

Agency Priority Goal | Action Plan | FY 2023 – Q1

**Aviation Safety** 

### **Goal Leaders**



Billy Nolen Acting Administrator Federal Aviation Administration (FAA) David Boulter Acting Associate Administrator for Aviation Safety (FAA) Jodi Baker Deputy Associate Administrator for Aviation Safety (FAA)

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#### **Goal statement**

**Increase aviation safety for the flying public**. By September 30, 2023, the Federal Aviation Administration's (FAA) range of programs will contribute to the commercial air carrier fatality rate remaining below the target of 4.9 fatalities per 100 million persons on board and contribute to the number of general aviation fatal accidents remaining at no more than 0.94 fatal accidents per 100,000 flight hours.

### **Problem to Be Solved**

FAA strives 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. It works diligently to reduce aviation fatal accidents and incidents across all aviation domains, with an emphasis on commercial and general aviation to ensure that the U.S. aviation system remains the safest in the world. This work is based upon a data-driven approach to identify systemic safety risks and hazards that are addressed by FAA policies, programs, and procedures. FAA's long-term goals include:

- Reduce commercial aviation fatalities by 50 percent, from a baseline of 8.9 fatalities per 100 million persons on board in FY 2007 to a target of 4.4 fatalities per 100 million persons on board by FY 2025.
- Reduce general aviation fatal accidents, from a baseline of 0.98 Fatal Accidents per 100,000 Flight Hours in FY 2019 to a target of 0.89 Fatal Accidents per 100,000 Flight Hours by FY 2028.

#### What Success Looks Like

Success in achieving this APG includes addressing most known system hazards and continuing to work with aviation industry stakeholders to establish and implement safety management systems to reduce commercial aviation risk. Success also includes working with the general aviation community and industry to continually improve general aviation safety by identifying precursors to accidents, developing a greater understanding of human factors, and effectively implementing agreed-upon safety risk mitigations.

# Goal Target(s)

### Please update the Current Value column each quarter

Achievement statement		Key indicator(s)		Frequency			
Ву	We will	Name of indicator	FY23 Target value	Starting value**	Current value***	Update cycle	
By September 30, 2024, the Federal Aviation Administration's (FAA) range of programs will contribute to the commercial air carrier fatality rate remaining below the target of 4.7 fatalities	U.SOwned Commercial Air Carrier Fatality Rate per 100 Million Persons on Board	4.9	0	0.1	Quarterly		
		Total U.SOwned Commercial Carrier Aviation Fatalities	42	0	1	Quarterly	
9/30/24		U.S. GA Fatal Accidents per 100,000 Flight Hours	0.94	0	0.75	Quarterly	
		Total U.SOwned GA Fatal Accidents	254*	0	48	Quarterly	

\* Fatal accident target value based on projection of FY23 GA flight hours \*\*Starting value data as of October 1, 2022.

\*\*\*Current Value as of Dec 31, 2022

### Goal Team

### Pete Buttigieg, DOT Secretary

### **Billy Nolen, Acting FAA Administrator**



#### (\*) Denotes acting

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# **Goal Strategies**

FAA strategies for commercial and general aviation include:

- Promoting the open exchange of safety information to continuously improve aviation safety and enable users to perform integrated queries across multiple databases through a variety of outreach methods.
- Partnering with industry and the aviation community to use a proactive, data-driven approach to identify systemic risks, develop mitigation strategies, and monitor the effectiveness of implemented actions. FAA will continue collaborating with the aviation community to encourage voluntary investment in risk mitigations that reduce fatality risk to ensure that safety risk is systematically considered a factor in decision-making.



Reduce U.SOwned Commercial Carrier Aviation Fatalities per 100 Million Persons on Board								
		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024
U.SOwned Commercial Carrier Fatalities per 100 Million Persons	Targets	6.2	5.9	5.7	5.4	5.2	4.9	4.7
on Board	Actuals	0.3	0.5	0.6	0.0	1.4	0.1*	N/A

\*FY 2023 data will be finalized December 2023

### FAA strategies to maintain commercial aviation safety include:

- Working with stakeholders to establish and implement safety management systems to address and reduce risk within their operations and the National Airspace System (NAS)
- Collaborating with the aviation community to encourage voluntary investment in safety enhancements that reduce fatality risk.
- Developing and promoting risk-based decision-making and safety management principles that target individual pilots and technicians in both commercial and general aviation; and
- Ensuring that safety risk is systematically included in decision-making at the FAA.
- Establishing a cross-functional FAA Cargo Safety Executive Committee (AIR, AHX, AFX, ANG-E) and Sub-Committee (AIR, AHX, AFX, ANG-E, and AVP) to address emerging risks associated with cargo on transport aircraft (both passenger and Cargo aircraft).
- Incorporating requirements included in the Aircraft Certification, Safety, and Accountability Act (ACSAA) and lessons learned following recent accidents.

Reduce US General Aviation Fatal Accidents per 100,000 Flight Hours (FAA)									
		FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	
U.S. General Aviation	Targets	1.00	0.98	0.97	0.96	.095	0.94	0.93	
Fatal Accidents per 100,000 Flight Hours	Actuals	0.89	0.95	0.91	0.74	0.75*	0.75**	N/A	

#### **Goal: Reduce U.S.-Owned General Aviation Fatal Accidents**

\*FY2022 data will be finalized in FY2023 Q1

\*\* FY2023 data will be finalized in FY2024 Q1

#### FAA strategies to maintain general aviation safety include:

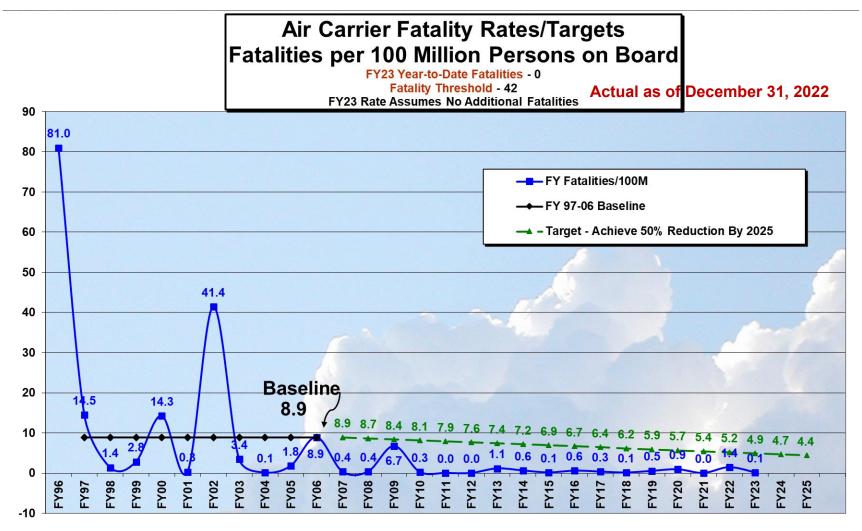
- FAA partners with industry to analyze and develop strategies using a non-regulatory, proactive, and data-driven approach to achieve higher levels of safety. Continuing and expanding these partnerships provides new opportunities to develop innovative methods to increase general aviation safety. This collaborative approach is supported through the following strategies:
  - Supporting the installation of new safety-enhancing technology in general aviation aircraft by streamlining the certification and installation process and encouraging aircraft owners to install such equipment.
  - Addressing human factors related to technology integration. FAA needs to continue to focus on non-technical areas, such as risk management and pilot/technician professionalism that affect safety, regardless of the level of technology being employed.

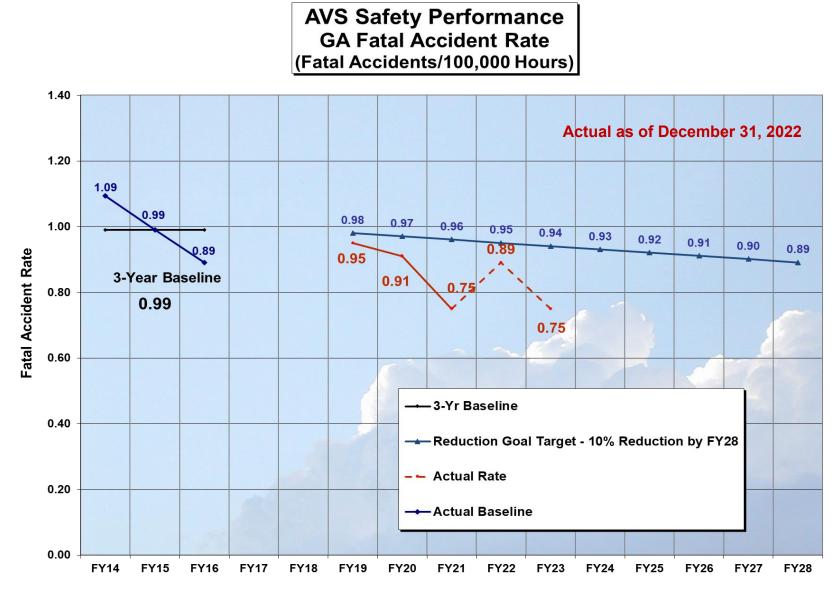
- Continuing to implement new airman training and testing standards to improve these activities by establishing an integrated, holistic airman certification system that clearly aligns testing with certification standards, guidance, and reference materials; and
- Working in partnership with industry on a data-driven approach to understand the causes of fatal accidents and developing safety enhancements to mitigate risk.
- The General Aviation Joint Safety Committee (GAJSC) developed 46 safety enhancements designed to address situations with a high-fatality risk, including maintaining control during unusual attitudes, spatial disorientation, and engine failure. These enhancements include technology improvements; improved education and training for both pilots and mechanics; documented best practices; increased awareness of issues related to medications; and outreach on a range of topics aimed at preventing Inflight Loss Of Control, Controlled Flight Into Terrain, and Engine Failures. The next GAJSC study is currently focusing on mechanical failures not related to engines.
- Implementing the US Helicopter Safety Team's (USHST) outreach program and SEs, which focuses on the top industry sectors with the highest percentage of fatal accidents. The USHST approved 16 Helicopter Safety Enhancements, all of which have been initiated as of June 1st, 2018. These cover fatal accidents during Unintended Flight in Instrument Meteorological Conditions, Loss of Control-Inflight, and Low Altitude Operations.
- Encouraging the general aviation community to educate pilots and other stakeholders on the benefits of sharing safety data in a protected, non-punitive manner.
- Leveraging the FAA Safety Team (FAASTeam) program products and product delivery outreach systems. National FAASTeam Outreach Initiatives include safety articles in the FAA Safety Briefing magazine, Social Media posts, FAASafety.gov safety notice emails, aviation safety courses through the FAASafety.gov website, and live and recorded safety seminars/ webinars. These outreach efforts promote the FAA's WINGS proficiency program

and GAJSC and USHST safety enhancements, provide courses on aviation safety topics, and promote runway safety.

- Focusing on print and social media collaboration with internal and external stakeholders.
- o Additional strategies within the agency include:
  - Conducting runway safety outreach through the "From the Flight Deck Videos" series to highlight surface safety at specific airports to general aviation pilots. This helps reduce runway incursions on airports.
  - Reducing pilot deviations, including Runway Incursions, caused by a lack of English language proficiency.
  - Covering topics such as Weather, Unmanned Aircraft Systems (UAS), Loss of Control (LOC), Controlled Flight into Terrain (CFIT), Illegal Air Charter, and Aeronautical Decision-Making (ADM) through FAASTeam outreach programs.

### **Key Indicators**





The baseline rate of 0.99 reflects beginning of FY 2019 baseline rate. NTE target rates reflect end of FY rate goals.

# Key Milestones

FAA has successfully addressed the majority of known system hazards and continues to work with aviation industry stakeholders to establish and implement safety management systems to reduce risk.

FAA strategies to maintain commercial aviation safety include:

- FAA and industry collaborating on a non-regulatory, proactive, and data-driven approach to mitigate the risks identified in commercial aviation through the Commercial Aviation Safety Team (CAST).
- Working with stakeholders to establish and implement safety management systems to address and reduce risk.
- Collaborating with the aviation community to encourage voluntary implementation of risk mitigations to reduce fatality risk.
- Developing and promoting risk-based decision-making and safety management principles across commercial aviation.
- Ensuring that safety risk management is included in decision-making at the FAA.
- Established a cross-functional FAA Cargo Safety Executive Committee (AIR, AHX, AFX, ANG-E) and Sub-Committee (AIR, AHX, AFX, ANG-E, and AVP) to address emerging risks associated with cargo on transport aircraft (both passenger and Cargo aircraft).
- Incorporating requirements included in the Aircraft Certification, Safety, and Accountability Act (ACSAA) and lessons learned following recent accidents.

FAA strategies to maintain general aviation safety include:

- FAA and industry collaborating on a non-regulatory, proactive, and data-driven approach to mitigate the risks that lead to general aviation fatal accidents (GAJSC and USHST).
- Developing and promoting risk-based decision-making and safety management principles across general aviation.
- Streamlining the certification and installation process of new, safety-enhancing technology and encouraging the installation of this equipment.
- Addressing human factors related to technology integration.
- Continuing to implement new airman training and testing standards.
- Continued expansions of sharing safety data in a protected, non-punitive manner.
- Leveraging the FAA Safety Team (FAASTeam) to conduct outreach on risks and risk mitigations.
- Working with industry to promote existing solutions to address safety issues and concerns
- Improving the certification and installation process to ensure safety enhancing technologies are getting to market.
- Working with industry (GAJSC, GAMA, EAA, NASA), and developing new tools, to provide in-service and maintenance data to proactively identify emerging safety issues.

Milestone Summary							
Key Milestone		Milestone Status	Change from last quarter	Comments			
Serving as the GAJSC Government co-chair, the FAA supports quarterly GAJSC meetings AVP	One GAJSC meeting each Quarter	On-Track	Q1 meeting held on December 13, 2022.	The GAJSC continues to hold quarterly meetings. Reviewed status of Safety Enhancements (SEs) and safety data analysis products.			
Serving as the CAST Government co-chair, the FAA supports bi-monthly CAST meetings.	Bi-monthly CAST meetings	On-Track	Q1 Meetings held on October 6 and December 1, 2022.	The CAST continues to hold bi-monthly meetings. Reviewed status of Safety Enhancements (SEs) and safety data analysis products.			
Leveraging the FAA Safety Team (FAASTeam) to conduct outreach on risks and risk mitigations to maintain general aviation safety. AFX	FAASTeam outreach each Quarter	On-Track	Q4 outreach conducted	The FAASTeam held 566 in-person seminars and 240 online webinars with 51,013 total attendees. Received a total of 43,393 online course completions of FAASTeam content. Social media FlySafe outreach had 9k reads with 191k views. The FAA Safety Briefing Magazine distributed 23,000 hard copies and had over 1 million digital views. FAASTeam social media/medium content had a reach of 892,513 reads of safety related content.			

# Narrative-FY 2023 Q1

Using performance information, FAA seeks ways to learn from past performance and improve outcomes. Performance measures and targets support FAA's mission to provide the Nation with an aerospace system that reflects the highest standards of safety and efficiency and serves as a model for the world.

As of December 31, 2022, the commercial aviation target is on track. To date, there has been one commercial aviation fatality against a not to exceed target of 42 fatalities. The goal of no more than 4.9 fatalities per 100 million persons on board is on target.

As of December 31, 2022, the general aviation target is on track. To date, there have been 48 general aviation fatal accidents against a not to exceed target of 60 fatal general aviation accidents for first quarter FY 2023. The goal of no more than 0.94 fatal accidents per 100,000 flight hours is on target.

FAA's continued success in addressing risk and improving safety is the result of strong safety partnerships between government and industry to pursue safety improvement collaboratively and in a proactive manner.

The FAASTeam outreach efforts included an awareness campaign for the monthly FlySafe topic, and new/existing 57 Seconds to Safer Flying videos were promoted via our social media channels, email, and at industry events.

# Data accuracy & reliability

DOT's <u>Performance Data Completeness and Reliability Report</u>, which is appended to the FY 2023 Annual Performance Report, provides detailed information on the performance indicators contained within this APG Action Plan.

The Performance Data Completeness and Reliability Report provides detailed information regarding the general accuracy, reliability, validity, completeness, and scope of the performance indicators listed below. The table below lists the page numbers of where each supporting performance indicator can be found in the report.

Performance Goal	Location
U.SOwned Commercial Carrier Aviation Fatalities per 100 Million Persons on Board	<u>Pg. 57</u>
U.S. GA Fatal Accidents per 100,000 Flight Hours	<u>Pg. 58</u>

### **Contributing Programs**

FAA and aviation industry partners focus on a data-driven, proactive approach to identify systemic risks, develop mitigation strategies, and monitor the effectiveness of implemented actions. To accomplish this, the FAA formed partnerships with the GAJSC, the USHST, and the CAST.

### Stakeholder / Congressional Consultations

The FAA Administrator meets regularly with aviation industry stakeholders, as do executives and managers in the Aviation Safety (AVS) organization. There are numerous meetings with industry associations, labor unions, and individual certificate holders throughout the year.

FAA and Aviation Safety (AVS) receive meaningful feedback and input from aviation rulemaking committees and the Aviation Rulemaking Advisory Committee (ARAC) regarding policy and rule changes. These committees are valuable tools for collaborating with industry to ensure complete implementation of and compliance with changes over the long term.