



FAA Needs Additional Accountability and Transparency in Reporting Performance Measures and Targets for Major System Investments and Environmental Reviews

Mandated by the FAA Reauthorization Act of 2018

Federal Aviation Administration | AV2022023 | March 14, 2022

What We Looked At

The Federal Aviation Administration (FAA) is responsible for managing and operating the busiest and most complex airspace system in the world. The FAA Reauthorization Act of 2018 (Act) required the Secretary of Transportation to establish metrics for evaluating FAA's management and performance related to (1) the timely and cost-effective completion of projects and (2) the effectiveness in achieving the goals for an expedited, coordinated environmental review process for major safety, security, and capacity projects. Also, the Act required our office to report on FAA's progress. Our objectives were to determine FAA's progress in meeting the performance targets for (1) the timely and cost-effective completion of projects and (2) the achievement of an expedited, coordinated environmental review process.

What We Found

FAA did not meet its major system targets in fiscal years 2019 and 2020, and full accountability and transparency in reporting is limited. Specifically, FAA did not meet its performance measure for 90 percent of major baselined acquisition programs to be within 10 percent of the current cost, schedule, and performance baselines. Also, we found weaknesses in FAA's reporting that limited transparency and accountability. For example, FAA does not disclose when it removes programs from the measure that exceed baselines by over 10 percent and no longer reports them. In contrast, FAA reported meeting the environmental performance target to achieve on-schedule performance for 90 percent of FAA-led major transportation projects and to reduce the average time to complete environmental reviews. However, FAA's actual results are unclear because the Agency may not have included all major projects or captured when project milestones were late in the measure. As a result, FAA's reporting may not provide an accurate picture on how major system investments are performing or the extent to which the Agency meets its goals in the environmental measure.

Our Recommendations

We made three recommendations to improve FAA's reporting on performance measures for major system investments and environmental review processes. FAA concurred with one recommendation and partially concurred with two. FAA proposed appropriate planned actions.

Contents

Memorandum	1
Results in Brief	3
Background	4
FAA Did Not Meet Its Major System Targets in Fiscal Years 2019 and 2020, and Full Accountability and Transparency Is Limited	6
FAA Reported Meeting the Environmental Measure, but Actual Progress Is Unclear	10
Conclusion	15
Recommendations	16
Agency Comments and OIG Response	16
Actions Required	17
Exhibit A. Scope and Methodology	18
Exhibit B. Organizations Contacted	21
Exhibit C. List of Acronyms	22
Exhibit D. Programs Tracked in the Major System Investments Performance Measure for Fiscal Years 2019, 2020, and 2021	23
Exhibit E. Major Contributors to This Report	25
Appendix. Agency Comments	26



Memorandum

Date: March 14, 2022

Subject: ACTION: FAA Needs Additional Accountability and Transparency in Reporting Performance Measures and Targets for Major System Investments and Environmental Reviews | Report No. AV2022023

From: Nelda Z. Smith 
Acting Assistant Inspector General for Aviation Audits

To: Federal Aviation Administrator

The Federal Aviation Administration (FAA) is responsible for managing and operating the busiest and most complex airspace system in the world. The FAA Reauthorization Act of 2018 (the Act)¹ required the Secretary of Transportation to establish metrics for evaluating the Agency's management and performance. Specifically, the Act required performance measures and targets related to (1) the timely and cost-effective completion of projects and (2) the effectiveness in achieving the goals for an expedited, coordinated environmental review process for major safety, security, and capacity projects. The Secretary delegated these requirements to the Federal Aviation Administrator. In 2019, to respond to the Act, FAA selected pre-established metrics to track progress towards the Agency's goals for completing major investment projects and environmental reviews.

The Act also required the Office of Inspector General (OIG) to report on FAA's progress in meeting the established performance targets. In accordance with the Act, we initiated this audit. Our objectives were to determine FAA's progress in meeting the performance targets established for (1) the timely and cost-effective completion of projects and (2) the achievement of an expedited, coordinated environmental review process.

We conducted this audit in accordance with generally accepted Government auditing standards. For more details about our scope and methodology, see exhibit A. Exhibit B lists the organizations we contacted, and exhibit C lists the acronyms used in this report.

¹ Pub. L. No. 115-254 (2018).

We appreciate the courtesies and cooperation of Department of Transportation (DOT) representatives during this audit. If you have any questions concerning this report, please call me at (202) 366-2140.

cc: The Secretary
DOT Audit Liaison, M-1
FAA Audit Liaison, AAE-100

Results in Brief

FAA did not meet its major system targets in fiscal years 2019 and 2020, and full accountability and transparency in reporting is limited.

FAA did not meet the Agency's performance measure for 90 percent of major baselined acquisition programs to be within 10 percent of their current cost, schedule, and performance baselines in fiscal years 2019 and 2020. Specifically, in fiscal years 2019 and 2020, FAA reported that 75 percent and 65 percent respectively of major programs were within 10 percent of their baselines. Further, we identified some weaknesses in FAA's reporting that limit transparency and accountability. For example, FAA does not disclose when it removes programs from the performance measure that exceed baselines by over 10 percent and no longer reports them. This is because FAA lacks a written procedure on how programs in the measure are added or removed, tracked, and publicly reported to ensure accountability for transparent reporting. As a result, stakeholders are not aware that the major system performance measure does not track all investments, and thus, will only have a partial, potentially inaccurate picture of how FAA's major system investments are actually performing.

FAA reported meeting the environmental measure, but actual progress is unclear.

FAA reported that from October 2018 through March 2021, the Agency has met the environmental performance target to achieve on-schedule performance for 90 percent of FAA-led major transportation projects (MTP)² and reduce the average time to complete environmental reviews for those projects. FAA reports the projects on the Federal Infrastructure Permitting Dashboard (Dashboard), an online tool for Federal agencies and the public to track the Federal Government's environmental review and authorization processes for large or complex infrastructure projects.³ However, FAA's actual results are unclear because the Agency may not have included all major projects in the measure, and the measure did not capture when project milestones are late. For example, we identified 33 projects that FAA did not categorize as MTPs, including projects that appeared to meet the definition of MTP, such as runway extensions and terminal projects. This occurred in part because FAA lacks a written policy that explains who is responsible for identifying MTPs, communicating identified projects to the

² According to FAA, MTPs include certain infrastructure projects undertaken by FAA or which FAA is providing funding, such as Metroplex projects (air traffic procedures in metropolitan areas with multiple airports and complex air traffic flows), new airports, new runways, major runway extensions, terminal projects, and projects subject to the streamlining provisions of 49 U.S. Code (U.S.C.) § 47171.

³ The Dashboard is located at www.permits.performance.gov.

Agency's Dashboard Administrator, and recording the reasons why projects are or are not determined to be MTPs. In addition, FAA's reporting on the measure is not fully transparent. Specifically, FAA's reporting of average environmental review time combines the times to complete both environmental assessments (EA) and environmental impact statements (EIS).⁴ This approach does not show the time it takes FAA to complete EIS, which historically take longer than EAs. For example, in fiscal year 2019, FAA recorded a 14-month average review time based on one EIS and five EAs. Based on our analysis, the one EIS review time was about 27 months, while the average of the five EAs was about 14 months. As a result, FAA's reporting on the environmental performance measure may not accurately represent the extent to which the Agency meets its goals since all projects may not be considered and EIS completion times used in the measure are not transparent.

We are making recommendations to improve FAA's reporting on performance measures for major system investments and environmental review processes.

Background

Section 558 of the Act required DOT to establish performance measures and targets to assess FAA's: (1) timely and cost-effective completion of projects and (2) effectiveness in achieving the goals for an expedited, coordinated environmental review process for airport capacity enhancement projects at congested airports, aviation safety projects, and aviation security projects.⁵

According to a May 2019 memorandum, FAA uses the following measures to meet the Act's requirements:

- Major System Investments—90 percent of major baselined acquisition programs must be maintained within 10 percent of their current acquisition cost, schedule, and performance baseline as of the end of the year.
- Environmental Review Processes—Achieve on-schedule performance for 90 percent of FAA-led major transportation projects and reduce the average time to complete environmental reviews to 42 months.

⁴ Under the National Environmental Policy Act (NEPA), 42 § U.S.C. 4321 et seq., FAA may conduct either an EA to determine if a project may significantly affect the environment or an EIS for actions significantly affecting the quality of the environment. If the EA determines that the environmental impacts of a proposed Federal action will be significant, an EIS must be prepared.

⁵ The Act required DOT to establish performance measures and targets to assess the effectiveness of FAA in achieving the goals described in 49 U.S.C. §47171, which required DOT to develop and implement an expedited and coordinated environmental review process for certain airport projects.

For both measures, FAA selected existing performance measures to meet the Act's requirements:

- For major system investments, FAA selected a performance measure consistent with Public Law 104-264,⁶ which requires FAA to consider ending a program if it exceeds baselines over 10 percent. FAA classifies major system investments as programs that are related to the Next Generation Air Transportation System (NextGen),⁷ strategic to the Agency, or under Acquisition Category (ACAT) levels 1, 2, or 3—which are categories of programs with total facilities and equipment costs greater than \$100 million or have significant impact, complexity, risk, sensitivity, safety or security issues. FAA has five ACAT levels with criteria based on dollar thresholds, risk, complexity, safety, security, and political sensitivity. ACAT levels 4 and 5 are considered non-major programs, unless designated by FAA as a major program because they are strategically important⁸ or NextGen.
- For environmental review processes, FAA selected an existing measure adopted in fiscal year 2018 to further the goal of streamlining and improving the environmental review process, including Executive Order (EO) 13807,⁹ which required Federal agencies to establish a goal to complete environmental reviews for major infrastructure projects¹⁰ in 2 years. Under the environmental measure, FAA tracks FAA-led MTPs such as runway construction, airport terminal expansion, and hangar development.

FAA uses two electronic systems to help track and record progress towards meeting these performance measures. FAA uses the Simplified Program Information Reporting and Evaluation (SPIRE) database to track data on cost, schedule, and performance of projects. FAA also uses data from SPIRE to report on progress in meeting its performance measures. For the environmental performance measure, FAA reports data and timeframes for individual projects' environmental reviews on the Dashboard publicly online.

⁶ Federal Aviation Reauthorization Act of 1996, Pub L. No. 104-264 (1996).

⁷ NextGen is a critical infrastructure project that will transform the Nation's air traffic management from ground-based radar to a satellite-based system with the goals of improving safety, meeting the expected demands for increased capacity, and improving efficiency.

⁸ According to FAA, there is no formal definition of "strategically important." Programs that are "strategically important" receive the designation based on FAA's interpretation. For instance, FAA designated the Aerospace Medicine Safety Information System as strategically important based on a Government Accountability Office audit's recommendation.

⁹ EO 13807 was signed by the President on August 15, 2017, and was rescinded on January 20, 2021 by EO 13990.

¹⁰ "Major infrastructure projects" are defined in EO 13807 as including those infrastructure projects subject to an EIS, for which multiple authorizations are required, and the project sponsor has identified the reasonable availability of funds sufficient to complete the project.

FAA Did Not Meet Its Major System Targets in Fiscal Years 2019 and 2020, and Full Accountability and Transparency Is Limited

FAA reported that 75 percent and 65 percent of major programs met the targets in fiscal years 2019 and 2020, respectively, which is below the 90 percent goal. Also, the Agency's performance measure may not accurately reflect the true status for all programs at the end of a fiscal year.

FAA Did Not Meet Its Major System Investments Measure in Fiscal Years 2019 and 2020

FAA did not meet the Agency's performance measure for 90 percent of major baselined acquisition programs to be maintained within 10 percent of their current acquisition cost, schedule, and performance baseline in fiscal years 2019 and 2020.¹¹ In fiscal year 2019, FAA reported 75 percent of major baselined programs (15 of 20) did not exceed cost, schedule, or performance baselines by more than 10 percent. In fiscal year 2020, FAA reported that 65 percent of the programs (13 of 20) were within 10 percent of baselines.

Over the 2 fiscal years, nine programs did not meet the target goal for schedule, cost, or performance. According to FAA, several programs experienced delays due to the lapse in appropriations for the Federal Government in fiscal year 2019 as well as the impacts of the COVID-19 pandemic in fiscal year 2020 (see table 1).¹² Three of the nine exceeded 10 percent of their baselines in fiscal years 2019 and 2020, including programs related to En Route Automation Modernization (ERAM),¹³ Time Based Flow Management (TBFM),¹⁴ and Traffic Flow Management System (TFMS).¹⁵

¹¹ FAA reported meeting its major system performance measure from fiscal year 2012 through fiscal year 2018.

¹² A lapse in appropriations for Federal Government agencies occurred from December 22, 2018, through January 25, 2019.

¹³ ERAM is a multibillion-dollar system for processing flight data at facilities that manage high-altitude traffic typically above 10,000 feet, where aircraft reach their cruising altitudes.

¹⁴ TBFM is an automation decision support tool to help controllers sequence and space aircraft and enable the use of more efficient approach procedures to airport runways.

¹⁵ TFMS provides in-flight aircraft position data to airports across the country and keeps air traffic flow safe and orderly to minimize delays.

Table 1. Major System Investments Breaching Target Goals in Fiscal Years 2019 and 2020

Program	Target Goal Breached	Fiscal Year Baselines Exceeded by Over 10 Percent	FAA's Explanation for Exceeding Baseline Cost, Schedule, and/or Performance by Fiscal Year
Common Support Services-Weather	Schedule and Cost	2019	Schedule – Performance of the prime contractor and software design/development under estimated Cost – Development and additional equipment
NextGen Weather Processor	Schedule and Cost	2019	Schedule – Dependency with Common Support Services – Weather Cost – Underestimated cost associated with software design/development
TFMS Enhancement 4	Schedule Performance	2019 2020	2019 – Lapse in appropriations for Federal Government and shift in resources to address issues in Traffic Flow Management System 2020 – Performance – Program refocused on the health/stability of the system
ERAM Sustainment 2	Schedule	2019 2020	2019 – Lapse in appropriations for Federal Government 2020 – COVID-19 and display monitor issues
TBFM Enhancement 1	Schedule Schedule, Cost, and Performance	2019 2020	2019 – Program replan to address changes in agency priorities and the lapse in appropriations for the Federal Government 2020 – Schedule – Projected a 5-month delay Cost – Increase in prime contractor costs Performance – Reduction in program scope
Data Communications Segment 1 Phase 2 (S1P2) Full En Route Services	Schedule	2020	COVID-19 impacts and the delay of Initial En Route Services; Full En Route Services are dependent on the activation of Initial Services
System Wide Information Management Segment 2B	Schedule	2020	COVID-19 impacts resulting in deployment and cutover delays
Data Communications S1P2 – Initial En Route Services	Schedule	2020	Continuing conflicts from lapse in Federal Government appropriations, COVID-19 protocols, and latent avionics and air/ground network issues
Terminal Flight Data Manager	Schedule	2020	Continuing conflicts from lapse in Federal Government appropriations and COVID-19

Source: OIG analysis of FAA data

FAA's Reporting for the Major System Measure Lacks Full Transparency and Accountability

Office of Management and Budget Memorandum M-10-06 directs agencies to take action to implement the principle of transparency and states that "transparency promotes accountability by providing the public with information about what the Government is doing." However, FAA is not fully transparent because the Agency does not publicly report which programs are and are not tracked in the measure (see exhibit D for a list of programs tracked under this measure). Additionally, FAA is not required to report the results of the measure to key stakeholders, including Congress and the public, regarding programs that do and do not meet the performance targets. For example, in the Fiscal Year 2020 Performance and Accountability Report,¹⁶ FAA included programs that exceeded 10 percent baselines in the measure, but did not show the programs that did not exceed the 10 percent threshold. As a result, the general public is not made fully aware of what programs FAA tracks under the measure.

Furthermore, FAA does not publicly disclose when the Agency removes major programs from the performance measure. FAA stated that if a program is exceeding its cost, schedule, or performance baseline by more than 10 percent, the Agency can remove the program from being included in the performance measure in the following year. As a result, the major system performance measure may not accurately reflect the status of all of the programs in a fiscal year. For example, FAA removed two programs (Common Support Services-Weather and NextGen Weather Processor) from the performance measure in fiscal years 2020 and 2021 for going over 10 percent of baseline schedule in fiscal year 2019.

In addition, once FAA removes a program from the measure, FAA can leave the program out of the measure for more than a year. FAA stated that once a program is removed from the measure, it is not added back in unless the program is re-baselined, which means that FAA gains approval to change the cost, schedule, or performance baseline. According to FAA, if a program exceeds a baseline by over 10 percent, the Joint Resources Council (JRC)¹⁷ could elect to keep a program running above 10 percent of its baseline or the program can be re-baselined. FAA stated that the re-baselining process usually takes about a year. However, the two programs that were dropped from the metric after fiscal

¹⁶ According to FAA, the Agency prepares the Performance and Accountability Report to demonstrate the Agency's accountability by presenting performance, management, and financial information.

¹⁷ The JRC oversees implementation of FAA investment programs and is the senior investment review board for FAA responsible for making corporate level investment decisions.

year 2019 (Common Support Services-Weather and NextGen Weather Processor) did not return back to the metric in fiscal year 2021.

Also, we found two programs that were removed from the measure prior to fiscal year 2018 that have not been returned to the measure. According to FAA, programs that are tracked in the performance measure include ACAT levels 1–3 programs, NextGen, and those that are of strategic importance. Programs with ACAT levels 1, 2, or 3 have costs over \$100 million or significant impact, complexity, risk, sensitivity, safety, or security issues. However, we found FAA’s measure does not include two programs—an ACAT 1 and ACAT 2—listed in the Capital Investment Plan (CIP)¹⁸ for fiscal years 2019 through 2021. Specifically, the performance measure does not include the Runway Safety Lights (RWSL) and Logistics Center Support System (LCSS). According to FAA, RWSL and LCSS were not included in the measure because those programs exceeded their baselines by greater than 10 percent in fiscal years 2017 and 2016, respectively. However, since the JRC elected not to re-baseline the programs, FAA has not included these programs back in its measure, even though both programs continued to operate.¹⁹ Programs can operate without re-baselining, but could continue to exceed their current cost, schedule, or performance baselines. Since the programs are not included in the measure, the general public would be unable to track the program’s performance. Further, FAA may not be held accountable for when programs continually exceed their baselines.

These lapses in transparency occurred because FAA lacks a written procedure on how programs in the measure are added or removed, tracked, and publicly reported to ensure accountability for transparent reporting. According to FAA, the Agency does not report all underperforming programs because if FAA reported the programs in the measure that were already exceeding baselines by over 10 percent, FAA would be entering each fiscal year with programs having already gone over the 10 percent threshold, causing FAA to miss the goal at the beginning of each year. However, it is unclear to the public what programs are not included in the measure and why, which does not provide a complete picture of how the major system investment programs are performing. Further, by not reporting all underperforming programs, FAA may not be fully meeting the intent of the Act for timely and cost-effective completion of projects, limiting full transparency and accountability.

¹⁸ FAA’s CIP provides the Agency’s annual update to a rolling 5-year plan for FAA programs funded by the Facilities and Equipment appropriation, including cost and schedule baseline estimates for its major capital programs.

¹⁹ RWSL ended in June 2019. According to FAA’s FY 2021 CIP, LCSS was projected to end in January 2022.

FAA Reported Meeting the Environmental Measure, but Actual Progress Is Unclear

FAA reported meeting the environmental performance measure but may not have included all qualified projects in its reporting. FAA also is not fully transparent in reporting since the Agency does not disclose the EIS times used in the measure. Additionally, the Agency's measure does not always report when project milestones are late.

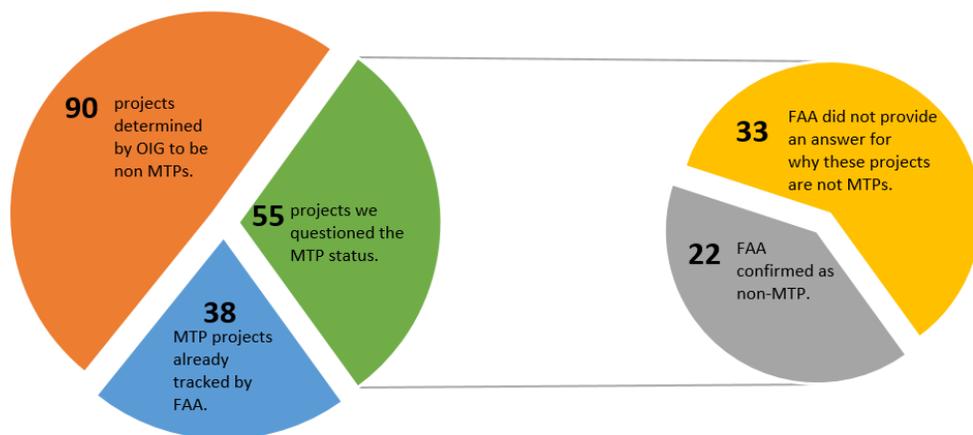
FAA's Reported Performance Measure May Not Include All Major Projects

In FAA's monthly internal reporting, the Agency reported meeting the targets for average environmental review time and on-schedule performance for FAA-led MTPs for the period October 2018 through March 2021. FAA provided us with a spreadsheet of 38 projects identified as MTPs, as defined by FAA. MTPs include certain infrastructure projects undertaken by FAA or which FAA is providing funding, such as Metroplex projects (air traffic procedures in metropolitan areas with multiple airports and complex air traffic flows), new airports, new runways, major runway extensions, terminal projects, and projects subject to the streamlining provisions of 49 U.S.C. § 47171.²⁰ FAA recorded the 38 MTP projects—along with 145 other FAA-led infrastructure projects—on the Permitting Dashboard. In addition, FAA uses a spreadsheet to track MTPs for the environmental performance measure because the Permitting Dashboard does not specifically classify projects as MTP.

However, FAA's actual results are unclear because the Agency may not have included all major projects in its performance measure. We analyzed all the aviation-related projects on the Dashboard and compared the project's description to the MTP definition (see figure).

²⁰ 49 U.S.C. § 47171(a) required DOT to develop and implement an expedited and coordinated environmental review process for airport capacity enhancement projects at congested airports, aviation safety projects, and aviation security projects.

Figure. Aviation-Related Projects on the Permitting Dashboard



Source: OIG analysis of aviation-related projects on the Permitting Dashboard

We identified 55 FAA-led projects on the Dashboard that FAA did not consider an MTP and did not include in FAA’s tracking spreadsheet or its performance measure. The projects we identified include runway extensions and terminal projects. When we asked FAA whether these projects should be considered as an MTP, FAA provided us with a spreadsheet showing 22 of the 55 projects were not MTPs because those runway rehabilitations, extensions, or terminal projects did not meet the definition of MTP. FAA also stated that runway rehabilitations are not covered under the MTP definition and only runway extensions categorized as “major” are MTPs.²¹ The Agency provided examples of terminal projects that FAA stated were not MTPs because not all project components were under FAA’s approval authority. FAA issued a memorandum in 2020 stating that terminal buildings will not typically be within FAA’s approval authority for a change to an airport layout plan unless it changes an area that an aircraft moves or parks.²² However, FAA does not have a policy document containing this full change to the definition of MTPs for terminal projects.

FAA officials did not provide a reason why the remaining 33 projects were not MTPs. FAA stated the Agency does not plan to track down additional information because these projects started before April 2019, which is the effective date of Section 558 of the Act. However, to comply with Section 558, FAA is using the same measure that existed in fiscal year 2018, which tracks projects started before April 2019. For example, in FAA’s MTP tracking spreadsheet, we found that

²¹ FAA defined major runway extensions in FAA Order 5050.4B, *National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions* (April 28, 2006).

²² According to FAA, one of the 22 projects was a runway extension that was not an MTP because it was changed to a categorical exclusion, which does not require an EA or EIS except in extraordinary circumstances. Also, another terminal project was not an MTP because it was cancelled.

7 of the 38 MTPs started before April 2019 and ended later in 2019 or in 2020. Further, FAA provided us with a document that shows that Office of the Associate Administrator for Airports determined that 2 of the 33 projects were in fact MTPs, but were not included in the measure.

These issues occurred because FAA does not have a written policy that states who is responsible for identifying MTPs, communicating projects identified as MTPs to the Dashboard Administrator, and recording the reasons why projects are or are not determined to be MTPs. FAA stated it has a process in which the Dashboard's points of contact in FAA's line of business work with project managers to identify MTPs and report them to the Dashboard Administrator. Also, this process relies on the project manager's awareness of the MTP definition and their communication for the project to be placed on FAA's MTP tracking spreadsheet. Without a written policy to facilitate a consistently applied process to track MTPs or a clear MTP definition, FAA's reporting of the performance measure could be inaccurate if it is missing qualified projects.

FAA Does Not Disclose Average Environmental Impact Statement Completion Times Used In the Measure

FAA's reporting on the environmental measure is not fully transparent because it reports one number, while the average review time is composed of two different types of environmental reviews. Specifically, FAA's calculation of the average environmental review time combines the times to complete EA and EIS into one number. In contrast, DOT has a measure to reduce the average time to complete EIS to 24 months.

Reporting the EAs and EIS in a combined average does not show the time it takes for FAA to complete EIS separate from EA (see table 2). For example, in fiscal year 2019, FAA recorded a 14-month average review based on one EIS and five EAs. Based on our analysis, the one EIS review time was about 27 months, while the average of the five EAs was about 14 months, which demonstrates the wide range of completion times between EAs and EIS. Although FAA reports the start and stop dates of individual EIS and EAs on the Dashboard, the Dashboard does not identify which projects are MTPs, which makes it difficult to determine how the EIS times impact the performance measure.

Table 2. FAA’s Average Environmental Review Time

Fiscal Year	FAA’s Reported Combined Average Review Time* (Rounded, in months)	FAA’s Number and Type of Environmental Review	OIG Calculation of Average Review Time (Rounded, in months)
2019	14	1 EIS	27
		5 EA	14
2020	15	1 EIS	26
		4 EA	32

* OIG calculated the combined FY 2019 average review time to be about 16 months and the FY 2020 review time to be around 30 months. For more details on our calculation of average review time, see exhibit A, Scope and Methodology.

Source: FAA summary report and OIG analysis of FAA MTP data.

Combining both EAs and EIS times into one average for the performance measure particularly impacts transparency because of the fact that an EIS can take significantly longer. For example in 2018 and 2020, the Council on Environmental Quality (CEQ)²³ published a report on the time that Federal agencies took to complete EIS (see table 3). As shown in the table, in 2018, FAA averaged 7.72 years, which was the highest of the agencies evaluated. In 2020, FAA averaged 7.12 years, which was the third highest of the agencies evaluated.²⁴

²³ NEPA established the CEQ within the Executive Office of the President to ensure Federal agencies meet their obligations under the law. The CEQ oversees NEPA implementation, principally through issuing guidance and interpreting regulations that implement NEPA’s procedural requirements.

²⁴ In the 2018 report, CEQ determined the averages of EIS issued by Federal agencies from 2010 to 2017. In the 2020 report, CEQ determined the averages of EIS agencies issued between 2010 and 2018.

Table 3. Comparison of Federal Agencies and FAA’s Average EIS Review Times

CEQ Report	All Federal Agencies’ Average EIS Completion Time	All Federal Agencies’ Median EIS Completion Time	FAA’s Average EIS Completion Time	FAA’s Median EIS Completion Time
December 2018 CEQ EIS Timelines Report (2010-2017)	4.5 years	3.6 years	7.72 years	6.63 years
June 2020 CEQ EIS Timelines Report (2010-2018)	4.5 years	3.5 years	7.12 years	6.58 years

Source: OIG analysis of CEQ EIS Timeline reports

According to FAA, the Agency combined EA and EIS completion times in calculating the average environmental review time because FAA thought it was a more accurate representation of its environmental review process. FAA stated that DOT directed the Agency to create a performance measure that discussed the average review time of major transportation projects. Further, at the time when FAA was developing the performance measure, DOT did not provide guidance on what constituted a major transportation project. Consequently, FAA was left to decide how to define those projects and how to calculate the average environmental review time. As a result of FAA’s approach, the Agency’s progress in addressing the time to complete projects with more significant environmental impacts is not captured in the performance measure.

FAA’s Reporting of the On-Schedule Measure Does Not Capture Late Milestones

Although FAA’s monthly internal reporting shows the Agency met the environmental measure for the period October 2018 through March 2021, we found instances when FAA missed project milestones in its environmental reviews for MTPs. Under the Dashboard reporting standards, a milestone²⁵ is considered

²⁵ For the EA, the Permitting Dashboard generally tracks four key milestones: determination to prepare an EA, issuance of a draft EA, issuance of final EA, and EA process concluded. In turn, the Dashboard tracks the following milestones for the EIS: issuance of notice of intent to prepare an EIS, scoping, official notice of availability of a draft EIS published in the Federal Register and concurrent Clean Air Act (CAA) Section 309 review, official notice of availability of a final EIS published in the Federal Register and concurrent CAA 309 review, and issuance of record of decision.

to be late if it is not updated within 10 business days after the milestone has passed. FAA then reports the project's original target date and the current target date publicly on the Dashboard.

When a project manager updates a milestone, this creates a new revision to the project's timeline. Revisions can occur throughout the project. It is also typical for a project to have multiple revisions. However, of the 142 revisions across 5 projects we looked at, we found that 7 (5 percent) of these revisions were late because they were made over 10 days after the milestone passed.

According to FAA, the definition of a late milestone in the Dashboard standards is not the same as the definition of "on schedule" used in the performance measure. The measure of "percent on-schedule" is defined as a snapshot of the scheduled milestones shown on the Dashboard as of a specific moment in time when the performance measure is reported (such as monthly or quarterly). As such, the "on schedule" measure is not intended to reflect changes to the scheduled milestones that are made between reporting times. Consequently, the performance measure may not capture when milestones are late if they are revised before FAA takes a snapshot of the milestones for its performance measure reporting.

While the errors of late milestones we identified do not impact FAA's success in meeting its performance measures, these findings signal a potential for error and inaccuracy of information in the Dashboard. As a result, the Agency cannot always report late performance accurately when reporting on the measure for a snapshot in time, which may limit its transparency and accountability.

Conclusion

FAA's cost effective and timely execution of programs is critical for enhancing the safety and efficiency of the Nation's air travel, including NextGen programs that aim to modernize our air traffic system. While FAA has established performance measures to meet requirements in the Act, FAA's reporting does not accurately reflect the cost, schedule, or performance status of major systems and environmental projects. To increase transparency and accountability, FAA can take steps to clarify which programs are included in its measures and standardize how it calculates and tracks their performance. Without complete and accurate performance data, FAA will be less equipped to identify areas of concern that need to be addressed, properly estimate project costs and completion times, and report results to Congress and the public.

Recommendations

To improve FAA's reporting on performance measures for major system investments and environmental review processes, we recommend the Federal Aviation Administrator:

1. Develop and implement a written policy to document the process for adding and removing programs and reporting the names of all the programs tracked in the major system investments performance measure.
2. Develop and implement a written policy or procedure to establish an internal control mechanism to identify all major transportation projects on the Federal Infrastructure Permitting Dashboard that should be tracked in the environmental performance measure and document reasons why projects are or are not determined to be major transportation projects.
3. Review and update the definition of the types of projects included in major transportation projects, to ensure all major transportation projects are being tracked under the measure.

Agency Comments and OIG Response

We provided FAA with our draft report on January 14, 2022, and received its formal response on February 10, 2022, which is included as an appendix to this report. FAA concurred with recommendation 1 and provided an appropriate planned action and completion date. FAA partially concurred with recommendations 2 and 3 and proposed acceptable alternative actions and appropriate completion dates. We consider all recommendations resolved pending completion of planned actions.

For recommendation 2, FAA stated it does not intend to develop an internal control mechanism to identify MTPs. This is because current initiatives to expand the tracking of environmental review projects have eliminated the need to define MTPs, as they are a smaller subset of projects. For example, FAA is evaluating ways to improve environmental reviews given the enactment of the Infrastructure Investment and Jobs Act (IIJA) in November 2021. Therefore, FAA stated it will revise its internal environmental review procedures and Permitting Dashboard Guidance Manual by December 31, 2022. We recognize that FAA may change how it tracks environmental reviews given the passage of IIJA and may no longer use the definition of MTPs. Thus, the Agency's proposed alternative action meets the intent of our recommendation.

For recommendation 3, FAA stated it does not need to update the definition of MTP because the term is no longer relevant to meeting Administration directives. Instead, by January 31, 2023, FAA will update its guidance to define new criteria for tracking projects on the Permitting Dashboard and reflect current Administration priorities and guidance. The Agency's proposed alternative action meets the intent of our recommendation.

Actions Required

We consider recommendations 1 through 3 resolved but open pending completion of planned actions.

Exhibit A. Scope and Methodology

This performance audit was conducted between December 2020 and January 2022. We conducted this audit in accordance with generally accepted Government auditing standards as prescribed by the Comptroller General of the United States. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives. Our audit objectives were to determine FAA's progress in meeting the performance targets established for (1) the timely and cost-effective completion of projects and (2) the achievement of an expedited, coordinated environmental review process.

For both objectives, we analyzed the requirements in Public Law 115-254, Section 558, which required FAA to develop performance measures. Additionally, we reviewed an FAA memorandum dated May 8, 2019, containing the performance measures FAA proposed to meet the law's requirements. We also interviewed FAA officials in the Office of Aviation Policy and Plans, the organization responsible for coordinating the response to the Congressional mandate.

For the first objective, we interviewed FAA officials in the Office of Finance and Management to understand the process used to track the major system investments performance. In addition, FAA program officials also provided a virtual walk through of its database containing performance management information, SPIRE, including demonstrating the system's reporting capabilities. Also, we analyzed FAA's spreadsheet of results for the 2019 and 2020 major system investments performance measure, Agency Performance Reports, and Performance and Accountability Reports to determine if FAA met its targets, which programs did or did not meet the targets, reasons why programs exceeded baselines by over 10 percent, and which programs FAA removed from the measure each fiscal year. Furthermore, we calculated the major system investments metric results for fiscal years 2019 and 2020 using data from FAA SPIRE reports to verify the accuracy of FAA's reporting on cost and schedule.

To assess whether or not FAA's reporting for fiscal year 2019 and 2020 included all qualified programs, we compared the programs contained in FAA's spreadsheets for fiscal years 2019 and 2020 of the major system investments metric to the programs listed in FAA's CIP. The CIP contains the activities and programs FAA intends to accomplish over a five year period for FAA programs funded by the Facilities and Equipment appropriation. We met with FAA to determine why programs listed on the CIP that appeared to meet the qualification to be tracked in FAA performance measure were not contained in FAA's spreadsheet of the measure's results.

For the second objective, we interviewed officials in the Office of Environment and Energy (AEE) to understand the specific types of projects that are included in the measure, and how FAA calculates the projects' average completion time and on-time performance. We also interviewed personnel from the Department of Transportation to understand the type of project and information—both current and historical—that is retained on the Permitting Dashboard. We reviewed the criteria for environmental review measures, including Title 49 US Code §47171, Expedited, Coordinated Environmental Review Process and Executive Order 13807, Establishing Discipline and Accountability in the Environmental Review and Permitting Process for Infrastructure Projects.

We obtained FAA's major transportation project tracking spreadsheet and compared the start and end date of each project against the information on the Permitting Dashboard to ensure that the spreadsheet was up-to-date. Plus, we analyzed data from the Federal Permitting Infrastructure Dashboard to determine if FAA included all applicable projects in its environmental performance measure. To do so, we obtained the universe of 183 FAA-led infrastructure projects on the Permitting Dashboard.²⁶ We analyzed each project's description to determine if it fell under FAA's definition of "major transportation projects."

We determined the impact of combining the average review time of environmental assessments and environmental impact statements into one figure. To further determine the impact, we obtained CEQ reports regarding EIS completion timelines for Federal agencies. We compared FAA's average and median EIS performance against the other agencies.

We analyzed the revision history of the 38 major transportation projects on the Federal Permitting Dashboard to determine the extent to which FAA reported milestones late. The revision history shows FAA's changes to a project's key milestone dates throughout its duration. We reviewed the edit dates in the revision history to determine whether milestones were updated within the 10-day allowable period. FAA stated it followed the draft Dashboard Reporting Standards dated June 2020, which states Federal agencies have 10 working days to update milestones for non-major infrastructure projects (such as MTPs).

In addition, we analyzed monthly and quarterly reports for the major transportation projects from October 2018 through March 2021. We compared FAA's major transportation spreadsheet against FAA's monthly results summary spreadsheet to determine if FAA accurately reported completed projects in the correct month. We also calculated the average quarterly review time using FAA's rolling average methodology. We applied FAA's formula to the applicable

²⁶ In August 2016, DOT determined that its Operating Administrations will use the Dashboard to post project information for projects covered by EAs and EISs. In 2018, DOT clarified that all FAA projects requiring EA or EIS must be posted to the Dashboard within 90 days of project initiation.

projects and compared our average calculation to the reported quarterly average in FAA's summary results spreadsheet. For any differences, we consulted with AEE to attempt to resolve discrepancies. We were unable to resolve all the differences because FAA does not retain documentation on how they calculated the quarter's rolling average and because FAA only provided information for 5 of the 9 quarters in our scope.

To determine whether FAA reported the environmental performance measure every fiscal year, we reviewed publicly available planning documents, such as the Performance and Accountability Reports, Portfolio of Goals, and Business Plans, from fiscal years 2019 through 2021, to determine the presence of FAA's environmental measure in the documents. In addition, we analyzed whether those planning documents reported the results of the environmental performance measure. We also obtained and analyzed quarterly agency priority goal and cross agency goal reports from performance.gov to determine how FAA reported its performance results from fiscal years 2018 through 2021.

Exhibit B. Organizations Contacted

Federal Aviation Administration

Office of Policy, International Affairs, and Environment

- Office of Aviation Policy and Plans
- Office of Environment and Energy

Office of Finance and Management

- Capital Programs Formulation Branch
-

Office of the Secretary of Transportation

Office of Policy Development, Strategic Planning, and Performance

- Infrastructure Permitting Improvement Center

Exhibit C. List of Acronyms

ACAT	Acquisition Category
AEE	Office of Environment and Energy
CAA	Clean Air Act
CEQ	Council on Environmental Quality
CIP	Capital Investment Plan
DOT	Department of Transportation
EA	Environmental Assessment
EIS	Environmental Impact Statement
EO	Executive Order
ERAM	En Route Automation Modernization
FAA	Federal Aviation Administration
JRC	Joint Resources Council
LCSS	Logistic Center Support System
MTP	Major Transportation Project
NEPA	National Environmental Policy Act
NextGen	Next Generation Air Transportation System
OIG	Office of Inspector General
RWSL	Runway Safety Lights
SPIRE	Simplified Program Information Reporting and Evaluation
TBFM	Time Based Flow Management
TFMS	Traffic Flow Management System
U.S.C.	United States Code

Exhibit D. Programs Tracked in the Major System Investments Performance Measure for Fiscal Years 2019, 2020, and 2021

Program	Fiscal Year Ending September 30, 2019	Fiscal Year Ending September 30, 2020	Fiscal Year Ending September 30, 2021
Automatic Dependent Surveillance-Broadcast Baseline Services & Applications	X	X	
Automatic Dependent Surveillance-Broadcast Baseline Services Future Segments		X	X
Aerospace Medicine Safety Information System Phase 1	X	X	X
Advanced Technologies & Oceanic Procedures Enhancement 1		X	X
Advanced Technologies & Oceanic Procedures Sustainment Technology Refresh 2	X	X	
Common Support Services-Weather	X		
Data Communications Segment 1 Phase 1	X		
Data Communications Segment 1 Phase 2 – Full En Route Services	X	X	
Data Communications Segment 1 Phase 2 – Initial En Route Services	X	X	
Enterprise Information Display System Phase 1			X
En Route Automation Modernization Enhancements 2		X	X
En Route Automation Modernization Sustainment 2	X	X	
En Route Automation Modernization Sustainment 3		X	X
Facility Security Risk Management 2	X		
Mode S Beacon Replacement System Phase 1A		X	X
Next Generation Air/Ground Communication Program Phase 2	X	X	X

Program	Fiscal Year Ending September 30, 2019	Fiscal Year Ending September 30, 2020	Fiscal Year Ending September 30, 2021
Next Generation Weather Processor	X		
System Approach for Safety Oversight Program Phase 3	X	X	X
Standard Terminal Automation Replacement System Sustainment 1	X	X	
Standard Terminal Automation Replacement System Sustainment 2	X	X	X
System Wide Information Management Segment 2B	X	X	
System Wide Information Management Segment 2C			X
Terminal Automation Modernization and Replacement Phase 4	X	X	
Time Based Flow Management Enhancement 1	X	X	
Terminal Flight Data Manager	X	X	
Traffic Flow Management System Enhancement 4	X	X	
Wide Area Augmentation System Phase 4A	X		

Source: OIG analysis of FAA data

Exhibit E. Major Contributors to This Report

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Appendix. Agency Comments



Federal Aviation Administration

Memorandum

Date: February 10, 2022

To: Barry J. DeWeese, Principal Assistant Inspector General for Auditing and Evaluation

From: H. Clayton Foushee, Director, Office of Audit and Evaluation, AAE-1 

Subject: Federal Aviation Administration's (FAA) Response to Office of Inspector General (OIG) Draft Report: FAA's Performance Measures and Target for Major System Investments and Environmental Reviews

The FAA has made significant progress toward streamlining the environmental review process in response to a statute requiring the development and implementation of an expedited and coordinated environmental review process for certain airport projects (codified at 49 U.S.C. § 47171) referenced in Section 558 of the FAA Reauthorization Act of 2018. In order to make this process fully transparent and accountable to the public, the FAA chose to apply the directive in Section 558 more broadly to cover other types of projects and to encompass the goals of the One Federal Decision framework set forth in Executive Order 13807. With the amendment of regulations implementing the National Environmental Policy Act in July 2020, the revocation of EO 13807 on January 20, 2021 and the enactment of the Bipartisan Infrastructure Law on November 15, 2021, the FAA is again evaluating ways to improve the conduct of reviews.¹

Upon review of the recommendations, the FAA concurs with recommendation 1 as written and plans to implement this recommendation by January 31, 2023. The FAA partially concurs with recommendations 2 and 3.

For recommendation 2, the FAA does not intend to develop an internal control mechanism for the identification of 'Major Transportation Projects', because current initiatives to expand the tracking of environmental review projects have eliminated the need to define this smaller subset of projects. Rather, the FAA will revise our internal environmental review procedures and Permitting Dashboard Guidance Manual by December 31, 2022, to reflect current requirements and directives.

¹ The FAA's environmental review process is subject to compliance with a number of requirements not referenced in the OIG Draft Report, and these requirements influence how the FAA demonstrates an expedited, publically transparent process. First and foremost, the FAA's process must align with the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of the National Policy Act (CEQ Regulations). These regulations were recently revised in 2020 and are currently under review for future revisions. In addition, new provisions in the Bipartisan Infrastructure Law and Department of Transportation Guidance address increasing the transparency of the environmental review process through tracking of environmental review documents.

For recommendation 3, as stated above, the FAA does not concur with the need to update the definition of ‘major transportation project’ as the terminology is no longer relevant to meeting Administration directives towards an expedited and transparent environmental review process. Instead, the updated guidance will define new criteria for projects to be tracked on the Permitting Dashboard, one that is reflective of current Administration priorities and guidance by January 31, 2023.

We appreciate this opportunity to offer additional perspective on the OIG draft report. Please contact H. Clayton Foushee at Clay.Foushee@faa.gov if you have any questions or require additional information about these comments.

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