief across all modes of transportation. While DOT is moving quickly to distribute these funds, the speed at which they are disbursed presents oversight challenges to ensure they are spent efficiently and effectively. Accordingly, our report integrates a discussion of COVID-19 challenges within each priority area for the Department.

For example, DOT's top priority remains ensuring transportation safety. It will be critical for the Federal Aviation Administration to strengthen its oversight of aircraft certification processes and air carrier safety programs, while also enhancing risk-based decisions as air travelers and the aviation industry continue to respond to the pandemic. In addition, the safety of our Nation's roads, rails, and pipelines depends on the Department's efforts to ensure compliance with safety regulations. Strengthening its oversight of surface transportation safety programs will also include addressing the economic effects of the pandemic on State and local transportation program funding.

Maintaining and upgrading our Nation's transportation infrastructure is another priority made further complex by the challenges of COVID-19. For example, the pandemic's impact on air traffic levels has delayed efforts to modernize our Nation's air traffic system. Further, the Department is now responsible for disbursing and overseeing billions of COVID-19 relief funds on top of its existing efforts to oversee construction and improvement of the Nation's aging highways, bridges, and tunnels. A key step will be to adjust the Department's oversight approach to account for the pandemic's impact on program risks and operations, such as in-person inspections and travel.

Overall, the large influx of COVID-19 relief funds will challenge DOT to sharpen its focus on its contract, grant award, and administrative practices to safeguard Federal tax dollars and detect fraud, waste, and abuse. This includes monitoring significantly more grants and grantees to reduce the increased risk of improper payments Departmentwide. Equally important will be protecting the integrity of DOT's financial management information systems to effectively administer and oversee COVID-19 relief funds, while partnering with other agencies and industry partners to resolve new and recurring cybersecurity challenges.

As DOT addresses these and other challenges, it will also be focused on another strategic priority—preparing America's transportation systems for a future in which America is a leader in innovation and providing opportunity to all Americans. Among the many facets the Department must tackle will be the safe integration of new transportation technologies, including advanced energy sources, Unmanned Aircraft Systems (UAS), commercial space operations, and vehicle automation. At the same time, DOT will need to apply lessons learned from the pandemic's impact on transportation supply chains and incorporate issues such as climate change into its decision-making processes.

Finally, the Department has faced COVID-19-related challenges to its overall operations and workforce management. On March 16, 2020, DOT transitioned to maximum telework. With the emergence of new COVID variants and the need to adapt to evolving public health guidance, it will be critical for DOT to realign its processes with operational and employee needs as it prepares to safely bring its workplace into the future and transition employees and contractors beyond a maximum-telework posture.

We considered several criteria to identify the Department's top management challenges for fiscal year 2022, including safety impact, documented vulnerabilities, large dollar implications, and the Department's ability to effect change. In the enclosed report, we identify and discuss the following challenge areas:

- Aviation Safety
- Surface Transportation Safety
- Air Traffic Control and Airspace Modernization
- Surface Transportation Infrastructure
- Contract and Grant Fund Stewardship
- Information Security
- Financial Management
- Innovation and the Future of Transportation
- Evolving Operations and Workforce Management

As always, we will continue to work closely with DOT officials to support the Department's efforts to improve safety, enhance efficiency, and protect resources, including overseeing COVID-19 relief funds. We appreciate the Department's commitment to prompt action in response to the challenges we have identified. Our final report and the Department's response will be included in DOT's Annual Financial Report, as required by law.

If you have any questions regarding this report, please contact me at (202) 366-1959. You may also contact Barry J. DeWeese, Principal Assistant Inspector General for Auditing and Evaluation, at (202) 366-1302.

#

cc: DOT Audit Liaison, M-1

Of the 17 key challenges identified by the IG for FY 2022, DOT tasked the FAA with addressing the following 8 challenges:

- **Maintaining Confidence in the Aircraft Certification Process**
- **Advancing the FAA's Air Carrier Oversight to Keep Pace with Safety Management System Requirements**
- **Managing Expectations of NextGen Benefits to Justify Investments**
- **Deployment of Controller Automation Tools to Improve Efficiency**
- **Dedicating Sufficient Oversight Resources for Contract and Grant Funds for Airports**
- **Dedicating Sufficient Oversight Resources for Contract and Grant Funds for Acquisition & Business Services**
- **Safely Integrating New Technologies into Transportation Systems — UAS**
- **Safely Integrating New Technologies into Transportation Systems — Commercial Space Operations**

After the IG's report was issued, the FAA coordinated with DOT to develop an "Action Plan" that listed actions and timelines for addressing each of the challenges. The FAA then developed an "Actions Taken" report (published here) that describes the progress the FAA made throughout FY 2022 in addressing each of the challenges. This Action Plan, the Actions Taken report, and the IG's comprehensive report identifying top management challenges for FY 2022 are posted on FAA's website at https://www.faa.gov/about/plans_reports#tmc.

Maintaining Confidence in the Aircraft Certification Process

Why this is a challenge

Multiple OIG reviews have highlighted significant issues related to the FAA's oversight of the aircraft certification process. Federal law allows the FAA to delegate certain functions to organizations like Boeing to determine compliance with regulations. The FAA's certification guidance does not adequately address integrating new technologies into existing aircraft models. The FAA did not have a complete understanding of Boeing's safety assessments until after recent accidents. Communication gaps between FAA certification offices, and between FAA

and Boeing, further hindered the Boeing 737 MAX certification process.

Progress in meeting the challenge

- **Safety Management Systems (SMS)** — The FAA developed and deployed an SMS course for all Aircraft Certification employees. The FAA continued to foster and expand the voluntary adoption of SMS in design and manufacturing, with 16 design and manufacturing companies currently participating.
- **Delegation** — In October 2021, the FAA issued supplemental policy that requires FAA to approve unit members, who are the employees in a company's Organization Designation Authorization (ODA) holder's group that perform the delegated functions. The policy also assigns FAA advisors for ODA unit members. In September 2022, the FAA issued additional policy to prevent ODA holder interference with ODA unit members and to facilitate open communication between unit members and the FAA. The newly formed ODA office on-boarded 30 staff members in September 2022.
- **Integration of Certification and Oversight** — The Integrated Program Management Team provided recommendations for policy and guidance updates. The FAA initiated an Integrated Program Management prototype for three projects in FY 2022. Additionally, the FAA continues monthly program reviews for significant projects. The FAA expanded and enhanced the Technical Advisory Board (TAB) process in February 2022. Reviews of high-priority projects are held on a regular basis and include technical experts from across the agency. The TABs ask questions or make recommendations that help prompt project leaders to add more context to their analysis, fill in actual or potential gaps, and better prepare for policies, issues, or feedback that may emerge.
- **Culture of Safety and Excellence** — In August 2022, the FAA initiated a comprehensive review of its engineering and inspector workforce to determine if the agency has the right skill sets within the workforce to adequately oversee the aviation industry, including the influx of new technology. To date, the FAA has completed competency and training reviews for more than 700 engineers. In support of a just safety culture, the FAA implemented the Voluntary Safety Reporting Program (VSRP) in April 2021. The FAA is measuring the effectiveness of the VSRP and will make enhancements as the program evolves.

What needs to be done

- **Safety Management Systems (SMS)** — The FAA anticipates issuing the Notice of Proposed Rulemaking (NPRM) for SMS applicable to 14 Code of Federal Regulations parts 21, 91, 135, and 145 by the end of calendar year 2022. In the interim, the FAA continues to foster and expand voluntary adoption of SMS in design and manufacturing.
- **System Safety and Human Factors** — The FAA anticipates publishing the System Safety Assessment Notice of Proposed Rulemaking in calendar year 2023. The FAA is also implementing recommendations made by the System Safety Implementation Team and will issue new policy to require disclosure of safety critical information by manufacturers.
- **Culture of Safety and Excellence** — The FAA anticipates completing its comprehensive review in calendar year 2022. In support of a just safety culture, the FAA is conducting an assessment of AVS safety culture that will be completed in calendar year 2022.

Advancing the FAA's Air Carrier Oversight to Keep Pace with Safety Management System Requirements

Why this is a challenge

The FAA faces challenges in achieving the proactive benefits of SMS while also ensuring regulatory compliance.

Progress in meeting the challenge

- The FAA took actions to promote SMS, including ensuring the FAA is properly resourced to support the industry as SMS expands. The FAA continues to emphasize regulatory compliance through the FAA's Compliance Program and does not permit operations in continued noncompliance, even when a risk is under analysis and corrective action is in development through a certificate holder's SMS.
- The FAA improved its inspector workforce staffing model, as recommended in the 2013 IG Audit. The agency fully or partially implemented most of the 25 recommendations made by the National Research Council and continued exploring options to address staffing needs and resource challenges.
- The FAA made progress towards completing each recommendation from last year's IG report concerning Southwest Airlines. In early FY 2022, the FAA completed a series of presentations focused on part 121 operations that stressed the responsibility of

the carrier to cease regulatory noncompliance at the time of discovery. These presentations were delivered internally to FAA Certificate Management Offices, air carrier executive management, and members of the Operation Specialists Working Group (comprised of aviation industry certificate holders, industry trade organizations, and the FAA). The presentations reinforced that SMS outputs could not be used to justify continued noncompliance.

- The FAA also made progress in addressing the recommendations from the 2021 IG report concerning American Airlines. In response to the recommendation about verification of compliance with corrective actions, the FAA published new guidance that does not allow closure letters on corrective actions to be sent until corrective actions are completed and validated to the FAA's satisfaction. The FAA also implemented an enhancement to its Safety Assurance System that requires input if corrective actions were validated before closing the regulatory compliance action. Finally, the FAA continued to emphasize the importance of proper training in ensuring effective safety oversight.

What needs to be done

The FAA is currently implementing several Flight Standards initiatives to improve certificate holder safety outcomes achieved through SMS implementation and to revise FAA inspector education courses and assessment tools to improve SMS performance evaluation and reporting. Efforts include:

- Revising Advisory Circular 120-92e (Safety Management Systems for Aviation Service Providers) to include more industry information on scaling SMS requirements to the size, scope, and complexity of certificate holder operations.
- Revising FAA Order 8900.1, Volume 17 (SMS Voluntary Program) revision to include a "Corporate SMS Process" that allows the industry more flexibility in implementing an SMS across multiple FAA operating certificates.
- Expanding industry SMS implementation and training support through an FAA/industry collaboration entitled "SMS Consultants Program."
- Developing improved FAA SMS data collection tools to better assess certificate holder SMS performance and related benefits.
- Revising inspector SMS training courses to improve SMS assessment capabilities of the Flight Standards' workforce.

Managing Expectations of NextGen Benefits to Justify Investments

Why this is a challenge

Airlines had high expectations for NextGen benefits from key programs including Time-Based Flow Management (TBFM), Terminal Flight Data Manager (TFDM), Terminal Sequence and Spacing (TSAS), Data Communications (Data Comm), and Automatic Dependent Surveillance-Broadcast (ADS-B In). The COVID-19 pandemic delayed implementations and shifted focus to controller training to provide base operations. Airlines have slowed equipage commitments, and the FAA has delayed TSAS and ADS-B In indefinitely. Demand has also been reduced, driving NextGen benefits further into the future.

Progress in meeting the challenge

- The FAA continued to work with industry through the Joint Analysis Team to reach an agreement on methodologies to evaluate benefits of key implementations, including North Texas Metroplex, Wake Turbulence Recategorization, Data Comm, and Established on Required Navigation Performance.
- Through 2021, FAA achieved \$8.5 billion in benefits from implemented NextGen capabilities. These benefits are shown in detail on the NextGen website: <https://www.faa.gov/nextgen/reporting-benefits>.
- The FAA edited the NextGen website to revise the previous projection of \$100 billion in benefits by the early 2030's and to provide reasons for the changes.
- The FAA communicated its rationale for changes to future benefit estimates to the IG, also conveying the conditions needed to make new benefit projections. COVID-19 impacted many of the underlying assumptions of future benefit projections, including aviation demand projections, program schedules and funding, and airline equipage.
- The FAA held several sessions with industry at the ATO Trajectory Based Operations Industry Day in September 2022, and at the Special Joint Analysis Team meeting, to explain the impact of reduced demand on performance measures.

What needs to be done

- The FAA will continue to measure benefits delivered to date by implementations such as North Texas Metroplex, Wake Turbulence Recategorization, Data Comm, expected departure clearance times, and integrated departure/arrival capacity.

- Implemented NextGen capabilities are expected to deliver another \$14 billion of benefits from 2022 to the early 2030s. The FAA will work with industry to assess how to prioritize major new capabilities, including Data Comm, ADS-B In, Traffic Flow Management System, TBFM/TSAS, and TFDM.
- Looking forward, the FAA will need more time to assess changes to the schedules of key programs in order to develop realistic future schedules for NextGen implementations.
- The FAA will continue to work with industry to fully equip aircraft to maximize NextGen benefits.

Deployment of Controller Automation Tools to Improve Efficiency

Why this is a challenge

The FAA has faced challenges in successfully implementing TBFM, and it has delayed planned TSAS implementations for more than three years. Currently, TSAS implementations are planned for only two locations (Denver and Southern California), a reduction from the nine previously planned locations. These reductions are due to changes in prioritization, a furlough, and the COVID-19 pandemic. These obstacles have impacted benefits for the Metroplex program, which aimed to implement Performance Based Navigation in 12 congested metropolitan areas.

The FAA also faces challenges in deploying the TFDM.

Progress in meeting the challenge

TBFM/TSAS

- In FY 2022, the FAA continued to implement TBFM metering tools to condition arrival flows in support of Initial Trajectory Based Operations. TBFM-extended metering already provides spacing to enable a more coordinated flow that feeds into Denver terminal airspace.
- Delays and funding shortfalls caused by COVID-19 impacted the FAA's progress toward TSAS capability. In August 2022, in accordance with industry and stakeholder feedback, the FAA deferred TSAS implementation until a new timeline can be developed.
- In FY 2022, the Denver and Las Vegas Metroplex implementations demonstrated benefits and efficiency gains with arrival metering through fewer miles flown and more efficient spacing to the Terminal Radar Approach Control Facilities boundary and on final approach.

TFDM

- Since January 2022, the TFDM Program significantly increased program activities to recover from the shutdown caused by COVID-19.
- The TFDM team began the implementation process at two key sites (Build 1 Cleveland and Build 2 Charlotte) and early waterfall sites (Indianapolis, Phoenix, Raleigh, Columbus, Las Vegas, Los Angeles, San Jose, and Tampa). These sites are in different stages of the implementation process, which includes site assessment (survey), site prep and design, system installation, optimization and customization, site acceptance, operations transition and familiarization (training), and systems going operational.
- The FAA finalized the software build resulting from William J. Hughes Technical Center Lab and on-site Cleveland/Phoenix operations testing, achieving the Build 1 Operations Suitability Decision in September 2022.

What needs to be done**TBFM/TSAS**

- Now that the TSAS capability has been deferred due to COVID-19 delays and funding shortfalls, the FAA will develop a new implementation timeline.

TFDM

- In FY 2023, the FAA plans to achieve three critical milestones in the acquisition process:
 - Build 1 Initial Operating Capability at the key site in Cleveland in the first quarter of FY 2023.
 - The Independent Operational Assessment a week after Initial Operating Capability.
 - The In-Service Decision (approval to deploy the waterfall) planned for the third quarter of FY 2023.
- The FAA will continue outreach to external stakeholders, including airlines and airports, by providing system demonstrations and integration testing in the TFDM testbed.

Dedicating Sufficient Oversight Resources for Contract and Grant Funds for Airports***Why this is a challenge***

With three COVID-19 airport relief programs up and running in FY 2022 and more than 7,000 grants executed, the FAA focused on building a larger, more specialized staff to handle the larger workload, and the different funding opportunities presented in CRRSAA and ARPA that were not in the CARES Act.

Progress in meeting the challenge

- Hired staff with specific expertise in the airport concessions industry to lead reviews of concessions relief plans that airports will submit to draw down on concessions relief funding.
- Hired additional staff to assist in general grant drawdown requests, outreach to sponsors who have been slower to draw down on their grants, and general reporting and audit requests.
- Continued to meet directly with sponsors to answer questions on eligible expenses, potential development projects, or concessions relief plans.
- Contracted for independent reviews of payment integrity for CRRSAA and ARPA. Contractors reviewed documentation from sponsors on selected samples to determine the strength of the oversight of the CRRSAA program. The contractors also created the initial sample of the ARPA general grants.
- Took steps to implement COVID-19 relief program management restructuring to provide additional management support.

What needs to be done

- Explore additional contract support to assist with the growing requests for data and reports while also planning to wind down the program. The FAA is finalizing the onboarding of additional contract staff to review and approve the SF-425 documentation that sponsors are required to submit annually.
- Continue outreach to sponsors who have been slow to draw down on their grants or to execute grants initially. Upon execution, the period of performance for these grants is four years. As such, the FAA will focus on older CARES Act grants.
- Continue to meet with sponsors to address any questions on the concessions rent relief grants provided by both CRRSAA and ARPA.

- Update guidance to both FAA staff and airport sponsors on any lessons learned, including updated FAQs for all three programs.
- Use contract staff to finalize the CRRSAA grant program review as well as complete their review of the ARPA grant program.
- Work to close out completed grants. In FY 2022, the FAA prioritized closing CARES Act grants. In FY 2023, the FAA will prioritize closing CRRSAA and ARPA grants that have been fully expended.

Dedicating Sufficient Oversight Resources to Contract and Grant Funds for Acquisition & Business Services

Why this is a challenge

Contracting Officer's Representatives who lack required certification may put the implementation of FAA programs at risk.

Progress in meeting the challenge

- In April 2022, the FAA used the Acquisition Learning Institute to strategically communicate, deploy, and manage training and to provide development activities and opportunities for the acquisition workforce.
- In June 2022, the FAA performed a business process reengineering review of the systems and processes used to track and report acquisition workforce certifications.
- In September 2022, the FAA's National Acquisition Evaluation Program expanded to include routine oversight of acquisition training and certification processes.

What needs to be done

The FAA's Acquisition & Business Services has completed and finalized this challenge. No further action is needed.

Safely Integrating New Technologies into Transportation Systems — UAS

Why this is a challenge

The FAA has not issued guidelines to address beyond visual line-of-sight (BVLOS) operation of UAS in the nation's airspace. As a result, achieving full and safe integration of UAS remains a challenge.

Progress in meeting the challenge

- The FAA received and published industry consensus recommendations from the UAS BVLOS Aviation Rulemaking Committee (ARC) in March 2022.
- The FAA held two public listening sessions for the BVLOS ARC Report, one in June 2022 and another in July 2022. Recordings are available on the FAA YouTube Channel at: <https://www.youtube.com/watch?v=YszixFBIrWY> and <https://www.youtube.com/watch?v=EZvdLqsOgJo>.
- The FAA initiated a rulemaking project to update existing regulations for safe, scalable, economically viable, and environmentally advantageous UAS BVLOS operations. The UAS Operations using Special Airworthiness (Regulatory Information Number 2120-AL81) project is the first in a series of rulemaking efforts. The rulemaking team for this effort began work in August 2022.
- The FAA formed a tiger team to review challenges associated with issuing exemptions, including many for BVLOS operations. The tiger team provided its recommendations earlier this summer.
- The BEYOND Program continued focus on enabling UAS BVLOS operations through its partnership with eight state, local, and tribal governments. Through the BEYOND program:
 - The FAA collects operational data (flight; maintenance; and accidents, incidents, and anomalies) from the eight BEYOND Program Lead Participants.
 - With input from the BEYOND Program Lead Participants, the FAA continues to build quantitative measures on the societal and economic impacts of various UAS operations.
 - The FAA used the BEYOND operational data to develop the FAA Aerospace Forecast, Fiscal Years 2022–2042, which can be viewed here: <https://www.faa.gov/dataresearch/aviation/faa-aerospace-forecast-fy-2022-2042>.
 - The FAA provided BEYOND operational data to the BVLOS ARC to inform its rulemaking recommendations. The ARC issued its final report in March 2022.

What needs to be done

- The FAA plans to initiate additional rulemaking for BVLOS UAS operations in FY 2023 that would consider other recommendations from the BVLOS ARC and build on the recommendations from the

UAS Operations using a Special Airworthiness rulemaking effort.

- The FAA plans to implement several approved recommendations from the tiger team in FY 2023.
- The FAA plans to publish a Notice of Proposed Rulemaking for UAS Operations using Special Airworthiness in February 2024.

Safely Integrating New Technologies into Transportation Systems – Commercial Space Operations

Why this is a challenge

Over the past five years, the FAA has gone from licensing approximately one commercial space launch every month to more than one every week, including newly introduced passenger flights. With the federal government and private industry increasingly relying on commercial space operators to meet its needs and to instill public confidence in this changing industry, it is critical to strike the right balance between supporting the industry's continued development and safely integrating its operations into the national air space. This requires effective coordination with industry and other federal agencies.

Progress in meeting the challenge

Space Collaborative Decision Making (SpCDM)

- In April 2022, the FAA completed the legal review of SpCDM and finalized the charter.
- The Space Operation Committee of the SpCDM first convened in June 2022. The participants included commercial space providers, the aviation industry, NASA, U.S. Space Force, and the FAA. Since then, the participants have met, as scheduled, every two months. The SpCDM has also formed several sub-teams regarding data exchange and international coordination. Overall, the SpCDM

conducts information exchange-based forums regarding space operations which inform safe and efficient integration of space operations into the national airspace.

Debris Response Area

- The Debris Response Area procedures went into effect in April 2022. The FAA now has real-time response capabilities for debris-generating space vehicle malfunctions, significantly enhancing flight safety.
- The Acceptable Level of Risk Review Team Subgroup on Contingency Procedures developed mandatory air traffic controller training. This training was assigned to air traffic personnel via the Electronic Learning Management System prior to Debris Response Area procedure implementation. FAA Order JO 7110.65Z Change 2, entitled "Air Traffic Control," revised in May 2022, includes all relevant procedural changes.

Space Data Integrator

- Since the deployment of the Space Data Integrator operational prototype in June 2021, the FAA has developed additional enhancements to support new operational procedures and improve the data exchange with launch operators.
- The FAA continues investment analysis as it moves towards a long-term integration plan. Specifically, the FAA conducted operational mock evaluations with users to validate requirements and engineering assessments for expanding the space data integration into existing automation.

What needs to be done

Space Data Integrator

- The FAA plans to integrate Space Data Integrator capabilities into existing automation tools in future investments. The FAA is currently working with stakeholders in the investment analysis process.

LIST OF ACRONYMS AND ABBREVIATIONS

AAE	The FAA Office of Audit and Evaluation
AAM	Advanced Air Mobility
AATF	Airport and Airway Trust Fund
ACE	Aviation Career Education
ACR	The FAA Office of Civil Rights
ADS-B In	Automatic Dependent Surveillance-Broadcast
AFN	The FAA Office of Finance and Management
AGC	The FAA Office of the Chief Counsel
AGI	The FAA Office of Government and Industry Affairs
AHR	The FAA Office of Human Resource Management
AIG	Airport Infrastructure Grants
AIP	Airport Improvement Program
ANG	The FAA Office of NextGen
AOC	The FAA Office of Communications
APL	The FAA Office of Policy, International Affairs, and Environment
ARC	Aviation Rulemaking Committee
ARP	Office of Airports (FAA line of business)
ARPA	American Rescue Plan Act of 2021 (Public Law 117-2)
ARTCC	Air Route Traffic Control Center
ASCENT	Aviation Sustainability Center
ASH	Security and Hazardous Materials Safety (FAA line of business)
ASIAS	Aviation Safety Information Analysis and Sharing

AST	Office of Commercial Space Transportation (FAA line of business)
ATCT	Air Traffic Control Tower
ATO	Air Traffic Organization (FAA line of business)
ATP	Airport Terminal Program
AVS	Aviation Safety Organization (FAA line of business)
AVSED	Aviation and Space Education
BIL	Bipartisan Infrastructure Law; another name for the Infrastructure Investment and Jobs Act, 2022 (Public Law 117-58)
BOD	Binding Operational Directive
BVLOS	Beyond Visual Line-of-Sight Operations
CAASD	Center for Advanced Aviation System Development
CARES	Coronavirus Aid, Relief, and Economic Security Act (Public Law 116-136)
CAST	Commercial Aviation Safety Team
CEAR	Certificate of Excellence in Accountability Reporting
CFO	Chief Financial Officer
CFR	Code of Federal Regulations
CLEEN	Continuous Lower Energy, Emissions, and Noise Program
CRRSAA	The Coronavirus Response and Relief Supplemental Appropriations Act, 2021 (Public Law 116-260)
CSRS	Civil Service Retirement System
Data Comm	Data Communications

DEIA	Diversity, Equity, Inclusion, and Accessibility
Delphi	DOT's Financial Management System
DHS	U.S. Department of Homeland Security
DOD	U.S. Department of Defense
DOL	U.S. Department of Labor
DOT	U.S. Department of Transportation
DST	Drone Safety Team
E	Electronic
EIM	Enterprise Information Management
EMAS	Engineered Material Arresting System
Emergency Assistance Act	Extending Government Funding and Delivering Emergency Assistance Act, 2022 (Public Law 117- 43)
EPA	U.S. Environmental Protection Agency
ESC	Enterprise Services Center
F&E	Facilities and Equipment
FAA	Federal Aviation Administration
FAASTeam	FAA Safety Team
FECA	Federal Employees' Compensation Act (Public Law 103-3)
FERS	Federal Employees Retirement System
FFMIA	Federal Financial Management Improvement Act of 1996
FFRDC	Federally Funded Research and Development Center
FMFIA	Federal Managers' Financial Integrity Act of 1982
Franchise Fund	Administrative Services Franchise Fund
FY	Fiscal Year
GA	General Aviation

GAAP	Generally Accepted Accounting Principles
GAJSC	General Aviation Joint Safety Committee
GAO	U.S. Government Accountability Office
GoAT	Global Outreach and Training
GSA	General Services Administration
HAZMAT	Hazardous Materials
ICAO	International Civil Aviation Organization
IG	Inspector General
IJA	Infrastructure Investment and Jobs Act, 2022 (Public Law 117-58)
IRA	Inflation Reduction Act (IRA) (Public Law 117-169)
IRS	Internal Revenue Service
IT	Information Technology
ITD	International Training Division
JRC	Joint Resources Council
MMAC	Mike Monroney Aeronautical Center
MITRE	The MITRE Corporation
NASA	National Aeronautics and Space Administration
NextGen	Next Generation Air Transportation System
NPIAS	National Plan of Integrated Airports System
NPRM	Notice of Proposed Rulemaking
NWP	National Wireless Program
ODA	Organization Designation Authorization
OIG	Office of Inspector General
OMB	Office of Management and Budget
OPM	Office of Personnel Management

PAR	Performance and Accountability Report
Part 21	Certification Procedures for Products and Articles (14 CFR Part 21)
Part 24	Uniform Relocation Assistance and Real Property Acquisition for Federal and Federally Assisted Programs (49 CFR Part 24)
Part 91	General Operating and Flight Rules (14 CFR Part 91)
Part 107	Small Unmanned Aircraft Systems (14 CFR Part 107)
Part 121	Air Carrier Certification (14 CFR Part 121)
Part 129	Operations: Foreign Air Carriers and Foreign Operators of U.S.-Registered Aircraft Engaged in Common Carriage (14 CFR Part 129)
Part 135	Operating Requirements: Commuter and On-Demand Operations and Rules Governing Persons on Board Such Aircraft (14 CFR Part 135)
Part 145	Repair Stations (14 CFR Part 145)
Part 450	Launch and Reentry License Requirements (14 CFR Part 450)
PIIA	Payment Integrity Information Act of 2019
PP&E	Property, Plant, and Equipment
PRISM	Procurement Information System for Management (internet-based acquisition system integrated with Delphi)
QCR	Quality Control Review
Radar	Radio detection and ranging
R&D	Research and Development
RE&D	Research, Engineering, and Development
RIM	Runway Incursion Mitigation
RPA	Robotic Process Automation

RSA	Runway Safety Area
SAF	Sustainable Aviation Fuel
SAVES	Strategic Sourcing for the Acquisition of Various Equipment and Supplies
SMS	Safety Management Systems
SOC	Security Operations Center
SpCDM	Space Collaborative Decision Making
STEM	Science, Technology, Engineering, and Math
TAB	Technical Advisory Board
TBFM	Time-Based Flow Management
Technical Center	William J. Hughes Technical Center
TFDM	Terminal Flight Data Manager
The Act	The FAA Reauthorization Act of 2018 (Public Law 115-254)
TRACON	Terminal Radar Approach Control
TSAS	Terminal Sequence and Spacing
UAS	Unmanned Aircraft Systems, or drones
URA	Uniform Relocation Act
U.S.C.	United States Code
USHST	The U.S. Helicopter Safety Team
VSRP	Voluntary Safety Reporting Program
WJHTC	William J. Hughes Technical Center

We Welcome Your Comments

Thank you for your interest

in the FAA's FY 2022 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:

Office of Financial Management



Federal Aviation Administration
800 Independence Avenue, SW
Room 1040W
Washington, DC 20591



202-267-9105



par@faa.gov

This FY 2022 Performance and Accountability Report and its companion, the FY 2022 Summary of Performance and Financial Information, and prior year documents are available on the FAA website at:



https://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.instagram.com/faa



www.linkedin.com/company/faa



<https://medium.com/faa>



www.twitter.com/FAANews



www.youtube.com/FAANews



U.S. Department of Transportation
Federal Aviation Administration

WWW.FAA.GOV

800 Independence Avenue, SW
Washington, DC 20591