# Closure of the Audit of the Association of Universities for Research in Astronomy, Inc.'s Indirect Cost Rate Structure





# AT A GLANCE

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Report No. 17-6-001 September 13, 2017

## WHY WE DID THIS AUDIT

We initiated this audit in response to a request from the Director of NSF and because past OIG reports identified weaknesses in the Association of Universities for Research in Astronomy, Inc.'s (AURA) accounting and cost estimating systems. Our objectives were to determine if AURA's indirect cost structure resulted in an equitable distribution of indirect expenses, complied with applicable Federal regulations, and was appropriate for the organization.

#### WHAT WE FOUND

We closed this audit after we learned that AURA is undergoing a reorganization that will result in a significant change to its indirect cost structure. We did not assess the proposed indirect cost model because it is in the planning stages and could change. We will monitor the progress of the reorganization to identify any risk areas for a future audit.

## WHAT WE RECOMMEND

There are no recommendations in this report.

## **AWARDEE RESPONSE**

As there are no recommendations in the report, there is no response from the awardee. However, a copy of the report was shared with AURA and its feedback was taken into consideration.

## **CONTACT US**

For further information, contact us at (703) 292-7100 or oig@nsf.gov.

#### **MEMORANDUM**

**DATE:** September 13, 2017

TO: Dale Bell

Director

Division of Institution and Award Support

Jamie French Director

Division of Grants and Agreements

FROM: Mark Bell

**Assistant Inspector General** 

Office of Audits

**SUBJECT:** Final Report No. 17-6-001, *Closure of the Audit of the Association of Universities* 

for Research in Astronomy, Inc.'s Indirect Cost Rate Structure

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We closed this audit because AURA is undergoing a reorganization that will significantly change its indirect cost structure. We confirmed that AURA accurately applied the correct indirect cost rates with one exception. We will monitor the progress of the reorganization to assess and identify any risk areas that may be considered for a future audit. There are no recommendations in this report.

We appreciate the courtesies and assistance NSF and AURA staff provided during the audit. If you have questions, please contact Ken Lish, Supervisory Audit Manager, at (703) 292-7100.

cc: Rochelle Ray Carrie Davison John Anderson

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# **Background**

The Association of Universities for Research in Astronomy, Inc. (AURA) is a consortium of 44 U.S. institutions and 5 international affiliates that operates astronomical observatories. AURA's mission is "to promote excellence in astronomical research by providing access to information about the universe from state-of-the-art facilities, surveys, and archives." AURA oversees the following NSF-funded astronomical centers (Centers):

- Gemini Observatory (Gemini)
- Large Synoptic Survey Telescope (LSST)
- National Optical Astronomical Observatory (NOAO)
- National Solar Observatory (NSO)

AURA's Corporate Office provides management and administrative oversight to the Centers. AURA's Central Administrative Services (CAS) and Human Resources (HR) offices provide business services for each Center. Gemini, NOAO, and LSST have operations in the United States and Chile.

AURA recovers all costs, including direct and indirect costs for the Centers and for Corporate, CAS, and HR supporting functions, in the United States and Chile. Direct costs include labor, benefits, materials, and travel. Indirect costs support more than one operation or project, including facility costs like building repairs and utilities and administrative costs like accounting and procurement services and human resources.

AURA prepares indirect cost rates annually, distributing the costs into rate pools based on the portion of facility and administrative (F&A) costs each Center incurred in the prior year. For example, Centers that occupy NOAO buildings share in the cost for NOAO's facilities.

AURA submits an indirect cost proposal to NSF's Cost Analysis and Pre-Award Branch for review and approval each year. NSF's approval of AURA's proposed indirect cost rates (provisional rates) temporarily allows funding and reimbursement of indirect costs before AURA and NSF can determine actual rates (final rates) using cost data at the end of AURA's accounting period.

## **Results of Audit**

We closed our audit of AURA's indirect cost rate structure because AURA is undergoing a reorganization that will materially change the structure. We did confirm that AURA accurately applied the correct indirect cost rates under its current structure with one exception. We will monitor the progress of the reorganization to assess and identify any risk areas that we may consider for a future audit.

### **AURA's Reorganization Will Materially Change the Indirect Cost Rate Structure**

AURA is working with NSF to implement an organizational structure that takes advantage of economies of scale to improve scientific output, and meets the needs of the scientific community and the Federal government.

AURA officials told us that the reorganization would have a material impact on AURA's indirect cost structure. As of April 2017, AURA's indirect cost structure was composed of 28 indirect cost rates. In addition to Corporate, CAS, and HR rates, each Center also has its own indirect cost rate and fringe benefit rate. Some Centers also have rates for facility use. AURA personnel said they designed the structure to allocate indirect costs in the most accurate way possible, but recognized that the structure is complicated. Along with the reorganization,

AURA's goal is to reduce the number of rates to as few as possible, while still ensuring fair and accurate allocation of indirect costs. Once it has been finalized and approved by NSF, AURA's indirect cost structure will likely be composed of

Table 1. Composition of AURA's Indirect Cost Rate Structure

Rate Type	Composition of Rates Under Current	Possible Composition of Rates Under Proposed NCOA
	Organizational Structure	Organizational Structure
		- 3

Source: NSF OIG

### With One Exception, AURA Applied Indirect Cost Rates Accurately

We tested AURA's application of its indirect cost rates for fiscal years 2015, 2016, and 2017. AURA accurately applied the correct rates with one exception. In FY 2015, AURA applied a rate that had not yet received final NSF approval for a particular set of costs rather than the approved provisional rate for those costs. NSF's Cost Analysis and Pre-Award Branch is aware of this exception and is working with AURA to resolve this issue.

#### Conclusion

We closed this audit because AURA is undergoing a reorganization that will have a material impact on the organization's indirect cost structure. Any recommendations related to an indirect cost structure that will be substantially different in the immediate future would be ineffective. Additionally, we did not evaluate the indirect cost structure proposed under the model because it is still in the planning stages and may change. We did ensure that AURA accurately applied the indirect cost rates under its current structure, and we will monitor the progress of the reorganization to assess and identify any risk areas for a future audit.

# Objectives, Scope, and Methodology

The objectives of the audit were to determine if AURA's indirect cost structure resulted in an equitable distribution of indirect expenses, complied with applicable Federal regulations, and was appropriate for the organization. We also conducted test work to ensure that AURA applied indirect rates appropriately. The audit stemmed from both a request from the Director of NSF and a series of past OIG reports that identified weaknesses in AURA's accounting and cost estimating systems.

To accomplish our objectives, we reviewed all applicable documentation related to AURA's indirect cost structure, interviewed staff from both AURA and NSF, and conducted test work to determine if AURA applied the indirect cost rates appropriately.

We are issuing this routine activity to report the closure of this performance audit of AURA's indirect cost rate structure.

We conducted this audit from February 2017 to September 2017, when the audit was closed.

# **OIG Staff Acknowledgments**

Dan Buchtel, Director, External Audits; Ken Lish, Supervisory Audit Manager; Holly Snow, Audit Manager; Darrell Drake, Senior Auditor; Jae Kim, Senior Auditor; Jeremy Hall, Management Analyst; and Kelly Stefanko, Independent Report Referencer, made key contributions to this report.

