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**Washington, DC  20548**

**Comptroller General**
**of the United States**

June 25, 2021

The Honorable Pete Buttigieg
Secretary
U.S. Department of Transportation
1200 New Jersey Avenue, SE
Washington, D.C. 20590

**Priority Open Recommendations: Department of Transportation**

Dear Mr. Secretary:

The purpose of this letter is to provide an update on the overall status of the Department of Transportation's (DOT) implementation of GAO's recommendations and to call your personal attention to areas where open recommendations should be given high priority.[1] In November 2020, we reported that on a government-wide basis, 77 percent of our recommendations made 4 years ago were implemented.[2] DOT's recommendation implementation rate was 77 percent. As of April 2021, DOT had 178 open recommendations. Fully implementing these open recommendations could significantly improve agency operations.

Since our April 2020 letter, DOT has implemented six of our 16 priority recommendations.

- DOT updated its Information Technology Risk Management standard operating procedure, which describes, among other things, how the department's Office of the Chief Information Officer is to coordinate with the office responsible for enterprise risk management (ERM) functions. The standard operating procedure incorporates cybersecurity and privacy risks into the department's ERM process. Accordingly, DOT senior leadership responsible for ERM is in a better position to be fully aware of significant cybersecurity risks and, thus, positioned to address them in the context of other risks and their potential impacts on the mission of the agency.

- The United States Maritime Administration (MARAD) published a January 2018 working group report and a May 2020 report on the number of credentialed U.S. mariners. As we recommended, the report identified potentially available qualified mariners and potential solutions to address the estimated mariner shortfall. Having this information will help MARAD ensure that there are sufficient mariners to fulfill DOD's requirements for its most serious scenario.

- DOT implemented two priority recommendations related to uncrewed aircraft systems (UAS). The Federal Aviation Administration (FAA) (1) conducted a number of outreach

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[1]Priority recommendations are those that GAO believes warrant priority attention from heads of key departments or agencies. They are highlighted because, upon implementation, they may significantly improve government operation, for example, by realizing large dollar savings; eliminating mismanagement, fraud, and abuse; or making progress toward addressing a high-risk or duplication issue.

[2]GAO, *Performance and Accountability Report: Fiscal Year 2020* GAO-21-4SP (Washington, D.C.: Nov. 16, 2020).

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activities to educate law enforcement on UAS safety oversight and set outreach targets for specific sizes of law enforcement agencies, and (2) took steps to identify and use data necessary in evaluating oversight activities. These actions allow FAA to enhance safe UAS operations as the number and type of UAS operations the agency is responsible for overseeing continues to expand.

- DOT clarified the federal role for mitigating local freight-related congestion in its National Freight Strategic Plan. By incorporating strategic objectives related to local freight-related congestion in the plan, DOT should be able to effectively prioritize and address local freight-related congestion in its national freight policy, programs, initiatives, and investments, and ultimately help reduce the environmental and community impacts of freight-related congestion.

- The Federal Transit Administration (FTA)'s Office of Transit Safety and Oversight (TSO) incorporated a question about enforcement effectiveness into its state safety oversight Auditor's Guide, which is used for all triennial reviews. Further, it informed state safety oversight agencies' program managers regarding this additional question. As FTA implements new authorities and responsibilities provided in federal law, this expansion of the triennial audit assessment to evaluate the effectiveness of states' enforcement practices will better position FTA to identify ineffective state safety enforcement and thereby remedy safety deficiencies.

We ask for your attention to the remaining 10 priority recommendations. We are also adding six new recommendations related to fraud and abuse risks in aircraft registration, pedestrian safety tests for new vehicles, aviation safety, and natural gas export facility permitting, bringing the total number of priority recommendations to 16. (See the enclosure for the list of recommendations.)

The 16 priority recommendations fall into the following five major areas.

**Identifying Program Leadership and Developing Comprehensive Plans**. Four recommendations identify program leadership and develop comprehensive plans.

- In December 2015, during the Ebola epidemic, we recommended that the Secretary of Transportation work with relevant stakeholders, such as the Department of Health and Human Services (HHS), to develop a national aviation-preparedness plan for communicable disease outbreaks. DOT partially concurred with our recommendation and agreed that an aviation preparedness plan is needed, but maintains that HHS and the Department of Homeland Security (DHS) have responsibility for communicable disease response and preparedness planning, respectively, and that these departments should lead any efforts, including for transportation. In response to the COVID-19 pandemic, DOT engaged with interagency partners and industry stakeholders, but as of April 2021, no aviation preparedness plan that incorporates such things as protocols for responding to the threat and coordination among stakeholders has been developed. To fully implement the recommendation, DOT should develop an aviation preparedness plan.

  In the absence of efforts to develop a plan, in June 2020, we urged Congress to take legislative action to require the Secretary of Transportation to work with relevant agencies and stakeholders, such as HHS, DHS, and members of the aviation and public health sectors and international organizations, to develop a national aviation-

preparedness plan to limit the spread of communicable disease threats and minimize travel and trade impacts.[3] Without such a plan, the U.S. may not be as prepared to minimize and quickly respond to future communicable disease events.

- In December 2016, we recommended that the Secretary of Transportation issue a directive governing department-wide and modal administration discretionary grant programs that includes requirements to, among other things, document key decisions (including the reasons for rating changes and how high-level concerns raised during the process were addressed) and align the grant programs' policy priorities with the evaluation process. We have also urged Congress to consider including language in the next surface transportation reauthorization bill that would require DOT to develop and implement transparency measures for its discretionary grant programs.

  In March 2019, DOT issued a memo directing secretarial offices and operating administrations involved in awarding discretionary grants to implement our recommendations and to include them in their policies and procedures. However, this memo did not define how key decisions will be documented, as we recommended, and exempted some of the Department's largest discretionary grant programs. To fully address this recommendation, DOT should create a department-wide approach to ensure that its discretionary grant programs are consistently and transparently administered.

- In November 2017, we recommended that the Secretary of Transportation develop and implement a comprehensive plan to better manage departmental initiatives related to automated vehicles. DOT has issued multiple plans that outline its overall approach for managing policy and research issues related to automated vehicles across its modal administrations. However, these published plans lack performance measures and other aspects of comprehensive planning. In January 2021, DOT released another plan for public comment, which builds on principles stated in a previously published plan. DOT plans to evaluate the public comments in the spring of 2021 and then assess next steps. To fully implement our recommendation, DOT should develop a comprehensive plan that includes elements such as goals and performance measures.

- In August 2020, we recommended that the FAA Administrator assign authority to an office or other entity to oversee use of the Compliance Program—an enforcement policy with a collaborative and problem-solving approach— across program offices. Under the Compliance Program, FAA emphasizes using compliance actions, such as counseling or training, to address many violations more efficiently. As no specific central authority, FAA office, nor entity oversee the Compliance Program, FAA lacks some controls to ensure that the program is achieving its objectives. As a result, FAA is not positioned to identify and share best practices or other valuable information across offices. To fully implement our recommendation, FAA should follow through on their plan to appoint an executive council and steering committee to oversee the Compliance Program across all FAA offices, which officials said they planned to do by summer 2021.

**Addressing Safety Risks.** Three recommendations are critical to mitigating safety risks.

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[3]GAO. *Covid-19: Opportunities to Improve Federal Response and Recovery Efforts.* GAO-20-625. (Washington, D.C.: June 25, 2020).

- In February 2014, we recommended that the Secretary of Transportation revise the Safety Measurement System (SMS) methodology to better account for data accuracy and sufficiency limitations in drawing comparisons of safety performance information across motor carriers. The accuracy and sufficiency of data used by the SMS is vital because Federal Motor Carrier Safety Administration (FMCSA) investigators and their state partners use this system to direct resources to identify unsafe motor carriers with the goal of helping reduce the number of crashes, injuries, and fatalities. However, FMCSA's ability to target unsafe motor carriers is hindered by insufficient information not accounted for in the SMS methodology, such as variability in the carrier population. The Department does not agree with our conclusions, and has requested that we close the recommendation as not implemented. However, it is developing a new methodology in response to a review by the National Academies of Sciences.

  While DOT has not yet committed to deploying the new methodology, officials said they hope to do so some time in 2021. To fully implement this recommendation, DOT should ensure that the methodology used to compare safety performance across motor carriers addresses the limitations we identified. This would ensure that FMCSA can better identify and intervene with carriers at highest risk for crashing. We continue to believe implementing this recommendation will improve the reliability of data used to assess carriers that pose the greatest safety risks.

- In August 2019, we recommended that FAA's Runway Safety Manager establish a plan to assess the effectiveness of all of FAA's terminal area-safety efforts, including Airport Surface Detection Equipment, Model X (ASDE-X), and the Runway Safety Program. FAA has many terminal-area safety efforts underway, but has not assessed their effectiveness. To fully implement this recommendation, FAA should complete its planned efforts to baseline, assess, and monitor the effectiveness of terminal safety efforts, including issuance of its "Runway Safety Evolution Plan". Implementing this recommendation would direct FAA resources toward activities and technologies proven to enhance safety and identify ways to strengthen those efforts.

- In August 2020, we recommended that the Administrator of the Pipeline and Hazardous Materials Safety Administration (PHMSA) conduct a standards-specific review of regulations that incorporate standards and, if necessary, update the regulations or document its decision for not updating them. A standards-specific review considers updates to technical standards used by federal agencies to ensure the safe design and operation of export facilities for liquefied natural gas. According to PHMSA's website, standards must be updated regularly in order to remain effective and relevant in their role to ensure safety at these facilities.

  In January 2021, PHMSA adopted a process for periodically reviewing standards, but as of May 2021, it had not updated the regulations to implement the process. To fully implement this recommendation, PHMSA should complete its standards-specific review of regulations that incorporate standards and, if necessary, update the regulations. Without reviewing and updating regulations, PHMSA cannot ensure its regulations remain effective at ensuring safety, and applicants may incur unnecessary costs and delays.

**Reducing Fraud and Abuse Risks.** Two priority recommendations address risks of fraud and abuse in DOT programs.

- In March 2020, we recommended that in order to prevent fraud and abuse in aircraft registration, which enable aircraft-related criminal, national security, or safety risks, the Administrator of FAA verify aircraft registration applicants' and dealers' eligibility and information. To fully implement this recommendation, FAA should update its current process to include stronger controls to prevent ineligible registrants and potential fraud and abuse. The absence of more and electronically analyzable information has substantially hindered FAA's ability to use the registry as a tool to detect potential fraud and abuse and to oversee registered aircraft.

- In the same March 2020 report, we recommended that the Administrator of FAA increase aircraft registration and dealer fees to ensure the fees are sufficient to cover the costs of FAA efforts to collect and verify applicant information while keeping pace with inflation. To implement this recommendation, FAA should increase aircraft registration and dealer fees. Without a change to these fees, the costs continue to be borne by the public and limit resources available for applicant verification.

**Improving Transparency and Communication.** Four priority recommendations are critical to improving transparency and communication for DOT's decision-making process.

- In July 2017, we recommended that the Secretary of Transportation assess available federal and industry data and determine what further information could assist in the evaluation of future complaints or concerns regarding unfair or deceptive practices in order to increase transparency and obtain information to better inform decisions on whether to investigate potentially unfair or deceptive practices in the air ambulance industry. DOT did not concur with this recommendation, and in September 2017, noted that its analysis of whether a complaint alleges conduct that could constitute an unfair or deceptive practice is fundamentally based on the unique facts of each case, rather than aggregate data.

  The FAA Reauthorization Act of 2018 (the Act), signed into law on October 5, 2018, directed the establishment of an Air Ambulance and Patient Billing Advisory Committee.[4] The Act also required the committee to make recommendations on a variety of topics, including requiring an assessment of additional data from air ambulance providers and other sources to be collected by DOT to improve its understanding of the industry. To fully implement this recommendation, DOT should act upon our recommendation and the forthcoming recommendations from the advisory committee.

- In October 2019, we recommended that the Administrator of the Federal Highway Administration (FHWA) require FHWA division offices to document the rationale for classifying projects as emergency repairs. Rationale to ensure future projects are classified appropriately could include descriptions of why an emergency repair is necessary, alternative strategies or repairs considered, and defined circumstances under which projects are classified as emergency repairs.

  In April 2021, DOT distributed a memorandum directing division offices to document the rationale for classifying projects as emergency repairs, along with the elements we recommended be included, and plans to incorporate this requirement in FHWA's primary guidance document—the Emergency Relief Manual—by October 2021. To fully implement our recommendation, FHWA should complete the revisions to the Emergency

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[4]Pub. L. No. 115-254, § 418(a), 132 Stat. 3186, 3334 (2018).

Relief Manual. This action would help ensure that emergency relief funds are being used for the purposes intended or put to the highest use.

- In April 2020, we recommended that the Administrator of the National Highway Traffic Safety Administration (NHTSA) document the overall process for making changes to the New Car Assessment Program (NCAP), including establishing criteria and milestones for decisions. To fully address this recommendation, NHTSA should publish a notice to the Federal Register to clarify the process NHTSA uses to update NCAP, and provide information on the criteria and milestones used by NHTSA to make changes to NCAP vehicle testing requirements. The lack of a documented process for updating NCAP affects NHTSA's ability to ensure its new vehicle tests are regularly updated to achieve NCAP's goals of providing manufacturers with an incentive to improve the safety performance of new vehicles and to assist consumers with their vehicle purchasing decisions.

- Also in the April 2020 report, we recommended that the Administrator of NHTSA decide whether to include pedestrian safety tests in NCAP and communicate this decision and rationale to relevant stakeholders and the public. To fully address this recommendation, NHTSA should publish a notice to the Federal Register with its decision, consider public comments received on the proposal, and communicate NHTSA's next steps. In the absence of a decision and the rationale, stakeholders lack clarity on whether NHTSA is using all of the policy tools at its disposal to address emerging safety risks and to achieve its strategic objectives.

**Managing Cybersecurity Risks and Information Technology (IT).** Three priority recommendations will improve DOT's risk management, including cybersecurity risks and IT workforce planning.

- We recommended in February 2018 that the Secretary of Transportation, in cooperation with DHS, take steps to consult, as appropriate, with respective sector partners such as DHS and the National Institute of Standards and Technology (NIST), to develop methods for determining the level and type of cybersecurity framework adoption by entities across the transportation systems sector. NIST developed, as called for by federal law and policy, the *Framework for Improving Critical Infrastructure Cybersecurity*, a voluntary framework of cybersecurity standards and procedures for industry to adopt. To fully implement this recommendation, DOT should complete the framework survey to develop these methods, which officials said they expected to do by October 2022. While the department has ongoing initiatives, implementing our recommendation to gain a more comprehensive understanding of the framework's use by critical infrastructure sectors is essential to the success of protection efforts.

- In July 2019 we recommended that the Secretary of Transportation fully develop a cybersecurity risk management strategy that includes key required elements, including a statement of departmental risk tolerance and risk mitigation strategies, and a description of acceptable risk assessment methodologies. To fully address this recommendation, DOT should develop and implement the strategy, which officials said they planned to do by January 2022. Addressing our recommendation would protect DOT from a growing number of cyber threats to systems and data by taking a risk-based approach to cybersecurity by effectively identifying, prioritizing, and managing their cyber risks.

- In November 2016, we recommended that the Secretary of Transportation, as well as four other agencies, implement eight IT workforce planning activities to facilitate a more rigorous analysis of gaps between current skills and future needs, as well as develop a strategy for filling gaps. DOT has since addressed one of the eight recommended IT workforce planning activities—developing competency and staffing requirements. In February 2021, DOT officials stated that the department is continuing its efforts to implement the recommendation and plans to complete final actions by the end of 2021. To fully address this recommendation, DOT should complete the remaining seven IT workforce planning activities. Until the department fully implements key workforce planning activities, it risks not adequately assessing and addressing gaps in knowledge and skills that are critical to the success of major acquisitions.

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In March 2021 we issued our biennial update to our High-Risk List, which identifies government operations with greater vulnerabilities to fraud, waste, abuse, and mismanagement or the need for transformation to address economy, efficiency, or effectiveness challenges.[5] One of our high-risk areas, funding the nation's surface transportation, requires congressional action to develop a sustainable plan while also centering on DOT and the agency's ability to maximize existing resources.

Several other government-wide high-risk areas also have direct implications for DOT and its operations. These include (1) ensuring the cybersecurity of the nation,[6] (2) improving the management of IT acquisitions and operations, and (3) improving strategic human capital management. We urge your attention to funding the nation's surface transportation and other government-wide high-risk issues as they relate to DOT. Progress on high-risk issues has been possible through the concerted actions and efforts of Congress, OMB, and the leadership and staff in agencies, including DOT.

Copies of this report are being sent to the Director of the Office of Management and Budget and appropriate congressional committees including the Committees on Appropriations, Budget, Commerce, Environment and Public Works and Homeland Security and Governmental Affairs, United States Senate, and the Committees on Appropriations, Budget, Transportation and Infrastructure, and Oversight and Reform, House of Representatives.

In addition, the report will be available on the GAO website at http://www.gao.gov.

I appreciate DOT's commitment to these important issues. If you have any questions or would like to discuss any of the issues outlined in this letter, please do not hesitate to contact me or David Trimble, Managing Director, Physical Infrastructure, at TrimbleD@gao.gov or 202-512-2834. Contact points for our Offices of Congressional Relations and Public Affairs may be found on the last page of this report. Our teams will continue to coordinate with your staff on all of the

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[5]GAO, *High-Risk Series: Dedicated Leadership Needed to Address Limited Progress in Most High-Risk Areas*, GAO-21-119SP (Washington, D.C.: Mar. 2, 2021).

[6]With regard to cybersecurity, we also urge you to use foundational information and communications technology supply chain risk management practices set forth in our December 2020 report: GAO, *Information Technology: Federal Agencies Need to Take Urgent Action to Manage Supply Chain Risks,* GAO-21-171 (Washington, D.C.: Dec. 15, 2020).

178 open recommendations, as well as those additional recommendations in the high-risk areas for which DOT has a leading role. Thank you for your attention to these matters.

Sincerely yours,

Gene L. Dodaro
Comptroller General
of the United States

Enclosure(s) – 1

cc:

The Honorable Shalanda Young, Acting Director, OMB
Steven Cliff, Acting Administrator, NHTSA
Steve Dickson, Administrator, FAA
Stephanie Pollack, Acting Administrator, FHWA
Meera Joshi, Deputy Administrator, FMCSA
Tristan Brown, Acting Administrator, PHMSA
Madeline Chulumovich, Office of the Secretary, DOT

Enclosure I:

## Department of Transportation (DOT) Priority Recommendations

**Identifying Program Leadership and Developing Comprehensive Plans.**

*Air Travel and Communicable Diseases: Comprehensive Federal Plan Needed for U.S. Aviation System's Preparedness.* GAO-16-127. Washington, D.C: December 16, 2015.

**Recommendation:** To help improve the U.S. aviation sector's preparedness for future communicable disease threats from abroad, the Secretary of Transportation should work with relevant stakeholders, such as the Department of Health and Human Services, to develop a national aviation-preparedness plan for communicable disease outbreaks. Such a plan could establish a mechanism for coordination between the aviation and public health sectors and could provide clear and transparent planning assumptions for a variety of types and levels of communicable disease threats.

**Action Needed:** DOT partially concurred with this recommendation. As of April 2021, the DOT has not developed a national aviation preparedness plan to respond to communicable disease threats from abroad. In the absence of a national aviation-preparedness plan, DOT officials point to ongoing efforts to engage with interagency partners at DHS and HHS, as well as industry stakeholders, to better collaborate on communicable disease response and preparedness as they relate to civil aviation. For example, in July 2020, DOT, HHS, and DHS issued guidance to airports and airlines for implementing measures to mitigate public health risks associated with COVID-19.[7] In addition, in March 2021, FAA issued occupational health and safety guidance to air carriers, which recommends that they incorporate the latest FAA and CDC guidance into their COVID-19 preparedness plans and procedures.[8]

While this guidance is a positive step, DOT has not yet taken action to develop an aviation preparedness plan for future communicable disease threats that incorporate such things as protocols for responding to the threat and coordination among stakeholders. We continue to believe that DOT is in the best position to work with its relevant stakeholders to develop a national aviation-preparedness plan, which could guide preparation for individual airlines and airports, as well as establish a framework for communication and response for the next communicable disease outbreak.

**Director**: Heather Krause

**Contact information:** KrauseH@gao.gov and (202) 512-2834

*DOT Discretionary Grants: Problems with Hurricane Sandy Transit Grant Selection Process Highlight the Need for Additional Accountability.* GAO-17-20. Washington. D.C.: December 14, 2016.

**Recommendation:** Given DOT's new discretionary grant programs and similar challenges we have found with previous DOT programs, the Secretary of Transportation should issue a directive that governs department-wide and modal administration discretionary grant programs.

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[7]DOT, DHS, HHS, *Runway to Recovery: The United States Framework for Airlines and Airports to Mitigate the Public Health Risks of Coronavirus* (Washington, D.C.: July 2020).

[8]FAA, *Safety Alert for Operators*, SAFO 20009, revision 1e (Washington, D.C.: Mar 3, 2021).

Such a directive should include requirements to: (1) develop a plan for evaluating project proposals in advance of issuing a notice of funding availability that defines the stages of the process, including how the process will be overseen to ensure a consistent review of applications; (2) document key decisions, including the reason for any rating changes and the officials responsible for those changes, and how high-level concerns raised during the process were addressed; and (3) align stated program purpose and policy priorities with the evaluation and selection process.

**Action needed:** DOT concurred with this recommendation. In March 2019, DOT issued a memo, directing all offices and departments that administer discretionary grants to update their policies and procedures to address our recommendation. However, this memo was essentially limited to a repetition of our recommendation and DOT did not take steps to ensure that the various affected offices consistently interpret and implement it. Moreover, DOT exempted the Office of the Secretary from the requirements contained in the March 2019 memo, effectively meaning that some of the Department's largest discretionary grant programs are not covered. Taken as a whole, these actions do not provide an assurance that DOT has created a department-wide approach to ensure that discretionary grant programs are consistently and transparently administered as we recommended.

To fully implement this recommendation, DOT needs to create a department-wide approach to ensure that its discretionary grant programs are consistently and transparently administered.

**High Risk Area:** Funding the Nation's Surface Transportation System

**Director:** Elizabeth Repko

**Contact information:** RepkoE@gao.gov and (202) 512-2834

*Automated Vehicles: Comprehensive Plan Could Help DOT Address Challenges.* GAO-18-132. Washington, D.C.: November 30, 2017.

**Recommendation:** The Secretary of Transportation should develop and implement a comprehensive plan to better manage departmental initiatives related to automated vehicles. This plan should include leading principles such as goals, priorities, and steps to achieve results, milestones, and performance measures to track progress.

**Action needed:** DOT concurred with this recommendation. In January 2021, DOT released a plan for public comment, which builds on principles stated in a previously published plan regarding its implementation of this recommendation.[9] However, DOT has not finalized the 2021 plan. To fully address this recommendation, DOT needs to incorporate leading principles of comprehensive planning, such as goals and performance measures. Until these principles are incorporated, it continues to be unclear whether DOT is adequately evaluating automated vehicle challenges.

**Director:** Elizabeth Repko

**Contact information:** RepkoE@gao.gov and (202) 512-2834

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[9]DOT, *AV 4.0, the Automated Vehicles Comprehensive Plan.* (Washington, D.C.: January 11, 2021).

*Aviation Safety: Actions Needed to Evaluate Changes to FAA's Enforcement Policy on Safety Standards.* GAO-20-642. Washington D.C.: August 18, 2020.

**Recommendation:** The FAA Administrator should assign authority to an office or other entity to oversee use of the Compliance Program across program offices.

**Action Needed:** FAA concurred with this recommendation and said it planned to appoint an executive council and steering committee to oversee the Compliance Program across all FAA offices by summer 2021. In June 2021, FAA provided us with documentation of a published order that provides guidance for implementing the FAA's strategic safety oversight approach. We are reviewing the documentation and will confirm whether FAA's actions address this recommendation.

**Director**: Heather Krause

**Contact information**: KrauseH@gao.gov and (202) 512-2834

**Addressing Safety Risks.**

*Federal Motor Carrier Safety: Modifying the Compliance, Safety, Accountability Program Would Improve the Ability to Identify High Risk Carriers.* GAO-14-114. Washington, D.C.: February 3, 2014.

**Recommendation**: To improve the Compliance, Safety, Accountability (CSA) program, the Secretary of Transportation should direct the FMCSA Administrator to revise the SMS methodology to better account for limitations in drawing comparisons of safety performance information across carriers; in doing so, the Secretary of Transportation should direct the FMCSA Administrator to conduct a formal analysis that specifically identifies limitations in: (1) the data used to calculate SMS scores including variability in the carrier population and the quality and quantity of data available for carrier safety performance assessments, and (2) the resulting SMS scores, including their precision, confidence, and reliability for the purposes for which they are used.

**Action needed**: FMCSA did not concur with this recommendation, disputing the methodology and conclusions in our report. However, we continue to believe that addressing Safety Measurement System (SMS) methodology limitations has merit and could help the agency better target FMCSA's resources to the carriers that pose the highest risk of crashing. For example, we found FMCSA requires a minimum level of information for a carrier to receive an SMS score; however, this requirement is not strong enough to produce sufficiently reliable scores. As a result, FMCSA identified many carriers as high risk that were not later involved in a crash, potentially causing FMCSA to miss opportunities to intervene with higher risk carriers.

To fully implement this recommendation, FMCSA should revise SMS methodology to account for data limitations that limit comparisons so that the FMCSA is better positioned to identify and mitigate carriers that pose the greatest safety risks. FMCSA has recently developed and tested a new methodological approach that could potentially account for the limitations we identified. While FMCSA has not yet committed to deploying the new methodology, officials said they hope to do so in 2021.

**Director:** Elizabeth Repko

**Contact information:** RepkoE@gao.gov and (202) 512-2834

*Aviation Safety: Opportunities Exist for FAA to Improve Airport Terminal Area Safety Efforts*.
GAO-19-639 Washington, D.C.: August 30, 2019.

**Recommendation:** The Runway Safety Manager should establish a plan to assess the effectiveness of all of FAA's terminal area-safety efforts, including Airport Surface Detection Equipment, Model X (ASDE-X) and the Runway Safety Program.

**Action Needed:** FAA concurred with this recommendation. FAA noted that it will identify actions to assess the effectiveness of all of its terminal-area safety efforts in a Runway Safety Evolution Plan. The agency expects to complete this in 2022. We will review this plan when it is available.

**Director**: Heather Krause

**Contact information:** KrauseH@gao.gov and (202) 512-2834

*Natural Gas Exports: Updated Guidance and Regulations Could Improve Facility Permitting Processes.* GAO-20-619 Washington, D.C.: August 6, 2020.

**Recommendation:** The Administrator of PHMSA should conduct a standards-specific review of regulations that incorporate standards and, if necessary, update the regulations or document its decision for not updating them.

**Action Needed:** PHMSA concurred with this recommendation and said that PHMSA is currently developing a proposed rule that would incorporate updated standards, as described in our report. We will continue to monitor these efforts.

**Director:** Frank Rusco

**Contact Information:** RuscoF@gao.gov and (202) 512-3841

**Reducing Fraud and Abuse Risks.**

*Aviation: FAA Needs to Better Prevent, Detect, and Respond to Fraud and Abuse Risks in Aircraft Registration.* GAO-20-164 Washington, D.C.: March 25, 2020.

**Recommendation:** The Administrator of FAA should verify aircraft registration applicants' and dealers' eligibility and information.

**Recommendation:** The Administrator of FAA should increase aircraft registration and dealer fees to ensure the fees are sufficient to cover the costs of FAA efforts to collect and verify applicant information while keeping pace with inflation.

**Action Needed:** FAA concurred with both recommendations. FAA officials said they completed a fraud risk assessment and focus groups to provide recommendations for verifying aircraft registrants and dealers. To support verification of an individual's identity and a corporation's eligibility, the agency plans to build in such checks into Civil Aviation Registry Electronic Services requirements. FAA also identified the need for more clearly defined eligibility parameters for an aircraft dealer. FAA's Office of Aviation Safety plans to review this recommendation with their Law Enforcement Assistance Program partners and Counsel. If rulemaking is required to clarify aircraft dealer eligibility, FAA officials said it will create an implementation plan.

To establish new fees, FAA's Office of Aviation Safety said it will need a minimum of 6 months of CARES aircraft registration and recordation data to be able to collect data to inform the increase in fees and provide rationale for the specific fees. FAA's Office of Aviation Safety plans to use the same process to inform the airmen-credentialing fees. FAA said it would work to create a rulemaking package specific for fees in late 2022 or early 2023 and once the rulemaking process is initiated, it may take a few years to get the fees in place. We will continue to monitor these efforts.

**Director:** Rebecca Shea

**Contact Information:** SheaR@gao.gov and (202) 512-6722

**Improving Transparency and Communication.**

*Air Ambulance: Data Collection and Transparency Needed to Enhance DOT Oversight.* GAO-17-637. Washington, D.C.: July 27, 2017.

**Recommendation:** To increase transparency and obtain information to better inform decisions on whether to investigate potentially unfair or deceptive practices in the air ambulance industry, the Secretary of Transportation should assess available federal and industry data and determine what further information could assist in the evaluation of future complaints or concerns regarding unfair or deceptive practices.

**Action Needed:** DOT did not concur with this recommendation, noting in September 2017 that its analysis of whether a complaint alleges conduct that could constitute an unfair or deceptive practice is fundamentally based on the unique facts of each additional case, rather than aggregate data. However, the FAA Reauthorization Act of 2018 (the Act), signed into law on October 5, 2018, directed the establishment of an Air Ambulance and Patient Billing (AAPB) Advisory Committee and required the committee to make recommendations on a variety of topics, including the recommendations from this report.[10] The AAPB Advisory Committee held its first meeting in January 2020 and soon after established three subcommittees. In January 2021, the three subcommittees issued reports that propose recommendations to DOT and others. For example, one of the subcommittees recommended that DOT promulgate regulations for the collection of data to improve understanding of the air ambulance industry and to increase transparency of market conditions impacting air ambulance services. The subcommittee reports are expected to assist the AAPB Advisory Committee develop its own recommendations as required by the Act.

To fully implement this recommendation, DOT needs to act on our and the committee's recommendations to increase transparency by assessing available data and determining information that could be useful in evaluating complaints regarding unfair or deceptive practices in the air ambulance industry.

**Director**: Heather Krause

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*Highway Emergency Relief: Federal Highway Administration Should Enhance Accountability over Project Decisions.* GAO-20-32. Washington, D.C.: October 17, 2019.

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[10]Pub. L. No. 115-254, § 418(a), 132 Stat. 3186, 3334 (2018).

**Recommendation:** The Administrator of FHWA should require FHWA division offices to document the rationale for classifying projects as emergency repairs, such as a description of why an emergency repair is necessary and which alternative strategies or repairs were considered, and to more clearly define the circumstances under which projects are classified as emergency repairs, including what constitutes restoration of essential traffic.

**Action Needed:** FHWA concurred with this recommendation. In April 2021, DOT distributed a memorandum directing division offices to document the rationale for classifying projects as emergency repairs, along with the elements we recommended be included, and plans to incorporate this requirement in FHWA's primary guidance document—the Emergency Relief Manual—by October 2021. We will continue to monitor the department's efforts to implement our recommendation.

**Director:** Elizabeth Repko

**Contact information:** RepkoE@gao.gov and (202) 512-2834

*Pedestrian Safety: NHTSA Needs to Decide Whether to Include Pedestrian Safety Tests in Its New Car Assessment Program.* GAO-20-419. Washington, D.C.: April 23, 2020.

**Recommendation:** The Administrator of NHTSA should document the overall process for making changes to NCAP, including established criteria and milestones for decisions, and share this process with external stakeholders.

**Recommendation:** The Administrator of NHTSA should decide whether to include pedestrian safety tests in NCAP and NHTSA should communicate this decision and rationale to relevant stakeholders and the public.

**Action Needed:** NHTSA concurred with both recommendations. As of April 2021, NHTSA reported that it is developing proposed updates to its New Car Assessment Program (NCAP), which it plans to publish in a notice in the Federal Register by December 31, 2021. According to NHTSA this notice will clarify the process by which NHTSA updates NCAP, and after receiving and responding to comments, NHTSA plans to update its website to provide information to stakeholders on how the agency considers and finalizes changes to NCAP.

Additionally, as of April 2021, NHTSA reported that it is developing its proposal on planned changes to NCAP, which is expected to include pedestrian safety tests, and is working to publish a notice to the Federal Register by December 31, 2021. According to NHTSA, this process will include receiving public comments on the proposal, which the agency will consider in deciding and communicating NHTSA's next stages. As stated in our report, making and communicating a decision regarding pedestrian safety testing would give automakers clarity on whether NHTSA intends to establish performance standards and tests to evaluate the pedestrian safety features that are commonly available on new vehicle models. In the absence of a decision on whether to include pedestrian safety testing in NCAP, and the rationale for that decision, stakeholders lack clarity on whether NHTSA is using all of the policy tools at its disposal to address emerging safety risks and to achieve its strategic objectives. We will continue to monitor NHTSA's efforts to address these recommendations.

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**Managing Cybersecurity Risks and Information Technology (IT).**

*Critical Infrastructure Protection: Additional Actions Are Essential for Assessing Cybersecurity Framework Adoption.* GAO-18-211. Washington, D.C.: February 15, 2018.

**Recommendation:** The Secretary of Transportation, in cooperation with the Secretary of Homeland Security, should take steps to consult with respective sector partner(s), such as the SCC, DHS and NIST, as appropriate, to develop methods for determining the level and type of framework adoption by entities across their respective sector.

**Action needed:** DOT concurred with this recommendation. As of February 2020, the department had begun taking steps to develop methods to determine the level and type of framework adoption in the respective sectors. Specifically, officials in the DOT's Office of Intelligence, Security, and Emergency Response, in coordination with the Department of Homeland Security (DHS), told us that they planned to develop and distribute a survey to the Transportation Systems sector to determine the level and type of framework adoption. DOT officials stated that the draft survey was undergoing DHS legal review. As of January 2021, DOT officials stated they expected to complete the framework survey to develop these methods by October 2022. While the department has ongoing initiatives, implementing our recommendations to gain a more comprehensive understanding of the framework's use by critical infrastructure sectors is essential to the success of protection efforts.

**High Risk Area:** Ensuring the Cybersecurity of the Nation

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*Cybersecurity: Agencies Need to Fully Establish Risk Management Programs and Address Challenges.* GAO-19-384. Washington, D.C.: July 25, 2019.

**Recommendation:** The Secretary of Transportation should fully develop a cybersecurity risk management strategy that includes the key elements identified in this report.

**Action Needed:** DOT concurred with this recommendation. In March 2021, DOT officials said the Department is working toward implementation of this recommendation and plans to provide us an update by January 2022. GAO continues to track its progress in implementing this recommendation.

**High Risk Area:** Ensuring the Cybersecurity of the Nation

**Director:** Jennifer R. Franks

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*IT Workforce: Key Practices Help Ensure Strong Integrated Program Teams; Selected Departments Need to Assess Skill Gaps*. GAO-17-8. Washington, D.C.: November 30, 2016.

**Recommendation:** To facilitate the analysis of gaps between current skills and future needs, the development of strategies for filling the gaps, and succession planning, the Secretary of Transportation should require the Chief Information Officer, Chief Human Capital Officer, and other senior managers as appropriate to address the shortfalls in IT workforce planning noted in

this report, including the following actions: (1) establish a time frame for when the department is to finalize its draft workforce planning process and maintain that process; (2) develop staffing requirements for all positions; (3) assess competency and staffing needs regularly for all positions; (4) assess gaps in staffing for all components of the workforce; (5) develop strategies and plans to address gaps in competencies and staffing; (6) implement activities that address gaps, including an IT acquisition cadre, cross-functional training of acquisition and program personnel, a career path for program managers, and use of special hiring authorities, if justified and cost-effective; (7) monitor the department's progress in addressing competency and staffing gaps; and (8) report to department leadership on progress in addressing competency and staffing gaps.

**Action Needed**: DOT concurred with this recommendation and has implemented one of the eight recommended IT workforce planning activities— developing competency and staffing requirements. In January 2020, the department stated that its Office of the Chief Information Officer and Office of Human Resource Management had established a workgroup to lead and conduct workforce planning activities, and had defined the strategic goals and objectives for the department's IT workforce. The department also stated that the workgroup was planning on subsequently completing additional activities, such as developing strategies to address any identified gaps in early 2021. In February 2021, DOT officials stated that the department is continuing its efforts to implement the recommendation and plans to complete final actions by the end of 2021. To fully address this recommendation, DOT should complete the remaining seven IT workforce planning activities. We will continue to monitor the department's efforts to implement our recommendation.

**High Risk Area**: Improving the management of IT acquisitions and operations

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