

Federal Aviation Administration



FY 2020 Portfolio of Goals



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Background

An accurate and detailed explanation of how a goal is measured, and what success requires, is an important component for any performance management program. Accordingly, the FAA Portfolio of Goals (PoG) provides technical information on the methodology by which progress is measured for the various FAA goals. The information for each goal's profile is updated annually. As new goals are established, new profiles are developed and designated as "Performance Measure Profiles" at the beginning of each goal. Collectively, these performance profiles are referred to as a "Portfolio," or a "Portfolio of Goals," as the title of this document indicates.

The material that comprises each profile also supports the internal verification review, the Performance and Accountability Report, the Data Completeness and Reliability section in DOT's budget submission, and other performance documents.



Aviation Safety (AVS) Performance Measure Profiles

Commercial Air Carrier Fatality Rate

Performance Metric: Reduce the commercial air carrier fatalities per 100 million persons on board U.S. carriers by 50% over 18-year period - FY 2008-2025.

FY 2020 Performance Target: 5.7 fatalities per 100 million persons on board.

Lead Organization: Aviation Safety (AVS)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	6.9	6.7	6.4	6.2	5.9	5.7
Actual	0.1	0.6	0.3	0.1	0.6	0.7*

** as of February 24, 2020. FY 2020 data will be finalized in the first quarter of FY 2021.*

Definition of Metric

Metric Unit: Number of fatalities per 100 million persons on board.

Computation:
$$\frac{\text{Number of Fatalities (including ramp accidents and other fatalities as a result of the accident)}}{\text{Per 100,000,000 Persons on Board}}$$

Formula: Commercial Air Carrier Fatality Rate =

$$\frac{\text{Number of Fatalities (including ramp accidents and other fatalities as a result of the accident)}}{\text{Per 100,000,000 Persons on Board}}$$

Scope of Metric: This metric includes both scheduled and nonscheduled flights of U.S. passenger and cargo air carriers (14 CFR Part 121) and scheduled passenger flights of commuter operators (14 CFR Part 135). It excludes on-demand (i.e., air taxi) service and general aviation. Accidents involving passengers, crew, ground personnel, and the uninvolved public are all included.

Method of Setting Target: The annual targets were calculated to reflect a linear reduction based on the long-term strategic target to reduce fatalities per 100 million persons on board to 4.4 fatalities per 100 million persons on board by the year 2025. The baseline of 8.9 fatalities per 100 million persons on board was established during the 1997-2006 timeframe.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: FAA chose this metric because it is easy to understand and measures the individual risk to the flying public. The metric will help the Agency to move toward a low sustainable rate by maintaining its focus on recently identified risks.



Public Benefit: As fatal air carrier accidents have declined in terms of average fatalities per accident, this metric will sharpen Federal Aviation Administration (FAA) focus on helping air travel become even safer.

Partners: Partners include Bureau of Transportation Statistics (BTS), National Transportation Safety Board (NTSB), FAA's Office of Policy, International Affairs and Environment (APL).

External Factors Affecting Performance: NTSB accident investigations indicate that aviation fatal accidents are largely related directly to some form or combination of human factors. These run the gamut of external organizational influences, inadequate supervision, personnel factors (such as self-imposed stress), to individual acts, such as skill-based errors, misperception errors, judgment and decision-making errors, etc. While an accident's causation can be thoroughly investigated and understood by FAA, as a practical matter, the agency's ability to influence basic decisions by every pilot, every day, and in every circumstance to prevent accidents becomes much more difficult.

Source of the Data: The data on commercial fatalities come from NTSB's Aviation Accident Database. All but a small share of the data for persons on board comes from the air carriers, who submit information for all passengers on board to the Office of Airline Information (OAI) within Bureau of Transportation Statistics (BTS). In addition, FAA estimates crew on board based on the distribution of aircraft departures by make and model, plus an average of 3.5 persons on board per Part 121 cargo flight.

Statistical Issues: Both accidents and passengers on board are censuses, having no sampling error. Crew on board is an estimate with a small range of variation for any given make and model of aircraft. Departure data and enplanements for Part 121 are from the BTS. The crew estimate is based on fleet makeup and crew requirements per number of seats. For the current fleet, the number of crew is equal to about seven percent of all Part 121 enplanements. The average number of cargo crew on board is 3.5 per departure, based on data from subscription services such as Air Claims (Ascend), a proprietary database used by insurers to obtain information such as fleet mix, accidents and claims. Cargo crews typically include two flight crew members, and occasionally another pilot or company rep, or two deadheading passengers.

Part 135 data also comes from BTS and Air Claims databases, but is not as complete. The Office of Aviation Policy and Plans (APO) verifies with the operators when it identifies gaps in the data. Based on previous accident and incident reports, the average Part 135 enplanement is five per departure. Crew estimates for Part 135 are based on previous accident and incident data. Any error that might be introduced by estimating crew will be very small and will be overwhelmed by the passenger census. Importantly, the fatality rate is low and could significantly fluctuate from year to year due to a single accident.

Completeness: The FAA does comparison checking of the departure data collected by BTS. This data is needed for crew estimates. However, FAA has no independent data sources against which to validate the numbers submitted to BTS. FAA compares its list of carriers to the Department of Transportation (DOT) list to validate completeness and places the carriers in the appropriate category (i.e., Part 121 or Part 135). The number of actual persons on board for any given period is considered preliminary for up to 18 months after the close of the reporting period. This is due to amended reports subsequently filed by the air carriers. Preliminary estimates are based on projections of the growth in departures



developed by APL. However, changes to the number of persons on board should rarely affect the annual fatality rate.

To overcome reporting delays of 60 to 90 days, FAA must rely on historical data, partial internal data sources, and Official Airline Guide (OAG) scheduling information to project at least part of the fiscal year activity data. The FAA uses OAG data until official BTS data are available. The final result for the air carrier fatality rate is not considered reliable until BTS provides preliminary numbers. Due to reporting procedures in place, it is unlikely that calculation of future fiscal year departure data will be markedly improved. This lack of complete historical data on a monthly basis and independent sources of verification increases the risk of error in the activity data.

NTSB and the Office of Accident Investigation and Prevention confer periodically to validate information on the number of fatalities. Accident data is considered preliminary. NTSB usually completes investigations and issues reports on accidents that occur during any fiscal year by the end of the next fiscal year. Results are considered final when all those accidents have been reported in the NTSB press release published early in the following year. FY 2019 results will therefore be final after the 2021 press release. In general, however, the number of fatalities are not likely to change significantly between the end of the fiscal year and the date they are finalized.

Reliability: Results are considered preliminary based on projected activity data. Most accident investigations are a joint undertaking. NTSB has the statutory responsibility to determine probable cause, while FAA has separate statutory authority to investigate accidents and incidents in order to ensure that FAA meets its broader responsibilities. The FAA's own accident investigators and other FAA employees participate in all accident investigations led by NTSB investigators. The FAA uses performance data extensively for program management, personnel evaluation, and accountability.



General Aviation Fatal Accident Rate

Performance Metric: Reduce the general aviation fatal accident rate to no more than 0.89 fatal accidents per 100,000 flight hours by FY2028.

FY 2020 Performance Target: No more than 0.97 fatal accidents per 100,000 flight hours.

Lead Organization: Aviation Safety (AVS)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	1.04	1.02	1.01	1.00	0.98	0.97
Actual	0.99	0.89	0.83	0.89	0.94*	0.93**

* as of December 31, 2019. FY 2019 data will be finalized in the first quarter of FY 2021.

** as of December 31, 2019. FY 2020 data will be finalized in the first quarter of FY 2022.

Definition of Metric

Metric Unit: Number of fatalities per 100 million persons on board.

Computation: $\frac{\text{Number of GA Fatal Accidents}}{(\text{GA Flight Hours}/100,000)}$

Formula: GA Accident Rate = $\frac{\text{Number of GA Fatal Accidents}}{(\text{GA Flight Hours}/100,000)}$

Scope of Metric: This metric includes U.S. registered on-demand (non-scheduled Title 14 Code of Federal Regulations (14 CFR) Part 135) and general aviation flights to include everything not Part 121 or Scheduled Part 135. General aviation comprises a diverse range of aviation activities, from single-seat homebuilt aircraft, helicopters, and balloons, single and multiple engine land and seaplanes, to highly sophisticated, extended range turbojets.

Method of Setting Target: The three safest years in general aviation history (FY 2014 – FY 2016) were used as the baseline. Government and industry consensus was to target a 10 percent reduction in 10 years from this baseline. Each year’s annual target is a one percent reduction to achieve the overall goal.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The FAA Administrator required the agency to convert the metric from numbers-based to rate-based for FY 2009. The FAA and the general aviation community have determined that a general aviation fatal accident rate rather than the number of fatal accidents is a better performance metric because the rate reflects fleet activity levels and their relationship to the number of fatal accidents. The Fatal Accident Rate is a true rate-based metric and tracks changes in the fatal accident rate for a fixed volume of flight hours (per 100,000).

Public Benefit: By tracking the rate of fatal accidents per flight hours, FAA can more accurately identify trends, indicating a decrease or increase of potential safety risks.



Partners: Partners include the National Transportation Safety Board (NTSB), FAA Office Aviation Policy and Plans (APO) and the FAA and Industry General Aviation Joint Steering Committee (GAJSC): Aircraft Owners and Pilots Association (AOPA), General Aviation Manufacturers Association (GAMA), National Business Aircraft Association (NBAA), Experimental Aircraft Association (EAA), academia, etc.

External Factors Affecting Performance: NTSB accident investigations indicate that general aviation fatal accidents are largely related directly to some form or combination of human factors. These run the gamut of external organizational influences, inadequate supervision, personnel factors (such as self-imposed stress), to individual acts, such as, skill-based errors, misperception errors, judgment and decision-making errors, etc. These human factor influences are occurring in a broad spectrum of general aviation activities from more highly regulated on-demand air taxi service in sophisticated aircraft, to more loosely regulated recreational flying in homebuilt aircraft. While accident causation can be thoroughly investigated and understood by FAA, as a practical matter, the FAA's ability to influence basic decisions by every pilot, every day, and in every circumstance to prevent accidents becomes much more difficult.

Source of the Data: The data for general aviation fatal accidents comes from the National Transportation Safety Board's (NTSB) Aviation Accident Database. Aviation accident investigators, under the auspices of the NTSB, develop the data. Annual flight hours are derived from the FAA's annual General Aviation and Part 135 Activity Survey. The FAA's Forecast and Performance Analysis Division provides current year estimates.

Statistical Issues: The NTSB finalizes the actual number of general aviation fatal accidents. Since this is a simple count of accidents, there are no statistical issues relevant to this data. The general aviation community and the GAJSC, as part of the Safer Skies initiative, recommended development of a data collection program that will yield more accurate and relevant data on general aviation demographics and utilization. Improved GA Survey and data collection methodologies have been developed. As a result of these efforts, FAA, working with the General Aviation Manufacturers Association (GAMA), the NTSB, and other aviation industry associations, has made many improvements to the survey. An improved survey was initiated in FY 2004.

These annual surveys created, for the first time, a statistically valid report of activity on which the general aviation community could agree. First, the sample size has significantly increased. Second, a reporting form has been created to make it much easier for organizations with large fleets to report. Third, the agency worked with the Aircraft Registry to improve the accuracy of contact information. Each year, significant improvements are being made to substantially improve the accuracy of the data.

The General Aviation Joint Steering Committee (GAJSC) and General Aviation Data Improvement Team (GADIT) worked closely with the general aviation community and industry to develop this performance metric and target. There was unanimous support and consensus for the metric and target.

Completeness: The number of general aviation fatal accidents, even when reported as preliminary, is very accurate. NTSB and the Office of Accident Investigation and Prevention confer periodically to validate information on the number of fatalities. Accident data are considered preliminary. NTSB usually completes investigations and issues reports on accidents that occur during any fiscal year by the end of the next fiscal year. Results are considered final when all those accidents have been reported in the



NTSB press release published early in the following year. FY 2020 results will therefore be final after the 2022 press release. In general, however, the numbers of fatalities are not likely to change significantly between the end of the fiscal year and the date they are finalized. General Aviation (GA) Survey calendar hours are finalized by December 31 of the following year. Hence, the fatal accident rate for FY 2019 will not be considered final/complete until December 31, 2020.

Reliability: Results are considered preliminary based on projected activity data. Most accident investigations are a joint undertaking. NTSB has the statutory responsibility to determine probable cause, while FAA has separate statutory authority to investigate accidents and incidents in order to ensure that FAA meets its broader responsibilities. The FAA's own accident investigators and other FAA employees participate in all accident investigations led by NTSB investigators. The FAA uses performance data extensively for program management, and personnel evaluation and accountability.



Positive Executive Order 13771 Implementation - (2 for 1)

Performance Metric: Eliminate two existing regulations for each new rule issued to maintain an in-modal (Deregulating)/Regulating ratio of 2:1 or greater.

FY 2019 Performance Target: Number of FAA deregulatory actions per year equal to or greater than twice the number of regulatory actions.

Lead Organization: Aviation Safety (AVS)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	2:1	2:1	2:1
Actual	N/A	N/A	N/A	5.0	4:0	TBD

Definition of Metric

For every significant regulation proposed (as defined by Section 3(f) of EO 12866), the FAA will propose two deregulating actions in an effort to repeal outdated, ineffective, or unnecessary regulations. In keeping with EO13771 guidance (*OMB Memo 4/5, Q 35*), the FAA shall specifically seek to provide relief from regulations that:

- Eliminate jobs, or inhibit job creation;
- Are outdated, unnecessary, or ineffective;
- Impose costs that exceed benefits;
- Create a serious inconsistency or otherwise interfere with regulatory reform initiatives and policies;
- Are inconsistent with the requirements of section 515 of the Treasury and General Government Appropriations Act, 2001;
- Derive from or implement EOs or other Presidential directives that have been subsequently rescinded or substantially modified.
- The FAA issues annual calls for rulemaking which serve as a scheduled opportunity for soliciting and identifying deregulating actions. These actions are evaluated in light of existing regulating needs to develop a balanced regulatory plan. As part of this plan the FAA may choose to bundle regulating and deregulating actions in the same regulatory action, provided these are clearly identified along with the respective cost and savings produced (*OMB Memo 2/2*).

The FAA recognizes the need for collective input and advance planning to achieve this objective, and has prioritized these factors in current revisions to our pre-rulemaking, rulemaking development processes, and portfolio/regulatory-budget management tools.

Metric Unit: Publication of Proposed or Final Rules.

Computation: Deregulating actions versus regulating actions ratio of 2:1 or greater.

Formula: Deregulatory action / Applicable published regulation => 2.



Scope of Metric: This deregulating requirement will apply to all significant regulations, and not apply to non-significant or enabling rules, or any other rulemaking actions so designated by the Office of Management and Budget (OMB).

Method of Setting Target: Derived from Executive Order 13771.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Consistency with Office of the Secretary of Transportation (OST) FY 2019 Performance Goals.

Public Benefit: Reduction of regulatory burden.

Partners: FAA Policy Offices for Federal Aviation Regulations.

External Factors Affecting Performance: OMB-level and cross-agency review of proposed FAA regulatory actions affect the timing and viability of each rulemaking action. Also, rulemaking actions mandated by law will require ongoing review and update of the FAA's rulemaking schedule.

Source of the Data: FAA rules published in the Federal Register.

Statistical Issues: N/A

Completeness: Each rule advanced by the FAA is published to the Federal Register, as required by the Administrative Procedures Act. The rules published there represent the complete set of regulatory actions.

Reliability: Simple computation of deregulatory (relieving) actions published in the Federal Register to the number of regulatory actions.



Positive Executive Order 13771 Implementation - Zero-Cost Allowance

Performance Metric: Meet the incremental zero-cost allowance requirement for new regulatory actions by maintaining a value of one or greater for the (Cost-Savings)/Cost ratio.

FY 2020 Performance Target: Cost-savings to cost ratio of all applicable published rules during the fiscal year are equal to, or greater than 1.

Lead Organization: Aviation Safety (AVS)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	1 or Greater	1 or Greater	1 or Greater
Actual	N/A	N/A	N/A	\$64M	\$5.95M	TBD

Definition of Metric

Similar to fiscal spending caps, the establishment of regulatory cost caps per EO 13771 provides a mechanism for the prudent management and control of regulatory costs imposed on society by agencies attempting to achieve regulatory benefits. (Office of Management and Budget (OMB) *Memo 2/2*). The FAA manages an average workload of 25 proposed and final rules per annum, the total cost and benefits of these actions to the society can vary widely from year to year. The ability to establish fixed numeric targets and/or accumulate savings/deregulatory balances is tempered by the demand for significant safety-based regulations. Recognizing the Agency flexibility to carry forward deregulatory and/or cost saving increments from year to year (*OMB Memo 4/5, Q29*), and the variability from year to year, suggests that the adoption of a ratio-based (Cost-Savings/Cost) metric, which demonstrates incremental, end-of-year, in-modal, cost savings greater than zero, is logical.

Metric Unit: Ratio

Computation: Cost-Savings/Cost => 1.

Formula: N/A

Scope of Metric: This savings requirement will apply to all significant regulations, and not apply to non-significant or enabling rules, or any other rulemaking actions so designated by the Office of Management and Budget (OMB)

Method of Setting Target: Derived from Executive Order 13771.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Consistency with OST FY19 Performance Goals.

Public Benefit: Reduction of regulatory burden.



Partners: FAA Policy Offices for Federal Aviation Regulations.

External Factors Affecting Performance: OMB-level and cross-agency review of proposed FAA regulatory actions affect the timing and viability of each rulemaking action which may affect total cost savings realized. Also, rulemaking actions mandated by law will require ongoing review and update of the FAA's regulatory budget.

Source of the Data: Cost information for FAA rules published in the Federal Register.

Statistical Issues: N/A

Completeness: Each rule advanced by the FAA is published to the Federal Register, as required by the Administrative Procedures Act. The rules published there represent the complete set of regulatory actions.

Reliability: N/A



Cargo Safety Risks

Performance Metric: Mitigate safety risks introduced by the carriage of air cargo. There are two initiatives serving as metrics for this effort: (1) providing guidance for operators to conduct specific safety risk assessment for their transport of cargo to manage cargo safety risk; and (2) implementing the FY19 research plan for providing tangible information related to fire risks associated with cargo.

FY 2020 Performance Initiatives/Targets

Work with industry to finalize guidance to aid operators in developing policies and procedures for the safety risk assessment of cargo, and offer approaches, methods, tools, and information that can be used by operators in their specific risk assessments of cargo.

Initiative 1: Incorporate feedback from industry into the guidance on specific topics, including use of tools to identify, analyze, and assess hazards; use of data and information for risk assessment; strategies for mitigation of cargo safety risk; and approaches to decision making about acceptance of cargo for transport when assessed safety risk could not be adequately mitigated.

Target 1: Publish cargo safety risk assessment guidance, reflecting industry feedback obtained, for use by operators in planning and conducting specific cargo safety risk assessments to meet new provisions being adopted into Annex 6. (“The State of the operator shall ensure that the Operator establishes policy and procedures for the transport of items in the cargo compartment which include the conduct of a specific safety risk assessment.” Draft of Annex 6, paragraph 15.1.1.) Due September 30, 2020 (AVS)

Initiative 2: Coordinated approach to research and standards. Implement the FY19 research plan for providing tangible information related to fire risks aboard aircraft.

Target 1: Complete the FY20 milestones in the Fire Risk Reduction Framework, for testing on safe handling of personal electronic device (PED) incidents in the flight deck, safe limits for lithium battery powered equipment as cargo, and cabin fire suppression agents for PED fires. Release two videos on the safe handling of PEDs and fire-risk reduction in the cabin and flight deck. Due September 30, 2020 (ASH)

Co-Lead Organizations: Office of Security and Hazmat Safety (ASH); Office of Aviation Safety (AVS)

	FY 2019	FY 2020	FY 2021
Initiative/ Target	Complete 2 targets	Complete 2 initiatives; 1 target each	TBD
Actual	09/30/2019	TBD	TBD



Definition of Metric

Metric Unit: Complete both milestones identified and coordinated by ASH and AVS.

Computation: N/A

Formula: N/A

Scope of Metric: The supporting milestones were selected and approved based on their importance to keeping the National Airspace System (NAS) safe by mitigating potential risks introduced by the carriage of air cargo. The tools and information to enable operators to evaluate their cargo operations for known and anticipated risks, along with implementation of the FY19 research plan related to fire risks aboard aircraft will further the efforts of the FAA, air carriers, and international partners to harmonize steps to minimize cargo fire safety risk.

Method of Setting Target: The targets were selected based on the FAA's overarching goal to keep the NAS safe and secure. Focusing on cargo fire safety research and using a systems approach to mitigate risk within the NAS are complementary targets that will advance safety within air transport by aiding operators in development and application of the most effective possible mitigations.

Why the FAA and/or DOT chose this Metric: By developing guidance on a systems approach to analyzing and mitigating cargo safety risk and by establishing a coordinated approach to fire safety research, the FAA and key stakeholders can reduce the risk to the NAS introduced by the air transport of goods. The systems approach can be used by operators with a Safety Management System (SMS) that conforms to 14 CFR part 5 for the assessment and management of cargo safety risks. The guidance can also be used by operators that do not have an SMS to effectively and proactively manage their cargo safety risk. These measured steps to ensure that cargo safety risk can be assessed and managed by operators in the NAS are consistent with international efforts towards the same goal of reducing safety risk of items transported in cargo compartments of aircraft.

Public Benefit: This metric provides tangible information to stakeholders for developing solutions to reduce the risks of fire when transporting flammable materials onboard an aircraft. The risk factors are to be identified; research-backed data will be provided; and effective mitigation strategies will be developed. The project will foster behavior, program and infrastructure changes that improve safety by providing valuable data for safety risk assessments along with educational materials to influence stakeholder behavior and actions in three identified areas of risk: Cabin, Flight Deck, and Cargo.

The project will contribute to the FAA's cargo safety objective of developing and implementing strategies to mitigate the known and anticipated cargo risks on aircraft. The project is also in alignment with DOT's strategic objectives to mitigate risks and encourage infrastructure and behavior change by using a data-driven systemic safety approach to identify risks, enhance standards and programs, and evaluate effectiveness.

Partners: Partners include, but are not limited to, FAA Lines of Business (LOBs), the Department of Transportation (DOT), and operators. In addition, Cargo Safety Risk Assessment has international attention, with two technical panels within the International Civil Aviation Organization (ICAO) working to identify specific information that operators will need to perform a safety risk assessment. Both the



Flight Operations and Airworthiness panels have efforts under way to modify Annexes 6 and 8, respectively, to assist operators in performing a safety risk assessment. The FAA is participating in both groups.

External Factors Affecting Performance: External factors affecting performance of these targets are related to the ability of the participating LOBs to timely complete the targets agreed to at the start of FY20.

Source of the Data: N/A

Statistical Issues: There are no statistical issues.

Completion: The FAA will work to ensure milestones showing the continued progress of the initiatives/targets are met. Progress is reported monthly via SPIRE on both the tools and information to enable operators to evaluate their cargo operations for known and anticipated risks, along with implementation of the FY19 research plan related to fire risks aboard aircraft.

Reliability: The metric has no reliability issue. The Cargo Safety Risk initiatives are either complete or they are not.



Expand Safety Management System (SMS) In Industry

Performance Metric: Develop agency strategy for expansion of SMS in industry based on management's decision. Achieve targets in rulemaking roadmap and approval of Part 139 SMS Rule.

FY 2020 Performance Target: Target 1: Develop SMS Rulemaking Roadmap for expansion of SMS Rules in industry.

Lead Organization: Aviation Safety (AVS)

Definition of Metric

Metric Unit: Deliver an SMS Rulemaking Roadmap to the FAA SMS Executive Council.

Computation: The successful completion and delivery of an SMS Rulemaking Roadmap to the FAA SMS Executive Council.

Formula: Count of the completed SMS Rulemaking Roadmap.

Scope of Metric: This metric will address AVP's completion of FY 2020 priority target by July 31, 2020.

Method of Setting Target: This metric was set based on collaboration with the FAA SMS Executive Council, the Aviation Safety Safety Management System (AVSSMS) Management Board, and the FAA SMS Committee.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: This metric constitutes the key, foundational planning tasks to prepare for and establish the formal rulemaking project, while ensuring that key FAA stakeholders and leadership are aligned and agree to the approach.

Public Benefit: Recent incidents and accidents involving parts 135 and 91 (Section 147) have highlighted the need for a more broad-based approach to make systemic improvements to operations. In addition, recent accidents whose causes have been traced to aircraft design and production under part 21 and maintenance under part 145 have, similarly, highlighted the need for systemic improvements. A Safety Management System (SMS) is a formal, top-down, organization-wide approach to managing safety risk and assuring the effectiveness of safety risk controls. It includes systematic procedures, practices, and policies for the management of safety risk. Certificate holders operating under part 119/121 already have SMS, so this effort will expand the application of SMS beyond part 119/121 certificate holders.

Partners: The 2019-2020 National Transportation Safety Board (NTSB) Most Wanted list recommends that the FAA "Require... Part 135 operators to establish safety management system programs" (A-16-036). Congress has sent the FAA recommendations and inquiries regarding SMS for parts 21, 91, and 135. This rulemaking would address recommendations from the NTSB and Congress, as well as move the United States closer to meeting International Civil Aviation Organization (ICAO) Annex 19 commitments. Due to the ICAO Annex 19 requirements, certificate holders that operate internationally should embrace the rule because it will enable them to provide documentation that they meet the established SMS requirements in accordance with Annex 19. Additionally, there are a number of certificate holders



currently voluntarily implementing SMS, so it is expected that they would also support the rulemaking proposal. Finally, given the support from the NTSB and Congress for SMS, it is expected that their reaction to this rulemaking would also be positive.

External Factors Affecting Performance: Completion of the SMS Rulemaking Roadmap is predicated on collaboration within Aviation Safety (AVS). Shifting priorities, resources, and other factors could affect completion of this effort. However, given the level of support from FAA leadership for SMS Rulemaking, it is expected to remain a high priority.

Source of the Data: Not applicable.

Statistical Issues: Not applicable.

Completeness: This activity will be completed when the SMS Rulemaking Roadmap is delivered to the FAA SMS Executive Council.

Reliability: Not applicable.



Expand Safety Management System (SMS) In Industry

Performance Metric: Develop agency strategy for expansion of SMS in industry based on management's decision. Achieve targets in rulemaking roadmap and approval of Part 139 SMS Rule.

FY 2020 Performance Target: Target 2: Provide appropriate support to OST to facilitate their approval of the Part 139 SMS Rule.

Lead Organization: Office of Airports (ARP)

Definition of Metric

Metric Unit: To provide information as requested by the OST or other offices, in order to facilitate the approval and signature of the proposed rule RIN 2120-AJ38 and its supporting details, that would require an SMS program at qualifying Part 139 certificated airports.

Computation: The successful completion of providing appropriate support to OST to facilitate their approval of the Part 139 SMS Rule.

Formula: Level of effort to ensure requested information from the OST or participating interests are provided requested information or data with minimum delay.

Scope of Metric: This metric will address ARP's completion of FY 2020 priority target by September 30, 2020.

Method of Setting Target: This metric was set based on collaboration with AVS.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: This metric constitutes a key function to ensure rule approval in a timely manner.

Public Benefit: Successful implementation of the rule will require certain part 139 certificate holders to develop, implement, maintain, and adhere to an airport safety management system (SMS). An SMS is a set of decision making tools that a certificate holder uses to plan, organize, direct, and control its everyday activities in a manner that enhances safety. An airport SMS must include, at a minimum, four components: (a) safety policy, (b) safety risk management, (c) safety assurance, and (d) safety promotion. The development and implementation of SMS ensures safety in air transportation by assisting airports to proactively identify and mitigate safety hazards, thereby reducing the possibility or recurrence of accidents in air transportation. The FAA applied a risk-based approach to the final rule's applicability. Instead of requiring SMS at all certificated airports, the FAA chose to require it only at certificated airports with the highest passenger enplanements, the largest total operations, and those certificated airports hosting international air traffic. Certificate holders that qualify under one or more triggering criteria (triggers) are required to develop an SMS under this final rule.

Partners: Partners are identified as required to generate information or data to successfully answer any



inquiries the OST may have that may impede the approval of the subject rule. In addition, both the NTSB and the International Civil Aviation Organization (ICAO) support SMS as a means to prevent future accidents and improve safety in air transportation. The NTSB has cited organizational factors contributing to aviation accidents and has recommended SMS for several sectors of the aviation industry, including aircraft operators and aerodromes (airports). The FAA has reached similar conclusions and has determined that the organizational factors and benefits of SMS apply across the aviation industry, including airports.

External Factors Affecting Performance: External factors affecting subject rule approval include internal OST docket capacity and Executive priorities. Shifting priorities, resources, and other factors could affect completion of this effort. However, given the level of support from FAA leadership for SMS Rulemaking, it is expected to remain a high priority.

Source of the Data: Not applicable.

Statistical Issues: Not applicable.

Completeness: This activity will be completed when the subject rule is approved, signed, and complete for public notification.

Reliability: Not applicable.



UAS Remote Identification

Performance Metric: The FAA will enable the safe and secure integration of Unmanned Aircraft Systems (UAS) into the National Airspace System (NAS). The Remote Identification of unmanned aircraft systems in the airspace of the United States would address safety, national security, and law enforcement concerns regarding the further integration of these aircraft into the airspace of the United States while also enabling greater operational capabilities.

FY 2020 Performance Target: Issue a Request for Information (RFI) that would solicit input from the low-altitude manned aviation (agriculture and helicopters) community on how they could participate in the Remote ID UAS Service Suppliers (USS) structure (described in December 2018 RFI) to provide UAS Remote ID data to manned pilots for situational awareness.

Lead Organization: Aviation Safety (AVS)

Definition of Metric

Metric Unit: An RFI from the low-altitude manned aviation community on Remote ID.

Computation: This metric is based upon the actual issuance of an RFI and demonstrations/participation in the Remote ID RFI UAS Service Suppliers structure.

Formula: One RFI issued that meets requirements outlined in the performance target.

Scope of Metric:

Remote Identification: Remote ID is the ability of an unmanned aircraft in flight to provide certain identification and location information that people on the ground and other airspace users can receive.

RFI: A Request for Information (RFI) seeks industry participation in developing Remote ID information technology applications and informs the Remote ID USS technical terms and conditions.

USS: A network of UAS Suppliers that collect the identification and location in real-time from in-flight UAS. These Remote ID suppliers would perform services under contract with the FAA, based on the same model the FAA currently uses for the Low Altitude Authorization and Notification Capability (LAANC).

Method of Setting Target: RFI Issuance requires both a sufficient level of responses from USS as well as timely review and analysis from the FAA team handling the responses.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The Remote ID of UAS is necessary to ensure public safety and the safety and efficiency of the airspace of the United States. The FAA is working towards establishing the Remote ID requirements for UAS through that rulemaking process. As the FAA works towards defining and implementing the final rule, we will facilitate the development of an information exchange infrastructure. That infrastructure, while focused on identifying UAS, may be leveraged to



benefit another community that operates in the area UAS tend to fly – the low altitude aviator community (e.g., agricultural operators and helicopters). Issuing the RFI targeted to this community provides the FAA information on how voluntary participation by manned aviators could potentially enhance safety – an area of information not captured by the Remote ID notice of proposed rulemaking.

Public Benefit: Information received from the RFI could potentially lead the FAA to encourage or facilitate voluntary participation of manned operators in the Remote ID framework for the purposes of enhancing safety.

Partners: The Office of Finance and Management (AFN) supports the publication of the RFI. The Office of Security and Hazardous Materials Safety (ASH) facilitates the engagement to our security partners who are a major stakeholder on the Remote ID rule itself. The Flight Standards Office (AFS), as the policy office for Remote ID, must ensure no implications to the rule, and that the questions asked would lead to information that could be actionable.

External Factors Affecting Performance: None for issuing the RFI. Follow-on activities depend on interest and comments from this community.

Source of the Data: The RFI requests solicitation of data from the low-altitude manned aviation (agriculture and helicopters) community on how they could participate in the Remote ID USS structure.

Statistical Issues: N/A

Completeness: Issuing an RFI that enables the FAA to receive and analyze responses and participation from the low altitude manned aviation community on how to participate in the USS structure within the appropriate timeline will determine completion of this performance target.

Reliability: The FAA seeks capable respondents that demonstrate in their responses capabilities to support the objectives of the RFI based on the responses and criteria required to safely implement Remote ID.



737 MAX DOT Secretary's (S1) Special Committee

Performance Metric: Provide an initial plan to address the future actions from the S1 Special Committee within 180 days of receiving the report and no later than September 30, 2020.

FY 2020 Performance Target: Provide an initial plan to address the future actions from the S1 Special Committee within 180 days of receiving the report and no later than September 30, 2020.

Lead Organization: Aviation Safety (AVS) – Aircraft Certification Service (AIR)

Definition of Metric

Metric Unit: Complete FY 2020 performance target in support the FAA's response to the Special Committee to review the Federal Aviation Administration's Aircraft Certification Process.

Computation: The successful completion of performance target.

Formula: Count of key activity completed.

Scope of Metric: This metric will address AIR release of an initial plan within 180 days of receiving the report. The report was received on January 16, 2020. 180 days from receipt is July 14, 2020.

Method of Setting Target: This metric was selected by AIR leadership, with support and approval from AVS-1.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The recommendations in the S1 Special Committee report are complex and AIR must use a systemic approach to address them. This is particularly relevant because there are other reports also providing recommendations, including many related to the 737 MAX. AIR is reviewing its existing and relevant FAA projects and strategic plans, completing a gap analysis to determine areas where new projects or strategic initiatives are necessary, and developing a response plan to the Special Committee's recommendations.

Public Benefit: AIR will benefit from the insights garnered from the recommendations to enhance the certification system to better manage the significant aviation industry growth and technology advances with improved processes and dedication to advancing aviation safety. A number of common themes emerge from the report and include recommendation for the FAA to:

1. Approach certification holistically by treating the aircraft as a system as opposed to a collection of isolated elements.
2. More effectively integrate the human in the system throughout the design process.
3. Improve our oversight process by ensuring a coordinated and flexible flow of information.
4. Focus on the workforce of the future, developing expertise to cope with coming technological advances.
5. Continue to improve and refine our certification process.



MOSAIC Rulemaking Project

Performance Metric: Completion of FY 2020 performance target.

FY 2020 Performance Target: Deliver a revision to the Comprehensive Implementation Plan for the Modernization of Special Airworthiness Certification (MOSAIC) rulemaking project originally delivered in FY19. Meet approved rulemaking milestone 1 (MS1): completion of draft regulatory text and supporting preamble text with sufficient maturity to enable the economic analysis and supplemental legal review.

Lead Organization: Aviation Safety (AVS)

Definition of Metric

Metric Unit: Complete FY 2020 activity (Comprehensive Implementation Plan and MS1) that supports the Modernization of Special Airworthiness Certification.

Computation: The successful completion of the key activity is calculated.

Formula: Count of key activity completed.

Scope of Metric: This metric will address Aircraft Certification Service (AIR) delivery of a Comprehensive Implementation Plan and completion of MS1 within 30 days of August 6, 2020.

Method of Setting Target: This metric was set based on collaboration between ARM, AIR, and AFS.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The metric – revision of the MOSAIC Comprehensive Implementation Plan and MS1 – are the key next steps for this strategic rulemaking effort to implement mandates in the *FAA Reauthorization Act of 2018*, sections 345, 347, and 581. The objective is to improve safety and decrease cost of entry-level GA and medium-risk UAS by modernizing 4 areas of certification: Airworthiness, Pilot, Repairman, and Operations.

Public Benefit: The effort addresses Congressional mandates, is a natural application of the Safety Continuum, improves the alignment of certification rigor with risk to the public, provides for increased flexibility and safe introduction of new products and technology into the NAS, and allows the FAA to recognize the diversity of aerospace users and be responsive to all stakeholders.

Partners: Commitment for strong participation across AVS, Industry has expressed strong support (GAMA, EAA, ASTM, AOPA, AUVSI), and other civil aviation authorities.

External Factors Affecting Performance: The Comprehensive Implementation Plan and attaining MS1 is predicated on collaboration across FAA organizations. Industry and CAA support can also enhance the likelihood of success. Shifting priorities, resources, and other factors could impact completion of this effort.



Partners: AIR is coordinating internally, as well as with other AVS S/O including AFX and AVP.

External Factors Affecting Performance: AIR is proactively responding to the S1 Special Committee report. Of paramount importance is the coordination of the many different report responses, as well as additional direction from key stakeholders and oversight organizations. These include the Joint Authorities Technical Review (JATR), National Transportation Safety Board (NTSB), and the DOT Office of Inspector General (OIG).

Source of the Data: Not applicable.

Statistical Issues: Not applicable.

Completeness: This activity will be complete when the Initial plan is released.

Reliability: Not applicable.



Air Traffic Organization ATO Performance Measure Profiles

Average Daily Capacity

Performance Metric: Maintain an average daily capacity for core airports of 58,388 or higher, arrivals and departures.

FY 2020 Performance Target: Maintain an average daily capacity for core airports of 58,388 or higher, arrivals and departures.

Lead Organization: Air Traffic Organization (ATO)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	57,975	58,006	59,136	59,303	58,388
Actual	60,168	60,987	60,448	59,446	TBD

Definition of Metric

Metric Unit: Average of daily arrival and departure rates during reportable hours.

Computation: Average Daily Capacity for a given airport and month is the sum of Efficiency Airport Arrival Rate (AAR) and Airport Departure Rate (ADR) computed over the entire month divided by the number of days in the month during reportable hours. The reportable hours intend to capture periods when at least 90% of Core Airports operations take place and generally exclude overnight hours. The annual capacity level is the weighted sum of the monthly capacity levels.

Formula:

$$\frac{\text{Sum of Hourly Efficiency Airport Arrival and Airport Departure Rates during Reportable Hours in a Month}}{\text{Number of Days in the Month}}$$

Scope of Metric: Only the Core Airports are included in this metric. The Core airports are those which have 1% or more of total U.S. enplanements (the DOT large hub airports) or 0.75% or more of total U.S. non-military itinerant operations.

Reportable hours are based on a review of actual flight counts for each of the Core airports.

Reportable Hours	Airports
15	DFW, IAH, LGA, MCO, PHX, SLC
16	ATL, BOS, CLT, DCA, DEN, FLL, IAD, LAS, MDW, MIA, MSP, ORD, PHL, SEA, SFO, TPA
17	BWI, DTW, EWR, HNL, LAX, SAN
18	JFK
24	MEM

Each airport facility determines the number of arrivals and departures it can handle for each hour of each day, depending on conditions, including weather. These numbers are the arrival and departure rates of the airport for that hour. Data are summed for daily, monthly, and annual totals.

Method of Setting Target: Annual targets are set using historical trend data for the previous three years, information on upcoming construction impacts, procedure changes, etc., and inputs from individual Air Traffic Control facilities.



Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Growth in air travel has generally been accomplished by increasing the number of flights. Measuring the growth of airport capacity indicates the limit at which increased service can be accommodated without affecting delay.

Public Benefit: The public benefits from increased capacity by experiencing a decrease in delays and improved on-time performance.

Partners: Air Traffic Organization (ATO) and Airports (ARP).

External Factors Affecting Performance: Arrival and departure rates at airports, which are adjusted in real time throughout the day, are primarily impacted by weather, construction/maintenance impacts, procedural changes, and equipment outages.

Source of the Data: The Aviation System Performance Metrics (ASPM) database, maintained by the FAA's Office of Performance Analysis (AJR-G), provides the data for this metric. The individual air traffic facilities for the Core Airports provide arrival and departure rates through the National Traffic Management Log (NTML). ATO staff feed this information into the ASPM database.

Statistical Issues: None

Completeness: Fiscal year data are finalized approximately 90 days after the close of the fiscal year.

Reliability: The reliability of ASPM is verified on a daily basis by the execution of a number of audit checks, comparison to other published data metrics, and through the use of ASPM by over 1,300 active registered users.



National Airspace System (NAS) On-Time Arrivals

Performance Metric: Achieve a NAS on-time arrival rate of 88 percent at Core airports.

FY 2020 Performance Target: Achieve a NAS on-time arrival rate of 88 percent at Core airports.

Lead Organization: Air Traffic Organization (ATO)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	88.00%	88.00%	88.00%	88.00%	88.00%
Actual	92.01%	92.98%	89.80%	88.31%	TBD

Definition of Metric

Metric Unit: Percentage of flights arriving no more than 15 minutes late.

Computation: NAS On-Time Arrival is the percentage of all flights arriving at the Core Airports equal to or less than 15 minutes late, based on the carrier flight plan filed with the FAA, and excluding minutes of delay attributed by air carriers to extreme weather, carrier action, security delay, and prorated minutes for late arriving flights at the departure airport. The number of flights arriving on or before 15 minutes of flight plan arrival time is divided by the total number of completed flights, and the result is multiplied by 100 to convert it to a percentage.

Formula:
$$\frac{\text{NAS On-Time Flights}}{\text{Total Flights}} \times 100$$

NAS Delayed Flights: The time of arrival of completed passenger flights to and from the Core Airports is compared to their flight plan scheduled time of arrival. For delayed flights, delay minutes attributable to extreme weather, carrier caused delay, security, and a prorated share of delay minutes due to a late arriving flight at the departure airport are subtracted from the total minutes of delay. If the flight is still late, it is counted as a delayed flight attributed to the National Aviation System (NAS) and the FAA.

Scope of Metric: A flight is considered on time if it arrives no later than 15 minutes after its published, scheduled arrival time. This definition is used in both the DOT Airline Service Quality Performance (ASQP), and Aviation System Performance Metrics (ASPM) reporting systems. Air carriers, however, also file up-to-date flight plans for their services with the FAA that may differ from their published flight schedules. This metric measures on-time performance against the carriers' filed flight plan, rather than what may be a dated published schedule.

The Core airports are those which have 1% or more of total U.S. enplanements (the DOT large hub airports) or 0.75% or more of total U.S. non-military itinerant operations.

Method of Setting Target: The target is set based on three years of historical trending data.



Additional Information on Metric

Why the FAA and/or DOT chose this Metric: On-time performance is a measure of the ability of the FAA to deliver services. A major weakness of using air carrier scheduled on-time performance as a metric is that it contains flight delays caused by incidents outside the FAA's control. However, the air carriers have supplied information on the causation of flight delay, by flight, since June 2003 under revised Part 234 instructions. Removal of delays not attributable to the FAA provides a more accurate and equitable method of measuring the FAA's performance.

Public Benefit: This metric helps members of the flying public reach their destinations on time.

Partners: FAA; Airlines for America (A4A); National Business Aviation Association (NBAA); airlines

External Factors Affecting Performance: Weather, airline scheduling practices, runway construction/maintenance, and ramp/airport congestion may all effect on time performance.

Source of the Data: The ASPM database, maintained by the FAA's Office of Performance Analysis (AJR-G), in conjunction with DOT's ASQP causation database, provides the data for this metric. By agreement with DOT, operators with at least 0.5% of passenger enplanements provide ASQP flight data for flights to and from most large and medium hubs. Flight records contained in the Traffic Flow Management System (TFMS) supplement the flight data.

Statistical Issues: Data are not reported for all carriers; at present, 25 operating carriers report monthly into the ASQP reporting system.

Completeness: Fiscal year data are finalized approximately 90 days after the close of the fiscal year.

Reliability: The reliability of ASPM is verified on a daily basis by the execution of a number of audit checks, comparison to other published data metrics, and through the use of ASPM by over 1,300 registered users. ASQP data is filed monthly with DOT under 14 CFR Part 234, Airline Service Quality Performance Reports, which separately requires reporting by major U.S. air carriers on domestic flights to and from Core airports.

Total On-Time Arrivals

Total On-Time Arrival measure helps monitor the overall NAS performance by providing a baseline for all on-time performance measures. It is the percentage of all flights arriving at the Core Airports equal to or less than 15 minutes late, based on the carrier flight plan filed with the FAA. It includes minutes of delay incurred due to all causal factors as defined by Airline Service Quality Performance System (ASQP). The number of flights arriving on or before 15 minutes of flight plan arrival time is divided by the total number of completed flights, and the result is multiplied by 100 to convert it to a percentage. The FAA collects the data quarterly for the purpose of monitoring NAS performance as a whole. This measure contains uncontrolled volatile causal factors that may have a major effect on the metric for total on-time performance. Therefore, there is no target set for this measure.



Hazard Risk Mitigations

Performance Metric: Implement approved activities in association with ATO’s Top Five (5) identified safety issues/hazards that affect safety risk in the National Airspace System (NAS).

FY 2020 Performance Target: Implement 75% of approved mitigation activities in association with ATO's Top Five (5) identified trending safety issues in the National Airspace System (NAS): Traffic Advisories/Safety Alerts, Altitude Compliance, Wrong Surface Landings, Pilot Reports (PIREP) Solicitation/Dissemination and Operational Risk Management (Coordination).

Lead Organization: Air Traffic Organization (ATO)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	80%	80%	80%	80%	75%
Actual	88%	93%	89%	93%	TBD

Definition of Metric

Metric Unit: The metric counts the number of activities implemented to address the Top 5 issues/hazards. Each activity is a defined action.

Computation: Implementation of 75% of the activities identified for the fiscal year

Formula: 100* (Number of Activities Completed) / (78 Activities Identified for FY2020)

Scope of Metric: This metric measures the ATO success of implementing mitigations to address trending issues in the NAS, as well as the impact of those mitigations on the originally identified trend. The list of FY2020 issues are Traffic Advisories / Safety Alerts, Altitude Compliance, Wrong Surface Landings, Pilot Reports (PIREP) Solicitation / Dissemination and Operational Risk Management (Coordination)

Method of Setting Target: There will be five phases of the Top 5 process—Candidate selection, Corrective Action Plan (CAP) development, CAP implementation, monitoring, and close-out. Metrics have been set that will measure success in each of those phases, all of which are deadline driven. Each major deadline that is coming up in a fiscal year will count as an activity toward the metric.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: This metric was identified because it addresses the issues found within the NAS and moves the agency away from merely counting mistakes. By identifying the Top 5 trending safety issues, developing activities to address them, ensuring mitigations are implemented, monitoring the impact of mitigations, and closing out an issue once we have met performance targets, the agency is taking a proactive stance in identifying and mitigating issues.

Public Benefit: The adoption of this metric benefits the public by identifying and reducing trending safety issues within the NAS.



Partners: ATO Safety and Technical Training works collaboratively with stakeholders including other ATO Service Units (Mission Support, Tech Ops, Air Traffic, etc.); the National Air Traffic Controllers Association (NATCA); the pilot community (A4A, NBAA, AOPA, etc.); and other FAA organizations (Airports, Flight Standards, etc.) to develop comprehensive activities to address the issues identified in the NAS.

External Factors Affecting Performance: There are no external factors that affect the performance of this metric.

Source of the Data: ATO Safety and Technical Training reaches out to responsible organization points of contact to track the implementation progress of the approved activities and distributes monthly progress reports.

Statistical Issues: Not applicable.

Completeness: The activities (e.g., corrective action and monitoring plans) to address the Top 5 trending safety issues are formed using specific subject matter experts who are led through a data-driven process. Safety data are comprehensively reviewed to select well-defined issues to the list. Then, CAPs are developed and reviewed by the pertinent responsible organizations to ensure they address the identified issue and can be feasibly accomplished. The monitoring plans measure against safety performance targets to determine whether or not the mitigations are in place and reducing the observed trend. Once those targets are met, the issue is eligible for close-out, and the process begins again to review safety data to select a new issue to the list.

This cycle is broken down for each Top 5 into a plan for the coming fiscal year. Once the plans are signed, they represent specific and comprehensive plans that when executed, should contribute to improved safety in the NAS. Safety and Technical Training solicits status updates regularly from responsible organizations to ensure the work is meeting the intent of the original action and will be completed on time. The activity is not closed until a deliverable confirms its completion. Additionally, a director-level ATO Top 5 Steering Committee oversees the prioritization and decision-making needs of the Top 5. This committee ensures awareness, transparency, and buy-in at the highest levels.

Reliability: There is no reliability issue with this metric. The activity is either implemented during this fiscal year or not. ATO Safety and Technical Training considers an activity implemented when the requirements associated with the activity are met. Each activity has a point of contact that provides the implementation status to the program manager.



Commercial and Non-Commercial Surface Safety Risk Index

Commercial Aviation Performance Metric: Measures the overall safety risk of commercial aviation operations in the airport surface environment of the National Airspace System (NAS) by aggregating all relevant risk events that occur on and around runway and taxiway areas.

FY 2020 Commercial Aviation Performance Target: Maintain commercial Surface Safety Risk Index at or below 0.35 per million operations.

Non-Commercial Aviation Performance Metric: Measures the overall safety risk of non-commercial aviation operations in the airport surface environment of the NAS by aggregating all relevant risk events that occur on and around runway and taxiway areas.

FY 2020 Non-Commercial Aviation Performance Target: Maintain non-commercial Surface Safety Risk Index at or below 0.60 per million operations.

Lead Organization: Air Traffic Safety (ATO)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Commercial Target	N/A	N/A	N/A	0.35	0.35
Actual	N/A	N/A	N/A	0.057	TBD

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Non-Commercial Target	N/A	N/A	N/A	0.60	0.60
Actual	N/A	N/A	N/A	0.214	TBD

*Data as February 1, 2020

Definition of Metric

Commercial Metric Unit: Unit less, an aggregate weighted measure of overall airport surface operations safety risk per million operations.

Commercial Computation: For each commercial accident, a penalty term is calculated by aggregating weights corresponding to the various effects of the accident (i.e., injury types or airframe damage types). A credit term, calculated as the fraction of lesser injured people and/or less-damaged airframes, is deducted from the penalty term to get the final score for the accident. For each commercial incident, only a penalty term corresponding to the incident type is calculated and becomes that incident’s score. All event (accident and incident) scores are aggregated over time and normalized by 1,000,000 operations. All rates used in the Commercial Surface Safety Risk Index calculation are derived from a Bayesian network model trained using a supervised algorithm, which essentially assigns a weight value to each event outcome indicative of its closeness to a fatal outcome.



Commercial Formula:
$$\frac{\text{Sum of individual Commercial event scores}}{(\text{Commercial Aviation Operations} \div 1,000,000)}$$

Non-Commercial Metric Unit: Unit less, an aggregate weighted measure of overall non-commercial surface operations safety risk per million operations.

Non-Commercial Computation: For each accident, a penalty term is calculated by aggregating weights corresponding to the various effects of the accident (i.e., injury types or airframe damage types). A credit term, calculated as the fraction of lesser injured people and/or less-damaged airframes, is deducted from the penalty term to get the final score for the accident. For each incident, only a penalty term corresponding to the incident type is calculated and becomes that incident's score. All event (accident and incident) scores are aggregated over time and normalized by 1,000,000 operations. All weights used in the Non-Commercial Surface Safety Risk Index calculation are derived from a Bayesian network model trained using a supervised algorithm, which essentially assigns a weight value to each event outcome indicative of its closeness to a fatal outcome.

Non-Commercial Formula:
$$\frac{\text{Sum of individual Non-Commercial event scores}}{(\text{Commercial Aviation Operations} \div 1,000,000)}$$

Scope of Metric: The Surface Safety Risk Index measures the overall safety performance of the NAS in the runway environment. It includes all manner of operations (commercial and other types), aircraft, vehicles and pedestrians that occur in that environment. It includes runway collision accidents, runway excursion accidents, taxiway collision accidents, runway incursion incidents, runway excursion incidents, and taxiway surface incidents. The definition of operations is total takeoffs and landings. Commercial and Non-Commercial operations are measured separately. The FAA considers operations under FAR Parts 121, 129, and 135 commercial operations and all other operation types non-commercial.

Method of Setting Target: Forecast modeling was used to attain challenging but reasonable targets based on past performance of the metric. Targets for commercial and non-commercial operations were set separately.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: By including various types of surface accidents and incidents the Surface Safety Metric provides a larger picture of National Airspace System (NAS) safety than previous metrics have. Additionally, because the Metric weights accidents and incidents based on their closeness to fatal accidents, it is more representative of safety risk than metrics that focus on simply counting occurrences.

Public Benefit: The Surface Safety Metric represents 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.

Partners: The FAA Co-Chairs the Runway Safety Council (RSC) with Air Line Pilots Association (ALPA). Other Council members include National Air Traffic Controllers Association, Airlines for America, Aircraft Owners and Pilots Association, National Association of Flight Instructors, National Business Aviation



Association, Regional Airline Association, National Air Traffic Controllers Association, Airport Councils International-North America, the American Association of Airport Executives, along with FAA Flight Standards, Office of Airports, and Air Traffic. The RSC collaborates government and industry leadership to develop and focus implementation of an integrated, data-driven strategy to reduce the number and severity of runway incursions.

External Factors Affecting Performance: Runway accidents and incidents are the result of an error by an air traffic controller, pilot, and/or vehicle/pedestrian event. The FAA has direct influence on air traffic controller performance, but indirect influence on pilots and airport personnel.

Source of the Data: The National Transportation Safety Board (NTSB) database is the primary source of runway accident data. Runway excursion data is supplemented by AVP's Aviation System Analysis and Sharing (ASIAS) database, which aggregates runway excursion data from multiple sources. Air traffic controllers and pilots are the primary source of runway incursion and surface incident reports. The data are recorded in the Comprehensive Electronic Data Analysis Reporting (CEDAR) system. CEDAR replaced the FAA Air Traffic Quality Assurance (ATQA) database for the Air Traffic Organization. Preliminary incident reports are evaluated when received and evaluation can take up to 90 days. Operations data used to calculate the runway incursion rate are provided via OPSNET, and are downloaded directly from the FAA Operations and Performance Data database.

Statistical Issues: Categorization of the various accidents is performed using statistical modeling, which is prone to sampling error.

Completeness: The FAA verifies and validates the accuracy of runway incursion and surface incident data through the initial validation process followed by quality assurance and quality control reviews. Reconciliation of the databases is conducted monthly and anomalies are explored and resolved. In cases where major problems are identified, a request to re-submit is issued. The FAA conducts annual reviews of reported data and compares them with data reported from previous years. Annual runway incursion incident data are used to provide a statistical basis for research, analysis, and outreach initiatives.

The Surface Safety Metric will be recalculated if accidents or incidents are reported late or if operations data are retroactively adjusted.

Reliability: A classification algorithm with approximately 95% accuracy is used to classify NTSB events as runway collisions, taxiway collisions, or runway excursions. Given this classification error, there is a small chance that irrelevant accidents will be included in the Surface Safety Metric calculation or relevant accidents will be excluded.



Community Engagement and Noise

Performance Metric: Develop a procedural communication campaign that results in better coordination and collaboration across lines of business, staff offices and stakeholders to address a wide range of concerns including aircraft noise.

FY 2020 Performance Targets

Target 1: Collate the best practices from existing guidance documents into a corporate FAA community engagement policy. Due: September 30, 2020

Target 2: Continue to enhance community engagement, including through improved noise screening tools. Develop a requirements document for an updated noise screening tool. Due: September 30, 2020

Lead Organizations: Air Traffic Organization (ATO) and Office of Environment and Energy (AEE)

Definition of Metric Unit: Binary yes/no of completion of the target.

Computation: No calculation is required.

Formula: No formula is required to calculate the measure.

Scope of Metric:

Target 1: Utilizing the existing guidance documents to update the FAA Order 7400.2 with best practices that promote standardized, repeatable, and scalable community engagement (CE) for air traffic actions across the National Airspace System (NAS). The final measure is the change to FAA Order 7400.2 Chapter 32-4-3 that adds the "Scenario- Based Guidance for Community Engagement" document to the list of resource documents in that paragraph.

Target 2: Develop the implementation plan for a more streamlined noise screening methodology to consistently assess noise impacts for federal actions across all FAA lines of business with National Environmental Policy Act (NEPA) responsibilities. As with existing policy and practice, this updated noise screening methodology would continue to support determinations for when a Categorical Exclusion (CATEX) may apply.

Method of Setting Target:

Target 1: The target was set based on the need for practitioners of FAA community engagement to collate the best practices from FAA community engagement guidance documents, which are periodically updated. The changes are highly prescriptive regarding community involvement (workshops, airport meetings, roundtables, presentations, etc.), which must be determined on a case-by-case basis.

Target 2: The target was set based the need to finalize the methodological and technical determinations required to initiate the development of a new noise screening tool in FY21. The new tool will be used by all FAA lines of business with NEPA responsibilities.



Additional Information on Metric Why the FAA and/or DOT chose this Metric:

Target 1: FAA is committed to open dialogue with the community and regards community input as an important consideration in decisions that affect the airspace.

Target 2: In recent years, the evolution of actions subject to NEPA review and the need to assess them in a more coordinated and streamlined manner has demonstrated a need to update and consolidate the FAA's noise screening tools to better serve the agency's needs. Preparation of an updated noise screening methodology provides a rigorous documentation of noise screening assumptions.

Public Benefit:

Target 1: This internal agency guidance is for FAA employees and contractors and does not impose requirements on the public. Yet the public will benefit by receiving early and consistent engagement within the community based on the update to FAA Order 7400.2 and the changes to the "Scenario- Based Guidance for Community Engagement."

Target 2: Greater consistency in the initial evaluation of noise across different types of actions subject to NEPA. A more consistent and documented noise screening methodology will aid the public's understanding of the way in which FAA makes environmental determinations for noise.

Partners: N/A – Internal to FAA

External Factors Affecting Performance:

Target 1: Resource and budget constraints are the impediments to a campaign to standardize community engagement practices for airspace actions.

Target 2: Time and resource constraints in coordinating agency-wide input from all FAA lines of business with NEPA responsibilities.

Source of the Data:

Target 1: The "Scenario-Based Guidance for Community Engagement" document is an internal agency guidance that promotes standardized, repeatable, and scalable community engagement (CE) for air traffic actions across the NAS. Although this document was developed for air traffic actions, the framework is applies to other FAA CE activities. Input from the guidance documents is reflected in the FAA Order 7400.2 Chapter 32-4-3 as of January 30, 2020.

Target 2: Technical assessments of the proposed noise screening methodology will be tested through case study analysis and results coordinated with FAA lines of business with NEPA responsibilities.

Statistical Issues: There are no statistical issues in the reporting of the metric for Target 1 or Target 2.

Completeness:

Target 1: As FAA employees continue to follow the guidance of the FAA Order 7400.2 Chapter 32-4-3, which dictates early community involvement in the project development process, open dialog with the communities is understood to be an important component in the overall FAA decision making process.



Target 2: The noise screening validation and case study analysis will be reviewed to inform the development of a detailed requirements document for the development of a new noise screening tool in FY21.

Reliability: The metric has no reliability issues for Target 1 or Target 2.



Operational Information System (OIS) Pilot

Performance Metric: Deliver prioritized and appropriate Minimum Viable Products (MVPs) identified during the discovery and framing phase to Production Environment.

FY 2020 Performance Target: As part of a pilot for a new way of developing software, the FAA will develop and test the “Minimum Viable Products (MVPs)” for the Operational Information System (OIS), an element of Traffic Flow Management System (TFMS) that disseminates delay information to NAS users. Due September 30, 2020

Lead Organization: _____ ATO

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	N/A	1 target
Actual	N/A	N/A	N/A	N/A	TBD

Definition of Metric

Metric Unit: Develop and test MVPs for the OIS procedures.

Computation: MVP is defined as a software product developed and available on Fly.Faa.Gov that provides FAA flight delay information on the OIS.

Formula: The product must show positive trends in the user community, operate on both desktop and mobile platforms, and the FAA team enabled for future work.

Scope of Metric: FAA will collaborate with a vendor to:

- Modernize FAA’s approach to building custom software,
- Improve the speed and agility of the development cycle,
- Better leverage its current IT assets, and
- Learn modern software development and unique approaches via demonstration of how vendor provides services and a minimally viable product in an accelerated manner through iterative development and rapid prototyping.

Method of Setting Target: The target was selected based on the following criteria:

1. Relief on first and second level NAS support
 - The TFMS first and second level engineering support teams will be able to focus on TFMS core functionality and not be burdened with the public-facing web products, maintained elsewhere. The speed of fixes, deployments, and feature additions will



increase relative to the current baseline. Offloading the public-facing OIS provides the benefit of reducing, or eliminating, maintenance of non-critical mission support functions.

2. Reduction of TFMS burden
 - This is a first step towards carving out products from TFMS and deploying them in a cloud-based environment. The first iteration of public-facing OIS will allow us to understand the future impact on the technical stability of TFMS. Additional iterations will continue to reduce the technical burden on TFMS.
3. Redesign for ease of future improvements
 - Implementing Pivotal-FAA practices on a public-facing website will reduce the time it takes to move an idea into production. Reducing the cost of change in software development is a major win. The investment in new practices should enable long-term value delivery by the enabled-FAA product team.
4. Avoids traditional obstacles
 - The team determined this path because of its isolation from traditional obstacles that have lengthened development cycles - for example, sensitive data and union negotiations
5. Potential to move into airline OIS version
 - A clear path to align the public-facing OIS with the Collaborative Decision Making (CDM) version exists. We will build the public-facing site with an eye to other users. More importantly, the public-facing site will be built in a way that enables quick iterations to address additional user groups.
6. Potential to move into Air Traffic Control Systems Command Center (ATCSCC) OIS version

ATCSCC OIS enables users to add/edit/delete certain data elements that can be brought into a new version of the system. Upon completing these features, additional burden will be lifted from the TFMS system management.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: These metrics were chosen through alignment exercises between the product team and the key stakeholders based on prioritized goals.

Public Benefit: Redesign of the 20-year-old web site to a more user-friendly interface platform that will allow for ease of modification, and increase the use of the web site.

Partners: Pivotal Software, Inc.

External Factors Affecting Performance: External factors that could affect the FAA's performance include:

- Ability to obtain all data required from the System Wide Information Management (SWIM) interface
- Budgetary constraints, and
- External stakeholder /user participation



Source of the Data: System Wide Information Management (SWIM)

Statistical Issues: No reliable baseline exists with the current web site to accurately compare metrics of the redesigned web site. Metrics from the production site showing increased usage will depend on when the FAA decides to promote the web site publicly.

Completeness: The product team and key stakeholders will facilitate a discussion to determine a plan for assessing the quality of performance. During that discussion, prioritized objectives are defined and measures generated to determine validity and verification of the product.

Reliability: N/A.



Reduction of Legacy and Underutilized Instrument Flight Procedures (IFPs)/National Procedure Assessment (NPA)

Performance Metric: Reduce Legacy and Underutilized IFPs/National Procedure Assessment (NPA).

FY 2020 Performance Target

- The FAA will reduce legacy and underutilized procedures by at least 1,000. Due September 30, 2020.

Lead Organization: _____ ATO

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	N/A	1,000
Actual	N/A	N/A	N/A	N/A	TBD

Definition of Metric

Metric Unit: Reduced number of legacy and underutilized procedures.

Computation: The metric is based upon the actual removal of lines of minima in the National Airspace System (NAS) on the Aeronautical Information, Regulation, and Control (AIRAC) dates specified in the FAAO 8260.26 via the Terminal Procedures Publication (TPP) every 56 days.

Formula: A count of each line of minima removed from the NAS and the activity completed every 56 days on the dates outlined in the FAAO 8260.26 AIRAC dates in FY2020.

Scope of Metric: The metric measures the reduction of lines of minima associated with NON-Directional Beacon (NDB), Localizer (LOC), and Very High Frequency Omnidirectional Radio Range (VOR), and circling that are removed in the National Airspace System.

Method of Setting Target: This metric is set based on collaboration with the Aeronautical Information Services, Eastern Service Center/Operations Support Group, Central Service Center/Operations Support Group, and Western Service Center/Operations Support Group to determine the number to remove, and the lines of minima targeted are underutilized lines of minima in the NAS identified by a MITRE study.



Additional Information on Metric

Why the FAA and/or DOT Chose this Metric:

Modernization of the NAS via efforts outlined in the PBN NAS Navigation Strategy 2016 established thousands of Area Navigation (RNAV) and Required Navigation Performance (RNP) procedures throughout the NAS, while maintenance continued on the conventional instrument approach procedures and the infrastructure required supporting those procedures to ensure the safety of the NAS. This effort will reduce the conventional based lines of minima and assist in the transition to a truly PBN-centric NAS.

Public Benefit:

By reducing legacy lines of minima in the NAS, increased efficiency gained to accommodate future PBN procedure amendments.

Partners:

National Business Aviation Association (NBAA)
Aircraft Owner and Pilots Association (AOPA)
Airlines for America (A4A)
Department of Defense (DOD)

External Factors Affecting Performance:

Comments from general aviation or the public on an aviation need for the specific line of minima to be retained could result in the line of minima being retained in the NAS.

Source of the Data:

MITRE Report on underutilized instrument approach procedures

Statistical Issues:

N/A

Completeness:

The NPA process was developed as a phased integrated approach to limit the impact on FAA resources and the NAS. The research conducted by MITRE identified underutilized lines of minima across the NAS, and criteria was developed to evaluate the need for the specific line of minima at the airport. The criteria utilized to identify the line of minima targeted for removal was issued in the Federal Register for public notification.

FAA coordinated with stakeholders to ensure awareness and concurrence of notification and comment process.

Reliability: There are no reliability issues with the data (lines of minima). The data is manually counted and validated every 56 days on the AIRAC dates specified in the FAAO 8260.26 within FY2020.



UAS Authorizations

Performance Metric: ATO will maintain the processing time for 107.41 authorization requests.

FY 2020 Performance Target:

- Process 95% of manual Part 107 Airspace Authorizations within the 90-day timeline mandated by Congress. Due September 30, 2020.

Lead Organization: _____ ATO

Process 95% of manual Part 107 Airspace Authorizations within the 90-day timeline mandated by Congress. Due September 30, 2020.

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	N/A	95%
Actual	N/A	N/A	N/A	N/A	TBD

Definition of Metric

Metric Unit: Part 107.41 Airspace Authorizations processed.

Computation: An average of the total number of processing days for Part 107.41 Authorizations completed since the beginning of FY20. Processing days are calculated as the number of days from when a Part 107.41 Authorization is received to when it is completed in DroneZone.

Formula: Total Number of Processing days for Applications Processed/Total Number of Applications Processed

Scope of Metric: This applies only to 107.41 Authorizations.

Method of Setting Target: This metric was mandated by Congress. It was set to effectively monitor the approval time to process and disposition controlled airspace authorizations applications as identified in 14 CFR Part 107.41.

Additional Information on Metric

Why the FAA and/or DOT Chose this Metric: This is a high-priority activity to enable UAS integration into the National Airspace System (NAS). Notification and awareness of sUAS activity in controlled airspace is necessary to ensure overall safety of flight objectives.



Public Benefit: The FAA continues to meet the mandated turnaround time on both application status updates, as well as the issuance of the individual authorizations themselves.

Partners: The Mission Support Service Centers.

External Factors Affecting Performance: None

Source of the Data: For applications submitted through DroneZone, an application is generated through the system and the system tracks how long it takes to process an authorization. For applications submitted through the Low Altitude Authorization and Notification Capability (LAANC), requests are approved in near-real time whenever those operations occur within the Unmanned Aircraft System Facility Map (UASFM) altitude limitations. If outside of those altitude limitations, applicants will go through DroneZone to be worked manually.

Statistical Issues: None.

Completeness: The lead office (UAS Policy Team Team, AJV-P22) tracked Part 107.41 applications from submission to disposition through various sources discussed above. These sources were interacted with assigned staff on a daily basis. The staff followed a standard operating procedure to process applications to ensure continuity and accuracy.

The data was collected by information collected via DroneZone to provide the reporting metric, which is the existing manual process.

Reliability: This is a process requiring queries from DroneZone to provide a unified response.



Policy, International Affairs, & environment (APL) Performance Measure Profiles

Multi-Year FAA International Strategy

Performance Metric:

Reaffirm U.S. global leadership and influence through the establishment of a Multi-Year FAA International Strategy designed to improve global system safety and efficiency for U.S. stakeholders, safely and efficiently integrate innovative and emerging technologies, minimize aviation's environmental impact, and enhance FAA's strategic international training capabilities.

FY 2020 Performance Target:

Target 1 - Establishment of a Multi-Year FAA International Strategy. Establish a multi-year FAA International Strategy including objectives and data-informed metrics to improve international system safety and efficiency, and initiate at least two enhanced global leadership activities in support of the new strategy to promote strategic partnerships in training and technical assistance.

Target 2 - Global Leadership - Establishment of a Multi-Year FAA International Strategy. Establish a multi-year FAA International Strategy including objectives and data-informed metrics to improve international system safety and efficiency, and achieve at least three enhanced global leadership activities in support of the new strategy to promote strategic partnerships in training and technical assistance.

Lead Organization: Office of Policy, International Affairs & Environment (API)

	FY 2020	FY 2021
Target	09/30/2020	TBD
Actual	TBD	TBD

Definition of Metric

Metric Unit:

Milestones identified and coordinated by API, validated by the International Steering Committee (ISC) and approved by the International Advisory Board (IAB).

Computation:

N/A.

Formula:

N/A.

Scope of Metric:

N/A.



Method of Setting Target:

The U.S. benefits from FAA global leadership to realize improvements in aviation safety, efficiency, capacity, and environmental sustainability. U.S. citizens travelling abroad and flights between the U.S. and other countries benefit from increased safety due to FAA expertise and leadership in developing global regulations and standards. FAA programs promote seamless connectivity across borders for air navigation and product exchanges. Worldwide acceptance of U.S. policies and regulatory approaches removes barriers for the U.S. aerospace industry, a vital component of the U.S. economy

Additional Information on Metric

Why the FAA and/or DOT Chose this Metric:

The US has long been the gold standard internationally when it comes to aviation technology, systems, procedures, safety regulation and oversight. This has led to global standards that are based on US requirements and systems. More and more, there are new influences from Europe, China and other emerging aviation markets that are threatening US global leadership in aviation and aggressively driving their standards and regulations as regional and global solutions around the world. This could undermine US leadership and negatively impact safety, operational efficiency and the adoption of US technology worldwide.

Public Benefit:

This metric will allow the FAA to make better resource decisions about how we engage globally using an integrated data-informed approach. We will make decisions about our international activities and programs based on our ability to enhance U.S. influence and better target our resources to shape global standards and assist countries to improve aviation safety, efficiency, capacity, and environmental sustainability to the benefit of the U.S. flying public.

Partners:

Partners include, but are not limited to, FAA Lines of Business, bilateral partners in civil aviation authorities and air navigation service providers, U.S. industry, regional organizations, and U.S. Government Agencies.

External Factors Affecting Performance:

Historically the U.S. shaped the global aviation sector based on its size, technological advancement, expertise, and regulatory development. The FAA has been the leading model for safety, efficiency, and environmental sustainability for decades. However, the global transportation network is changing with more entities striving to influence global standards based on their regional/State priorities (not those of the U.S.). While the U.S. still maintains the largest airspace in the world, its percentage of overall global traffic and operational aerospace products is decreasing. Hence, the FAA needs to adapt its international approach to maintain and enhance its leadership position.

Source of the Data:

At the request of agency executives, the Office of International Affairs was tasked to examine the agency's current process for program planning, including the focus and effectiveness of international training.



Statistical Issues:

No statistical issues.

Completeness:

As the Multi-Year International strategy evolves, it may be necessary to revisit the identified data and revise the criteria on a regular basis to ensure it is valid and supports the strategy.

Reliability:

The identified data collection criteria will change on a regular basis as it is updated at the source. Although this may not affect the future inclusion of this criterion in the future, it would affect the prioritization process.



Develop the Consolidated Agency Resource Library (CARL)

Performance Metric: The CARL will be the FAA’s information technology search tool that allows senior executives and other key personnel to quickly access FAA authoritative information from all relevant FAA Lines of Business and Staff Offices (LOB/SO).

FY 2020 Performance Target:

FY 2020 Target 1: FAA Deputy Administrator and LOB/SO Deputy's will ensure annual funding and resources are available to develop and maintain the CARL as an ongoing corporate application.

Deliverable: System Development initially or fully funded.

FY2020 Target 2: Coordinate with all relevant LOB/SOs to ensure key appropriate content sources (e.g. data systems, SharePoint sites, dashboards) are identified and made available to the search tool, in a retrievable format, for the CARL. Deliverable: Complete list of content required for Phase 3 of CARL reported to the CARL development KSN.

FY2020 Target 3: AIT will work with APL and LOB/SO to develop and implement the first production release of CARL. Deliverable: Initial production release. Due September 30, 2020.

FY2020 Target 4: To ensure the CARL system meets its user needs, APL and AIT will work with the LOB/SOs to develop and implement Key Performance Indicators (KPI) for the CARL system. Deliverable: APL and AIT will conduct at least three quality assurance reviews to assess how Tableau dashboards and Search results meet the user needs.

Lead Organization: (APL) APO

FY 2020	
Target 1 Status	Y/N
Actual Status	TBD
FY 2020	
Target 2 Status	Y/N
Actual Status	TBD
FY 2020	
Target 3 Status	Y/N
Actual Status	TBD
FY 2020	
Target 4 Status	Y/N
Actual Status	TBD



Definition of Metric

Metric Unit: Target 1 is “yes/no” regarding if the project was funded initially for Phase 2 development. Target 2 is “yes/no” depending on whether Phase 3 content requirements were identified. Target 3 is “yes/no” depending on if the date a production version of CARL Phase 2 is available. Target 4 is “yes/no” depending on if 3 user performance assessments are conducted.

Computation: N/A

Formula: N/A

Scope of Metric: The metrics apply to activities performed by the CARL development team.

Method of Setting Target: The targets were developed in collaboration between the organizations share responsibility for developing the CARL, and approved by the senior stakeholder.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The FAA created this metric due to the importance of developing the CARL that meets user requirements within budgetary allowances.

Public Benefit: CARL will increase the efficiency and effectiveness of senior executives and subordinate staff.

Partners: DOT, other Federal Agencies and the general public will benefit by increased efficiency and effectiveness of the FAA.

External Factors Affecting Performance: External factors affecting the performance of CARL include future funding and the governance of the content data made available for CARL search and presentation.

Source of the Data: The measurement data is observed and reported by the Project Team.

Statistical Issues: There are no statistical issues with regard to reporting metrics for these targets.

Completeness: These metrics are very simple and easy to identify. They completely measure the success of important milestones for the CARL program development.

Reliability: These metrics are directly related to the status of the targets. Reporting has a direct correlation to the complete or not complete status of the target and are highly reliable.



Cybersecurity/Information Technology (IT) Risk Management and Information Systems Security

Performance Metric: Implement vulnerability management processes to address high value risks threats and vulnerabilities to FAA Information Systems. Continue to provide information to the Cybersecurity Steering Committee to assure consistent risk acceptance decisions.

FY 2020 Performance Target: Address 80% of Internet Protocol (IP) based high value risks within 30 days.

Lead Organization: Office of Finance and Management (AFN), Office of Information and Technology Services (AIT)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	80% of high value risks within 30 days	80% of high value risks within 30 days	80% of high value risks within 30 days	80% of high value risks within 30 days	80% of high value risks within 30 days
Actual	100%	100%	100%	99.7%	TBD

Definition of Metric

Metric Unit: Percentage of high value risks addressed within 30 days from initial incident detection. High value risks are defined as:

1. Threats that are identified by the US Computer Emergency Response Team (US-CERT) as high and deemed exploitable within FAA’s infrastructure, or
2. Vulnerabilities that affect high risk systems – Plan of Action & Milestones (POA&Ms) that can be easily exploited, or
3. Vulnerabilities related to current attacks (such as US-CERT) that are exploitable in the environment or that are related to current incidents

Computation: The performance target is measured by dividing the number of high value risks that were addressed within 30 days from initial detection by the total number of high value risks detected.

Formula:
$$\frac{\text{High Value Risks Addressed within 30 Days}}{\text{Total Number of High Value Risks}} \times 100$$

Scope of Metric: High value risks are detected across the three FAA operating domains: These risks are identified through internal audits and scans, as well as the DHS Cyber Hygiene Vulnerability Scanning.

Method of Setting Target:

80 % Goal: The FAA’s Security Operations Center (SOC) executes the process to identify high value risks and track their disposition by establishing a baseline and notifying domain POCs with high value risk information. Domain POCs will address risks within 30 days and report disposition to FAA SOC. The Cybersecurity Steering Committee will review for consistent risk acceptance decisions.



Reporting will occur monthly to the Cybersecurity Steering Committee and quarterly to the Business Council, or as requested.

Providing Information to the Cybersecurity Steering Committee to assure consistent risk acceptance decisions: Provide data monthly to ensure that the appropriate Authorizing Official within each of the three operating domains approves security incidents and/or vulnerabilities with residual risks.

Visualizing vulnerabilities on all FAA information systems: Vulnerabilities visualized through the deployment of a visualization dashboard in conjunction with implementation of continuous diagnostics and mitigation (CDM) capabilities, providing near, real-time information about Agency hardware, software, and vulnerabilities. In addition, support of other Information Security Continuous Monitoring (ISCM) activities, such as integrating information from the NAS domain.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Today's electronically dependent environment demands that IT systems be delivered securely and cost effectively, while meeting the agency's diverse business requirements. The Information Systems Security (ISS) metric measures the FAA's response to vulnerabilities against persistent and evolving cyber threats.

Public Benefit: The Office of the Chief Information Officer (CIO-AIT) is dedicated to providing the highest level of cybersecurity available and is committed to the security and protection of personally identifiable information.

Partners: AIT continues to strengthen ties with partners in the DOT and the Department of Homeland Security (DHS). DOT and DHS support our efforts of a cyber-defense strategy to harden the internal backbone of FAA systems and networks to avoid disruptions to services. Collaboration, both internally and externally, will help mitigate risks to an acceptable level.

The SOC, a 24x7x365 day operation, is the central reporting point for all cyber events occurring within the FAA and as well as all other modes within the Department of Transportation (DOT). The SOC is the single source provider of the cyber "big picture" when reporting to the DHS.

External Factors Affecting Performance: The occurrence, pace and volume of emerging threats and vulnerabilities that could potentially target the FAA are unpredictable.

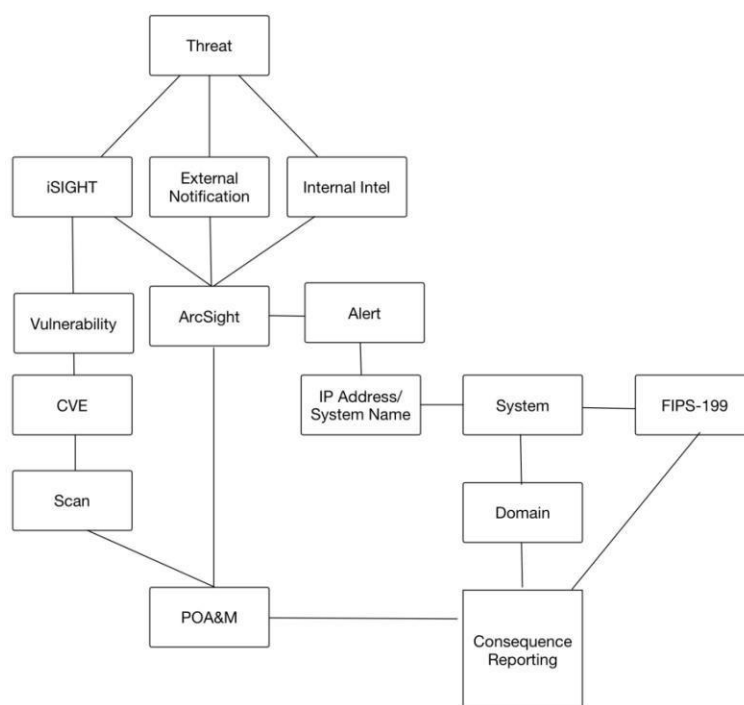
Source of the Data: High value risks are threats and vulnerabilities identified by cyber intelligence sources as well as the DHS National Cybersecurity and Communications Integration Center (NCCIC). The NCCIC conducts persistent network and vulnerability scans of all Federal civilian agency internet-accessible systems to identify known critical vulnerabilities and configuration errors, capturing the total number of critical vulnerabilities in the Cyber Hygiene Report. Critical systems are rated as Federal Information Processing Standards (FIPS)-199 "HIGH" in the Cyber Security Assessment and Management (CSAM) system, and support mission-essential services identified in the FAA Continuity of Operations Plans.

Statistical Issues: None



Completeness: The FAA’s Security Operations Center (SOC) develops and executes the process to identify high value risks and track their disposition by establishing a baseline and notifying domain POCs with high value risk information. Domain POCs will address high value risks within 30 days from initial incident detection and report the disposition to FAA SOC. The Cybersecurity Steering Committee will review high value risks monthly to ensure consistent risk acceptance decisions. For high value risks not addressed within 30 days, a detailed justification must be submitted to DHS within the same 30-day period, outlining any barriers, planned steps for resolution, and a timeframe for mitigation.

Reliability: The governance process validates whether threat data received impacts FAA information and systems, and the potential risk to each domain. The technical implementation of this approach, divided into three phases: threat, vulnerability and consequence, involves the flow of data from threat reporting sources into the SOC, as shown in the graphic below.





Unmodified Audit Opinion

Performance Metric: Obtain an unmodified audit opinion on the FAA’s FY 2020 financial statements. This goal requires an unmodified audit opinion identified by external independent auditors.

FY 2020 Performance Target: Obtain an unmodified audit opinion on the FAA’s FY 2020 financial statements identified by external independent auditors.

Lead Organization: Office of Finance and Management (AFN)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	Unqualified Audit Opinion w/NMW	Unmodified Audit Opinion w/NMW	Unmodified Audit Opinion w/NMW	Unmodified Audit Opinion w/NMW	Unmodified Audit Opinion
Actual	Unmodified Audit Opinion w/NMW	Unmodified Audit Opinion w/MW (target not met)	Unmodified Audit Opinion w/ NMW	Unmodified Audit Opinion w/NMW	TBD

Definition of Metric

Metric Unit: *Unmodified independent auditors’ opinion rendered on FAA’s annual financial statements.*

Computation: N/A

Formula: N/A

Scope of Metric: The scope of this measure includes FAA’s annual audited financial statements, which include several required elements such as related footnotes, required supplementary information, and management’s discussion and analysis. The financial statements, together with the auditors’ report (the audit opinion referenced in this goal), are published by FAA in its annual Performance and Accountability Report.

Method of Setting Target: This measure was set as “unmodified.” This means that in the opinion of independent auditors, FAA’s financial statements are fairly stated in all material respects, in accordance with generally accepted accounting principles. Prior to FY 2020, the Unmodified Audit Opinion measure also included a requirement for no material weaknesses (NMW) in internal control. This latter requirement was eliminated in FY 2020.



Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The FAA chooses this measure because it is an independent and objective assessment about whether the FAA's financial statements are fairly presented in all materials respects, in accordance with generally accepted accounting principles. During the course of the financial statements audit, the auditors also consider the internal control environment over financial reporting, and FAA's compliance with certain laws and regulations.

Public Benefit: The public benefits because an unmodified opinion by independent auditors is a critical indicator of financial condition. It is an independent and objective assessment of the fair presentation of FAA's financial statements, and in connection with that process, considers the internal controls over financial reporting.

Partners: Although the Office of Financial Services takes the lead in achieving this goal, all FAA organizations have key roles. They have responsibility for initiating only bona fide transactions, entering accurate and timely source data into the accounting system, and following accounting policy properly. These are essential components to achieving an unmodified audit opinion. The following activities in particular, are required from all lines of business and staff offices to accomplish this goal (but this is not an all-inclusive list):

- Financial and budgetary transactions (e.g., obligations and expenditures) must be accurate, timely, and for bona-fide needs. This also includes removing assets, liabilities, and budgetary balances from the books and records accurately and timely (e.g., de-obligating, closing out contracts, recording asset retirements, etc.).
- The Enterprise Services Center (ESC) must achieve a good audit result on its service provider audit so that any information technology and systems security-related findings are insignificant. Similarly, the Office of Information and Technology (AIT) must adopt and enforce appropriate information technology controls to protect the data that is processed through FAA's business systems.
- Lines of business and staff offices must continue to review their aged obligations (defined as no activity for 12 months) quarterly and de-obligate amounts no longer needed. They must also take the Federal Managers' Financial Integrity Act (FMFIA) vulnerability assessment process seriously to identify and mitigate any significant financial control weaknesses.
- Program offices must process paperwork for asset acquisitions and deployments in a timely manner. Also, they must report asset transfers and disposal activities timely so that the financial effects of those activities can be recorded into the FAA's financial statement.

External Factors Affecting Performance: External factors that can affect FAA's financial audit results include the fact that certain financial data, such as excise tax revenue of the Airport and Airway Trust Fund (AATF), are collected and attributed to the AATF by the Department of Treasury (Treasury). While FAA analyzes this data to ensure reasonableness, FAA must rely, to some degree, upon various Treasury bureaus (such as the Internal Revenue Service) for the accuracy of these amounts which are reported in FAA's financial statements.

Source of the Data: The data used to evaluate FAA's measure against this target comes from the independent auditors' report, issued at the conclusion of their audit of FAA's annual financial statements. The auditors' report is published annually in FAA's Performance and Accountability Report (PAR). The PAR is the agency's annual public-facing document that includes the agency's financial statements, the auditors' report on those financial statements, as well as a summary of performance



against agency-wide performance measures.

Statistical Issues: None

Completeness: Because of the nature of this measure and how the outcome is reported, there is virtually no possibility that the result could be reported inaccurately or incompletely. FAA reports the outcomes of this goal in its annual Performance and Accountability Report (PAR) together with a full copy of the auditors' official report (called the audit "opinion letter"). The auditors' opinion letter is the official "ruling" from the independent third party source (the auditors) of the outcome of this measure. The auditors' opinion is published on the letterhead stationery of the audit firm, and bears the signature of the audit partner on behalf of the audit firm. Therefore, the FAA does not have any opportunity to interpret the results, translate data, make projections, or perform calculations, in order to identify whether this goal was met or not. The auditors tightly control the publication of the PAR and will not allow FAA to publish or release the report until they have verified that it includes the official and final version of their audit report. Office of Management and Budget Circular A-136, Financial Reporting Requirements, specifies that agency financial statements, together with the auditors' report on those financial statements be published no later than November 15th annually.

Finally, the financial statements audit is the responsibility of the independent Office of Inspector General (OIG). The OIG must perform sufficient quality control procedures over the contract auditors' work, so that the OIG can accept the conclusions reached as their own. As evidence of the OIG's quality control review over the work and conclusions reached by the third party auditors, the OIG issues a quality control memorandum, on the OIG's letterhead, under the signature of the Inspector General. The OIG's quality control memorandum is also fully published in FAA's PAR. For these reasons, the performance of this measure that is reported by FAA is beyond reproach. There is virtually no method of erroneously reporting this measure because both the third party auditors and the OIG provide the final outcome in written documents that they each issue and that FAA publishes without any summarization or interpretation.

Reliability: The outcome of this measure is reliable because it is reported by a third party auditor and the OIG in the PAR. This document is closely scrutinized by both the contract auditors and the OIG before it is published; therefore, it is virtually impossible that this result could be reported inaccurately.



Cost Control

Performance Metric: Complete documented cost savings and cost avoidance of \$40.49 million in FY 2020.

FY 2020 Target: Achieve 90% (OSI target) of cost savings and cost avoidance of \$44.99 Million in FY 2020.

Lead Organization: Office of Finance and Management (AFN)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	Achievement of \$50.27 Million of Cost Savings and Cost Avoidance	Achievement of \$42.46 Million of Cost Savings and Cost Avoidance	Achievement of \$41.37 Million of Cost Savings and Cost Avoidance	Achievement of \$42.45 Million of Cost Savings and Cost Avoidance	Achievement of \$40.49 Million of Cost Savings and Cost Avoidance
Actual	\$61.12 Million	\$43.41 Million	\$58.75 Million	\$66.31 Million	TBD

Definition of Metric

Metric Unit: The dollar amount of cost savings and cost avoidance year-to-date.

Computation: Sum of individual program savings.

Formula: (Sum of Fiscal Year Targeted Savings for Individual Programs) x (90%) = FY 2020 OSI target

Scope of Metric: Reduction or avoidance of costs associated with agreed upon actions (activities) that save money, avoid incurring additional costs, or streamline a process. Examples include contracts for strategic acquisition of goods and services, proactive and centralized management of injury claims, square foot reduction of administrative space, personnel savings from the Voluntary Early Retirement Authority (VERA) and the Voluntary Separation Incentive Program (VSIP) and reduction of AIT software subscription costs.

Method of Setting Target: This measure is a dollar savings based measure. This target was chosen because of the maturity of the program and the ability of organizations to accurately project cost savings.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Presidential budget proposals and Reauthorization Acts have challenged the FAA to operate more efficiently under tight budget constraints. To address these concerns, the agency continues to take aggressive steps to stem the growth of operating costs. Cost Control is a centrally developed and managed initiative under the executive direction of the FAA’s Chief Financial Officer. It provides the impetus for implementing sustained and successful cost control activities. Organizations’ participation and progress are reported to the Performance Committee members and during the AFN Monthly Performance Meetings.

Public Benefit: The public benefit to this measure is that funds received by the FAA are being used in a more efficient and cost effective manner.



Partners: The Office of Financial Services (ABA) partners with FAA Lines of Business (LOB) and Staff Offices (SO) to document and review savings activities throughout the agency. ABA reviews and validates cost control initiatives across the Agency, establishes the approved savings and consolidates and reports on the total cost savings and avoidances on a monthly basis.

External Factors Affecting Performance: External factors affecting the performance of this measure are related to the ability of each LOB/SO to meet their individual targeted savings. Some of the factors that affect the LOBs/SOs are funding, need and timing.

Source of the Data: LOBs/SOs utilize a financial template designed by ABA to propose cost saving and/or cost avoidance activities. Once submitted, the templates are reviewed by ABA analysts who validate the proposals and associated financial computations. Cost control activities are then tracked and reported on a monthly basis through an Excel spreadsheet maintained by ABA. Organizations provide monthly status updates on progress toward their annual goals.

Statistical Issues: None

Completeness: Each completed template and the monthly status spreadsheet is retained on an ABA shared drive.

Reliability: ABA verifies organizations' activities, milestones, and dollars saved/avoided using a template completed by the organizations. In addition to ABA's monthly financial tracking, individual organizations are responsible for maintaining files and spreadsheets containing supporting calculations and documentation on their activities.



Critical Acquisitions on Schedule

Performance Metric: Critical Acquisitions on Schedule

FY 2020 Performance Target: 90% of the critical acquisitions selected annual milestones (76) are achieved by their planned completion dates.

Lead Organization: Finance and Management (AFN)

	FY 2016	FY 2017	FY 2018	FY 2019	FY2020
Target	90.00%	90.00%	90.00%	90.00%	90.00%
Actual	96.00%	100%	95.16%	97.5%	TBD

Definition of Metric

Metric Unit: Number of milestones completed by their target due date, compared to the number of milestones selected as the starting baseline of measurement, results in the percentage of milestones completed by their target due date.

Computation: Performance is measured by dividing the total number of milestones for the Fiscal Year (FY) that completed on or before their target due dates by the total number of milestones planned.

Formula: $\frac{\text{(Total Number of Critical Acquisition Milestones) Met}}{\text{Total Number of Critical Acquisition Milestones Tracked}} \times 100$

Scope of Metric: FAA organizations in coordination with the Capital Program Formulation Branch (ABP-310) select annual milestones and target completion dates based on specific criteria. Programs strategically important to the FAA and programs with approved Acquisition Management System (AMS) Acquisition Categories (ACATs) of new investment, technology refreshment, variable quantity, and facility programs are the basis for this goal.

The designation of “critical acquisition programs” in the title of the performance target expresses the critical value of the program to the FAA. The schedule measure is set to only those milestones selected at the beginning of the current fiscal year. Once the selected milestones are approved, no milestones are added, deleted, or changed during the year.

Method of Setting Target: Maintaining the 90 percent target each year ensures that FAA demonstrates its commitment to meet cost and schedule goals and benchmarks using a 90% target parameter that is well established across government agencies.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The Critical Acquisitions on Schedule target represents a progressive measure for each fiscal year of the performance of FAA acquisition programs. The performance measure began in FY 2003 and will continue each fiscal year through the acquisition of the selected programs. The performance target increased each year until it reached 90 percent in FY 2008.



Public Benefit: 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.

Partners: ABP-310 works with the FAA Lines of Business (LOBS)/Service Units (SU) responsible for the programs selected. These organizations include ATO, AFN, AVS, etc. Programs provide monthly updates of the critical acquisition schedule milestones using the SPIRE system. A rigorous assessment and review process is conducted monthly to ensure status and appropriate commentary is completed.

External Factors Affecting Performance: External factors that may affect the achievement of this performance target include funding limitations, unanticipated political developments, legislative constraints, or policy changes.

Source of the Data: FAA tracks and reports the status of all schedule targets using Strategic Planning, Implementation, Reporting and Evaluation (SPIRE) Portal tool, an automated database. FAA LOBs provide a monthly red, yellow, or green assessment that indicates their confidence level in meeting their established milestones. Comments are provided monthly that detail problems, issues, and corrective actions to ensure milestones meet their planned target dates. The performance status is reported monthly during the AFN monthly performance reviews and performance committee meetings.

Statistical Issues: The programs and milestones that are selected each fiscal year represent a cross-section of programs within the Agency. There is no bias with the selection of milestones, and there are established criteria for selecting milestones included in the annual goal. The milestones selected represent the program offices’ determination as to what efforts they deem “critical” or important enough to warrant inclusion in the critical acquisitions performance goal for the year.

Completeness: This measure is current with no missing data. Reporting will begin 30 days after the finalization of the milestones included in this measure.

Reliability: Each FAA organization uses the data during periodic acquisition program reviews, to determine resource requests. They are also used during the annual budget preparation process, for reporting progress made in the President’s budget and for making key program management decisions. The monthly status is reported through the automated databases and included in monthly high-level management reviews. Since the Critical Acquisitions on Schedule target is a fiscal year performance measure, the specific milestones and date selected are set at the beginning of each fiscal year and are not changed. Once the milestone is approved, it is reported on with detailed commentary each month and assigned a red, yellow, or green confidence indicator that the milestone will be met on schedule. These detailed reports are reviewed at all levels of the appropriate organization, executive levels up to the Performance Committee.



Major System Investment

Performance Metric: 90% of major baselined acquisition programs (20) must be maintained within 10% of their current acquisition cost, schedule and performance baseline as of the end of fiscal year 2020.

FY 2020 Performance Target: 90% of major baselined acquisition programs must be maintained within 10% of their current acquisition cost, schedule and performance baseline as of the end of fiscal year 2020.

Lead Organization: Finance and Management (AFN)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	90%	90%	90%	90%	90%
Actual	95.45%	95.24%	90.5%	75%	TBD

Definition of Metric

Metric Unit: Percentage of programs within a 10 percent variance of the investment’s total established baseline cost at completion, baseline schedule duration at completion and performance baseline.

Computation:

- Cost performance for each Major Investment program is measured by subtracting the Estimated Cost at Completion (ECAC) from the total Baseline Cost at Completion (BCAC) established with the approved Acquisition Program Baseline (APB), resulting in a Cost Variance of Completion (CVAC).
- Schedule performance for each program is measured by subtracting the Estimated Schedule duration at Completion (ESAC) from the Baseline Schedule duration at Completion (BSAC) (first milestone to last milestone) established with the approved APB, resulting in a Schedule Variance at Completion (SVAC).
- Performance Variance at Completion (PVAC) is computed by subtracting the estimated performance at completion from the baseline performance values.

Formula:
$$\frac{\text{Total Number of Programs within 10\% Variance of Cost, Schedule, and Performance Baseline}}{\text{Total Number of Programs Tracked}} \times 100$$

Scope of Metric: Programs classified as Acquisition Category (ACAT) 1, 2, or 3 or is considered strategic or part of NextGen are considered “Major” programs and included in this measure. For FY 2020, twenty major acquisition programs will be tracked and monitored. This measure is consistent with Public Law 104-264, which requires the FAA Administrator to consider termination of a program if the program is breaching the cost, schedule, or performance baseline by more than 10%.

Method of Setting Target: Public Law 104-264 dated October 9, 1996 requires the FAA Administrator to consider the termination of acquisition programs if a program: 1) is more than 10 percent over the cost goal established for the program; 2) fails to achieve at least 90 percent of the performance goals



established for the program; or 3) is more than 10 percent behind the schedule goal established for the program.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The Major Systems Investment target represents a progressive measure for each fiscal year of the performance of major FAA acquisition programs. The performance measure will continue each fiscal year through the acquisition and implementation phase of the selected programs. Choosing this measure ensures continuity and consistency with the Public Law reporting. Public Law 104-264, dated October 9, 1996, requires the FAA Administrator to consider terminating any substantial acquisition with cost, schedule, or performance variances greater than 10 percent. In addition, the law requires the FAA Administrator to terminate programs funded from Facilities and Equipment (F&E) appropriations with variances greater than 50 percent for cost, schedule, or performance initiated after the enactment of the Air Traffic Management System Performance Improvement Act of 1996.

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

Partners: Capital Program Formulation Branch (ABP-310) works with the LOBs/SOs organizations that are responsible for the programs identified. These organizations include ATO, AFN, etc. ABP-310 works to monitor and track the cost, schedule and performance of these major programs through an automated system. The processes, disciplines, and infrastructure are in place to provide monthly monitoring and reporting.

External Factors Affecting Performance: External factors that may affect the achievement of this performance target include funding limitations, unanticipated political developments, legislative constraints or policy changes.

Source of the Data: FAA Lines of Business (LOB) report monthly status of their APBs using the Simplified Program Information Reporting and Evaluation (SPIRE) tool, an automated database. FAA LOBs provide a monthly status of the ECAC, ESAC and performance including an analysis of the risks in maintaining program baselines. Performance Indicators and commentary is provided monthly that details problems, issues, and corrective actions, to ensure baselines are maintained within the established acquisition baseline parameters. The performance status is reported monthly to the senior level managers via the monthly Performance Committee Meetings.

Statistical Issues: The programs selected each fiscal year represent a cross section of programs within the FAA. They include Automation, Communication, Facility, NextGen, Navigation, Weather, and Surveillance programs that have an Acquisition Category 1, 2, or 3 is or are of strategic importance to the agency.



Completeness: This measure is current with no missing data. Reporting will begin 30 days after the list of programs is finalized.

Reliability: Each organization having major acquisitions uses the data during periodic acquisition program reviews. They are also used during the annual budget preparation process, for reporting progress made in the President's budget and for making key program management decisions. The monthly status is reported through the SPIRE tool and included in monthly high-level management reviews. Detailed status is reported each month, supported by Red, Yellow, or Green measures for cost, schedule, and performance parameters. These detailed reports are reviewed with the appropriate Lines of Business and Executive levels.



Cybersecurity in the Aviation Ecosystem

Performance Metric: Develop a strategy to guide collaborative engagements with external Aviation Cyber Initiative (ACI) partners and ecosystem stakeholders to ensure the resiliency of the aviation ecosystem. This strategy will facilitate informed and actionable conversations about cyber risks, and industry best practices and standards.

FY 2020 Performance Target: Develop a 1-year, 3-year, and 5-year strategy with associated goals and objectives for FAA cybersecurity stakeholder engagement within the Aviation Ecosystem.

Due: 04/30/2020

Lead Organization: Office of Information and Technology Services (AIT), Information Security & Privacy Service (AIS)

	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023
Target	Deliver briefing & Complete approval	Develop 1-year, 3-year, and 5-year strategy	N/A	N/A	N/A
Actual	Briefing 03/05/19 Approval 05/30/19	TBD	N/A	N/A	N/A

Definition of Metric

Metric Unit: N/A

Computation: N/A

Formula: N/A

Scope of Metric: N/A

Method of Setting Target: The ACI is focused on implementing cyber aspects of the National Strategy for Aviation Security (NSAS). The ACI established a Community of Interest (COI) encompassing broad engagement with stakeholders across the Aviation Ecosystem.

The FY 2020 performance target was established as part of the work done by AIS’s Aviation Ecosystem and Stakeholder Engagement Office (AIS-30) to conduct wide-ranging activities and engage in cyber risk conversations with stakeholders. The strategy includes all areas of the Aviation Ecosystem, including internal engagements across the agency and external engagements with government and industry partners.



Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Aviation Ecosystem cybersecurity efforts are driven by collaboration and information sharing among stakeholders. Briefings and discussions with groups such as the Aviation Government Coordinating Council (AGCC) and Aviation Sector Coordinating Council (ASCC) are an essential element of information sharing on aviation cybersecurity. The ACI is recognized in the NSAS as the focal point for cybersecurity engagement across the Aviation Ecosystem. The primary objective for these efforts is to help ensure the resiliency of the aviation ecosystem by facilitating informed and actionable conversations about cyber risks with stakeholders throughout the ecosystem

- The AIS-030 office serves as a focal point for internal FAA coordination and external engagement on risk reduction and information sharing for the Aviation Ecosystem.
- The ACI has a “Tri-Chair” governance structure that includes DHS, DoD, and DoT/FAA. The DoT/FAA ACI lead is AIS-30.

Public Benefit: The primary objective for this effort is to help ensure the resiliency of the aviation ecosystem by facilitating informed and actionable conversations about cyber risks with stakeholders throughout the ecosystem.

The aviation ecosystem is an increasingly interconnected environment. Identifying and addressing cybersecurity risks in the ecosystem is growing in importance every day as a component of ensuring a safe and efficient National Airspace System for the flying public and the American economy. As both an operator of critical infrastructure and a civil aviation regulator, FAA cybersecurity engagement with stakeholders serves as a “bully pulpit,” seeking to build a shared vision and creating a cyber-aware and responsive culture in aviation.

Partners: The FAA will work with stakeholders across the US Government, industry, and international partners to identify and address cybersecurity issues, risks, and challenges in aviation. These stakeholders range from airlines to aviation suppliers to aviation personnel to foreign partners in air traffic management and regulation as well as many others.

External Factors Affecting Performance: N/A

Source of the Data: N/A

Statistical Issues: N/A

Completeness: N/A

Reliability: N/A



Assistant Administrator for NextGen (ANG) Performance Measure Profiles

NextGen Advisory Committee (NAC) Recommendations

Performance Metric: Complete 80% of the NAC Recommendations

FY 2020 Performance Target: Achieve eighty 80% of NextGen Priorities Joint Implementation Plan commitments, excluding industry-controlled milestones, within a calendar quarter of their scheduled dates and within 10% of the planned cost (OSI target). Due September 30, 2020.

Lead Organization: NextGen (ANG)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	80/90%	80/90%	80/90%	80/90%	80/90%	80/90%
Actual	97/97%	95/95%	92/92%	100/100%	100/100%	TBD

Definition of Metric

Metric Unit: The metric unit is the number of target goals completed that make up the NextGen Priorities commitments to the NAC and to Congress.

Computation: The requirement is completion of the 28 milestones (implementation and pre-implementation commitments as well as activities that support future NextGen commitments)

$$= \frac{\text{Total Commitments Completed}}{\text{Total Commitments}} * 100$$

Formula: The NAC OSI performance target is completion of 80% of the total 35 targets contained in the NAC Recommendations – complete 28 targets.

Scope of Metric: This metric measures the NextGen’s success in completing the identified milestones in five areas: Surface Operations and Data Sharing (Surface); Multiple Runway Operations (MRO); Data Communications (DataComm); Performance-Based Navigation (PBN), and Northeast Corridor (NEC).

Method of Setting Target: The NAC Joint Implementation Plan recommendation schedule for completion of all targets and milestones is by quarter 3 of calendar year 2020. The FY 2020 schedule is to complete the 35 targets within the business plan by September 30, 2020.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The Overall NAC Recommendation schedule for completion of all targets and milestones is by quarter 3 of calendar year 2020. The FY 2020 schedule is to complete the 35 targets within the business plan by September 30, 2020.

Public Benefit: These capabilities were identified by the NAC as “high priority, high readiness” capabilities that could bring tangible, near-term benefits to NAS users. Each of the five focus areas provides a different benefit to the public. MRO capabilities increase airport efficiency and reduce flight delays. PBN procedures



provide shorter, more direct flight paths, improved airport arrival rates, and increased safety due to repeatable and predictable flight paths. Surface operations increase predictability and provide actionable and measurable surface efficiency improvements. DataComm enhances safety by reducing communication errors between the pilot and air traffic control. NEC recommended implementations will mitigate and address adverse weather, deconflict arrivals in the New York area, improve arrival and departure throughput, ease congestion points, and address community noise.”

Partners: Air Traffic Organization (ATO) – ATO is responsible for implementing the vast majority of commitments. Aviation Safety (AVS) – AVS is responsible for several of the pre-implementation commitments and has coordination role in some industry commitments. NextGen Advisory Committee (NAC) - The NAC is responsible for ensuring industry delivers their commitments as outlined in the NextGen Priorities Joint Implementation Plan.

External Factors Affecting Performance: The implementation of these capabilities are subject to change based on budget conditions or unanticipated logistical issues such as airport construction.

Source of the Data: Completion of these commitments are closely tracked, monitored, and coordinated across ANG, AVS, and ATO lines of business. The agency will continue to monitor progress by conducting internal meetings at least monthly to oversee implementation status. Progress reports will be provided publicly through the NAC with advance notice available to the public in the Federal Register. The FAA will also report on progress against the milestones for each focus area of the NextGen Performance Snapshots website.

Statistical Issues: There are no statistical issues related to the NextGen Priorities.

Completeness: The decision to declare a commitment complete is as follows:

- Implement a functioning capability at a specific location or finish an assessment/study.
- Hold the bi-weekly NAC NextGen Priorities meeting where Subject Matter Experts (SME) share recent accomplishments with ANG, ATO, and AVS leadership.
- ANG, ATO, and AVS leadership jointly determine if the commitments is complete. If so, the commitment’s status is changed from “on track” to “complete” on the public NextGen Performance Snapshot website.

Reliability: The metric has no reliability issue. The NAC recommended commitments are either complete or they are not.



Northeast Corridor (NEC) Commitments

Performance Metric: Complete 80/90% of the NextGen priorities for the Northeast Corridor (NEC) Commitments

FY 2020 Performance Targets

Target 1: Achieve eighty (80) percent of NextGen priorities for the Northeast Corridor (NEC) commitments, excluding industry-controlled milestone, with a calendar quarter of their scheduled dates. Due September 30, 2020

Target 2: Achieve ninety (90) percent of NextGen priorities for the Northeast Corridor (NEC) commitments, excluding industry-controlled milestone, with a calendar quarter of their scheduled dates. Due September 30, 2020

Lead Organization: NextGen (ANG)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	N/A	80/90%	80/90%
Actual					100/100%	TBD

Definition of Metric

Metric Unit: The metric unit is the number of target goals completed that make up the Northeast Corridor commitments to the NAC and to Congress.

Computation: The requirement is completion of the 14 milestones (implementation and pre-implementation commitments as well as activities that support future NextGen commitments)

$$= \frac{\text{Total NEC Commitments Completed}}{\text{Total Commitments}} * 100$$

Formula: The NEC OSI performance target is completion of 80% of the total 14 targets contained in the NEC Commitments – complete 11 NEC Commitments.

The NEC CSTI performance target is completion of 90% of the total 14 targets contained in the NEC Commitments – complete 13 NEC Commitments.

Scope of Metric: This metric measures the NextGen’s success in completing the identified milestones in five areas: Surface Operations and Data Sharing (Surface); Multiple Runway Operations (MRO); Data Communications (DataComm); Performance-Based Navigation (PBN), and Northeast Corridor (NEC).

Method of Setting Target: The NEC Commitments schedule for completion of all targets and milestones is by quarter 3 of calendar year 2020. The FY 2020 schedule is to complete the 14 targets within the business plan by September 30, 2020.



Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The NEC Commitments schedule for completion of all targets and milestones is by quarter 3 of calendar year 2020. The FY 2020 schedule is to complete the 14 targets within the business plan by September 30, 2020.

Public Benefit: The Northeast Corridor (NEC) covers the most congested airports and airspace in the United States, and has a significant effect on the daily operations of the national aviation system. Nearly 50 percent of aviation delays in the entire U.S. National Airspace System (NAS) are attributable to the Northeast Corridor. The commitments in this report identify near-term initiatives that will enhance operations and are focused on the NAC's stated goal to improve execution of today's operations. Given the complex and compact nature of NEC operations, and its connection to the rest of the NAS, single operational improvements can have significant savings in time and during weather events. These enhancements establish a foundation and framework for longer-term effective implementation of NextGen using time-based management techniques and precise repeatable Performance Based Navigation procedures for a more predictable and efficient operation.

Partners: Air Traffic Organization (ATO) – ATO is responsible for implementing the vast majority of commitments. Aviation Safety (AVS) – AVS is responsible for several of the pre-implementation commitments and has coordination role in some industry commitments. NextGen Advisory Committee (NAC) - The NAC is responsible for ensuring industry delivers their commitments as outlined in the NextGen Priorities Joint Implementation Plan.

External Factors Affecting Performance: The implementation of these capabilities are subject to change based on budget conditions or unanticipated logistical issues such as airport construction.

Source of the Data: Completion of these commitments are closely tracked, monitored, and coordinated across ANG, AVS, and ATO lines of business. The agency will continue to monitor progress by conducting internal meetings at least monthly to oversee implementation status. Progress reports will be provided publicly through the NAC with advance notice available to the public in the Federal Register. The FAA will also report on progress against the milestones for each focus area of the NextGen Performance Snapshots website.

Statistical Issues: There are no statistical issues related to the NextGen Priorities.

Completeness: The decision to declare a commitment complete is as follows:

- Implement a functioning capability at a specific location or finish an assessment/study.
- Hold the bi-weekly NAC NextGen Priorities meeting where Subject Matter Experts (SME) share recent accomplishments with ANG, ATO, and AVS leadership.
- ANG, ATO, and AVS leadership jointly determine if the commitments is complete. If so, the commitment's status is changed from "on track" to "complete" on the public NextGen Performance Snapshot website.

Reliability: The metric has no reliability issue. The NEC commitments are either complete or they are not.



Remote Towers

Performance Metric: Work with ATO Technical Operations and Air Traffic Services to: 1) develop a strategy for long-term Remote Tower integration into the NAS and 2) develop a documented process to achieve the approval to integrate Remote Tower systems as an option especially for smaller rural communities.

FY 2020 Performance Targets

Target 1: Render agency decision on the level of service the Remote Tower system could provide in an environment similar to that of Leesburg Executive Airport (JYO). This decision will allow the agency to focus on integration process documents going forward. Issue FAA Decision Memo on operational viability of Leesburg vendor’s Remote Tower system.

Target 2: Using version 1 of the Operational Visual Requirements (with no additional edits/caveats), develop a draft system level Operational Safety Assessment for Remote Towers operating in a Visual Flight Rules environment, and an associated draft of Technical Requirements.

Target 3: Provide Leesburg Remote Tower vendor the Technical Requirements document developed in Target 2 so they can review and provide any additional system documentation needed to meet evaluation requirements.

Target 4: Establish initial cost benefit model, including draft strategy to evaluate safety and efficiency benefits vs. cost, to apply Remote Tower technology at FCT airports operating in a VFR environment. Deliver initial Business Case document for Remote Tower systems at FCT airports.

Lead Organization: NextGen (ANG)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	N/A	N/A	N/A	N/A	4	4
Actual	N/A	N/A	N/A	N/A	4	TBD

Definition of Metric

Metric Unit: Complete the four targets by their prescribed due dates.

Computation: N/A

Formula: N/A

Scope of Metric: This metric measures ANG progress in supporting certifications of Non-Federal Remote Tower Systems.

Method of Setting Target: The approach for setting this target takes into consideration the need for safety requirements in integrating a new system into the National Airspace System (NAS). The FAA does not have a process in place for approving non-federal Remote Tower equipment and operations. There are no existing Remote Tower systems in the National Airspace (NAS), which are alike and used for providing Air Traffic Control Tower (ATCT) services without an out-the-window view. Therefore, no established requirements or certification approval process exist.



Additional Information on Metric

Why the FAA and/or DOT chose this Metric: The FAA is exploring the viability of Remote Tower technologies at smaller communities as a potential lower-cost alternative to building brick-and-mortar air traffic control towers. Specifically, the FAA is exploring if air traffic control services can be provided safely, efficiently and potentially at a lower cost. This is an opportunity for federal, state government, and private partnerships. FAA provides subject matter expertise and the states provide equipment at local facilities. Through these partnerships, we are developing, documenting, and validating a structure that will guide communities to adapt and fund these technologies to grow their local infrastructure.

Public Benefit: Remote Tower systems will potentially provide more cost effective solutions to airports than traditional brick and mortar towers, especially for smaller rural communities. By certifying these systems, the FAA will grant NAS access to small communities, providing opportunities for improved efficiency, economic growth and aviation safety.

Partners: External stakeholders include the local airport authorities at the test sites, the surrounding communities and pilot populations, and the Remote Tower system vendors. The Department of Defense is also evaluating of Remote Tower technology, and the FAA is sharing data and lessons learned with them. European entities are also working with the FAA to establish global requirements for Remote Towers.

External Factors Affecting Performance: The FAA has been working with remote tower system vendors to evaluate the viability of the concept and the capability of the technology to safely provide air traffic services in the NAS. This sequence of evaluations yielded that the capability is not yet fully mature and is currently still developmental in nature. As a result of the evaluations, the system vendors are continuing to make significant system adjustments to ensure higher levels of robustness of the remote tower capability. For the near-term, the performance of these remote tower systems will continue to depend on the vendors' abilities to address system shortfalls such that safe and efficient operations are fully enabled.

In addition, the FAA has been collaborating with other Air Navigation Service Providers (ANSPs) worldwide to develop international standards for remote towers. These service providers are applying remote tower technologies into differing environments, which necessitates extensive international coordination as the associated remote tower standards are being developed. Although many countries have been evaluating and validating various elements of the remote tower concept, none of the other service providers have applied remote tower technologies into as complex of an air traffic environment as the US. As a result, the FAA needs to conduct significant amount testing of the capability to ensure safe introduction of remote tower technologies into the NAS.

Source of the Data: Remote Tower evaluation sites, Remote Tower system vendors, FAA Air Traffic Organization (ATO), FAA NextGen (ANG), and international safety and standards development organizations such as ICAO, EASA, and EUROCAE.

Statistical Issues: N/A



Completeness:

The FAA continues to make progress on its remote tower system evaluations, which directly inform the development of remote tower standards in the US. These evaluations are also allowing vendors to continue to mature their remote tower system capabilities, which should ensure more robust operations for the long-term. At the same time, the FAA is applying its findings to influence other international air navigation service providers and lead the international community toward worldwide remote tower standards development. The FAA is applying its safety risk management processes throughout the remote tower capability evaluations and associated standard development activities.

Specifically, for the Leesburg remote tower project, the FAA conducted various passive shadow and active evaluations in 2016-2017. Subsequently, from June 2018-September 2019, the Leesburg remote tower system was running in its initial operating capability (IOC). Overall the data collected during these evaluations provided the FAA with critical information in verifying and validating the Leesburg remote tower system's effectiveness and long-term viability. In September 2019, the vendor began efforts to relocate the remote tower controller facility at Leesburg Executive Airport (JYO) to a nearby, off airport, site. Once the move is completed, the final system verification and validation (V&V) activities will commence. Following the final V&V activities the Agency will make a decision on the level of services the Remote Tower system can provide in an environment similar to that of Leesburg Airport; this decision will complete the "FY 2020 Target 1" Performance Target.

Under the Fort Collins remote tower project, the FAA collaborated with the State of Colorado and the system vendor in 2017 to define the concept and associated design for the system at Northern Colorado Regional Airport (FNL). Based on that design, the vendor installed the system and conducted system initial optimization activities during 2018. In October 2018, the FAA conducted its initial evaluation of the system in a passive, uncontrolled airport environment. As the outcome of this initial evaluation, the FAA provided a list of system capability shortfalls to the vendor. In 2018-2019, the vendor made various system improvements based on identified shortfalls. The next step is to begin passive evaluation of the system in a controlled airport environment (i.e. a mobile air traffic control tower is providing services, while data is collected from the remote tower). Overall, the Fort Collins system will go through the same safety centric evaluation process that was applied at Leesburg. The findings at FNL will inform updates to the remote tower standards, approval processes, and cost benefit model that are currently under development.

For the overarching remote tower standards and cost benefit development, both the Leesburg and Fort Collins activities are continuing to provide relevant data. In terms of the standards development, the FAA conducted a series of workshops with the air traffic community in 2018 and 2019 to define initial Operational Visual Requirements (OVRs) for a remote tower camera system. The workshop participants were informed by data from the JYO evaluations and safety panels. The Remote Tower Operational Visual Requirements document was completed in July 2019. Using this first version of the OVR document, the FAA is currently developing a draft system level Operational Safety Assessment (OSA) for a Remote Tower operating in a Visual Flight Rules (VFR) environment, and an associated draft of Technical Requirements. Various OSA preparation activities are underway and the safety panel is scheduled for May 2020. Completion of the OSA and Technical Requirements will complete "FY 2020 Target 2" Performance Target. Following completion of the draft Technical Requirements, the FAA will work with the Leesburg Remote Tower vendor to advise what information is required, review any documentation that is received, and provide feedback to close the gaps between the existing vendor system documentation set and what is required to demonstrate compliance to the Technical



Requirements; completion of this activity will satisfy the “FY 2020 Target 3” Performance Target.

Concurrently to developing remote tower standards for the U.S., the FAA has been working with the International Civil Aviation Organization (ICAO), the European Union Aviation Safety Agency (EASA) and the European Organization for Civil Aviation Electronics (EUROCAE) to establish remote tower standardization and guidance material for worldwide compliance. To fully characterize standards for remote towers, including airports with more complex environments, significant additional evaluation of the technology will still be required over the next decade.

In terms of the cost benefit model, the FAA is working to mirror the existing Federal Contract Tower (FCT) Benefit-Cost (B/C) model for application to remote towers. The existing model uses two benefits categories (i.e. safety and efficiency). In December 2019, the FAA sponsored an efficiency study of the JYO remote tower; the study and conclusion are still under review by the Agency. Results of the JYO and FNL operational evaluations and subsequent safety panels will inform the level of safety of Remote Towers. Operating cost data from JYO and FNL will be used to identify what costs should be included in any Remote Tower B/C model. Completion of the initial remote tower B/C model will satisfy the “FY 2020 Target 4” Performance Target.

Leesburg and Fort Collins are the first two sites under the FAA’s Remote Tower Pilot Program. Both sites are evaluating technology considered to be developmental in nature. At its future third site of the Pilot Program, the FAA plans to conduct V&V of its newly drafted advisory circular, which will reference the OVRs and Technical Requirements currently under development. The V&V will be conducted at the third site to ensure that the drafted process can be seamlessly applied at additional future airports. For its fourth and fifth Pilot Program sites, the FAA is considering airports with higher levels of environmental complexity, such as longer runways, multiple runways and crossing runways. Finally, for its sixth site, the FAA is considering the application of remote tower capabilities at a larger hub airport. This effort would likely require considerable system adjustments as compared to the systems begin evaluated today. Overall, the execution of these Remote Tower Pilot Program plans are dependent on availability of future funding over the next decade.

Reliability: N/A



Assistant Administrator for Human Resources (AHR) Performance Measure Profiles

Workforce Transformation: Program Effectiveness-FAA Leadership and Learning Institute (FLLI)

Performance Metric: Deliver FAA foundational leadership and management training to 2,400 students. Due September 30, 2020

FY 2020 Performance Target: Maintain leadership and management training throughput at 2,400 students

Lead Organization: Human Resource Management (AHR)

	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY2020
Target	N/A	1,400	1,800	2,200	2,400	2400
Actual	N/A	2,501	3,265	2,938	2414	

Definition of Metric

Metric Unit: *The metric is based on the number of FAA Managers attending an instructor-led (ILT) course.*

Computation: The computation is derived by querying the FAA Electronic Learning Management System (ELMS). FLLI personnel enter course completion data into ELMS after each class. On the 5th of each month, a report is generated that lists each FLLI ILT course and the number of personnel who have completed that course. Totals are derived from that data.

Formula: No formula utilized.

Scope of Metric: The metric applies to only Centrally Funded course completions.

Method of Setting Target: The target is based on the projected available funding for the next fiscal year, projected corporate assessment funding anticipated for the next fiscal year, and the results of the FAA Call-for-Training. Student throughput data from previous years play a minor role since a substantial backlog of students continues to grow and total throughput is based on the number of classes offered.

Additional Information on Metric

Why the FAA and/or DOT choose this Metric: The methodology was chosen in order to ensure the FAA was keeping up with the demand to provide leadership and management training to employees.

Public Benefit: The FAA manager group provides the day-to-day supervision of more than 42,000 aerospace professionals. Effective training in leadership and management principles ensure the safe skies concept adopted by the FAA.

Partners: None



External Factors Affecting Performance: The ability to meet the performance target is primarily based on budgetary factors. This includes central funding, corporate assessment, obligated travel dollars and funding available to each Line of Business (LOB/) and Staff Office (SO) for Fee-for-Service programs.

Source of the Data: FAA Electronic Learning Management System

Statistical Issues: Reporting numbers are usually not available until the 5th of each following month.

Completeness: The process used to develop the metric is a straight line process. Students sign up for a course, attend the course, sign the course completion roster for the course, FLLI personnel enter course completion data into ELMS throughout the reporting period, and end-of-month results are garnered on the 5th of the next month. Quality control is conducted monthly by FLLI logistics specialists. Limitation of data compilation is "if" the FAA ELMS system goes down or becomes corrupted (neither has occurred in 17 years of its existence). Data is presented to three FAA senior committees (Workforce Transformation Executive Steering Committee and the FAA Learning and Development Council) who ensure high standards are maintained and best practices are utilized and the Performance Committee who oversee the accomplishment of FAA corporate goals.

Reliability: No reliability exceptions noted.



Learning Technology Innovation

Performance Metric: Utilizing electronic Learning Management System (eLMS) software, expand technology capabilities throughout the FAA to improve learning efficiency and support the development of the aviation workforce.

FY 2020 Performance Target

- Complete development of communications plan by 6/1/20
- Complete testing of new eLMS capabilities by 6/15/20
- Launch communications activities by 7/15/20
- Move new eLMS capabilities from staging to production environment by 9/15/20

Lead Organization: AHR

Definition of Metric

Metric Unit: On-time completion of planned milestones

Computation: Weekly reporting from technical project lead in AHA and communications lead in AHD-100

Formula: Not applicable

Scope of Metric: Integration and communication to stakeholders of the following technology capabilities: 1) Self-Enrollment/Automated Approval Processes; 2) Automatic Email Notifications; 3) Automated Assignment of New Manager Curricula; 4) Digital Surveys; and 5) Digital Attendance

Method of Setting Target: The target was set through discussions with eLMS PMO in AHA, FLLI director, and AHD/AHR senior leadership after review of an FY19 analysis of data from staff and partners on burden and inefficiencies associated with routine manual operations.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: Technology offers the ability to automate, streamline, and improve results from routine tasks. Successful adoption of new capabilities requires effective communications and change management.

Public Benefit: Government personnel time can be freed and redirected to more value-added activities.

Partners: No federal partners; minimal contract support.

External Factors Affecting Performance: Continuation of maximum telework and social distancing associated with COVID-19 could reduce effectiveness of certain communications/engagement methods



and may require some re-planning. External factors should have no impact on technology capability testing and production.

Source of the Data: Progress data will come from the technical project lead in AHA and communications lead in AHD-100

Statistical Issues: None

Completeness: The communications plan considered advice and practices from leading change management models, e.g., ADKAR. Stakeholder questions and feedback will be monitored throughout implementation to assess impact and need for adjustments.

Reliability: Not applicable



Implement Cross-Enterprise Certification and Credentialing Capability

Performance Metric: Achieve initial cross-enterprise information capability regarding certification, credentialing and currency for required FAA occupational series. All four targets must be met.

FY 2020 Performance Target

Target 1, Identify Occupational Series: Identify all occupational series that require certification, credentialing and/or currency.

Target 2, System Information Identification for Occupational Series: Identify where information for each occupational series resides and system type.

Target 3: Identify FAA system access points or system of record.

Target 4, Develop transition plans: Develop transition plan for each occupation.

Lead Organization: AHR

Definition of Metric

Metric Unit: Identification of an FAA cross-information capability that can access the currency level of all technical skills occupational series that require certification, credentialing and/or currency. Development of a transition plan that allows access to the currency level of all technical skills occupational series in real time.

Computation: Weekly reporting from participating Lines of Business (LOB).

Formula: No formula utilized.

Scope of Metric: This program is only applicable to those LOBs participating and those technical skill occupational series identified by those LOBs.

Method of Setting Target: The target was set through discussions with AOA, AVS, ATO and AHR leadership.

Additional Information on Metric

Why the FAA and/or DOT choose this Metric: The methodology was chosen to ensure those FAA technical skills related to the 'safety of flight' are identified to ensure real-time identification of individual currency.

Public Benefit: In order to respond effectively to public and governmental inquiries, it is important that this information is consolidated and available in real time.



Partners: None

External Factors Affecting Performance: The ability to meet this performance objective is primarily based on the ability to identify and locate certification and credentialing data throughout the FAA.

Source of the Data: Certification and credentialing data is derived from databases maintained throughout the FAA enterprise via the LOB Program Office responsible for those actions.

Statistical Issues: There are no statistical issues related to this goal.

Completeness: The process used to complete this performance goal is based on the validity of the data obtained throughout the process. The process follows a linear approach outlined in each of the four Targets under this performance objective. Once each Line of Business identifies each classification series and the location of each certification related to that classification series, the data will be compiled and reviewed by those contributing offices and other concerned organizations responsible to ensure the effectiveness of the final product. A forum of stakeholders and subject matter experts will then propose solutions as to how all certification data can be accessed and determine a transition plan that allows access to the currency level of all technical skills occupational series in real time. The primary limitation of this objective is the currency and accuracy of the certification data.

Reliability: No reliability exceptions noted.



Increase FAA STEM AVSED program outreach capabilities (OSI/CSTI)

Performance Metric: Increase outreach capabilities of the FAA STEM AVSED program to ensure alignment and compliance with the FY20 FAA/AHR Business Plan (For CSTI all three (3) targets must be met).

FY 2020 Performance Target(s) (from FAA/AHR Business Plan)

Target 1: Using a baseline number on the last day of FY19, increase the number of STEM AVSED Outreach Representatives registered and tracked by the national program office by 50% over FY19.

Target 2: Using a baseline number on the last day of FY19, increase the number of STEM AVSED outreach activities tracked by the national program office by 100% over FY19.

Target 3: Using a baseline number on the last day of FY19, increase the number of students reached and tracked by the national STEM AVSED program office by 100% over FY19.

Lead Organization: AHR

Program Statistics	FY20 ACTUALS (as of 4/10/20)	FY20 GOAL
Events Held	526	1,188
Outreach Representatives	1,440	1,167
Students Reached	60,553	118,000

**This table is current as of 4/10/20, the data changes frequently, therefore no extrapolation should be made with additional inference

Definition of Metric

Metric Unit: The data from Outreach Representatives, events conducted, and students reached are captured weekly on internal FAA tracking and reporting tools and through eLMS course completions.

Computation: Biweekly reporting data will be aggregated into annual numbers and then compared to previous FY totals.

Formula: N/A

Scope of Metric: This program is applicable FAA wide (includes all LOBs and SOs). The metric captures all activities, students reached through the activities and FAA employees (Outreach Representatives) who supported the activities. These activities include, but are not limited to; academic institutions, secondary classroom visits, summer aviation career education (ACE) camps, support of Airshows, Expos and other large events. The metric also captures data on activities done with national partners such as



the Experimental Aircraft Association (EAA), Women In Aviation (WAI), International, Organization of Black Aerospace Professionals (OBAP) and others.

Method of Setting Target: These targets were set through discussions with leadership from AOA, the LOBs and SOs.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: This methodology provides the capability to ensure clear, accurate and timely status reporting and projections. It provides a straight-line comparison of performance in FY19 with performance expectations for FY20.

Public Benefit: To address the growing aviation workforce shortage and ensure a consistent pipeline of skilled aerospace professionals.

Partners: FAA, additional government agencies, industry, and educational stakeholders. These include but are not limited to the Experimental Aircraft Association, Women In Aviation International, the Real World Design Challenge and others.

External Factors Affecting Performance: The program was on target as of February 2020 and the national response to the global pandemic of COVID-19 has postponed or canceled most upcoming activities.

Source of the Data: Event and student data is maintained on internal FAA tracking and reporting tools and overseen by the Office of Career and Leadership Development (AHD). Employee participation as Outreach Representatives is tracked through eLMS reporting mechanisms.

Statistical Issues: N/A

Completeness: The process used to complete this performance goal is based on the validity of the data obtained throughout the process. The process follows a linear approach (an aggregate of daily totals) outlined in each of the 3 targets. A primary limitation of this performance metric is the utilization of reporting mechanisms by outreach representatives.

Reliability: N/A



Office of Environment and Energy Performance Measure Profiles

Implement Supersonic Plan

Performance Metric: Progress development of Final Rule on changes to the Part 91 Appendix B.

FY 2020 Performance Target 1: Develop a disposition of comments to the NPRM and submit a Final Decision Document to the Rulemaking Management Council. Due February 20, 2020

FY 2020 Performance Target 2: Develop final rule preamble text and regulators text so that the regulatory evaluation of the rule can be initiated. Due September 30, 2020.

Lead Organization: Office of Environment and Energy (AEE)

Definition of Metric

Metric Unit: Delivered – Yes or No

Computation: N/A

Formula: N/A

Scope of Metric: This metric tracks whether certain milestones in the final rule development process have been delivered.

Method of Setting Target: These targets reflect the timing needed to accommodate the rulemaking schedule for final rules.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: This action is a major milestone in the ability to publish a Final Rule on changes to the Part 91 Appendix B. These changes are designed to modernize the application process for a person applying to operate a civil aircraft at supersonic speeds for the purposes stated in that rule. The metric was selected to track critical milestones needed in the development of the Final Rule.

Public Benefit: The public will benefit from the rule as it is deregulatory because of the increased clarity, information, and accessibility it would provide to applicants and expects to reduce the number of follow-up requests for additional information between the FAA and applicants. In the future, FAA will examine the possibility of further revising Part 91 to address civil aircraft sonic boom (91.817).

Partners: Office of the Secretary of Transportation, Components of the Executive Office of the President including the Office of Management and Budget (OMB)

External Factors Affecting Performance: The drafting of the Final Rule is a Departmental responsibility.

Source of the Data: The Final Rule does not require additional data.



Statistical Issues: N/A

Completeness: The Office of Environment and Energy (AEE) and the Office of the Chief Counsel (AGC) are responsible for resolving policy issues and reviewing and completing preamble sections that will constitute the final rule. AEE is the lead office for this rule.

Reliability: AEE and ARM are responsible for tracking and reporting the progress of the Final Rule.



Office of Communications (AOC) Performance Measure Profiles

Improved Quality of Applications for UAS Waivers and Authorizations (OSI/M)

Performance Metric: Through education and outreach based on trending data provided through the FAA DroneZone to AOC, increase the approval rate of operational waiver and airspace authorization applications, and decrease processing time and agency assessment burden by 10-15%.

FY 2020 Performance Target: Use digital communications tactics to educate the public about and decrease processing time by 10-15%

Lead Organization: Office of Communications (AOC)

Definition of Metric: AOC will measure social media impressions, engagement metrics for FAA.gov, GovDelivery email marketing open rates, and webinar attendance metrics and YouTube views.

Metric Unit: Social media impressions, FAA.gov metrics, open rates for GovDelivery emails and webinar attendance and YouTube views. AOC is working on a strategic plan to further public education on LAANC and waivers.

Computation: N/A

Formula: N/A

Scope of Metric: National

Method of Setting Target: N/A

Additional Information on Metric: N/A

Why the FAA and/or DOT chose this Metric: Standard digital metrics

Public Benefit: Educate the public so more waivers are issued for drones to benefit the public **Partners:**

Drone community stakeholders and tech media

Statistical Issues: N/A

Completeness: N/A

Reliability: N/A



Office of Airports (ARP) Performance Measure Profiles

Runway Pavement

Performance Metric: Maintain runway pavement in excellent, good, or fair condition for 93% of the paved runways in the National Plan of Integrated Airport Systems.

FY 2020 Performance Target: Maintain 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.

Lead Organization: Office of Airports (ARP)

	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020
Target	93.0%	93.0%	93.0%	93.0%	93.0%
Actual	97.6%	97.7%	97.9%	97.9%	TBD

Definition of Metric

Metric Unit: This metric tracks, on an annual basis, the number of open and paved runways at public use airports included in the federal airport system that meet FAA’s standard for safe operation of aircraft with runway pavement considered to be in excellent, good, or fair condition. The metric covers all paved runways at federally funded NPIAS airports.

Computation: Runway Pavement Condition data is collected annually by FAA Airport Certification Safety Inspectors during their physical inspection of all certified airports in the U.S. and its territories. Other Public use airports are inspected by airports or airport safety data inspectors under an FAA contract every three years. Information is collected through visual inspection of runway pavement in accordance with existing FAA guidance, resulting in a condition rating for each runway of excellent, good, fair, poor, or failed. The number of paved runways in the National Plan of Integrated Airport Systems (NPIAS) with surface ratings in each of the five conditions (excellent, good, fair, poor, and failed) is totaled. Paved runway ratings are then numbered by condition: excellent = 5; good = 4; fair=3; poor=2; failed=1. Landing surfaces that are not paved, including water, dirt, turf, gravel, and permafrost, are not included. The percentage of runways rated excellent, good, and fair is calculated based on the total number of paved runways at NPIAS airports.

Formula:
$$\frac{X \text{ condition 5 runways} + y \text{ condition 4 runways} + z \text{ condition 3 runways}}{\text{Total NPIAS paved runways}} \times 100$$

Scope of Metric: The metric covers all open and paved runways at federally funded NPIAS airports.

Method of Setting Target: Maintaining runway pavement conditions requires careful coordination, often years in advance, of a runway rehabilitation project. Projects must be timed carefully, regardless of whether they involve the phased reconstruction of a single-runway airport or the sequential resurfacing of multiple runways over a period of several years. In addition, there cannot be too many runways undergoing reconstruction at any one time; if we reconstruct too many in any given year, then we lose system-wide capacity during reconstruction, and if we reconstruct too few in any given year, _____



then we lay the groundwork for having to catch up in a subsequent year, with a corresponding impact on system-wide capacity. Due to the length of time required to plan and implement major pavement projects and in order to maintain the overall condition of the system, 93% of the system in excellent, good or fair condition is a long established standard that sponsors understand and support, and with a goal of 93%, this means no more than 7% of the runways should be undergoing reconstruction at a time. Some of the nation's largest airports resurface their runways on an established revolving basis. As a result, at times the FAA is able to exceed the goal. However, this does not necessarily represent a sustainable trend. For major reconstruction, runways must typically be taken out of service for a full construction season or longer. It can be particularly challenging to rehabilitate one runway while keeping intersecting runways operational. FAA works with airports to ensure that the system never has too many runways out of service at any given time.

Additional Information on Metric

Why the FAA and/or DOT chose this Metric: This metric was chosen because if runway pavement is neglected, severe deterioration can cause damage to airframes, engines, and landing gear, unnecessarily compromising safety, and leading to higher rehabilitation costs.

Public Benefit: Periodic maintenance of runways, particularly resurfacing, has proven a cost effective way to delay the need for major runway rehabilitation. The FAA funds a broad range of capital infrastructure development at most NPIAS airports; however, airports are generally responsible for funding periodic and ongoing maintenance. More significant rehabilitation, resurfacing or reconstruction projects may be funded through a variety of funding sources, including Airport Improvement Program (AIP) grants, Passenger Facility Charge (PFC) revenues, airport revenues and/or other funding sources. Deferred or delayed maintenance creates an increased risk of damage to aircraft and is a safety concern for the travelling public, increasing both the scope and cost of eventual rehabilitation or reconstruction.

Partners: FAA's Regional Airports Division and Airports District Offices partner with individual airports to identify poor or failed pavements. Three other FAA offices support this effort: the Air Traffic organization, which helps evaluate and minimize the capacity and delay impacts resulting from runway reconstruction projects and helps communicate temporary closures; the Aircraft Certification Service, which helps assess the impact of pavement conditions on aircraft; and the William J. Hughes Technical Center, which assists with a broad range of pavement research. External partners include State aeronautical agencies and other aeronautical user groups.

External Factors Affecting Performance: Airport infrastructure, particularly airfield facilities at commercial service airports, is exposed to constant heavy use and harsh environmental conditions. Runways, taxiways, and aprons are designed to withstand the heavy equipment that operates on them, but even so these facilities require frequent maintenance and rehabilitation in order to remain in good working condition. Runways and taxiways have to be kept clear of snow, ice, and ponding water that can jeopardize aircraft directional control or braking action. Chemicals and plowing, as well as freeze-thaw cycles, all take a toll on runways, taxiways, and other paved areas. Even at smaller, non-commercial airports, pavement degradation due to meteorological conditions quickly leads to more serious damage if periodic maintenance and resurfacing is not completed in a timely manner. At the same time, limited financial resources can lead airport operators to try to defer needed capital projects, which both



increases costs and may impact operational capacity if runways and taxiways require more in-depth reconstruction. Funding constraints may significantly affect when the airport sponsor is able to fund pavement rehabilitation. This is why it is so crucial that the FAA can offer airports financial assistance in the form of Airport Improvement Program (AIP) grants, in order to ensure infrastructure is properly protected and preserved at the lowest possible cost.

Source of the Data: Data and information is collected through visual inspection of runway pavement in accordance with existing FAA guidance; including Advisory Circular 150/5320-17 Airfield Pavement Surface Evaluation and Rating Manuals provide uniformity to field observations made by individuals collecting data for the Airport Master Record (FAA Form 5010). The pavement condition is reported in the 5010 Airport Master Record database and results of the inspections are entered into FAA's National Airspace System Resource.

Statistical Issues: None

Completeness: The inspection and reporting of conditions are conducted in accordance with existing FAA guidance. The data are publicly available and therefore can be examined and evaluated by any federal auditor.

Reliability: N/A