

APPENDIX II: Top Management Challenges



**U.S. Department
of Transportation**

ACRONYMS & ABBREVIATIONS

AVS	Aviation Safety
CARES Act	Coronavirus Aid, Relief, and Economic Security Act
CFO	Chief Financial Officer
DATA Act	Digital Accountability and Transparency Act
DOT	Department of Transportation
ERAM	En Route Automation Modernization
FAA	Federal Aviation Administration
FAQ	Frequently Asked Question
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
FY	Fiscal year
MPO	Metropolitan Planning Organization
NHTSA	National Highway Traffic Safety Administration
OA	Operating Administration
OCIO	Office of the Chief Information Officer
ODA	Organization Designation Authorization
ODI	Office of Defects Investigations
OMB	Office of Management and Budget
OIG	Office of the Inspector General
PBN	Performance-Based Navigation
PHMSA	Pipeline and Hazardous Materials Safety Administration
POA&Ms	Plans of actions and milestones
TAM	Transit Asset Management
UAS	Unmanned aircraft systems

OIG TOP MANAGEMENT CHALLENGE: AVIATION SAFETY

FAA is responsible for maintaining the safety of a diverse, complex, and rapidly evolving aviation industry. While FAA has historically maintained an excellent safety record, two fatal accidents in October 2018 and March 2019 and the subsequent grounding of the FAA-certified Boeing 737 MAX aircraft brought to light significant issues related to FAA's certification process and use of delegation authority to certify new aircraft designs. In addition, FAA continues to face challenges related to air carrier Safety oversight and aircraft maintenance, as OIG highlighted recently at Allegiant Air and Southwest Airlines.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: IMPROVING FAA'S OVERSIGHT OF AIRCRAFT CERTIFICATION PROCESSES

Federal Aviation Administration: FAA will take the following actions to address this focus area:

- **Operationalize the Aviation Safety Organization Designation Authorization Office:** FAA will operationalize the Organization Designation Authorization (ODA) Office by the end of fiscal year (FY) 2021. The office will lead strategic efforts to achieve a more consistent approach to ODA program oversight, promote performance improvement, and enhance ODA oversight policies. This includes overseeing the implementation of the delegation-related provisions identified in the [Aircraft Certification Reform and Accountability Act](#). Additionally, the office will focus on coordination between the Aircraft Certification Service and the Flight Standards Service.
- **Issue New Policy for ODA:** FAA will issue new policies in FY 2021 to address the appropriate level of ODA oversight based on the risks associated with each ODA's authorized functions, size, and complexity. Additionally, FAA plans to issue new policies by March 2021 that will emphasize safety as the top priority by providing clarity about undue pressure and appropriate communications between unit members and FAA.
- **Continue Rulemaking Efforts for Safety Management Systems:** FAA will obtain concurrence, a critical internal milestone in the rulemaking process for the Safety Management Systems for Design and Manufacturing Organizations notice of proposed rulemaking by September 2021. This will include input from industry stakeholders and international regulatory partners. While FAA completes the rulemaking, the agency will continue to foster and expand voluntary adoption of Safety Management Systems in design and manufacturing.
- **Enhance Data Integration and Sharing:** By September 2021, FAA will establish a governance system to engage the agency's workforce in data management oversight and sharing. A robust feedback loop between the certification process and operational environment will improve the agency's human factors capabilities.
- **Establish an FAA-Recognized Compliance Assurance System:** Under the Safety Oversight and Certification Aviation Rulemaking Committee, FAA created a Compliance Assurance System working group to establish processes to provide confidence in the fulfillment of all applicable certification requirements for design approvals. The committee is developing recommendations on Compliance Assurance System and is expected to submit them to FAA in early FY 2021. The agency will review and evaluate all of the committee's recommendations once received.

OIG FOCUS AREA: ENHANCING AVIATION SAFETY OVERSIGHT WHILE WORKING IN A COLLABORATIVE ENVIRONMENT

Federal Aviation Administration: FAA is actively addressing issues raised in its conduct of Aviation Safety (AVS) oversight while working in a collaborative environment, as well as issues raised regarding execution of the compliance program in response to recommendations from OIG and the Government Accountability Office.

- **Allegiant Airlines Audit Recommendations:** FAA is enhancing guidance to ensure safety issues are properly tracked until mitigated. The agency is implementing policies to monitor inspector compliance with the safety assurance system and providing guidance as to how personnel can raise safety concerns to upper management. The FAA updated its directives to ensure that disagreements regarding the handling of non-compliance issues are addressed consistently. Aviation Safety now requires that compliance action records remain open until validation is complete. The agency will conduct a comprehensive review of its root-cause analysis training and will implement a process to track and consider historical compliance actions for use in surveillance and oversight decision-making by inspectors.
- **Southwest Airlines Audit Recommendations:** FAA will initiate a System Analysis Team with Southwest Airlines personnel to work collaboratively to identify and address root causes of error. The System Analysis

Team will address systemic software calculation errors that occurred when aircraft were being weighted to determine operational empty weights. This is significant because Operating Empty Weights are used during the dispatch process to determine aircraft performance parameters. The agency will review all employee concerns related to performance weight and balance to ensure that actions adequately address those concerns.

FAA will also ensure that on-the-job training for aviation safety inspectors will include review of previous courses and pertinent content from [Order 8900.1 - Flight Standards Information Management System](#). In addition, FAA will enhance designee training and complete a compliance review of other U.S. standard airworthiness certificates for transport aircraft issued by designated airworthiness representatives who worked on the aircraft that led to this inquiry. The agency will also reinforce inspector knowledge of the process contained within the designee management system to provide feedback on performance by designated airworthiness representatives. Aviation Safety will strengthen existing policy and guidance in safety assurance and safety management systems, and will integrate an assessment of safety culture into each data collection tool.

OIG TOP MANAGEMENT CHALLENGE: SURFACE TRANSPORTATION SAFETY

The Department's top priority is to ensure the U.S. transportation system is the safest in the world. Although the number of fatalities in all motor vehicle traffic crashes on U.S. roadways decreased by 3.3 percent from 2016 to 2018, fatalities in crashes involving large trucks or buses have increased by 5.8 percent. To enhance safety, the Department faces the ongoing challenge of ensuring compliance with regulations for safety programs nationwide. At the same time, the Department must continue making progress on monitoring and enforcement efforts in order to have timely and effective outcomes for highway, motor carrier, pipeline, and railroad safety programs.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: ENSURING COMPLIANCE WITH SAFETY REGULATIONS AND PROGRAMS

Federal Motor Carrier Safety Administration: The primary mission of FMCSA is to reduce crashes, injuries, and fatalities involving large trucks and buses. In addition to its inspection, audit, and investigation programs, the agency works to ensure that commercial drivers are properly licensed, and that license suspensions and revocations occur when required. FMCSA reviews each State's Commercial Driver's License program annually to determine whether there are substantial non-compliance issues. If substantial non-compliance issues are identified, the agency promptly notifies the State to ensure there is a corrective action plan that will bring them into compliance by a certain date. FMCSA is modifying its Annual Program Reviews to improve consistency of the review and corrective actions. The new process will include reviews of a State's transmission of violations to the driver's State of record. They will also include a review of the State's posting of violations and suspension or disqualification action taken. Reviews of all States using the new process are scheduled to be completed during FY 2021.

Additionally, FMCSA is working with the Office of the Secretary of Transportation to improve the functionality of the agency's State Compliance Records Enterprise system, which tracks findings and corrective actions by the States to help improve the agency's oversight.

Finally, FMCSA will soon issue a Final Rule to codify the statutory requirement that State driver's licensing agencies implement a system for the exclusively electronic exchange of driver history record information through the Commercial Driver's License Information System, including the posting of convictions, withdrawals, and disqualifications. The rule aligns FMCSA's regulations with existing statutory requirements set forth in the Moving Ahead for Progress in the 21st Century Act ([Public Law 112-141](#)). The rule also establishes a date by which States must be in substantial compliance (RIN 2126-AC36 in the Unified Agenda).

Federal Railroad Administration: In June 2020, FRA completed restructuring the Office of Railroad Safety, establishing the Audit Management Division within the Office of Data Analysis and Program Support. The Division seeks to ensure that the compliance audits FRA staff perform on regulated entities meet quality, consistency, transparency, and accountability standards. The Division's major activities include:

- Developing and maintaining FRA performance auditing standards;
- Developing criteria and identifying which FRA activities are audits, program reviews, or inspections;

- Ensuring that staff who conduct audits complete appropriate planning, sign-off, and tracking;
- Developing and overseeing an FRA audit quality assurance program;
- Developing and maintaining record-keeping systems, including a case management system for FRA performance audits; and
- Providing auditing training to FRA personnel. Approximately 25 employees have received 40 hours of training. FRA has a multi-year contract with a training organization for up to 20 classes over the next three years.

Pipeline and Hazardous Materials Safety Administration: As of October 2020, PHMSA's Office of Pipeline Safety had 304 of its 308 positions filled. To retain staff and quickly fill vacancies, PHMSA will do the following:

- Continue using open and continuing announcements to fill vacancies, which has been successful in reducing time-to-hire and allowing the agency to maintain a pool of certified candidates;
- Broaden the reach of its recruitment by contracting for recruitment services for qualified engineers. This professional recruitment firm will establish and utilize a broad and appropriate recruiting network (through avenues such as direct outreach to universities and professional networks) to expand the applicant pool for Office of Pipeline Safety job announcements;
- Conduct biannual follow-on updates to the Strategic Workforce Plan, in accordance with DOT's Workforce Planning Guidance, to include an assessment of the agency's progress in meeting its workforce planning priorities, assessing key trends, updating its workforce analysis, and forecasting hiring needs out to FY 2023;
- Complete a compensation study comparing regional salaries and hiring incentives at public and private organizations for general engineers skilled in the field of natural gas, petroleum, and other hazardous materials. PHMSA will take action on the results, which will include submitting a response to OIG regarding its audit recommendation ([OIG Report ST-2018-010](#));
- Update its recruiting plan for FY 2021 to include conducting virtual online career fairs and outreach to professional organizations, veterans' groups, and college/university campus hiring events. The agency plans to combine this with its Direct-Hiring Authority to reduce the time-to-hire for general engineers and other critical hiring needs for FY 2021 and beyond. PHMSA has requested, in the FY 2021 Congressional Justification, an additional \$1 million for recruitment incentives, including special pay rates, tuition reimbursement, student loan repayment, and other hiring incentives for hard-to-recruit science and technology pipeline engineers. The agency has also requested Direct-Hiring Authority and special pay rates in its reauthorization proposal for pipeline safety.

OIG FOCUS AREA: CONTINUING PROGRESS IN SAFETY MONITORING AND ENFORCEMENT

Federal Motor Carrier Safety Administration: Data collection and data quality are some of the National program elements in FMCSA's Motor Carrier Safety Assistance Program. Through this program, FMCSA ensures the timely and accurate reporting of crash and inspection data, which feed into the Safety Measurement System to help identify high-risk carriers. As of the end of FY 2020, each State had an inspection record completeness score of at least 85 percent. All but one State had a crash record completeness score of at least 85 percent (the one score below 85 was due to staffing challenges that should be resolved in FY 2021). FMCSA will continue working with its State partners to address data challenges as the agency reviews each of the States' Commercial Vehicle Safety Plans for FY 2021.

In addition, FMCSA has completed its assessment of a National Academy of Sciences Correlation Study,

which made recommendations to the agency on data quality and collection, as well as the potential for using an Item Response Theory modeling approach for carrier prioritization. The proposal will use Item Response Theory best practices and other lessons learned from the agency's modeling to improve the identification of high-risk carriers.

National Highway Traffic Safety Administration: NHTSA will continue to enhance its vehicle recall management and defect identification processes, including improving early warning reporting and data mining capabilities to identify safety trends as early as possible. In addition, NHTSA will continue leverage multiple media platforms and partnerships to raise public awareness about the importance of addressing safety recalls.

OIG TOP MANAGEMENT CHALLENGE: AIR TRAFFIC CONTROL AND AIRSPACE MODERNIZATION

FAA continues to modernize the National Airspace System (NAS) through the multibillion-dollar Next Generation Air Transportation System (NextGen) program. As envisioned, NextGen will provide safer, more efficient air traffic management by 2025. While it has implemented new capabilities, FAA still faces challenges in upgrading aging infrastructure, continuing NextGen's deployment, and achieving intended benefits in a cost-effective manner. These challenges may be compounded in part by the ongoing impacts of the COVID-19 pandemic on the aviation industry.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: MODERNIZING NEW SYSTEMS WHILE INTRODUCING NEW CAPABILITIES

Federal Aviation Administration: After delays caused by the COVID-19 pandemic and associated site work restrictions, FAA restarted En Route Automation Modernization (ERAM) technology refresh installations at the key sites in December 2020. ERAM is vital to the future of air navigation, providing the foundational platform required for FAA to enable modernization programs such as System-Wide Information Management, Data Communications (Data Comm), and Automatic Dependent Surveillance-Broadcast. Installations at the remaining 17 ERAM operational locations will restart in the second quarter of calendar year 2021.

Additionally, FAA is currently testing a software build to support ERAM Sustainment 3, ERAM Enhancements 2, and Data Comm Initial Services. The software was scheduled for release to key sites in February 2021. Finally, in order to mitigate the risk of going below acceptable levels of spare components, FAA has already completed a small technology refresh at seven ERAM locations.

A supplement to voice communications, Data Comm enables controllers to text flight clearance and reroute instructions to multiple aircraft at once. Data Comm reduces the communication time between controllers and pilots, which reduces gate delays and taxi-out times, thereby improving the overall efficiency of the system. The Data Comm services are ready for activation at the remaining 17 air route traffic control centers once outside personnel are allowed back into the facilities to train the controllers and test the system. The deployment is currently on hold due to COVID-19 safety protocols.

OIG FOCUS AREA: IMPLEMENTING NEW PBN FLIGHT PROCEDURES AND DELIVERING BENEFITS TO AIRSPACE USERS

Federal Aviation Administration: Initial implementation of Performance-Based Navigation (PBN) is complete and the associated terminology issues have been addressed. Performance-Based Navigation routes and procedures leverage new technologies and aircraft navigation capabilities to increase safety, capacity, and operational efficiency. This technology allows for more optimized flight paths, such as continuous descent routes when approaching an airport. FAA will continue the deployment and implementation of traffic sequencing, metering, and/or merging and spacing automation tools.

Along with promoting PBN procedures, these tools will decrease controller workload. For example, the Terminal Sequencing and Spacing tool capitalizes on the precision that PBN affords to provide controllers with enhanced, real-time information to aid in traffic metering. In addition to reducing controller workload, the Terminal Sequencing and Spacing tool increases efficiency and reduces flying

miles. FAA is currently testing the software and plans to deploy the tool at Denver International Airport in FY 2022 and Los Angeles International Airport in FY 2023.

In coordination with the MITRE Corporation, FAA has initiated optimization of the Instrument Flight Procedure Inventory project, which will develop and apply automated, data-driven capabilities for review, design, and amendment of routes and procedures. This lean process based on data-driven criteria will reduce the time and resources needed for review, removal, and modification of legacy routes and procedures.

OIG TOP MANAGEMENT CHALLENGE: SURFACE TRANSPORTATION INFRASTRUCTURE

The Department annually invests over \$60 billion through highway, transit, and railroad infrastructure programs that are vital to the American economy and our everyday lives. A significant challenge for DOT is to effectively manage these various programs and ensure that funded projects adhere to Federal requirements, including those funded by the CARES Act. Moreover, due to limited resources and evolving demands, DOT must ensure that States and other grantees use sound asset and performance management practices. These are critical to improve the condition of the Nation's infrastructure and address overall surface transportation needs cost effectively.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: ENHANCING OVERSIGHT OF SURFACE TRANSPORTATION PROJECTS

Federal Highway Administration: FHWA has taken actions to enhance oversight of surface transportation projects by issuing updated risk-based project involvement guidance to division offices on September 25, 2020. Two internal webinars, held on October 14 and November 19, 2020, explained the guidance. Actions to implement the May 2020 OIG recommendations are on schedule for completion by June 30, 2021, while the guidance takes full effect in FY 2022 beginning October 1, 2021.

Federal Transit Administration: FTA is implementing a series of actions to address this focus area. These include revising Emergency Relief program guidance to incorporate time frames for the use of insurance proceeds, ensuring that FTA regional offices review compliance with relevant time frames when approving grants, and developing procedures to track the use of insurance proceeds for projects.

Federal Railroad Administration: FRA continues to improve and strengthen its infrastructure grant oversight to focus resources where they will achieve the greatest programmatic benefits. FRA's refinement of its oversight program includes developing new procedures and revising several existing procedures, as follows:

- **Project Risk Assessment Model:** Conducted during the initial stage of the grant life cycle to identify

potential project risks. The comprehensive risk model informs FRA of oversight actions it will take to minimize project risks.

- **Deliverable Review Guidebook:** Establishes an oversight framework for the monitoring of a grantee's project for FRA staff and its continued assessment of project risks throughout the grant life cycle.
- **Monitoring Procedures:** Outline how contracted expertise may supplement FRA staff in its oversight program where resources are limited. It refines how risks are elevated to FRA staff and managed.
- **Grants Management Manual:** Establishes the policies and procedures for grant processing and management throughout the grant life cycle. FRA's risk mitigation actions have been refined to strengthen oversight of a project and ensure successful project delivery.
- **Annual Scheduled Grant Monitoring:** FRA's annual monitoring activities play a critical part in FRA's risk management and oversight program. The annual effort includes identification, through a data-driven, risk-based approach, of specific projects to conduct in-depth analyses and technical assistance.

OIG FOCUS AREA: EMPLOYING EFFECTIVE ASSET AND PERFORMANCE MANAGEMENT

Federal Highway Administration: FHWA established 17 performance measures through a series of rulemakings to implement Moving Ahead for Progress in the 21st Century Act ([Public Law 112-141](#)) and Fixing America's Surface Transportation Act ([Public Law 114-94](#)) performance provisions. These measures are used by State DOTs to assess performance and carry out several performance-based apportioned programs. Additionally, FHWA established new requirements for State DOTs to develop Transit Asset Management (TAM) Plans for National Highway System pavements and bridges. State DOTs developed their initial TAM Plans in FY 2018, with their first plans completed in FY 2019. At this time, FHWA is focused on working with States as their TAM maturity grows to develop updated plans, which are due in FY 2022.

State DOTs and Metropolitan Planning Organizations (MPOs) are in the early stages of implementing the new performance requirements. FHWA has and continues to work closely with State DOTs and MPOs to capture leading practices and identify needs for assistance in performance management. An [implementation plan](#) published on the FHWA website outlines specific efforts underway or completed to provide assistance and support. FHWA reports progress on seven of the 17 National performance measures supporting the Department and FHWA's Strategic Goals through annual performance reporting processes.

Office of the Secretary: All State DOTs have reported performance data and targets for each of the 17 performance measures. FHWA publishes State Performance Dashboards, reports, and updates annually, sharing all data and targets in one place.

State DOTs and MPOs work together to set data-informed targets and are accountable for managing progress toward the performance targets they set. FHWA facilitates the collaborative target-setting process by providing guidance, training, and technical assistance to State DOTs and MPOs. State DOTs can also benchmark their performance among peer agencies leveraging their access to consistent data. FHWA uniformly tracks performance data to tell a National story.

To ensure that transit agencies effectively manage grant funds in a manner consistent with TAM principles, FTA will continue to provide robust TAM technical assistance and oversight, including virtual training and conference opportunities, quarterly webinars featuring peer agencies, and formal published case studies on new and innovative TAM practices. In addition, FTA is undertaking a five-year program evaluation effort to quantify the impacts of regulation on the transit industry, including the state of good repair performance targets.

OIG TOP MANAGEMENT CHALLENGE: CONTRACT AND GRANT FUND STEWARDSHIP

In FY 2019, DOT obligated almost \$73.6 billion for contracts and grants to support its mission of ensuring our Nation has one of the world's safest, most efficient, and modern transportation systems. In addition to its annual funding for contracts and grants, the CARES Act provided DOT with an additional \$36 billion in FY 2020 to distribute for COVID-19 pandemic relief. The Department must place sustained focus on its contract and grant awards and oversight to ensure these funds are efficiently and effectively spent for their intended purpose and result in the expected quality of services, products, and performance.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: AWARDING PANDEMIC RELIEF AND OTHER DOT CONTRACTS AND GRANTS EFFICIENTLY, EFFECTIVELY, AND FOR INTENDED PURPOSES

Office of the Senior Procurement Executive: The Office of the Senior Procurement Executive plans to take the following actions to address this focus area:

- Finalizing an update to the DOT Guide to Financial Assistance to incorporate OMB's Uniform Guidance updates, which reflect government-wide changes for the award and administration of grants. These changes include directives to increase performance measurement and align to the phases of the grant life cycle;
- Execute FY 2021 Procurement Management Reviews to assess procurement office performance (i.e., competition rate) and policy/regulatory compliance for selected OAs;
- Explore opportunities to annually collect and internally report standard OA procurement metrics to include competition rate; and
- Leverage the DOT Acquisition Strategy Review Board to ensure appropriate competition approach for Major Acquisitions and OA procurement office compliance with regulatory/policy requirements prior to solicitation release.

Federal Aviation Administration: FAA is addressing this focus area through policy clarification, improved internal controls, and expanded oversight. Through a revision to FAA's Contract Pricing Handbook, the agency will add techniques and scenarios that will address how to best support and document a fair and reasonable price determination.

Additionally, FAA will reinforce existing internal controls within the Chief Financial Officer (CFO) review process to better ensure that Independent Government Cost Estimates are compliant and supportable. This will include increased scrutiny towards the basis and assumptions for each cost estimate and increased collaboration with Acquisitions to facilitate appropriate reconciliations at award. Finally, in collaboration with contracting management, the National Acquisition Evaluation Program will reinforce ongoing oversight activities to address records management and rationale for award decisions.

OIG FOCUS AREA: ENHANCING CONTRACT AND GRANT MANAGEMENT AND OVERSIGHT TO ACHIEVE DESIRED RESULTS AND COMPLIANCE WITH REQUIREMENTS

Federal Aviation Administration: FAA will update its Frequently Asked Questions (FAQs), which form the primary public guidance on the Coronavirus Aid, Relief and Economic Security Act (CARES Act, [Public Law 116-136](#)) Airport Grants Program. The FAQs provide instructions to airport operators requesting reimbursement from their respective CARES Act Airport Grants. This guidance is consistent with the training provided to reimbursement approvers, and in many cases, comes from frequently experienced issues identified by these approvers. Ensuring that everyone involved in each step of the reimbursement process is operating within the same set of rules helps to increase overall compliance. Even with these updated FAQs, approvers will continue to review all requests.

To increase oversight of CARES Act funding, FAA hired new, experienced employees to approve all reimbursement requests by grantees. FAA continues to hold weekly meetings with approvers, compliance staff, and management to ensure that approvers can raise issues and questions for resolution. FAA is also documenting reimbursement decisions made, so that new approvers can continue to consistently apply these policies and practices to future requests. To date, all CARES Act Airport Grants reimbursement requests have been for airport operations and maintenance expenses. FAA will be adding an addendum to the original program to allow funds to be used for airport development. FAA already has knowledgeable, experienced field office staff that regularly review the eligibility of costs for development projects for its ongoing Airport Improvement Program. FAA expects CARES Act development projects will be similar to Airport Improvement Program projects. As such, CARES Act Airport Grants Program funding requests for development projects will be handled primarily by FAA's field staff, with guidance from HQ staff with development project experience.

Federal Railroad Administration: FRA's CARES Act funding differs from other OAs' in that funds were directed exclusively to Amtrak. FRA increased Amtrak's two FY 2020 grants, Northeast Corridor and National Network, for which FRA already had a comprehensive monitoring and technical assistance program in place. FRA continues to coordinate closely with Amtrak on its CARES Act expenditures through monitoring activities, such as weekly, monthly, and ad hoc meetings and reviews of monthly and cumulative expenditures to ensure compliance with all requirements. FRA is also incorporating lessons learned

from CARES Act implementation to strengthen oversight. For example, FRA is adding new terms and conditions to its FY 2021 Amtrak grant agreements, including:

- Creating an approval process before Amtrak reclassifies expenditures from one funding source to another;
- Enhancing monthly progress reports for greater visibility into project performance, rolling stock reliability, and credit status; and
- Requiring new, end-of-year reports that facilitate comparison of Amtrak's planned and actual grant performance and expenditures, analysis of monthly allocation of costs and revenues to service lines, and evaluation of rolling stock condition.

In addition, FRA is creating an enforcement framework to identify Amtrak grant violations and determine appropriate FRA options. FRA will add this framework to its grants management manual. The agency is also hiring more grant managers and dedicating existing accounting staff to increase its oversight capabilities for review and analysis of Amtrak's reports and invoices.

Federal Transit Administration: FTA will continue to provide guidance to its recipients on the management and oversight of CARES Act grants through its ten regional offices and FAQs website, which acts as FTA's primary form of notification to the transit industry regarding COVID-19 relief and CARES Act grant administration. FTA will continue to provide supplemental training to regional offices on the administration of CARES Act funding, consistent with the requirements outlined in the [July 2, 2020 Supplemental Apportionments, Allocations, Program Information and Guidance Federal Register Notice](#). FTA will continue to oversee the award and administration of CARES Act funding through its existing risk-based grant management and oversight procedures. FTA will also continue to coordinate with the Federal Emergency Management Agency to identify any transit projects receiving funding and eliminate any potential duplication of funding. FTA has a very low improper payment rate in its regular programs. To reduce the risk of improper payments for CARES Act funding, FTA will conduct an OMB A-123, Appendix C improper payment review, including a quantitative risk assessment. FTA has hired additional staff in its headquarters and regional offices to assist in the increased number of grants being processed due to the additional CARES Act funding.

OIG TOP MANAGEMENT CHALLENGE: INFORMATION SECURITY

The Department relies on over 450 information systems to carry out its mission, which includes safely managing air traffic control operations and administering billions of dollars. However, the Department faces challenges in strengthening oversight to address longstanding cybersecurity weaknesses. Addressing internal control weaknesses will be key to protect information and systems from attacks and other compromises that may pose risks to safety or taxpayer dollars, including DOT's large infusion of CARES Act funding. To better mitigate risks, DOT must also develop policy to validate the proper adoption and security of internet-based cloud computing services.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: ADDRESSING LONGSTANDING CYBERSECURITY WEAKNESSES

Office of the Chief Information Officer: Through its 2020 Federal Information Security Management Act audit, OIG identified 10,385 security weaknesses in the Department's plans of actions and milestones (POA&Ms). To address these risks, the Office of the Chief Information Officer (OCIO) will take the following actions:

- Coordinate with FAA to finalize actions to reconcile those POA&Ms migrated from other management systems, and which form the greatest percentage of the open POA&Ms;
- Establish a cybersecurity working group to address open POA&Ms for the other OAs and provide assistance with cleanup and closure;
- Update the DOT Security Weakness Management Guide to provide improved direction on the creation, management, and closure of POA&Ms;
- Pilot a dashboard capability to provide near-real-time visibility into open POA&Ms by OA, and leverage the dashboard from the staff to leadership levels to provide visibility and drive actions towards closure; and
- Leverage the DOT IT Spend Approval process to identify and prioritize funding to support activities to drive POA&Ms towards closure.

To address identified weaknesses in the Department's annual security training processes and contingency

planning, OCIO will take the following actions:

- Engage the U.S. Department of Homeland Security and its Cybersecurity & Infrastructure Security Agency to assist in linking the DOT personnel security system to the Common Operating Environment to provide accurate identification of authorized federal and contract personnel;
- Complete the implementation of security awareness training within the DOT Learns system for contractors;
- Coordinate with the DOT Assistant Secretary of Administration and CFO to ensure funding in future years to operate and maintain these capabilities;
- Establish a cybersecurity working group to address contingency planning, review OA plans, and provide recommendations for improvements, including increased use of the IT Shared Services environment and OCIO-managed enterprise solutions to reduce OA requirements and burden;
- Coordinate with OAs to develop and issue a task against the enterprise cybersecurity contract to improve contingency planning for mission systems; and
- Continue to leverage DOT enterprise cloud solutions to modernize physical and legacy systems by moving them to the cloud and applying best practices for resiliency and availability in the cloud.

OIG FOCUS AREA: DEVELOPING DEPARTMENT-WIDE POLICY TO VALIDATE THE PROPER ADOPTION AND SECURITY OF CLOUD SERVICES

Office of the Chief Information Officer: OCIO will take the following actions to address this challenge and focus area:

- Develop and issue implementation guidance on Federal Risk and Authorization Management Program requirements and oversight by OCIO;
- Update the DOT Federal Information Technology Acquisition Reform Act ([H.R. 1232](#)) IT spend approval process to identify instances of investment activity in the cloud, ensure the prioritization of resources for securing those systems, and ensure that plans are established to implement and comply with Federal Risk and Authorization Management Program requirements.
- Expand the use of DOT enterprise cloud services to modernize physical and legacy systems. This will be achieved by directing migration to approved shared service and cloud service provided through the DOT IT spend approval and enterprise change management processes, prioritizing the use of DOT enterprise contract vehicles and solutions for implementation of systems in the cloud, and applying architectural and operational best practices for system and application resiliency and availability within the cloud.
- Coordinate with OAs and their CFOs to identify budget and funding opportunities for cloud security as modernization, mission enablement and resiliency, and efficiency initiatives.

OIG TOP MANAGEMENT CHALLENGE: FINANCIAL MANAGEMENT

The recent influx of new grant funding may present financial management challenges for the Department. On an annual basis, DOT typically disburses about \$82 billion in cash. With the CARES Act, DOT will have the potential to outlay \$118 billion, a 44 percent increase from the prior year. Although the Department has made progress in its financial management, such as reducing improper payments, DOT will now have to monitor significantly more grants and grantees to continue reducing improper payments and to comply with the Digital Accountability and Transparency Act (DATA Act), which requires agencies to improve reporting on spending.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: STRENGTHENING PROCEDURES TO MONITOR AND REPORT GRANTEE SPENDING

Office of the Financial Management: The Office of Financial Management will take the following actions to address this focus area:

- Updating existing reconciliation tools to incorporate new DATA Act ([Public Law 113-101](#)) data quality validations deployed by Treasury in relation to the revised reporting requirements for CARES Act funding;
- Updating the existing DOT Data Quality Plan to address data quality through the life of CARES Act funding;
- Developing trend analyses to identify DATA Act reporting data quality trends and improvements over time; and
- Finalizing procedures for the development of quarterly action plans to identify data quality issues that require investigation and/or correction.

OIG FOCUS AREA: PREVENTING AN INCREASE IN IMPROPER PAYMENTS

Office of the Secretary: OST and relevant OAs will take the following actions to address this focus area:

- Sampling supporting documentation from FHWA's grant-related transactions and calculating an estimated amount of improper payments;
- Developing and implementing targeted corrective actions to strengthen procedures;
- Sampling supporting documentation from grant-related transactions and assessing the improper payment risk of programs that received significant CARES Act funding; and
- Publicly reporting results of the FY 2021 improper payment review in accordance with OMB requirements.

OIG TOP MANAGEMENT CHALLENGE: INNOVATION AND THE FUTURE OF TRANSPORTATION

A top DOT priority is to guide the country into the future of transportation through innovation. Emerging technologies and innovative approaches to such areas as financing and project delivery will ultimately transform how DOT carries out its mission, shapes its workforce, and deploys resources. One immediate challenge is stewarding the fast pace and scope of emerging technologies in vehicle automation and Unmanned Aircraft Systems as they are integrated into our Nation's transportation system. These technologies have the potential for long-term benefits but also pose new safety, oversight, and regulatory challenges.

DOT PLANNED ACTIONS TO ADDRESS THIS CHALLENGE

OIG FOCUS AREA: ADAPTING OVERSIGHT APPROACHES FOR EMERGING VEHICLE AUTOMATION TECHNOLOGIES

National Highway Traffic Safety Administration: The Office of Defects Investigations (ODI) continues to take a proactive approach to monitor potential safety defects in emerging vehicle technologies. The ODI regularly engages with industry to learn about new technologies to better oversee their implementation and operation. To better track potential defects of these systems, ODI has recently added eight specific Advanced Driver Assistance System components to its consumer complaint form

that allows consumer complaints to indicate allegations with the performance of these systems. The ODI will be able to confirm trends from its Early Warning Reporting elements on these systems, including electronic stability control, forward collision avoidance, lane departure and backover prevention, foundation brakes, and automatic brake controls. Using its risk-based processes, ODI will be able to open and perform investigations more efficiently and effectively on these systems.

OIG FOCUS AREA: ENSURING THE SAFE INTEGRATION OF UAS IN THE NATIONAL AIRSPACE SYSTEM

Federal Aviation Administration: FAA will take the following actions to address this focus area:

- **Conclude the Unmanned Aircraft Systems Integration Pilot Program:** FAA concluded the Unmanned Aircraft Systems (UAS) Integration Pilot Program in October 2020. A final report on the program was issued in 2021.
- **Initiate the BEYOND Program:** With the successful conclusion of the UAS Integration Pilot Program, FAA initiated the BEYOND Program. This program will focus on normalizing routine, scalable, and

economically viable Beyond Visual Line of Sight operations. These more complex operations represent the key to unlocking the next round of economic potential for UAS, including operations to inspect critical infrastructure and deliver medical supplies and other small goods. The BEYOND program will focus on operating under established rules rather than waivers, collecting data to develop performance-based standards, streamlining the approval processes for UAS integration, collecting and addressing community feedback, and understanding the societal

and community benefits associated with small UAS operations. FAA will also continue to collaborate with industry stakeholders, leveraging partnerships to find solutions for operational and technical challenges associated with expanding Beyond Visual Line of Sight approvals.

- **Execute Rulemaking Efforts:** FAA published the [Remote Identification of Unmanned Aircraft](#) final rule and the [Operations of Small Unmanned Aircraft Systems Over People](#) final rule on January 15, 2021. These rules are crucial to the agency's UAS integration

efforts of moving toward longer-term, more routine, and more complex drone operations, including package delivery services and urban air mobility. Once the rules become effective (60 days after publication), FAA will coordinate and execute items on the Remote ID implementation schedule.

- **Enhance Outreach Efforts to the Public:** FAA is also committed to expanding UAS support and outreach efforts with the public to advocate safety policies, guidance, and best practices, such as the annual Drone Safety Awareness Week.

	Focus Area	Responsible Official(s)	Associated Performance Measure(s)
Aviation Safety	Improving FAA's Oversight of Aircraft Certification Processes	Ali Bahrami (FAA)	U.S. General Aviation Fatal Accidents per 100,000 Flight Hours
	Enhancing Aviation Safety Oversight While Working in a Collaborative Environment		U.S.-Owned Commercial Carrier Fatalities per 100 Million Persons
Surface Transportation Safety	Ensuring Compliance with Safety Regulations and Programs	<ul style="list-style-type: none"> Joseph DeLorenzo (FMCSA) Rosalyn Millman (FRA) TaNika Dyson (PHMSA) Jennifer Antonielli (PHMSA) 	<ul style="list-style-type: none"> Number of Motor Carrier Incidents Rail-Related Fatalities Train Accidents Incidents Involving Death or Major Injury Resulting from the Transport of Hazardous Materials by All Modes Including Pipelines Pipeline Hazardous Liquid Spilled, Gross Volume (Barrels) Pipeline Hazardous Liquid Spilled, Net Volume (Barrels) Hazardous Materials Incidents Reported Annually
	Continuing Progress in Safety Monitoring and Enforcement	<ul style="list-style-type: none"> Joseph DeLorenzo (FMCSA) Joe Kolly (NHTSA) 	<ul style="list-style-type: none"> Average Number of Days to Investigate "High Risk" Designated Carriers Occupants Ejected from Passenger Vehicles per 100 Emergency Medical Services Motor Vehicle Crash Dispatches Improve Safety of Fleet on U.S. Roadways Percentage of States that Meet the Quarterly Timeliness Benchmark for Reporting
Air Traffic Control and Airspace Modernization	Modernizing New Systems While Introducing New Capabilities	Teri Bristol (FAA)	Percentage of Major System Investments Completed On-Time and On Budget
	Implementing New PBN Flight Procedures and Delivering Benefits to Airspace Users		<ul style="list-style-type: none"> Percentage of NextGen Projects Completed On-Time and On Budget Percentage of Completed NextGen Priorities for the Northeast Corridor
Surface Transportation Infrastructure	Enhancing Oversight of Surface Transportation Projects	<ul style="list-style-type: none"> Rosalyn Millman (FRA) Firas Ibrahim (FHWA) Gregory Danis (FTA) 	<ul style="list-style-type: none"> Percentage of DOT Environmental Impact Statements Posted on Permitting Dashboard that are On Schedule Percentage of DOT Major Infrastructure Projects Posted on Permitting Dashboard that are On Schedule FTA Grant Dollars Allocated to Rural Areas and Small Urban Areas

	Focus Area	Responsible Official(s)	Associated Performance Measure(s)
Surface Transportation Infrastructure	Employing Effective Asset and Performance Management	<ul style="list-style-type: none"> Susanna Reck (FHWA) Hari Kalla (FHWA) 	<ul style="list-style-type: none"> Average Months to Complete and Environmental Review for Major Infrastructure Projects for which DOT is the National Environmental Policy Act Lead State of Good Repair Backlog (Current-Year Dollars)
Contract and Grant Fund Stewardship	Awarding Pandemic Relief and Other DOT Contracts and Grants Efficiently, Effectively, and for Intended Purposes	<ul style="list-style-type: none"> Willie Smith (OST-M) Mark House (FAA) 	<ul style="list-style-type: none"> Percentage of Grants Identified as Inactive at the Beginning of the Fiscal Year that are Either Closed or Returned to Active Status Average Number of Days from Grant Application Submission to Grant Award
	Enhancing Contract and Grant Management Oversight to Achieve Desired Results and Compliance with Requirements	Willie Smith (OST-M)	Best-in-Class Performance
Information Security	Addressing Longstanding Cybersecurity Weaknesses	Andrew Orndorff (OCIO)	<ul style="list-style-type: none"> Percentage of Systems with Proper Security Authorizations Percentage of Systems Converted to an Ongoing Authorization Process
	Developing Department-wide Policy to Validate the Proper Adoption and Security of Cloud Services		
Financial Management	Strengthening Procedures to Monitor and Report Grantee Spending	Jennifer Funk (OST-B)	Improper Payment Percentage for Activities Identified as Susceptible
	Preventing an Increase in Improper Payments		
Innovation and the Future of Transportation	Adapting Oversight Approaches for Emerging Vehicles Automation Technologies	Joe Kolly (NHTSA)	Deployment of Automated Driving Systems
	Ensuring the Safe Integration of UAS in the National Airspace System	Ali Bahrami (FAA)	<ul style="list-style-type: none"> Percentage of Manual Part 107 Airspace Authorizations Processed Within the 90-Day Timeline Mandated by Congress Average Time to Process UAS Part 107 Operational Waivers