

# NSF Could Improve Accountability for Its Vehicle Fleet and Recipient-titled Vehicles at Major Facilities

NATIONAL SCIENCE FOUNDATION  
OFFICE OF INSPECTOR GENERAL

May 21, 2020  
OIG 20-2-006





## AT A GLANCE

### NSF Could Improve Accountability for Its Vehicle Fleet and Recipient-titled Vehicles at Major Facilities

Report No. 20-2-006

May 21, 2020

#### WHY WE DID THIS AUDIT

Senate Report 115-139, *Federal Vehicle Fleet Management*, dated July 27, 2017, requires Inspectors General to conduct annual audits of their agency's Federal vehicle fleet management practices. The objective of the audit was to determine if NSF is managing its Federal vehicle fleet in accordance with the *Federal Management Regulation* (FMR).

#### WHAT WE FOUND

NSF is generally managing its fleet in accordance with the FMR. However, NSF did not conduct a complete vehicle allocation methodology because it did not have formal policies and procedures for conducting one. Additionally, NSF could improve accountability for vehicles purchased with Federal funds. Specifically, NSF was not aware of all vehicles it owned nor did it have a consistent process for determining when NSF should retain title to vehicles at major facilities or when title should vest in award recipients, resulting in different levels of accountability over these vehicles. As a result of this audit, NSF established a working group to increase its ability to account for equipment, including vehicles, and has begun taking other corrective actions.

#### WHAT WE RECOMMEND

We made three recommendations to improve NSF's ability to account for vehicles in its fleet as well as ones maintained by award recipients.

#### AGENCY RESPONSE

NSF agreed with our recommendations. NSF's response is included in its entirety in Appendix A.

FOR FURTHER INFORMATION, CONTACT US AT [OIGPUBLICAFFAIRS@NSF.GOV](mailto:OIGPUBLICAFFAIRS@NSF.GOV).



National Science Foundation • Office of Inspector General  
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**MEMORANDUM**

**DATE:** May 21, 2020

**TO:** Teresa Grancorvitz  
Office Head and Chief Financial Officer  
Office of Budget, Finance and Award Management

Wonzie Gardner  
Office Head and Chief Human Capital Officer  
Office of Information and Resource Management  
[REDACTED]

**FROM:** Mark Bell  
Assistant Inspector General  
Office of Audits

**SUBJECT:** Audit Report No. 20-2-006, *NSF Could Improve Accountability for Its Vehicle Fleet and Recipient-titled Vehicles at Major Facilities*

Attached is the final report on the subject audit. We have included NSF's response to the draft report as an appendix.

This report contains three recommendations aimed at improving NSF's accountability for its motor vehicle fleet. NSF concurred with all of our recommendations. In accordance with Office of Management and Budget Circular A-50, *Audit Followup*, please provide a written corrective action plan to address the report recommendations. In addressing the report's recommendations, this corrective action plan should detail specific actions and associated milestone dates. Please provide the action plan within 60 calendar days.

We appreciate the courtesies and assistance NSF staff provided during the audit. If you have any questions, please contact Elizabeth Kearns, Director, Audit Execution, at 703.292.8483 or [ekearns@nsf.gov](mailto:ekearns@nsf.gov).

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## ABBREVIATIONS

FAST	Federal Automotive Statistical Tool
FMR	Federal Management Regulation
GSA	U.S. General Services Administration
VAM	vehicle allocation methodology



## Background

The National Science Foundation is an independent Federal agency created by Congress in 1950 “[t]o promote the progress of science; to advance the national health, prosperity, and welfare; to secure the national defense; and for other purposes” (Pub. L. No. 81-507). NSF is the only Federal agency that funds basic non-biomedical research and education across all fields of science and engineering and at all levels of education. Among other things, it funds advanced instrumentation and facilities; supports Arctic and Antarctic research and science operations; and encourages research partnerships between universities and industry and U.S. participation in international scientific efforts.

To accomplish its mission, NSF may purchase or lease equipment, including motor vehicles. Additionally, a recipient organization may request funding to purchase property and equipment, including motor vehicles, as part of its proposal for an award. In its *FY 2017 Fleet Management Plan and Budget Narrative for National Science Foundation*, NSF reported 560 vehicles encompassing three categories:

- 1. Vehicles Operated by NSF Staff and Its Contractors** — This included 2 vehicles located at NSF’s Headquarters in Alexandria, Virginia; 139 vehicles operated by NSF’s support contractor for the U.S. Antarctic Program; and 44 vehicles operated by contractors for NSF’s Arctic program in Greenland and Alaska.
- 2. Vehicles Operated by Major Facility Award Recipients** — NSF award recipients that operate major facilities, such as telescopes and observatories, may acquire a significant number of vehicles to meet their missions. NSF reported 373 vehicles at major facilities funded under assistance awards.
- 3. Vehicles Operated by Other Award Recipients** — NSF reported 2 vehicles held by an award recipient other than a major facility award recipient.

The *Federal Management Regulation* (FMR) governs the economical and efficient management and control of motor vehicles that the Government owns, leases commercially, or leases through the U.S. General Services Administration (GSA).<sup>1</sup> For example, the FMR requires agencies to annually report vehicle information via GSA’s Federal Automotive Statistical Tool (FAST) and to use U.S. Government license plates for all Government motor vehicles unless exempt. It also requires NSF to establish and document a structured vehicle allocation methodology to determine the appropriate size, number, and types of motor vehicles. After our audit began, the NSF Office of General Counsel assessed the Foundation’s vehicle management practices and determined that NSF’s fleet should consist of vehicles operated by NSF staff and its Federal Acquisition Regulation-based contractors. For purposes of this report, we are using that definition.

Senate Report 115-139, *Federal Vehicle Fleet Management*, dated July 27, 2017, requires OIGs to conduct annual audits of agency fleet management practices. We conducted this audit to determine if NSF is managing its vehicle fleet in accordance with the FMR.

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<sup>1</sup> §102-34.5





## Results of Audit

NSF is generally managing its fleet<sup>2</sup> in accordance with the FMR. However, NSF did not conduct a complete vehicle allocation methodology (VAM) because it did not have formal policies and procedures for conducting a VAM. Additionally, at the time of our audit, NSF did not have a consistent process for titling vehicles purchased with award funds or for tracking vehicles at major facilities. As a result of our audit, NSF established a working group to improve its ability to account for equipment, including vehicles, and has begun taking other corrective actions.

### NSF Could Improve Its Vehicle Allocation Methodology

According to the FMR,<sup>3</sup> Federal agencies must establish and document a structured VAM to determine the appropriate number and size of motor vehicles needed to fulfill their mission requirements. GSA Bulletin FMR B-30, *Motor Vehicle Management*,<sup>4</sup> provides guidance to executive branch agencies on conducting their annual VAM, including the following steps:

- Establishing a baseline inventory of the agency's fleet, including information about the size, type, and cost of individual vehicles.
- Developing utilization criteria to justify mission essential vehicles, such as frequency of use and ratio of employees to vehicles.
- Conducting a utilization survey to identify vehicles that meet utilization criteria. This includes collecting data about each vehicle, such as what tasks were accomplished while using the vehicle and how those tasks supported the agency's mission.
- Determining optimal fleet inventory, including a comparison of the existing fleet composition to mission needs.

NSF established a baseline fleet inventory for its vehicles at Headquarters and its vehicles operated by contractors in the Arctic and Antarctic. NSF also collected information such as the purpose and mileage for each trip for its vehicles at its Headquarters facility and information such as mileage, hours of operation, and replacement priorities for its vehicles operated by contractors in the Arctic and Antarctic. However, NSF did not conduct a utilization survey for each of its vehicles. Additionally, NSF did not identify a process or timeframe for conducting a VAM — including a utilization survey — in its policies and Standard Operating Guidance or identify who is responsible for completing the VAM.

According to NSF, it plans to conduct an NSF-wide VAM utilization survey in 2020 and incorporate the results in the agency's treatment of federally owned vehicles.

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<sup>2</sup> For the purposes of this report, NSF's fleet consists of its Headquarters vehicles and its vehicles operated by Federal Acquisition Regulation-based contractors.

<sup>3</sup> §102-34.50(b)

<sup>4</sup> GSA Bulletin FMR B-30, *Motor Vehicle Management*, dated August 22, 2011, applied during the first part of our audit scope. It was replaced by GSA Bulletin FMR B-43, *Motor Vehicle Management*, dated March 20, 2017, which requires a VAM study (utilization survey) every 5 years. B-43 applied during the remainder of our audit scope.



## **NSF Could Improve Titling and Tracking of Vehicles Purchased with Award Funds at Major Facilities**

At the time of our audit, NSF did not have a consistent process for titling vehicles purchased with award funds at major facilities or for tracking those vehicles.

NSF may vest title to equipment, including motor vehicles, either in the Government (i.e., NSF), making it federally owned property, or in the award recipient. At the time of our audit, according to NSF policy, title to equipment purchased by a for-profit organization vested in the Government. Unless otherwise specified in the award terms, title to equipment purchased by a non-profit organization vests in the award recipient. Generally, when NSF vests title in the award recipient, it reserves the right to transfer the equipment to the Federal Government (including NSF) or another third party at any time during the award or within 120 days after the award expires. Additionally, NSF can allow award recipients to keep equipment purchased with award funds.

### **NSF Was Not Titling Vehicles at Major Facilities Consistently**

In its *FY 2017 Fleet Management Plan and Budget Narrative for National Science Foundation*, NSF reported 560 vehicles purchased with award funds; of these, we determined more than 500 were at major facilities. In January 2020, as a result of our audit, an NSF working group analyzed NSF accountability practices for vehicles purchased with award funds at major facilities and agreed with OIG that NSF was inconsistently titling vehicles at major facilities. Although at most major facilities vehicles were titled to the Government (i.e., NSF), at some, title vested in the award recipients.

To address this inconsistency, NSF has decided that title to vehicles purchased with award funds and operated at major facilities should be vested in the award recipients, unless there is a specific reason to vest title in the Government. Although award recipients are responsible for day-to-day operation of these vehicles, NSF must still be aware of and able to account for the vehicles in case the agency transfers operations of a major facility to a new recipient, consistent with NSF's authority under the NSF Act.

### **NSF's Property Management Office Was Not Notified of All Federally Owned Vehicles Purchased by Major Facilities Operators Using Federal Funds**

NSF's Property Management Office (the office) relies on award recipients to report vehicles they purchase with award funds when designated as federally owned. However, we found that recipients did not always report these vehicles to the office when required, and the office did not have a process to give confidence in the accuracy of reported vehicles. In FY 2017, one major facility recipient did not report 16 federally owned vehicles it purchased with award funds to the office. As a result, NSF was not aware of the vehicles, which were operated by the award recipient, and could not adequately track them as federally owned property. The office became aware of these vehicles when NSF transferred operation of the major facility to a new award recipient, who reported the vehicles to the office in FY 2018.



The *Uniform Guidance*<sup>5</sup> requires award recipients with conditional title to equipment to take a physical inventory and reconcile the results with property records at least once every 2 years. As such, NSF could request vehicle inventory information from major facility recipients to ensure adequate oversight of vehicles purchased with Federal funds when a major facility transfers operations.

## Recommendations

We recommend the Head of the Office of Budget, Finance and Award Management and the Head of the Office of Information and Resource Management, National Science Foundation:

- 1) Conduct a complete vehicle allocation methodology (VAM) for all vehicles in NSF's motor vehicle fleet, and update NSF's optimal fleet profile and minimum utilization criteria based on the results.
- 2) Develop internal guidance to ensure that NSF regularly establishes and documents a VAM. Guidance should identify timelines for conducting a VAM, who is responsible for that exercise, and how NSF will conduct VAMs in the future.
- 3) Complete Standard Operating Guidance for NSF staff. Guidance should include language and mechanisms to help ensure:
  - a) NSF staff roles and responsibilities are clear;
  - b) NSF has criteria to help its staff make determinations on whether a vehicle should be federally owned or recipient titled;
  - c) NSF Property Management can identify and track all federally owned vehicles and NSF is aware of recipient-titled vehicles to ensure they can be transferred if a new recipient takes over operations of the facility; and
  - d) NSF documents transfer of title determinations.

## OIG Evaluation of Agency Response

NSF agreed with our recommendations. NSF's response is included in its entirety in Appendix A.

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<sup>5</sup> The Office of Management and Budget issued *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (to non-Federal entities). The *Uniform Guidance* is codified in 2 CFR Part 200.





## Appendix A: Agency Response



National Science Foundation

### MEMORANDUM

**Date:** May 11, 2020

**To:** Mark Bell, Assistant Inspector General, Office of Audits

**From:** Wonzie Gardner, Chief Human Capital Officer and Head, OIRM

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Teresa Grancorvitz, Chief Financial Officer and Head, BFA

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**Subject:** Official Draft Report, *NSF Could Improve Accountability for Its Vehicle Fleet and Recipient-titled Vehicles at Major Facilities*

The National Science Foundation (NSF) appreciates the opportunity to review and provide comments on the OIG’s draft report. We also greatly appreciated the on-going dialog with your office during the audit that enabled NSF to take early action related to all property and equipment. NSF considers its stewardship over federal funds a high priority and appropriately meeting statutory requirements for Federally funded motor vehicles is an important element of sound stewardship.

NSF agrees with all three of the OIG’s recommendations. As stated in the draft report, the development of internal standard operating guidance is well underway as are discussions with award recipients regarding appropriate title of property and equipment, including vehicles. Details will be provided in NSF’s Corrective Action Plan.

On behalf of the NSF staff participating in the engagement, we want to acknowledge the OIG staff for their diligence and commitment to understanding NSF's oversight processes. We look forward to receiving the final report. If you have any concerns, please contact Matthew Hawkins at [mjhawkin@nsf.gov](mailto:mjhawkin@nsf.gov)/(703)292-7407 or Peggy Gartner at [pgartner@nsf.gov](mailto:pgartner@nsf.gov)/(703) 292-7535.

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## Appendix B: Objective, Scope, and Methodology

The objective of this performance audit was to determine if NSF is managing its Federal vehicle fleet in accordance with the *Federal Management Regulation*.

We reviewed Federal regulations and guidance for agencies acquiring vehicles, including Part 102-34 of the FMR on Motor Vehicle Management, and analyzed NSF's policies and procedures related to the management of its vehicle fleet. We interviewed staff from NSF's Office of Information and Resource Management, Division of Administrative Services, Property Management Section, who are responsible for overseeing NSF vehicles. We also interviewed NSF program and award administration staff in the Division of Acquisition and Cooperative Support and determined their roles in vehicle acquisition and oversight.

We analyzed NSF's FYs 2016, 2017, and 2018 FAST reports to determine the number, location, and types of NSF-owned vehicles. We also interviewed NSF staff to determine how they gathered information to report in FAST. We compared NSF's FYs 2017 and 2018 FAST reports to identify changes in the number of vehicles and determined the causes of the most significant changes.

To determine if NSF was identifying reportable vehicles on assistance awards, we selected a judgmental sample of awards that were active as of October 31, 2018, or administratively closed between May 1, 2015, and October 31, 2018, whose terms and conditions contained the word "vehicle"; this resulted in a universe of 32 awards. From this universe, we selected 8 awards and contacted the responsible NSF Program Officers. We did not identify any additional vehicles that NSF should have reported in FAST based on this test. Similarly, to test if contractors acquired vehicles that NSF did not report in FAST, we selected a judgmental sample from a list of 406 contracts, which were active on March 27, 2019, based on the contract value and whether the recipient may acquire a vehicle. From this universe, we selected 5 contracts and contacted the responsible Contracting Officer's Representative. We did not identify any additional vehicles that NSF should have reported in FAST based on this test.

To determine how NSF manages the vehicles at its Headquarters, we interviewed NSF staff responsible for their accountability and usage. We analyzed vehicle use logs showing the trips and miles driven, safety inspections, and an NSF analysis examining the need to acquire additional vehicles. Similarly, to identify NSF accountability for vehicles contractors purchase, we reviewed FAST reports, interviewed NSF staff, and identified the contract requirements. We determined how NSF and the contractors are meeting requirements of the FMR, including tracking vehicles, handling vehicle maintenance, and identifying vehicle replacement needs.

We also requested and reviewed additional information about select NSF vehicles in the Arctic and Antarctic. Based on vehicle maintenance, acquisition cost, and mileage, we selected 11 of the 45 vehicles in the Arctic and 33 of the 139 U.S. Antarctic Program vehicles NSF reported in FAST in FY 2018. We requested NSF Program staff provide a VAM or other documentation supporting the acquisition of these vehicles.

We conducted this performance audit between March 2019 and January 2020 in accordance with *Generally Accepted Government Auditing Standards*. Those standards require that we plan and perform



the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions, based on our audit objective. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions.

Key contributors to the report include Elizabeth Kearns, Director, Audit Execution; Philip Emswiler, Audit Manager; Nacole White, Management and Program Analyst; Elizabeth Argeris Lewis, Executive Officer and Communications Analyst; and Keith Nackerud, Independent Report Referencer.



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