

The logo for the National Stock Exchange (NSE) is centered in the upper half of the page. It features the letters 'NSE' in a bold, serif font, set within a circular emblem. The emblem is surrounded by a gear-like pattern of interlocking teeth. The background is a dark blue gradient.

**NSE**

**Financials**

**Chapter 2**





## A MESSAGE FROM THE CHIEF FINANCIAL OFFICER



*Credit: Sandy Schaeffer*

I am pleased to present NSF's FY 2016 Agency Financial Report (AFR). The AFR is being published in January, rather than November, to accommodate a delay in the financial statement audit. This delay was due to a bid protest on the Office of the Inspector General's financial statement audit contract. The transition to the new independent audit firm commenced in July 2016, NSF met its financial reporting requirement (though unaudited) by November 15, and the financial statement audit was completed in mid-January 2017.

NSF received its 19<sup>th</sup> consecutive unmodified audit opinion on our FY 2016 financial statements, with no material weaknesses in internal control over financial reporting. The audit opinion affirms the agency's financial statements for the year ending September 30, 2016 were presented fairly in all material respects and in accordance with U.S. generally accepted accounting principles. The Independent Auditors' Report indicates that the longstanding significant deficiency related to monitoring of construction-type cooperative agreements is resolved, and NSF was found compliant with the Improper Payments Elimination and Recovery Act. The report identifies a new significant deficiency related to our information technology access controls and monitoring processes. We have taken immediate action to address the risks raised by this finding.

Several important management accomplishments in FY 2016 highlight NSF's continued government-wide leadership in stewardship and federal financial management.

- NSF took swift action to enhance our current risk management processes to reflect revised Office of Management and Budget Circular A-123 guidance. Our newly-deployed enterprise risk management (ERM) framework will not only be fully integrated into the agency's existing senior management structure, but will be aligned with key NSF business processes. ERM is an important tool in providing valuable, enterprise-wide information to ensure accomplishment of NSF's mission and objectives. Therefore, NSF's implementation is being coordinated with our strategic planning and strategic reviews processes, as well as with our internal control program.
- NSF made substantial progress to further strengthen controls over the management of large facility projects, and, as noted above, the Independent Auditors' Report indicates that there is no longer a significant deficiency related to the monitoring of construction-type cooperative agreements. The finding is indicative of the comprehensive policies, procedures, training, and oversight that have been strengthened and honed in the last few years. In December 2015, the National Academy of Public Administration (NAPA) issued its report on NSF's use of cooperative agreements to support large scale investment in research infrastructure. The report affirmed support for NSF's use of cooperative agreements, and it included recommendations to improve internal management of business practices that will enhance oversight and project success. As of September 30, 2016, NSF had already implemented most of the NAPA recommendations and will continue its efforts to implement all the

recommendations in some form in FY 2017. (For the significant FY 2016 accomplishments in this area, please see *FY 2016 Progress Report on OIG Management Challenges*, Appendices-22).

- NSF continued its role as a recognized leader in interagency efforts to improve government-wide grants administration. On behalf of the National Science and Technology Council’s (NSTC) Committee on Science (CoS), NSF coordinated the interagency development and clearance of Research Terms & Conditions under the *Uniform Guidance*, which will be fully implemented in FY 2017. We also led the development of a standard format for use in reporting on research and research-related awards for NSTC/CoS. Finally, we are proud to have been the first agency to post a record in the new Federal Awardee Performance and Integrity Information System, designed to ensure federal awards are issued to reliable and qualified recipients. NSF worked diligently in interagency groups, such as the Financial Assistance Committee on E-Government, resulting in a quick and efficient implementation of this important stewardship activity.
- With the goal of reducing administrative burden on the research community and NSF staff while, concurrently, ensuring fair and consistent treatment of submitted proposals, NSF expanded automated system checks to ensure proposal submission requirements are met—such as submission deadlines, biographical sketches, and the inclusion of current/pending support files for senior personnel.
- NSF also achieved a number of financial management successes in FY 2016. We continued to refine reporting and business processes during our second year of operations of iTRAK, NSF’s financial system. More significantly, iTRAK met stringent GSA FedRAMP security requirements for the system and cloud-based hosting environment and received an authority to operate designation. NSF is one of the few agencies authorized to use the “cloud” for its financial system operations putting us in the forefront of federal financial systems.

FY 2017 will continue to pose challenges and opportunities for NSF including the facilitation of a successful Presidential transition, the implementation of the DATA Act, and the relocation of NSF’s headquarters to Alexandria, Virginia. Throughout FY 2017, NSF will continue to ensure accountable reporting, transparency, and stewardship of taxpayer funds. As always, I welcome your feedback on how we can make this report more informative to our stakeholders and our readers.

/s/


**MARTHA A. RUBENSTEIN**

January 17, 2017



National Science Foundation • Office of Inspector General  
4201 Wilson Boulevard, Arlington, Virginia 22230

**TO:** Dr. France Córdova  
Director, National Science Foundation  
  
Dr. Maria T. Zuber  
Chair, National Science Board

**FROM:** Allison Lerner   
Inspector General, National Science Foundation

**DATE:** January 13, 2017

**SUBJECT:** Audit of the National Science Foundation's  
Fiscal Years 2016 and 2015 Financial Statements

This memorandum transmits Kearney and Company's (Kearney) audit report on the financial statements of the National Science Foundation (NSF) for FY 2016, which include FY 2015 comparative information.

### Results of Independent Audit

The *Chief Financial Officer's (CFO) Act of 1990* (P.L. 101-576), as amended, requires NSF's Inspector General or an independent external auditor, as determined by the Inspector General, to audit NSF's financial statements. Under a contract we monitored, Kearney and Company (Kearney), an independent public accounting firm, performed the audit of NSF's FY 2016 financial statements. The contract required that the audit be performed in accordance with the *Government Auditing Standards* issued by the Comptroller General of the United States and Office of Management and Budget (OMB) Bulletin 15-02, *Audit Requirements for Federal Financial Statements*.

Kearney issued an unmodified opinion on NSF's financial statements. In its Report on Internal Control over Financial Reporting, Kearney did not report any material weaknesses in internal control; however, it did report one significant deficiency in internal control, which relates to NSF's Information Technology control environment. This issue is described in detail in the Schedule of Findings. Kearney reported no instances of noncompliance with the *Improper Payments Elimination and Recovery Act* (IPERA) that are required to be reported in accordance with *Government Auditing Standards* and OMB Bulletin 15-02. Kearney also reported that there were no other instances of noncompliance with certain provisions of laws, regulations, contracts, and grant agreements that it tested, including those relating to the financial management systems requirements of the *Federal Financial Management Improvement Act of 1996* (FFMIA). Another

firm under contract with us performed the audit of NSF's FY 2015 financial statements, and issued its report dated November 13, 2015.

NSF's response, dated January 13, 2017, follows Kearney's report.

### **Evaluation of Kearney's Audit Performance**

To fulfill our responsibilities under the *CFO Act of 1990*, as amended, and other related Federal financial management requirements, we reviewed Kearney's approach and planning of the audit; evaluated the qualifications and independence of Kearney and its staff; monitored the progress of the audit at key points; coordinated periodic meetings with NSF management to discuss audit progress, findings, and recommendations; reviewed Kearney's audit report to ensure compliance with *Government Auditing Standards* and OMB Bulletin No. 15-02; and coordinated issuance of the audit report.

Kearney is responsible for the attached Independent Auditor's Report, dated January 13, 2017, which includes the following:

- Opinion on the Financial Statements;
- Report on Internal Control over Financial Reporting; and
- Report on Compliance with Laws, Regulations, Contracts, and Grant Agreements.

We do not express any opinion on NSF's financial statements, or conclusions on the effectiveness of internal control, or on compliance with laws, regulations, contracts, and grant agreements.

Kearney's Independent Auditor's Report, is meant only to be distributed and read as part of the Agency Financial Report (AFR) document. Also, Kearney's Independent Auditor's Report is not a stand-alone document because it refers to the AFR contents and should not be circulated to anyone other than those receiving this transmittal.

In accordance with OMB Circular A-50, *Audit Followup*, please provide a written corrective action plan within 60 days for the recommendations in the Audit Report. This corrective action plan should detail specific actions and milestone dates. We are available to work with your staff during the next 60 days to ensure the submission of a mutually agreeable corrective action plan.

Consistent with our responsibilities under the *Inspector General Empowerment Act of 2016*, we are providing copies of this report to the appropriate congressional committees with oversight and appropriation responsibilities over NSF. In addition, we will post a copy on our public website.

We appreciate the courtesies and cooperation NSF extended to Kearney and the OIG staff during the audit. If you or your staff have any questions, please contact me or Mark Bell, Assistant Inspector General for Audits, at 703-292-2985.

Attachment

## INDEPENDENT AUDITOR'S REPORT

To the Director and Inspector General of the National Science Foundation

### Report on the Financial Statements

We have audited the accompanying financial statements of the National Science Foundation (NSF), which comprise the balance sheet as of September 30, 2016, the related statements of net cost and changes in net position, and the combined statement of budgetary resources (hereinafter referred to as the "financial statements") for the year then ended, as well as the related notes to the financial statements.

### Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

### Auditor's Responsibility

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*. Those standards and OMB Bulletin No. 15-02 require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

## **Opinion**

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of NSF as of September 30, 2016, as well as its net cost of operations, changes in net position, and budgetary resources for the year then ended, in accordance with accounting principles generally accepted in the United States of America.

## **Other Matters**

### *Fiscal Year 2015 Financial Statements Audited by a Predecessor Auditor*

NSF's consolidated financial statements for fiscal year (FY) 2015, as of and for the year ended September 30, 2015, were audited by a predecessor auditor whose report, dated November 13, 2015, expressed an unmodified opinion on those consolidated financial statements.

We were not engaged to audit, review, or apply any procedures on the FY 2015 consolidated financial statements. Accordingly, we do not express an opinion or any other form of assurance on the FY 2015 financial statements as a whole.

### *Required Supplementary Information*

Accounting principles generally accepted in the United States of America require that the Management's Discussion and Analysis, Required Supplementary Stewardship Information, and Required Supplementary Information as named in the Agency Financial Report (hereinafter referred to as the "required supplementary information") be presented to supplement the financial statements. Such information, although not a part of the financial statements, is required by OMB and the Federal Accounting Standards Advisory Board (FASAB), who consider it to be an essential part of financial reporting for placing the financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing it for consistency with management's responses to our inquiries, the financial statements, and other knowledge we obtained during our audit of the financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.



*Other Information*

Our audit was conducted for the purpose of forming an opinion on the financial statements taken as a whole. The information in the NSF Mission and Vision Statement, About This Report, Message from the Director, the Message from the Chief Financial Officer, Other Information, and the Appendices, as listed in the Table of Contents of NSF's Agency Financial Report, is presented for purposes of additional analysis and is not a required part of the financial statements. Such information has not been subjected to the auditing procedures applied in the audit of the financial statements and, accordingly, we do not express an opinion or provide any assurance on the information.

**Other Reporting Required by *Government Auditing Standards***

In accordance with *Government Auditing Standards* and OMB Bulletin No. 15-02, we have also issued reports, dated January 13, 2017, on our consideration of NSF's internal control over financial reporting and on our tests of NSF's compliance with provisions of applicable laws, regulations, contracts, and grant agreements, as well as other matters for the year ended September 30, 2016. The purpose of those reports is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance and other matters. Those reports are an integral part of an audit performed in accordance with *Government Auditing Standards* and OMB Bulletin No. 15-02 and should be considered in assessing the results of our audit.



Alexandria, Virginia  
January 13, 2017

**INDEPENDENT AUDITOR'S REPORT ON INTERNAL CONTROL OVER  
FINANCIAL REPORTING**

To the Director and Inspector General of the National Science Foundation

We have audited the financial statements of the National Science Foundation (NSF) as of and for the year ended September 30, 2016, and we have issued our report thereon dated January 13, 2017. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*.

**Internal Control over Financial Reporting**

In planning and performing our audit of the financial statements, we considered NSF's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing an opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of NSF's internal control. Accordingly, we do not express an opinion on the effectiveness of NSF's internal control. We limited our internal control testing to those controls necessary to achieve the objectives described in OMB Bulletin No. 15-02. We did not test all internal controls relevant to operating objectives as broadly defined by the Federal Managers' Financial Integrity Act of 1982 (FMFIA), such as those controls relevant to ensuring efficient operations.

A deficiency in internal control exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent or detect and correct misstatements on a timely basis. A material weakness is a deficiency, or combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A significant deficiency is a deficiency, or combination of deficiencies, in internal control that is less severe than a material weakness yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies; therefore, material weaknesses or significant deficiencies may exist that were not identified. Given these limitations, during our audit, we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified. We did identify a certain deficiency in internal control, described in the accompanying Schedule of Findings, that we consider to be a significant deficiency.



We noted certain additional matters involving internal control over financial reporting that we will report to NSF's management in a separate letter.

### **NSF's Response to Findings**

NSF's response to the findings identified in our audit is described in a separate memorandum attached to this report. NSF's response was not subjected to the auditing procedures applied in our audit of the financial statements; accordingly, we do not express an opinion on it.

### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of internal control and the results of that testing, and not to provide an opinion on the effectiveness of NSF's internal control. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* and OMB Bulletin No. 15-02 in considering the entity's internal control. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in blue ink that reads "Kearney &amp; Company". The signature is written in a cursive, flowing style.

Alexandria, Virginia  
January 13, 2017

## Schedule of Findings

### Significant Deficiency

#### I. Information Technology Control Environment

Information technology (IT) relies on a foundation of interconnected information systems that use various methodologies and service providers to protect the confidentiality, integrity, and availability of data that is needed to accomplish an organization's mission. In addition, information systems serve as the basis for the financial reporting process. The National Institute of Standards and Technology (NIST) prescribes various types of controls to ensure the confidentiality, integrity, and availability of data. We identified several deficiencies within NSF's access controls process across the three financial systems we tested in Fiscal Year (FY) 2016. We considered the resulting combination of weaknesses in the IT control environment severe enough to be a significant deficiency within the scope of our financial statement audit. Specifically, we found:

- NSF did not properly authorize and recertify access at the application layer for two financial feeder systems. Failure to formally authorize new users and to review their access periodically increases the risk that users may have access beyond their business needs, which could result in unauthorized transactions being initiated in the financial systems.
- NSF did not properly monitor privileged<sup>1</sup> users' actions within the operating system and database layers for its core financial system and one of its feeder systems. Without specifically defining and reviewing the critical events for privileged users, NSF increases the risk that unauthorized changes to data, audit log settings, and configurations could go undetected and affect the integrity of financial transactions.

Without an effective access control program, NSF is vulnerable to weaknesses that increase the risk that sensitive financial information could be accessed by unauthorized individuals or that financial transactions could be altered, either accidentally or intentionally, and remain undetected. These access control weaknesses could compromise NSF's ability to report financial data accurately.

#### Recommendations:

We recommend that NSF take the following actions to correct the deficiencies identified:

1. Document and implement a process to authorize and recertify user access within the two affected financial feeder systems.
2. Perform and document a risk-based assessment of critical actions that are financially relevant within its core financial system and the affected feeder system that should be logged, aggregated, reviewed, and followed-up upon for privileged users.

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<sup>1</sup> Privileged users are database and operating system administrators.

3. Implement independent logging and monitoring process based on the completed risk assessment.

**Status of Prior-Year Findings**

One issue was noted relating to internal control over financial reporting in the *Independent Auditors' Report* on the National Science Foundation's (NSF) fiscal year (FY) 2015 financial statements. The table below presents a summary of the current-year status of the issue.

**Status of Prior-Year Findings**

<b>Control Deficiency</b>	<b>FY 2015 Status</b>	<b>FY 2016 Status</b>
Monitoring of Construction Type Cooperative Agreements	Significant Deficiency	No longer considered a significant deficiency.

\* \* \* \* \*

# **Attachment I – National Science Foundation’s Management Response**



**OFFICE OF BUDGET, FINANCE & AWARD MANAGEMENT**

**MEMORANDUM**

Date: January 13, 2017

To: Allison Lerner, Inspector General

From: Martha A. Rubenstein, Chief Financial Officer *Marty*

Subject: Management's Response to Independent Auditor's Report for Fiscal Year (FY) 2016

Thank you for the opportunity to comment on the Independent Public Auditor's Report on the National Science Foundation's (NSF) fiscal year (FY) 2016 financial statements. FY 2016 was a year that brought unprecedented challenges and therefore required unprecedented collaboration, so I am very proud that NSF received its 19<sup>th</sup> consecutive unmodified audit opinion on its financial statements and continued its record of no material weaknesses in internal control over financial reporting. During FY 2016 NSF reached two major milestones. First, the longstanding significant deficiency on monitoring of construction-type cooperative agreements was resolved and second, NSF was found compliant with the Improper Payments Elimination and Recovery Act.

The Auditors did, however, identify a new significant deficiency related to our information technology access controls and monitoring processes. We are taking this determination very seriously, and we have taken immediate actions to address the risks raised. We do not agree, however, that the aggregation of individual operational and documentation issues from disparate systems constitutes a deficiency significant enough to merit a reportable condition in financial reporting oversight. We nevertheless will take corrective actions to address these findings (and are doing so now).

Based on our initial assessment we found no instances of unauthorized use of NSF systems or changes to NSF data. In addition, we have no evidence that suggests NSF data was at risk of malicious intent. While we agreed with the control deficiencies identified, we assessed the risk of the control deficiencies to NSF's financial statements and systems as low.

I appreciate the NSF's staff dedication and resolve in dealing with the audit delay while meeting our ongoing operational responsibilities and sustaining improvements in NSF business processes



and internal control environment. I also want to thank your staff and your audit contractor for their collaboration and professionalism during the course of the audit. If you have any questions or require additional information concerning our response, please contact Mike Wetklow, Deputy Chief Financial Officer and Division Director for Financial Management at [mwetklow@nsf.gov](mailto:mwetklow@nsf.gov).

# **Attachment II – Kearney’s Rebuttal of National Science Foundation’s Management Response Disagreement**



Kearney & Company, P.C. (referred to as “Kearney,” “we,” and “our” in this document) appreciates the thorough and thoughtful responses to the audit report provided by the National Science Foundation’s (NSF) management. NSF agreed with the control deficiencies identified and has “taken immediate actions to address the risks raised.” We commend NSF for quickly taking actions to mitigate the risks identified and improve internal controls.

NSF does not agree with our appraisal of the level of severity of the issues that compose the significant deficiency. Based on an initial assessment, NSF officials found “no instances of unauthorized use of NSF systems or changes to NSF” and “no evidence that suggest NSF data was at risk of malicious intent.” While we appreciate the results of NSF’s assessment, we note that known errors or malicious intent are not necessary elements in a significant deficiency. A significant deficiency may exist due to the possibility that the controls will fail to prevent, or detect and correct, a misstatement. The combination of inadequate access controls and inadequate user monitoring may allow an unauthorized user to access the systems and make changes that go undetected. Kearney maintains that the combined issues identified result in a significant deficiency.

\* \* \* \* \*

**INDEPENDENT AUDITOR'S REPORT ON COMPLIANCE WITH LAWS,  
REGULATIONS, CONTRACTS, AND GRANT AGREEMENTS**

To the Director and Inspector General of the National Science Foundation

We have audited the financial statements of the National Science Foundation (NSF) as of and for the year ended September 30, 2016, and we have issued our report thereon dated January 13, 2017. We conducted our audit in accordance with auditing standards generally accepted in the United States of America; the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; and Office of Management and Budget (OMB) Bulletin No. 15-02, *Audit Requirements for Federal Financial Statements*.

**Compliance and Other Matters**

As part of obtaining reasonable assurance about whether NSF's financial statements are free from material misstatement, we performed tests of its compliance with provisions of applicable laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts, as well as provisions referred to in Section 803(a) of the Federal Financial Management Improvement Act of 1996 (FFMIA).

We limited our tests of compliance to these provisions and did not test compliance with all laws, regulations, contracts, and grant agreements applicable to NSF. Providing an opinion on compliance with those provisions was not an objective of our audit; accordingly, we do not express such an opinion. The results of our tests, exclusive of those referred to in the FFMIA, disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards* and OMB Bulletin No. 15-02.

The results of our tests of compliance with FFMIA disclosed no instances in which NSF's financial management systems did not comply substantially with the Federal financial management system's requirements, applicable Federal accounting standards, or application of the United States Standard General Ledger at the transaction level.



### **Purpose of this Report**

The purpose of this report is solely to describe the scope of our testing of compliance and the results of that testing, and, therefore, does not express an opinion on the effectiveness of the entity's compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* and OMB Bulletin No. 15-02 in considering the entity's compliance. Accordingly, this communication is not suitable for any other purpose.

A handwritten signature in blue ink that reads "Kearney &amp; Company". The signature is written in a cursive, flowing style.

Alexandria, Virginia  
January 13, 2017



### Status of Prior-Year Findings

One issue was noted relating to non-compliance with the Improper Payments Elimination and Recovery Act of 2010 (IPERA) in the *Independent Auditors' Report* on the National Science Foundation's (NSF) fiscal year (FY) 2015 financial statements. The table below presents a summary of the current-year status of the issue.

### Status of Prior-Year Findings

Non-Compliance Issue	FY 2015 Status	FY 2016 Status
Non-Compliance with the Improper Payments Elimination and Recovery Act of 2010 (IPERA) Reporting Requirements in Fiscal Year 2014 Agency Financial Report	Non-Compliance	No longer considered a non-compliance issue

\* \* \* \* \*



# National Science Foundation

## **Financial Statements**

As of and for the Fiscal Years ended  
September 30, 2016 and 2015

**National Science Foundation**  
**Balance Sheet**  
**As of September 30, 2016 and 2015**  
**(Amounts in Thousands)**

<b>Assets</b>	<b><u>2016</u></b>	<b><u>2015</u></b>
Intragovernmental Assets		
Fund Balance With Treasury (Note 2)	\$ 12,971,429	\$ 12,318,849
Accounts Receivable	4,316	9,667
Advances	64,682	62,273
Total Intragovernmental Assets	<u>13,040,427</u>	<u>12,390,789</u>
Cash and Other Monetary Assets (Note 2)		
Accounts Receivable, Net	21,951	50,520
General Property, Plant and Equipment, Net (Note 3)	1,513	1,909
	266,726	281,450
<b>Total Assets</b>	<b><u>\$ 13,330,617</u></b>	<b><u>\$ 12,724,668</u></b>
<b>Liabilities</b>		
Intragovernmental Liabilities		
Advances From Others	\$ 3,039	\$ 10,096
Other Intragovernmental Liabilities	16,671	6,707
Total Intragovernmental Liabilities	<u>19,710</u>	<u>16,803</u>
Accounts Payable		
FECA Employee Benefits	131,613	118,198
Environmental and Disposal Liabilities (Note 6)	1,171	1,215
Accrued Grant Liabilities, Net	18,247	18,247
Accrued Payroll and Other Liabilities	412,639	340,877
Accrued Annual Leave	7,333	6,087
	18,012	17,382
<b>Total Liabilities</b>	<b><u>\$ 608,725</u></b>	<b><u>\$ 518,809</u></b>
<b>Net Position</b>		
Unexpended Appropriations - Other Funds	\$ 11,923,203	\$ 11,427,234
Cumulative Results of Operations - Other Funds	289,469	308,703
Cumulative Results of Operations - Dedicated Collections (Note 7)	509,220	469,922
<b>Total Net Position</b>	<u>12,721,892</u>	<u>12,205,859</u>
<b>Total Liabilities and Net Position</b>	<b><u>\$ 13,330,617</u></b>	<b><u>\$ 12,724,668</u></b>

*The accompanying notes are an integral part of these statements.*



**National Science Foundation**  
**Statement of Net Cost**  
**For the Years Ended September 30, 2016 and 2015**  
**(Amounts in Thousands)**

<b>Program Costs (Note 8)</b>	<b><u>2016</u></b>	<b><u>2015</u></b>
Research and Related Activities		
Gross Costs	\$ 5,979,543	\$ 5,905,726
Less: Earned Revenues	<u>(108,177)</u>	<u>(129,829)</u>
<b>Net Research and Related Activities</b>	<b><u>5,871,366</u></b>	<b><u>5,775,897</u></b>
 Education and Human Resources		
Gross Costs	\$ 861,295	\$ 842,079
Less: Earned Revenues	<u>(2,514)</u>	<u>(6,320)</u>
<b>Net Education and Human Resources</b>	<b><u>858,781</u></b>	<b><u>835,759</u></b>
 Major Research Equipment and Facilities Construction		
Gross Costs	\$ 182,474	\$ 264,161
Less: Earned Revenues	<u>-</u>	<u>-</u>
<b>Net Major Research Equipment and Facilities Construction</b>	<b><u>182,474</u></b>	<b><u>264,161</u></b>
 Donations and Dedicated Collections		
Gross Costs	\$ 133,726	\$ 104,527
Less: Earned Revenues	<u>-</u>	<u>-</u>
<b>Net Donations and Dedicated Collections</b>	<b><u>133,726</u></b>	<b><u>104,527</u></b>
 <b>Net Cost of Operations (Notes 8 and 14)</b>	<b><u>\$ 7,046,347</u></b>	<b><u>\$ 6,980,344</u></b>

*The accompanying notes are an integral part of these statements.*

**National Science Foundation**  
**Statement of Changes in Net Position**  
**For the Year Ended September 30, 2016**  
**(Amounts in Thousands)**

	<b>2016</b>		
	<b>Funds From</b>	<b>All Other</b>	<b>Total</b>
	<b>Dedicated Collections</b>		
<b>Cumulative Results of Operations</b>			
<b>Beginning Balances (Note 7)</b>	\$ 469,922	308,703	778,625
<b>Budgetary Financing Sources</b>			
Appropriations Used	-	6,897,524	6,897,524
Non-exchange Revenue	-	26	26
Donations	-	24,416	24,416
Appropriated Funds from Dedicated Collections			
Transferred In / (Out) (Note 7)	139,293	-	139,293
<b>Other Financing Sources</b>			
Imputed Financing From Costs Absorbed By Others	-	9,020	9,020
Other	-	(3,868)	(3,868)
<b>Total Financing Sources</b>	<b>139,293</b>	<b>6,927,118</b>	<b>7,066,411</b>
<b>Net Cost of Operations (Notes 7 and 8)</b>	<b>(99,995)</b>	<b>(6,946,352)</b>	<b>(7,046,347)</b>
<b>Cumulative Results of Operations (Note 7)</b>	<b>\$ 509,220</b>	<b>289,469</b>	<b>798,689</b>
 <b>Unexpended Appropriations</b>			
<b>Beginning Balances</b>	\$ -	<b>11,427,234</b>	<b>11,427,234</b>
<b>Budgetary Financing Sources</b>			
Appropriations Received	-	7,463,485	7,463,485
Cancelled Authority Adjustments	-	(69,992)	(69,992)
Appropriations Used	-	(6,897,524)	(6,897,524)
<b>Total Budgetary Financing Sources</b>	<b>-</b>	<b>495,969</b>	<b>495,969</b>
<b>Total Unexpended Appropriations</b>	<b>\$ -</b>	<b>11,923,203</b>	<b>11,923,203</b>
 <b>Net Position</b>	 <b>\$ 509,220</b>	 <b>12,212,672</b>	 <b>12,721,892</b>

*The accompanying notes are an integral part of these statements.*

**National Science Foundation**  
**Statement of Changes in Net Position**  
**For the Year Ended September 30, 2015**  
**(Amounts in Thousands)**

	<u>2015</u>		
	<u>Funds From</u> <u>Dedicated Collections</u>	<u>All Other</u>	<u>Total</u>
<b>Cumulative Results of Operations</b>			
<b>Beginning Balances (Note 7)</b>	\$ 404,199	289,423	693,622
<b>Budgetary Financing Sources</b>			
Appropriations Used	-	6,880,952	6,880,952
Non-exchange Revenue	-	78	78
Donations	-	34,787	34,787
Appropriated Funds from Dedicated Collections			
Transferred In / (Out) (Note 7)	142,999	-	142,999
<b>Other Financing Sources</b>			
Imputed Financing From Costs Absorbed By Others	-	9,133	9,133
Other	-	(2,602)	(2,602)
<b>Total Financing Sources</b>	<b>142,999</b>	<b>6,922,348</b>	<b>7,065,347</b>
<b>Net Cost of Operations (Notes 7 and 8)</b>	<b>(77,276)</b>	<b>(6,903,068)</b>	<b>-</b>
<b>Cumulative Results of Operations (Note 7)</b>	<b>\$ 469,922</b>	<b>308,703</b>	<b>778,625</b>
<b>Unexpended Appropriations</b>			
<b>Beginning Balances</b>	\$ -	11,057,969	11,057,969
<b>Budgetary Financing Sources</b>			
Appropriations Received	-	7,344,205	7,344,205
Cancelled Authority Adjustments	-	(93,988)	(93,988)
Appropriations Used	-	(6,880,952)	(6,880,952)
<b>Total Budgetary Financing Sources</b>	<b>-</b>	<b>369,265</b>	<b>369,265</b>
<b>Total Unexpended Appropriations</b>	<b>\$ -</b>	<b>11,427,234</b>	<b>11,427,234</b>
<b>Net Position</b>	<b>\$ 469,922</b>	<b>11,735,937</b>	<b>12,205,859</b>

*The accompanying notes are an integral part of these statements.*

**National Science Foundation**  
**Statement of Budgetary Resources**  
**For the Years Ended September 30, 2016 and 2015**  
**(Amounts in Thousands)**

	<u>2016</u>	<u>2015</u>
<b>Budgetary Resources</b>		
Unobligated Balance - Brought Forward, October 1	\$ 394,527	\$ 393,733
Recoveries of Prior Year Unpaid Obligations	105,748	218,337
Other Changes in Unobligated Balance	(67,967)	(90,620)
Unobligated Balance from Prior Year Budget Authority, Net	432,308	521,450
Appropriations	7,627,220	7,522,070
Spending Authority from Offsetting Collections	97,461	100,897
<b>Total Budgetary Resources (Note 12)</b>	<b>\$ 8,156,989</b>	<b>\$ 8,144,417</b>
<b>Status of Budgetary Resources</b>		
New Obligations and Upward Adjustments (Note 9 & 12)	\$ 7,808,724	\$ 7,749,890
Unobligated Balance, End of Year		
Apportioned, Unexpired (Note 2)	160,313	223,723
Unapportioned, Unexpired (Note 2)	28,162	19,620
Unobligated Balance, Unexpired, End of Year	188,475	243,343
Unobligated Balance, Expired, End of Year (Note 2)	159,790	151,184
Total Unobligated Balance, End of Year	348,265	394,527
<b>Total Status of Budgetary Resources</b>	<b>\$ 8,156,989</b>	<b>\$ 8,144,417</b>
<b>Change in Obligated Balance</b>		
Unpaid Obligations		
Unpaid Obligations - Brought Forward, October 1	\$ 12,078,549	\$ 11,544,639
New Obligations and Upward Adjustments (Note 9)	7,808,724	7,749,890
Gross Outlays	(7,041,117)	(6,997,643)
Recoveries of Prior Year Unpaid Obligations	(105,748)	(218,337)
Unpaid Obligations, End of Year	12,740,408	12,078,549
Uncollected Payments		
Uncollected Payments from Federal Sources - Brought Forward, October 1	\$ (103,956)	\$ (122,935)
Change in Uncollected Payments from Federal Sources	8,570	18,979
Uncollected Payments from Federal Sources, End of Year	(95,386)	(103,956)
Memorandum (non-add) Entries		
Obligated Balance, Start of Year	\$ 11,974,593	\$ 11,421,704
Obligated Balance, End of Year (Note 2)	\$ 12,645,022	\$ 11,974,593
<b>Budget Authority and Outlays, Net</b>		
Budget Authority, Gross	\$ 7,724,681	\$ 7,622,967
Actual Offsetting Collections	(108,056)	(123,245)
Change in Uncollected Payments from Federal Sources	8,570	18,979
Recoveries of Prior Year Paid Obligations	2,025	3,369
Budget Authority, Net	<b>\$ 7,627,220</b>	<b>\$ 7,522,070</b>
Gross Outlays	\$ 7,041,117	\$ 6,997,643
Actual Offsetting Collections	(108,056)	(123,245)
Net Outlays	<b>6,933,061</b>	<b>6,874,398</b>
Distributed Offsetting Receipts (Note 12)	(28,648)	(37,834)
Net Agency Outlays	<b>\$ 6,904,413</b>	<b>\$ 6,836,564</b>

*The accompanying notes are an integral part of these statements.*

## Notes to the Principal Financial Statements

### Note 1. Summary of Significant Accounting Policies

#### A. Reporting Entity

The National Science Foundation (NSF or “Foundation”) is an independent federal agency created by the National Science Foundation Act of 1950, as amended (42 U.S.C. 1861-75). Its mission is to promote and advance scientific progress in the United States. NSF initiates and supports scientific research and research fundamental to the engineering process and programs to strengthen the Nation’s science and engineering potential. NSF also supports education programs at all levels in all fields of science and engineering. NSF funds research and education in science and engineering by awarding grants and contracts to educational and research institutions throughout the United States and its territories. NSF, by law, cannot operate research facilities except in the polar regions. NSF enters into relationships through awards, to fund the research operations conducted by grantees.

NSF is led by a presidentially-appointed, Senate confirmed, Director and the 24-member National Science Board (NSB). The NSB members represent a cross section of prominent leaders in science and engineering research and education, and are appointed by the President for 6-year terms. The NSF Director is an *ex officio* member of the Board.

NSF has a total workforce of about 2,100 at its Arlington, VA, headquarters, including approximately 1,400 career employees, 200 rotator scientists from research institutions in temporary positions, 450 contract workers and the staff of the NSB office and the Office of the Inspector General. NSF provides the opportunity for scientists, engineers, and educators to join the Foundation as temporary program directors and advisors. These "rotators" provide input during the merit review process of proposals; provide insight for new directions in the fields of science, engineering, and education; and support cutting-edge interdisciplinary research. Rotators can come to NSF under multiple mechanisms. The largest numbers come on Intergovernmental Personnel Act assignments, or IPAs, who remain employees of their home institutions. NSF facilitates IPA assignments through grants to their institution as a reimbursement in whole or in part for salary and benefits, and that reimbursement is then paid by the institution to their employee. All rotators are subject to criminal conflict of interest statutes (statutes) as well as the Government-wide Standards of Ethical Conduct of Employees of the Executive Branch (regulations) which prohibit them from participating in NSF proposals and awards affecting themselves and their home institutions.

#### B. Basis of Presentation

These financial statements have been prepared to report the financial position and results of operations of NSF as required by the Chief Financial Officers Act of 1990, the Government Management Reform Act of 1994, the Reports Consolidation Act of 2000, and the Office of Management and Budget (OMB) Circular A-136, *Financial Reporting Requirements*. While the statements have been prepared from the books and records of NSF in accordance with United States Generally Accepted Accounting Principles (U.S. GAAP) for federal entities and the formats prescribed by OMB, the statements are in addition to the financial reports used to monitor and control budgetary resources, which are prepared from the same books and records.

#### C. Basis of Accounting

The accompanying financial statements have been prepared in accordance with U.S. GAAP for federal entities using the accrual method of accounting. Under the accrual method, revenues are recognized when earned, and expenses are recognized when a liability is incurred, without regard to receipt or payment of cash. The accompanying financial statements also include budgetary accounting transactions that ensure compliance with legal constraints and controls over the use of federal funds.

#### **D. Revenues and Other Financing Sources**

NSF receives the majority of its funding through appropriations contained in the Commerce, Justice, Science, and Related Agencies Appropriations Act. NSF receives annual, multi-year, and no-year appropriations that may be expended within statutory limits. NSF also receives funding via warrant from a receipt account for dedicated collections that is reported as H-1B Nonimmigrant Petitioner Account (H-1B) funds. Additional amounts are obtained from reimbursements for services provided to other federal agencies as well as from receipts to the NSF Donations Account. Also, NSF receives interest earned on overdue receivables and excess cash advances to grantees. The interest earned on overdue receivables and excess cash advances to grantees is returned to Treasury at the end of each fiscal year.

In FY 2016, The Science Appropriations Act, 2016 under Public Law 114-113, provided funding for each of NSF's appropriations. In addition, the Act provided an administrative provision allowing NSF to transfer up to 5 percent of current year funding between appropriations. Appropriations are recognized as a financing source at the time the related "funded" program or administrative expenditures are incurred. Appropriations are also recognized when used to purchase Property, Plant and Equipment (PP&E). "Unfunded" liabilities result from liabilities not covered by budgetary resources and will be paid when future appropriations are made available for these purposes. Donations are recognized as revenues when funds are received. Revenues from reimbursable agreements are recognized when the services are provided and the related expenditures are incurred. Reimbursable agreements are mainly for grant administrative services provided by NSF on behalf of other federal agencies.

Under the general authority of the Foundation, NSF is authorized to accept and use both U.S. and foreign funds in the NSF Donations Account. In accordance with 42 U.S.C. 1862 Section 3 (a)(3), NSF has authority "to foster the interchange of scientific and engineering information among scientists and engineers in the United States and foreign countries"; and in 42 U.S.C. 1870 Section 11 (f), NSF is authorized to receive and use funds donated by others. Donations may be received from foreign governments, private companies, academic institutions, non-profit foundations, and individuals. These funds must be donated without restriction other than that they be used in furtherance of one or more of the general purposes of the Foundation. Funds are made available for obligations as necessary to support NSF programs.

#### **E. Fund Balance with Treasury and Cash and Other Monetary Assets**

*Fund Balance with Treasury* is composed of appropriated funds that are available to pay current liabilities and finance authorized purchase commitments. *Cash and Other Monetary Assets* include non-appropriated funding sources from donations and undeposited collections. Cash receipts and disbursements are processed by Treasury.

#### **F. Accounts Receivable**

*Accounts Receivable* consist of amounts due from governmental agencies, private organizations, and individuals. Additionally, NSF has the right to conduct audits on awardees to verify billed amounts. These audits may result in monies owed back to NSF. Upon resolution of the amount owed by the awardee to NSF, a receivable is recorded.

NSF establishes an allowance for loss on accounts receivable from non-federal sources that are deemed uncollectible but regards amounts due from other federal agencies as fully collectible. NSF analyzes each account independently to assess collectability and the need for an offsetting allowance or write-off. NSF writes off delinquent debt from non-federal sources that is more than 2 years old.

#### **G. Advances**

*Advances* consist of advances to federal agencies which are issued when agencies are operating under working capital funds or are unable to incur costs on a reimbursable basis. Advances are reduced when documentation supporting expenditures is received and recorded. Additionally, some NSF grantees receive

advanced funds prior to incurring expenses. Payments are only made within the amount of the recorded grant obligation and are intended to cover immediate cash needs. Grant advances are presented net of grant liabilities on NSF's Balance Sheet.

#### **H. General Property, Plant and Equipment**

NSF capitalizes PP&E with costs exceeding \$25.0 thousand and useful lives of 2 or more years; items not meeting these criteria are recorded as operating expenses. NSF currently reports capitalized PP&E at original acquisition cost; assets acquired from the General Services Administration (GSA) excess property schedules are recorded at the value assigned by the donating agency; and assets transferred in from other agencies are valued at the cost recorded by the transferring entity for the asset net of accumulated depreciation or amortization.

The PP&E balance consists of Equipment, Aircrafts and Satellites, Buildings and Structures, Leasehold Improvements, Construction in Progress, Internal Use Software, and Software in Development. These balances are comprised of PP&E maintained "in-house" by NSF to support operations and PP&E under the U.S. Antarctic Program (USAP). The majority of USAP property is under the custodial responsibility of the NSF prime contractor for the program.

Depreciation expense is calculated using the straight-line half-year convention. The economic useful life classifications for capitalized assets are as follows:

#### **Equipment**

5 years	Computers and peripheral equipment, fuel storage tanks, laboratory equipment, and vehicles
7 years	Communications equipment, office furniture and equipment, pumps and compressors
10 or 15 years	Generators, Department of Defense equipment
20 years	Movable buildings (e.g., trailers)

#### **Aircraft and Satellites**

7 years	Aircraft, aircraft conversions, and satellites
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#### **Buildings and Structures**

31.5 years	Buildings and structures placed in service prior to 1994
39 years	Buildings and structures placed in service after 1993

#### **Leases and Leasehold Improvements**

NSF's headquarters are leased through GSA under an occupancy agreement. The cancellation clause within the agreement allows NSF to terminate use with a 120-day notice. NSF is billed by GSA for the leased space as rent based upon estimated lease payments made by GSA plus an administrative fee. Therefore, the cost of headquarters is not capitalized by NSF. All NSF leases are cancellable and/or in effect for a period of no more than 1 year. Leasehold improvements performed by GSA are financed with NSF appropriated funds. Amortization is calculated using the straight-line half-year convention upon transfer from construction in progress.

#### **Construction in Progress**

Costs incurred to construct buildings and structures are accumulated and tracked as construction in progress. At 75 percent completion of construction, an on-site Conditional Occupancy inspection is performed to evaluate for compliance with the approved plans, design, specifications, and changes. Items that pertain to the safety and health of any future occupants of the facility must be corrected before a Conditional Occupancy is granted and the facility occupied. When Conditional

Occupancy is granted, the completed project is transferred from construction in progress to real property or capital equipment and depreciated over the respective useful life of the asset.

### **Internal Use Software**

NSF controls, values, and reports purchased or developed software as tangible property assets, in accordance with the Statement of Federal Financial Accounting Standards (SFFAS) No. 10, *Accounting for Internal Use Software*. NSF identifies software investments as capital property for items that, in the aggregate, cost \$500.0 thousand or more to purchase, develop, enhance, or modify a new or existing NSF system, or configure a government-wide system for NSF needs. Software projects that are not completed at year end and are expected to exceed the capitalization threshold are recorded as software in development. All internal use software meeting the capitalization threshold is amortized over a 5-year period using the straight-line half-year convention.

*Assets Owned by NSF in the Custody of Other Entities:* NSF awards grants, cooperative agreements, and contracts to various organizations, including colleges and universities, non-profit organizations, state and local governments, Federally Funded Research and Development Centers (FFRDCs), and private entities. The funds provided may be used in certain cases to purchase or construct PP&E to be used for operations or research on projects or programs sponsored by NSF. In these instances, NSF funds the acquisition of property, but transfers control of the assets to these entities. NSF's authorizing legislation specifically prohibits the Foundation from operating such property directly.

In practice, NSF's ownership interest in such PP&E is similar to a reversionary interest. To address the accounting and reporting of these assets, specific guidance was sought by NSF and provided by the Federal Accounting Standards Advisory Board (FASAB). This guidance stipulates that NSF should: (i) disclose the value of such PP&E held by others in its financial statements based on information contained in the audited financial statements of these entities (if available); and (ii) report information on costs incurred to acquire the research facilities, equipment, and platforms in the Research and Human Capital Activity costs as required by SFFAS No. 8, *Supplementary Stewardship Reporting*. Very few entities disclose information on NSF-owned property in their audited financial statements. Therefore, NSF has elected to disclose only the number of entities in possession of NSF-owned property. Entities that separately present the book value of NSF-owned property in their audited financial statements and all FFRDCs are listed in Note 4, *General Property, Plant and Equipment in the Custody of Other Entities*, along with the book value of the property held.

### ***I. Advances From Others***

*Advances From Others* consist of amounts obligated and advanced by other federal entities to NSF for grant administration and other services to be furnished under reimbursable agreements.

### ***J. Other Intragovernmental Liabilities***

*Other Intragovernmental Liabilities* consist of federal accounts payable, federal payroll payable, and liabilities for non-entity assets. Federal accounts payable consist of liabilities to federal agencies recognized by NSF related to unbilled revenue reported to NSF by the reciprocating federal agency. Liabilities for federal payroll payable consist of the federal portion of payroll benefits, taxes, and unfunded Federal Employees' Compensation Act (FECA) liabilities. Liabilities for non-entity assets are recorded to offset accounts receivable balances associated with cancelled appropriations.

### ***K. Accounts Payable***

*Accounts Payable* consist of liabilities to commercial vendors, contractors, federal agencies, and disbursements in transit. *Accounts Payable* to federal agencies, commercial vendors, and contractors are expenses for goods and services received but not yet paid for by NSF at the end of the fiscal year. At year end, NSF accrues for the amount of estimated unpaid expenses to vendors for which invoices have not been



received, but goods and services have been delivered and rendered. *Accounts Payable* also consist of disbursements in transit recorded by NSF but not paid by Treasury.

**L. Accrued Grant Liabilities, Net**

*Accrued Grant Liabilities, Net* consist of estimated liabilities to grantees for expenses incurred but not reported (IBNR) by September 30. NSF's grant accrual methodology utilizes a linear regression model based on the statistical correlation between prior year unliquidated obligations and prior year expenses IBNR. NSF utilizes the Award Cash Management Service (ACM\$), a grantee cash request and expenditure reporting system. ACM\$ enables all grantee institutions to request funds at the award level to support project needs.

**M. Accrued Payroll and Other Liabilities**

*Accrued Payroll and Other Liabilities* consist of accrued payroll and undeposited collections. NSF's payroll services are provided by the Department of the Interior's Interior Business Center. Accrued payroll relates to services rendered by NSF employees, for which they have not yet been paid. At year end, NSF accrues the amount of wages and benefits earned, but not yet paid. Undeposited collections are funds received by NSF, but not remitted to Treasury prior to September 30.

**N. Employee Benefits**

A liability is recorded for estimated and actual future payments to be made for workers' compensation pursuant to FECA. The liability consists of the net present value of estimated future payments calculated by the U.S. Department of Labor (DOL) and the actual unreimbursed cost paid by DOL for compensation paid to recipients under FECA. The actual costs incurred are reflected as a liability because NSF will reimburse DOL 2 years after the actual payment of expenses. Future NSF Agency Operations and Award Management (AOAM) appropriations will be used for DOL's estimated reimbursement.

Annual leave is accrued as it is earned, and the accrual is reduced as leave is taken. Each year, the balance in the accrued annual leave account is adjusted to reflect changes. To the extent current and prior-year appropriations are not available to fund annual leave earned but not taken, funding will be obtained from future AOAM appropriations. Sick leave and other types of non-vested leave are expensed as taken.

**O. Net Position**

*Net Position* is the residual difference between assets and liabilities and is composed of unexpended appropriations and cumulative results of operations. *Unexpended Appropriations* represent the amount of undelivered orders and unobligated balances of budget authority. Unobligated balances are the amount of appropriations or other authority remaining after deducting the cumulative obligations from the amount available for obligation. The *Cumulative Results of Operations* represent the net results of NSF's operations since the Foundation's inception.

**P. Retirement Plan**

In FY 2016, approximately 6 percent of NSF employees participated in the Civil Service Retirement System (CSRS), to which NSF matches contributions equal to 7 percent of pay. The majority of NSF employees are covered by the Federal Employees Retirement System (FERS) and Social Security. A primary feature of FERS is the thrift savings plan to which NSF automatically contributes 1 percent of pay. The maximum NSF matching contribution is 5 percent of employee pay, of which 3 percent is fully matched, and 2 percent is matched at 50 percent. NSF also contributes the employer's matching share for Social Security for FERS participants.

Although NSF funds a portion of the benefits under FERS and CSRS relating to its employees and withholds the necessary payroll deductions, the Foundation has no liability for future payments to

employees under these plans, nor does NSF report CSRS, FERS, Social Security assets, or accumulated plan benefits on its financial statements. Reporting such amounts is the responsibility of the Office of Personnel Management (OPM) and the Federal Retirement Thrift Investment Board.

SFFAS No. 5, *Accounting for Liabilities of the Federal Government*, requires employing agencies to recognize the cost of pensions and other retirement benefits during their employees' active years of service. OPM actuaries determine pension cost factors by calculating the value of pension benefits expected to be paid in the future, and provide these factors to the agency for current period expense reporting. Information is also provided by OPM regarding the full cost of health and life insurance benefits.<sup>1</sup>

#### **Q. Contingencies and Possible Future Costs**

*Contingencies - Claims and Lawsuits:* NSF is a party to various legal actions and claims brought against it. In the opinion of NSF management and legal counsel, the ultimate resolution of the actions and claims will not materially affect the financial position or operations of the Foundation. NSF recognizes the contingency in the financial statements when claims are expected to result in a material loss (and the payment amounts can be reasonably estimated), whether from NSF's appropriations or the Judgment Fund, administered by the Department of Justice under Section 1304 of Title 31 of the United States Code.

Claims and lawsuits can also be made and filed against awardees of the Foundation by third parties. NSF is not a party to these actions and NSF believes there is no possibility that NSF will be legally required to satisfy such claims. Judgments or settlements of the claims against awardees that impose financial obligation on them may be claimed as costs under the applicable contract, grant, or cooperative agreement and thus may affect the allocation of program funds in future fiscal years. In the event that the claim becomes probable and amounts can be reasonably estimated, the claim will be recognized.

*Contingencies – Unasserted Claims:* For claims and lawsuits that have not been made and filed against the Foundation, NSF management and legal counsel determine, in their opinion, whether resolution of the actions and claims they are aware of will materially affect the Foundation's financial position or operations. NSF recognizes a contingency in the financial statements when unasserted claims are probable of assertion, and if asserted, would be probable of an unfavorable outcome and expected to result in a measurable loss, whether from NSF's appropriations or the Judgment Fund. NSF discloses unasserted claims if the loss is more likely than not to occur, but the materiality of a potential loss cannot be determined.

*Termination Claims:* NSF engages organizations, including FFRDCs, in cooperative agreements and contracts to manage, operate, and maintain research facilities for the benefit of the scientific community. As part of these agreements and contracts, NSF funds on a pay-as-you-go basis certain employee benefit costs (accrued vacation and other employee related liabilities, severance pay and medical insurance), long term leases, and vessel usage and drilling. In some instances, an award decision is made to continue operation of a facility with a different entity performing operation and management duties. In such an occurrence, NSF does not classify the facility as terminated. Claims submitted by the previous managing entity for expenditures not covered by the indirect cost rate included in the initial award are subject to audit and typically paid with existing program funds.

Agreements with FFRDCs include a clause that commits NSF to seek appropriations for termination expenses, if necessary, in the event a facility is terminated. NSF considers termination of these facilities only remotely possible. Should a facility be terminated, NSF is obligated to pay termination expenses for FFRDCs in excess of the limitation of funds set forth in the agreements, including any Post-Retirement Benefit liabilities, only if funds are appropriated for this specific purpose. Nothing in these agreements can

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<sup>1</sup> OPM Benefit Administration website:

<https://www.opm.gov/retirement-services/publications-forms/benefits-administration-letters/2016/16-101.pdf>

be construed as implying that Congress will appropriate funds to meet the terms of any claims. Termination costs that may be payable to an FFRDC operator cannot be estimated until such time as the facility is terminated.

*Environmental Liabilities:* NSF manages USAP. The Antarctic Conservation Act and its implementing regulations identify the requirements for environmental clean-up in Antarctica. NSF continually monitors USAP in regards to environmental issues. NSF establishes its environmental liability estimates in accordance with the requirements of SFFAS No. 5, *Accounting for Liabilities of the Federal Government*, and as amended by SFFAS No. 12, *Recognition of Contingent Liabilities Arising from Litigation*, and the Federal Financial Accounting and Auditing Technical Release No. 2, *Determining Probable and Reasonably Estimable for Environmental Liabilities in the Federal Government*.

While NSF is not legally liable for environmental clean-up costs in the Antarctic, there are occasions when the NSF Division of Polar Programs chooses to accept responsibility and commit funds toward clean-up efforts of various sites as resources permit. Decisions to commit funds are in no way driven by concerns of probable legal liability for failure to engage in such efforts, but rather a commitment to environmental stewardship of Antarctic natural resources. Environmental clean-up projects started and completed during the year are reflected in NSF's financial statements as expenses for the current fiscal year. An estimated cost would be accrued for approved projects that are anticipated to be performed after the fiscal year end or will take more than 1 fiscal year to complete.

Separate from environmental clean-up costs related to the Antarctic Conservation Act, NSF discloses NSF-owned buildings in the Antarctic that have been identified as having, or expected to have, friable and non-friable asbestos containing material. NSF's estimated cost for asbestos related clean-up is shown on the Balance Sheet as a liability. Additional detail on the estimate methodology is included in Note 6, *Environmental and Disposal Liability*.

#### **R. Use of Estimates**

Management has made certain estimates and assumptions when reporting assets, liabilities, revenues, and expenses, and also in the note disclosures. Estimates underlying the accompanying financial statements include accounting for grants, contracts, accounts payable, payroll, and PP&E. Actual results may differ from these estimates, and the difference will be adjusted for and included in the financial statements of the following fiscal year.

## Note 2. Fund Balance With Treasury

*Fund Balance with Treasury* (FBWT) consisted of the following components as of September 30, 2016 and 2015:

(Amounts in Thousands)	2016			
	Appropriated Funds	Donated Funds	Funds from Dedicated Collections	Total
Obligated	\$ 12,155,149	\$ 36,858	\$ 453,015	\$ 12,645,022
Unobligated Available, Unexpired	75,882	22,268	62,163	160,313
Unobligated Unavailable, Unexpired	14,031	1,666	12,465	28,162
Unobligated Unavailable, Expired	159,790	-	-	159,790
Less: Cash and Other Monetary Assets	(93)	(21,858)	-	(21,951)
Add: Undeposited Collections	93	-	-	93
<b>Total FBWT</b>	<b>\$ 12,404,852</b>	<b>\$ 38,934</b>	<b>\$ 527,643</b>	<b>\$ 12,971,429</b>

(Amounts in Thousands)	2015			
	Appropriated Funds	Donated Funds	Funds from Dedicated Collections	Total
Obligated	\$ 11,571,214	\$ 35,655	\$ 367,724	\$ 11,974,593
Unobligated Available, Unexpired	85,694	27,561	110,468	223,723
Unobligated Unavailable, Unexpired	12,512	1,557	5,551	19,620
Unobligated Unavailable, Expired	151,184	-	-	151,184
Less: Cash and Other Monetary Assets	(249)	(50,271)	-	(50,520)
Add: Undeposited Collections	249	-	-	249
<b>Total FBWT</b>	<b>\$ 11,820,604</b>	<b>\$ 14,502</b>	<b>\$ 483,743</b>	<b>\$ 12,318,849</b>

The NSF Donations Account includes amounts donated to NSF from all sources. Funds in the NSF Donations Account may be used to further one or more of the general purposes of the Foundation. The donated funds are reported as FBWT or as *Cash and Other Monetary Assets*. Donations reported as *Cash and Other Monetary Assets* represent cash held outside of Treasury at commercial banks in interest bearing accounts. These funds are collateralized up to \$37.5 million by the bank, through the Federal Reserve Bank of St. Louis, in accordance with Treasury Financial Manual Volume 1, Chapter 6-9000. *Undeposited Collections* are funds received by NSF, but not remitted to Treasury prior to September 30. *Unobligated Unavailable* balances include recoveries of prior year obligations and other unobligated expired funds that are unavailable for new obligations.

In FY 1999, in accordance with P.L. 105-277, a special fund, H-1B, was established in the general fund of the U.S. Treasury. These funds are considered Funds from Dedicated Collections and are not included in Appropriated Funds. The funds represent fees collected for each petition for nonimmigrant status. Under the law, NSF was prescribed a percentage of these fees for specific programs.

### Note 3. General Property, Plant and Equipment, Net

The components of *General Property, Plant and Equipment, Net* as of September 30, 2016 and 2015 are shown below. As of September 30, 2016, NSF had not identified any asset impairments.

(Amounts in Thousands)	2016		
	Acquisition	Accumulated	Net Book Value
	Cost	Depreciation	
Equipment	\$ 154,365	\$ (137,650)	\$ 16,715
Aircraft and Satellites	115,806	(115,806)	-
Buildings and Structures	319,125	(141,477)	177,648
Leasehold Improvements	11,705	(11,524)	181
Construction in Progress	2,710	-	2,710
Internal Use Software	87,189	(46,313)	40,876
Software in Development	28,596	-	28,596
Total PP&E	\$ 719,496	\$ (452,770)	\$ 266,726

(Amounts in Thousands)	2015		
	Acquisition	Accumulated	Net Book Value
	Cost	Depreciation	
Equipment	\$ 155,764	\$ (133,030)	\$ 22,734
Aircraft and Satellites	138,487	(138,487)	-
Buildings and Structures	319,207	(132,426)	186,781
Leasehold Improvements	11,705	(11,162)	543
Construction in Progress	1,186	-	1,186
Internal Use Software	76,900	(31,372)	45,528
Software in Development	24,678	-	24,678
Total PP&E	\$ 727,927	\$ (446,477)	\$ 281,450

### Note 4. General Property, Plant, and Equipment in the Custody of Other Entities

NSF received a ruling from FASAB on accounting for PP&E owned by NSF but in the custody of and used by others (see Note 1H. *General Property, Plant, and Equipment*). The FASAB guidance requires PP&E in the custody of others be excluded from NSF PP&E as defined in SFFAS No. 6, *Accounting for Property, Plant and Equipment*. NSF is required to disclose the dollar amount of NSF PP&E held by others in the footnotes based on information contained in the most recently issued audited financial statements of the organization holding the assets.

As of September 30, 2016, there were 31 colleges or universities, and 16 commercial entities that held property titled to NSF. With the exception of the entities listed below, none of the colleges, universities or commercial entities reported NSF-owned property separately.

The amount of PP&E owned by NSF but in the custody of an NSF awardee is identified in the table below. In some cases entities operate on a fiscal year end basis other than September 30. If NSF PP&E is not separately stated on the entity's audited financial statements, the entity is not audited, or the disclosed PP&E balances are not audited, the related amounts are annotated as Not Available (N/A) in the table.

(Amounts in Thousands)

<i>Entities with Reported NSF Government Owned Equipment</i>	Amount	Fiscal Year Ending
Association of Universities for Research in Astronomy, Inc. - AURA	N/A	9/30/15
National Radio Astronomy Observatory - AUI	\$503,426	9/30/15
University Corporation for Atmospheric Research - UCAR	\$206,956	9/30/15

## Note 5. Leases

NSF leases its headquarters under an operating lease with GSA. The cancellation clause within the agreement allows NSF to terminate use with a 120-day notice. In FY 2017, NSF will be relocating to new headquarters in Alexandria, VA. The following is a schedule of future minimum lease payments for the current and future headquarters, warehouses, and office space in Denver, Colorado. The current leases are active through FY 2032.

(Amounts in Thousands)

Fiscal Year	Building Operating Lease Amount
2017	31,585
2018	29,735
2019	24,750
2020	24,733
2021	24,784
2022 and After	276,157
Total Minimum Lease Payments	\$ 411,744

In addition to its headquarters, NSF occupies common spaces with other federal agencies overseas through the Department of State's (State) International Cooperative Administrative Support Services (ICASS) system. NSF uses ICASS in Beijing, Brussels, and Tokyo for residential and non-residential space. In FY 2016, the NSF Europe Regional Office relocated from Paris, France to Brussels, Belgium, resulting in the termination of the Paris lease. ICASS is a voluntary cost distribution system and the agreement to receive ICASS services is through an annual Memorandum of Understanding (MOU) between NSF and State. Additionally, NSF leases residential space in Tokyo. As with all NSF leases, this lease is cancellable and/or for a period not more than a year.

## Note 6. Environmental and Disposal Liability

Pursuant to FASAB Technical Bulletin 2006-1, *Recognition and Measurement of Asbestos-Related Cleanup Costs*, federal entities are required to recognize a liability for federal property asbestos cleanup costs. Some NSF owned buildings and structures used to support the USAP have been identified as having, or expected to have, friable and non-friable asbestos containing material.

As required by SFFAS No. 6, *Accounting for Property, Plant and Equipment*, NSF works with the current USAP contractor through the Antarctic Support Contract (ASC) to determine the need for asbestos liability adjustments based on actual asbestos costs incurred on an annual basis. Actual asbestos remediation costs are submitted quarterly by the ASC and the asbestos liability is reduced by the reported amount. No asbestos remediation costs were incurred as of September 30, 2016 and the balance remains \$18.2 million.

## Note 7. Funds from Dedicated Collections

In FY 1999, Title IV of the American Competitiveness and Workforce Improvement Act of 1998 (P.L. 105-277) established the H-1B Nonimmigrant Petitioner Account in the General Fund of the U.S. Treasury. Funding is established from fees collected for alien, nonimmigrant status petitions. The law requires that a prescribed percentage of the funds in the account be made available to NSF for the following activities:

- Computer Science, Engineering, and Mathematics Scholarship (CSEMS)
- Grants for Mathematics, Engineering, or Science Enrichment Courses
- Systemic Reform Activities

The H-1B Nonimmigrant Petitioner fees are available to the Director of NSF until expended. The funds may be used for scholarships to low income students, or to carry out a direct or matching grant program to support private and/or public partnerships in K-12 education. The H-1B fund is set up as a permanent indefinite appropriation by NSF. These funds are described in the Budget of the United States Government (President's Budget). *Funds from Dedicated Collections* are accounted for in a separate Treasury Account Symbol (TAS), and the budgetary resources are recorded as *Appropriated Funds from Dedicated Collections Transferred In / (Out)*. *Funds from Dedicated Collections* are reported in accordance with SFFAS No. 43, *Funds from Dedicated Collections: Amending Statement of Federal Financial Accounting Standards 27, Identifying and Reporting Earmarked Funds*. For the years ended September 30, 2016 and September 30, 2015, NSF was subject to H-1B sequestrations in the amounts of \$6.8 million and \$7.3 million, respectively.

(Amounts in Thousands)	2016	2015
<b>Balance Sheet as of September 30, 2016 and 2015</b>		
Fund Balance With Treasury	\$ 527,643	\$ 483,743
Intragovernmental Advances	313	375
Total Assets	<u>527,956</u>	<u>484,118</u>
Other Intragovernmental Liabilities	-	137
Accounts Payable	3,289	3,241
Accrued Grant Liabilities, Net	15,447	10,818
Total Liabilities	<u>18,736</u>	<u>14,196</u>
Cumulative Results of Operations	509,220	469,922
Total Liabilities and Net Position	<u>\$ 527,956</u>	<u>\$ 484,118</u>
<b>Statement of Net Cost for the Years Ended September 30, 2016 and 2015</b>		
Program Costs	\$ 99,995	\$ 77,276
Net Cost of Operations	<u>\$ 99,995</u>	<u>\$ 77,276</u>
<b>Statement of Changes in Net Position for the Years Ended September 30, 2016 and 2015</b>		
Net Position Beginning of Period	\$ 469,922	\$ 404,199
Appropriated Dedicated Collection Transferred In / Out	139,293	142,999
Net Cost of Operation	<u>(99,995)</u>	<u>(77,276)</u>
Change in Net Position	39,298	65,723
Net Position End of Period	<u>\$ 509,220</u>	<u>\$ 469,922</u>

## Note 8. Statement of Net Cost

The Statement of Net Cost presents NSF's support for research and education awards as a single program with three primary appropriations: Research and Related Activities (R&RA), Education and Human Resources (EHR), and Major Research Equipment and Facilities Construction (MREFC). *Donations and Dedicated Collections* are also presented in the Statement of Net Cost and in the tables below.

In pursuit of its mission, NSF incurs costs in line with the Foundation's strategic plan for 2014-2018: *Investing in Science, Engineering, and Education for the Nation's Future*. The strategic goals outlined in this plan are: "Transform the Frontiers of Science and Engineering", "Stimulate Innovation and Address Societal Needs through Research and Education", and "Excel as a Federal Science Agency". "Transform the Frontiers of Science and Engineering" emphasizes the seamless integration of research and education as well as the close coupling of research infrastructure and discovery. "Stimulate Innovation and Address Societal Needs through Research and Education" points to the tight linkage between NSF programs and societal needs, and highlights the role that new knowledge and creativity play in economic prosperity and society's general welfare. "Excel as a Federal Science Agency" emphasizes the importance to NSF of attaining excellence and inclusion in all operational aspects. Stewardship costs directly reflect the third strategic goal, "Excel as a Federal Science Agency", and are prorated among the Net Cost programs. Stewardship costs include expenditures incurred from the AOAM, NSB, and Office of Inspector General (OIG) appropriations. These appropriations support salaries and benefits of persons employed at NSF; general operating expenses, including support of NSF's information systems technology; staff training, audit and OIG activities; and OPM and DOL benefits costs paid on behalf of NSF.

As of September 30, 2016 and 2015, approximately 95 percent of NSF's expenses amounting to \$6.8 billion, in both fiscal years, were directly related to the "Transform the Frontiers of Science and Engineering" and "Stimulate Innovation and Address Social Needs through Research and Education" strategic outcome goals. As of September 30, 2016 and 2015, costs related to the stewardship activities totaled \$371.2 million and \$329.7 million, respectively.

In accordance with OMB Circular A-136, costs incurred for services provided by other federal entities are reported in the full costs of NSF programs and are separately identified in this note as "Federal." Costs incurred with non-federal entities are identified in this note as "Public." All earned revenues are offsetting collections provided through reimbursable agreements with other federal entities and are retained by NSF. Earned revenues are recognized when the related program or administrative expenses are incurred and are deducted from the full cost of the programs to arrive at the net cost of operating NSF's programs. NSF applies a cost recovery fee on other federal entities consistent with applicable legislation and U.S. Government Accountability Office decisions. NSF recovers the costs incurred in the management, administration, and oversight of activities authorized and/or funded by interagency agreements where NSF is the performing agency.



**Intragovernmental and Public Costs and Earned Revenue by Program**

(Amounts in Thousands)	2016		
	Federal	Public	Total
Research and Related Activities			
Gross Costs	\$ 221,997	\$ 5,757,546	\$ 5,979,543
Less: Earned Revenue	(104,648)	(3,529)	(108,177)
Net Research and Related Activities	<u>117,349</u>	<u>5,754,017</u>	<u>5,871,366</u>
Education and Human Resources			
Gross Costs	\$ 8,587	\$ 852,708	\$ 861,295
Less: Earned Revenue	(2,432)	(82)	(2,514)
Net Education and Human Resources	<u>6,155</u>	<u>852,626</u>	<u>858,781</u>
Major Research Equipment and Facilities Construction			
Gross Costs	\$ -	\$ 182,474	\$ 182,474
Less: Earned Revenue	-	-	-
Net Major Research Equipment and Facilities Construction	<u>-</u>	<u>182,474</u>	<u>182,474</u>
Donations and Dedicated Collections			
Gross Costs	\$ 171	\$ 133,555	\$ 133,726
Less: Earned Revenue	-	-	-
Net Donations and Dedicated Collections	<u>171</u>	<u>133,555</u>	<u>133,726</u>
Net Cost of Operations	<u>\$ 123,675</u>	<u>\$ 6,922,672</u>	<u>\$ 7,046,347</u>

(Amounts in Thousands)	2015		
	Federal	Public	Total
Research and Related Activities			
Gross Costs	\$ 209,657	\$ 5,696,069	\$ 5,905,726
Less: Earned Revenue	(127,447)	(2,382)	(129,829)
Net Research and Related Activities	<u>82,210</u>	<u>5,693,687</u>	<u>5,775,897</u>
Education and Human Resources			
Gross Costs	\$ 6,741	\$ 835,338	\$ 842,079
Less: Earned Revenue	(6,204)	(116)	(6,320)
Net Education and Human Resources	<u>537</u>	<u>835,222</u>	<u>835,759</u>
Major Research Equipment and Facilities Construction			
Gross Costs	\$ -	\$ 264,161	\$ 264,161
Less: Earned Revenue	-	-	-
Net Major Research Equipment and Facilities Construction	<u>-</u>	<u>264,161</u>	<u>264,161</u>
Donations and Dedicated Collections			
Gross Costs	\$ -	\$ 104,527	\$ 104,527
Less: Earned Revenue	-	-	-
Net Donations and Dedicated Collections	<u>-</u>	<u>104,527</u>	<u>104,527</u>
Net Cost of Operations	<u>\$ 82,747</u>	<u>\$ 6,897,597</u>	<u>\$ 6,980,344</u>

**Note 9. Apportionment Categories of Obligations Incurred: Direct vs. Reimbursable Obligations**

OMB Circular A-11, *Preparation, Submission, and Execution of the Budget*, requires direct and reimbursable obligations be reported as Category A, Category B, or Exempt from Apportionment. In fiscal years 2016 and 2015, NSF's SF-133, *Report on Budget Execution and Budgetary Resources*, reported all new obligations and upward adjustments under Category B which is by activity, project, or object.

As of September 30, 2016 and 2015, direct and reimbursable obligations were:

(Amounts in Thousands)	2016	2015
Apportionment Category B		
Direct	\$ 7,714,090	\$ 7,623,853
Reimbursable	94,634	126,037
New Obligations and Upward Adjustments	\$ 7,808,724	\$ 7,749,890

**Note 10. Undelivered Orders at the End of the Period**

In accordance with SFFAS No. 7, *Accounting for Revenue and Other Financing Sources*, the amount of budgetary resources obligated for undelivered orders for the years ended September 30, 2016 and 2015 amounted to \$12.2 billion and \$11.7 billion, respectively.

**Note 11. Permanent Indefinite Appropriations**

NSF maintains permanent indefinite appropriations for R&RA, AOAM and MREFC.

The R&RA appropriation is used for polar research and operations support, and for reimbursement to other federal agencies for operational and science support, and logistical and other related activities for USAP. In FYs 2016 and 2015 the permanent indefinite appropriations for R&RA were \$442.8 million and \$437.8 million, respectively, and are reported as current year transfers from the annual R&RA appropriation.

The AOAM appropriation is used to fund the multi-year effort associated with NSF's upcoming headquarters relocation. In FYs 2016 and 2015, the permanent indefinite appropriations for AOAM were \$30.8 million and \$18.1 million, respectively. The FY 2016 permanent indefinite appropriation was comprised of a \$3.8 million current year transfer from the annual AOAM appropriation and a \$27.0 million transfer from the R&RA, EHR, and MREFC appropriations. The latter transfer was the result of exercising the Administrative Provision described in Note 1D, *Revenue and Other Financing Sources*. In FY 2015, the permanent indefinite appropriation for AOAM was reported as a current year transfer from the annual AOAM appropriation.

The MREFC appropriation supports the procurement and construction of unique national research platforms and major research equipment. In FY 2016, the permanent indefinite appropriation for MREFC was \$198.3 million and is reported net of transfers out as a result of the Administrative Provision. In FY 2015, the permanent indefinite appropriation for MREFC was \$200.8 million.

**Note 12. Explanation of Differences between the Statement of Budgetary Resources and the Budget of the United States Government**

SFFAS No. 7, *Accounting for Revenue and Other Financing Sources and Concepts for Reconciling Budgetary and Financial Accounting*, requires explanations of material differences between amounts reported in the Statement of Budgetary Resources (SBR) and the actual balances published in the

President’s Budget. The FY 2018 President’s Budget will include FY 2016 budget execution information and is scheduled for publication in the spring of 2017.<sup>2</sup>

Balances reported in the FY 2015 SBR and the related President’s Budget are shown in a table below for *Budgetary Resources*, *Obligations Incurred*, *Unobligated Balance - Unavailable*, *Distributed Offsetting Receipts*, and any related differences. The differences reported are due to differing reporting requirements for expired and unexpired appropriations between the Treasury guidance used to prepare the SBR and the OMB guidance used to prepare the President’s Budget. The SBR includes both unexpired and expired appropriations, while the President’s Budget presents only unexpired budgetary resources that are available for new obligations. Additionally, the *Distributed Offsetting Receipts* amount on the SBR includes donations, while the President's Budget does not.

(Amounts in Thousands)	2015			
	Budgetary Resources	Obligations Incurred	Unobligated Balance - Unavailable	Distributed Offsetting Receipts
Combined Statement of Budgetary Resources	\$ 8,144,417	\$ 7,749,890	\$ 170,804	\$ 37,834
Budget of the U.S. Government	\$ 7,921,439	\$ 7,678,096	\$ 19,620	\$ 3,000
Difference	\$ 222,978	\$ 71,794	\$ 151,184	\$ 34,834

### **Note 13. Awards to Affiliated Institutions**

NSB members may be affiliated with institutions that are eligible to receive grants and awards from NSF. NSF made awards totaling \$848.3 million to Board member affiliated institutions in FY 2016. The Board does not review all NSF award actions; however the following require NSB approval for the NSF Director to take action under delegated authority:

- Proposed awards, requests for proposals (RFPs), and solicitations that meet or exceed a threshold where the average annual award amount is the greater of 1 percent or more of the awarding Directorate's or Office's prior year plan or 0.1 percent or more of the prior year total NSF budget (enacted level);
- New programs where the total annualized awards exceed 3 percent of the awarding Directorate's or Office's prior year current plan, involve sensitive political or policy issues, or will be funded as an ongoing NSF-wide activity; and
- Major construction projects.

The Director’s Review Board (DRB) reviews proposed actions for evaluation adequacy and documentation, and compliance with Foundation policies, procedures, and strategies. Items requiring DRB action include large awards and RFPs that meet or exceed a threshold of 2.5 percent of the prior year Division or Subactivity Plan. In addition, the DRB reviews all items requiring NSB action, as well as NSB information items prior to submission.

NSF may fund awards meeting the above requirements to institutions affiliated with Board members. Federal conflict-of-interest rules prohibit NSB members from participating in matters where they have a conflict of interest or there is an impartiality concern without prior authorization from the Designated Agency Ethics Official (DAEO). Prior to Board meetings, all NSB action items are screened for conflict-of-interest/impartiality concerns by the Office of the General Counsel. Members who have conflicts are either recused from the matter or receive a waiver from the DAEO to participate. In FY 2016, NSB did not approve any awards to Board member affiliated institutions.

<sup>2</sup> OMB website: <https://www.whitehouse.gov/omb>

**Note 14. Reconciliation of Net Cost of Operations to Budget**

(Amounts in Thousands)	2016	2015
<b>Resources Used To Finance Activities</b>		
Budgetary Resources Obligated		
New Obligations and Upward Adjustments	\$ 7,808,724	\$ 7,749,890
Less: Spending Authority from Offsetting Collections and Recoveries	(205,234)	(322,603)
Obligations Net of Offsetting Collections and Recoveries	7,603,490	7,427,287
Less: Distributed Offsetting Receipts	(28,648)	(37,834)
Net Obligations	7,574,842	7,389,453
Other Resources		
Imputed Financing	9,020	9,133
Other Resources	(3,868)	(2,602)
Net Other Resources Used to Finance Activities	5,152	6,531
<b>Total Resources Used to Finance Activities</b>	<b>7,579,994</b>	<b>7,395,984</b>
<b>Resources Used to Finance Items Not Part of the Net Cost of Operations</b>		
Change in Budgetary Resources Obligated for Goods, Services and Benefits Ordered but Not Yet Provided	(577,426)	(445,362)
Resources that Fund Expenses Recognized in Prior Periods	352	(15)
Budgetary Offsetting Collections and Receipts that Do Not Affect Net Cost of Operations	28,648	37,834
Resources that Finance the Acquisition of Assets	(17,088)	(35,835)
<b>Total Resources Used to Finance Items Not Part of the Net Cost of Operations</b>	<b>(565,514)</b>	<b>(443,378)</b>
<b>Total Resources Used to Finance Net Cost of Operations</b>	<b>7,014,480</b>	<b>6,952,606</b>
<b>Components of the Net Cost of Operations that will not Require or Generate Resources in the Current Period</b>		
Components Requiring or Generating Resources in Future Periods		
Other	649	11
<b>Total Components of Net Cost of Operations that will Require or Generate Resources in Future Periods</b>	<b>649</b>	<b>11</b>
Components Not Requiring or Generating Resources		
Depreciation and Amortization	31,754	28,326
Other	(536)	(599)
<b>Total Components of Net Cost of Operations that will not Require or Generate Resources</b>	<b>31,218</b>	<b>27,727</b>
<b>Total Components of Net Cost of Operations that Will Not Require or Generate Resources in the Current Period</b>	<b>31,867</b>	<b>27,738</b>
<b>Net Cost of Operations</b>	<b>\$ 7,046,347</b>	<b>\$ 6,980,344</b>

# **Required Supplementary Stewardship Information**

## **Stewardship Investments**

For the Fiscal Years ended September 30, 2016 and 2015

**Stewardship Investments**  
**Research and Human Capital**  
**(Dollars in Thousands)**

**Research and Human Capital Activities**

	<u>2016</u>	<u>2015</u>	<u>2014</u>	<u>2013</u>	<u>2012</u>
Basic Research	\$ 5,216,976	\$ 5,202,144	\$ 5,383,795	\$ 5,446,790	\$ 5,590,843
Applied Research	793,519	782,986	726,087	588,261	532,729
Education and Training	775,326	801,678	941,330	861,871	991,543
Non-Investing Activities	371,217	329,685	309,837	327,357	333,712
<b>Total Research &amp; Human Capital Activities</b>	<u>\$ 7,157,038</u>	<u>\$ 7,116,493</u>	<u>\$ 7,361,049</u>	<u>\$ 7,224,279</u>	<u>\$ 7,448,827</u>

**Inputs, Outputs and/or Outcomes**

**Research and Human Capital Activities**

Investments In:

Universities	\$ 5,289,267	\$ 5,201,477	\$ 5,407,717	\$ 5,025,068	\$ 5,445,926
Industry	300,279	365,221	286,916	337,818	280,452
Federal Agencies	178,845	167,018	252,596	208,806	264,846
Small Business	240,759	225,958	224,931	249,443	239,866
Federally Funded R&D Centers	231,977	231,813	234,515	280,032	229,474
Non-Profit Organizations	446,750	451,232	529,482	605,059	523,772
Other	469,161	473,774	424,892	518,053	464,491
	<u>\$ 7,157,038</u>	<u>\$ 7,116,493</u>	<u>\$ 7,361,049</u>	<u>\$ 7,224,279</u>	<u>\$ 7,448,827</u>

Support To:

Scientists	\$ 595,743	\$ 584,865	\$ 550,800	\$ 539,713	\$ 544,452
Postdoctoral Programs	195,874	203,128	190,188	190,564	192,863
Graduate Students	625,059	629,922	586,443	568,548	574,557
	<u>\$ 1,416,676</u>	<u>\$ 1,417,915</u>	<u>\$ 1,327,431</u>	<u>\$ 1,298,825</u>	<u>\$ 1,311,872</u>

**Outputs & Outcomes (Rounded):**

Number of:

Award Actions	21,000	21,000	20,000	20,000	23,000
Senior Researchers	44,000	42,000	41,000	44,000	56,000
Other Professionals	14,000	14,000	17,000	14,000	14,000
Postdoctoral Associates	6,000	6,000	6,000	6,000	6,000
Graduate Students	41,000	42,000	40,000	42,000	42,000
Undergraduate Students	38,000	36,000	34,000	29,000	31,000
K-12 Students	170,000	172,000	130,000	124,000	125,000
K-12 Teachers	44,000	41,000	40,000	40,000	45,000

NSF's mission is to support basic scientific research and research fundamental to the engineering process as well as science and engineering education programs. NSF's Stewardship Investments fall principally into the categories of Research and Human Capital. For expenses incurred under the Research category, the majority of NSF funding is devoted to basic research, with a relatively small share going to applied research. This funding supports both the conduct of research and the necessary supporting infrastructure, including state-of-the-art instrumentation, equipment, computing resources, and multi-user facilities such as digital libraries, observatories, and research vessels and aircraft. Basic research, applied research, and education and training expenses are determined by prorating the program costs of NSF's R&RA, EHR, and MREFC appropriations, donations, and funds from dedicated collections reported on the Statement of Net Cost. The proration uses the basic research, applied research, and education and training percentages of total estimated research and development obligations reported in the FY 2017 Budget Request to Congress. The actual numbers are not available until later in the following fiscal year. Non-Investing activities reflect stewardship costs incurred from the AOAM, NSB, and OIG appropriations.

The data provided for scientists, postdoctoral associates, and graduate students are obtained from NSF's award budget information as recorded at the time the award is made. The number of award actions are actual values from NSF's Enterprise Information System (EIS). The remaining outputs and outcomes are estimates provided annually by the NSF directorates. These estimates are reported in the annual NSF Budget Request to Congress.

NSF's Human Capital investments focus principally on education and training, toward a goal of creating a diverse, internationally competitive, and globally engaged workforce of scientists, engineers and well-prepared citizens. NSF supports activities to improve formal and informal science, mathematics, engineering and technology education at all levels, as well as public science literacy projects that engage people of all ages in life-long learning. The number of K-12 students involved in NSF activities is based on a robust data collection and analysis process. The reported number of K-12 students and teachers in FY 2016 is an estimate and excludes data from the jurisdictions of Mississippi, Nebraska, Puerto Rico, and Tennessee. Reporting from these jurisdictions is expected to be final by December 2016 and will be reflected in the FY 2018 Budget Request to Congress.

## **Required Supplementary Information**

### **Deferred Maintenance and Repairs**

For the Fiscal Years ended September 30, 2016 and 2015



## **Deferred Maintenance and Repairs**

NSF performs condition assessment surveys in accordance with SFFAS No. 42 for capitalized general PP&E to determine if any maintenance and repairs are needed to keep an asset in an acceptable condition or restore an asset to a specific level of performance. NSF considers deferred maintenance and repairs to be any maintenance and repairs that are not performed on schedule, unless it is determined from the condition of the asset that scheduled maintenance does not have to be performed. Deferred maintenance and repairs also include any other type of maintenance or repair that, if not performed, would render the PP&E non-operational. Circumstances such as non-availability of parts or funding are considered reasons for deferring maintenance and repairs.

NSF considered whether any scheduled maintenance or repair necessary to keep fixed assets of the agency in an acceptable condition was deferred at years ended September 30, 2016 and 2015. Assets deemed to be in excellent, good, or fair condition are considered to be in acceptable condition. Assets in poor condition are in unacceptable condition and the deferred maintenance and repairs required to get them to an acceptable condition are reported. NSF determines the condition of an asset in accordance with standards comparable to those used in the private industry. Due to the environment and remote location of Antarctica, all deferred maintenance and repairs on assets in poor condition are considered critical in order to maintain operational status.

In accordance with SFFAS No. 42, NSF discloses the beginning and ending balances for the year ending September 30, 2016. At September 30, 2016 NSF determined that scheduled maintenance or repairs on one item of Antarctic capital equipment in poor condition was not completed and was deferred or delayed for a future period. The dollar amount of deferred maintenance for this item was \$0.6 thousand. The item is heavy, mobile equipment and is considered critical to NSF operations.

At September 30, 2015, NSF determined that scheduled maintenance on one item of Antarctic capital equipment in very poor condition was not completed and was deferred or delayed for a future period. The dollar amount of deferred maintenance for this item was \$2.6 thousand. The item is light, mobile equipment and is considered critical to NSF operations.

## **Required Supplementary Information**

### **Combining Statement of Budgetary Resources by Major Budget Accounts**

In the following tables, NSF budgetary information for the fiscal years ended September 30, 2016 and 2015, as presented in the Statement of Budgetary Resources, is disaggregated for each of NSF's major budget accounts.

The Science Appropriations Act, 2016

2016

(Amounts in Thousands)

	<u>Research and Related Activities</u>	<u>Education and Human Resources</u>	<u>Major Research Equipment</u>	<u>OIG, AOAM, and NSB</u>	<u>Special and Donated</u>	<u>Total</u>
<b>Budgetary Resources</b>						
Unobligated Balance - Brought Forward, October 1	\$ 130,595	36,992	58,058	23,745	145,137	\$ 394,527
Recoveries of Prior Year Unpaid Obligations	70,230	22,004	2,343	6,581	4,590	105,748
Other Changes in Unobligated Balance	(50,217)	(14,567)	-	(3,271)	88	(67,967)
Unobligated Balance from Prior Year Budget Authority, Net	150,608	44,429	60,401	27,055	149,815	432,308
Appropriations	5,989,675	878,970	218,310	376,530	163,735	7,627,220
Spending Authority from Offsetting Collections	87,580	4,395	-	5,486	-	97,461
<b>Total Budgetary Resources</b>	<b>\$ 6,227,863</b>	<b>927,794</b>	<b>278,711</b>	<b>409,071</b>	<b>313,550</b>	<b>\$ 8,156,989</b>
<b>Status of Budgetary Resources</b>						
New Obligations and Upward Adjustments	\$ 6,084,322	889,957	241,499	377,958	214,988	\$ 7,808,724
Unobligated Balance, End of Year						
Apportioned, Unexpired	17,311	5,394	28,538	24,639	84,431	160,313
Unapportioned, Unexpired	3,219	2,023	8,674	115	14,131	28,162
Unobligated Balance, Unexpired, End of Year	20,530	7,417	37,212	24,754	98,562	188,475
Unobligated Balance, Expired, End of Year	123,011	30,420	-	6,359	-	159,790
Total Unobligated Balance, End of Year	143,541	37,837	37,212	31,113	98,562	348,265
<b>Total Status of Budgetary Resources</b>	<b>\$ 6,227,863</b>	<b>927,794</b>	<b>278,711</b>	<b>409,071</b>	<b>313,550</b>	<b>\$ 8,156,989</b>
<b>Change in Obligated Balance</b>						
Unpaid Obligations						
Unpaid Obligations - Brought Forward, October 1, Gross	\$ 9,671,789	1,736,551	174,408	92,422	403,379	\$ 12,078,549
New Obligations and Upward Adjustments	6,084,322	889,957	241,499	377,958	214,988	7,808,724
Gross Outlays	(5,585,066)	(816,626)	(173,268)	(342,253)	(123,904)	(7,041,117)
Recoveries of Prior Year Unpaid Obligations	(70,230)	(22,004)	(2,343)	(6,581)	(4,590)	(105,748)
Unpaid Obligations - End of Year, Gross	10,100,815	1,787,878	240,296	121,546	489,873	12,740,408
Uncollected Payments						
Uncollected Payments from Federal Sources - Brought Forward, October 1	\$ (97,894)	(5,191)	-	(871)	-	\$ (103,956)
Change in Uncollected Payments from Federal Sources	10,149	(2,023)	-	444	-	8,570
Uncollected Payments from Federal Sources, End of Year	(87,745)	(7,214)	-	(427)	-	(95,386)
Memorandum (non-add) Entries						
Obligated Balance - Start of Year	\$ 9,573,895	1,731,360	174,408	91,551	403,379	\$ 11,974,593
Obligated Balance - End of Year	\$ 10,013,070	1,780,664	240,296	121,119	489,873	\$ 12,645,022
<b>Budget Authority and Outlays, Net</b>						
Budget Authority, Gross	\$ 6,077,255	883,365	218,310	382,016	163,735	\$ 7,724,681
Actual Offsetting Collections	(98,572)	(2,924)	-	(6,472)	(88)	(108,056)
Change in Uncollected Customer Payments from Federal Sources	10,149	(2,023)	-	444	-	8,570
Recoveries of Prior Year Paid Obligations	843	552	-	542	88	2,025
Budget Authority, Net	<b>\$ 5,989,675</b>	<b>878,970</b>	<b>218,310</b>	<b>376,530</b>	<b>163,735</b>	<b>\$ 7,627,220</b>
Gross Outlays	\$ 5,585,066	816,626	173,268	342,253	123,904	\$ 7,041,117
Actual Offsetting Collections	(98,572)	(2,924)	-	(6,472)	(88)	(108,056)
Net Outlays	<b>5,486,494</b>	<b>813,702</b>	<b>173,268</b>	<b>335,781</b>	<b>123,816</b>	<b>6,933,061</b>
Distributed Offsetting Receipts	-	-	-	-	(28,648)	(28,648)
Net Agency Outlays	<b>\$ 5,486,494</b>	<b>813,702</b>	<b>173,268</b>	<b>335,781</b>	<b>95,168</b>	<b>\$ 6,904,413</b>

**The Science Appropriations Act, 2015**

2015  
(Amounts in Thousands)

	<u>Research and Related Activities</u>	<u>Education and Human Resources</u>	<u>Major Research Equipment</u>	<u>OIG, AOAM, and NSB</u>	<u>Special and Donated</u>	<u>Total</u>
<b>Budgetary Resources</b>						
Unobligated Balance - Brought Forward, October 1	\$ 202,480	48,507	390	6,157	136,199	\$ 393,733
Recoveries of Prior Year Unpaid Obligations	174,987	29,285	-	9,197	4,868	218,337
Other Changes in Unobligated Balance	(71,891)	(17,228)	1,668	(3,353)	184	(90,620)
Unobligated Balance from Prior Year Budget Authority, Net	305,576	60,564	2,058	12,001	141,251	521,450
Appropriations	5,933,645	866,000	200,760	343,800	177,865	7,522,070
Spending Authority from Offsetting Collections	90,122	4,793	-	5,982	-	100,897
<b>Total Budgetary Resources</b>	<b>\$ 6,329,343</b>	<b>931,357</b>	<b>202,818</b>	<b>361,783</b>	<b>319,116</b>	<b>\$ 8,144,417</b>
<b>Status of Budgetary Resources</b>						
New Obligations and Upward Adjustments	\$ 6,198,748	894,365	144,760	338,038	173,979	\$ 7,749,890
Unobligated Balance, End of Year						
Apportioned, Unexpired	6,836	3,577	56,390	18,891	138,029	223,723
Unapportioned, Unexpired	8,811	2,033	1,668	-	7,108	19,620
Unobligated Balance, Unexpired, End of Year	15,647	5,610	58,058	18,891	145,137	243,343
Unobligated Balance, Expired, End of Year	114,948	31,382	-	4,854	-	151,184
Total Unobligated Balance, End of Year	130,595	36,992	58,058	23,745	145,137	394,527
<b>Total Status of Budgetary Resources</b>	<b>\$ 6,329,343</b>	<b>931,357</b>	<b>202,818</b>	<b>361,783</b>	<b>319,116</b>	<b>\$ 8,144,417</b>
<b>Change in Obligated Balance</b>						
Unpaid Obligations						
Unpaid Obligations - Brought Forward, October 1, Gross	\$ 9,173,916	1,667,606	287,357	87,747	328,013	\$ 11,544,639
New Obligations and Upward Adjustments	6,198,748	894,365	144,760	338,038	173,979	7,749,890
Gross Outlays	(5,525,888)	(796,135)	(257,709)	(324,166)	(93,745)	(6,997,643)
Recoveries of Prior Year Unpaid Obligations	(174,987)	(29,285)	-	(9,197)	(4,868)	(218,337)
Unpaid Obligations - End of Year, Gross	9,671,789	1,736,551	174,408	92,422	403,379	12,078,549
Uncollected Payments						
Uncollected Payments from Federal Sources - Brought Forward, October 1	\$ (116,508)	(6,195)	-	(232)	-	\$ (122,935)
Change in Uncollected Payments from Federal Sources	18,614	1,004	-	(639)	-	18,979
Uncollected Payments from Federal Sources, End of Year	(97,894)	(5,191)	-	(871)	-	(103,956)
Memorandum (non-add) Entries						
Obligated Balance - Start of Year	\$ 9,057,408	1,661,411	287,357	87,515	328,013	\$ 11,421,704
Obligated Balance - End of Year	\$ 9,573,895	1,731,360	174,408	91,551	403,379	\$ 11,974,593
<b>Budget Authority and Outlays, Net</b>						
Budget Authority, Gross	\$ 6,023,767	870,793	200,760	349,782	177,865	\$ 7,622,967
Actual Offsetting Collections	(110,090)	(5,930)	(1,668)	(5,373)	(184)	(123,245)
Change in Uncollected Customer Payments from Federal Sources	18,614	1,004	-	(639)	-	18,979
Recoveries of Prior Year Paid Obligations	1,354	133	1,668	30	184	3,369
Budget Authority, Net	<b>\$ 5,933,645</b>	<b>866,000</b>	<b>200,760</b>	<b>343,800</b>	<b>177,865</b>	<b>\$ 7,522,070</b>
Gross Outlays	\$ 5,525,888	796,135	257,709	324,166	93,745	\$ 6,997,643
Actual Offsetting Collections	(110,090)	(5,930)	(1,668)	(5,373)	(184)	(123,245)
Net Outlays	<b>5,415,798</b>	<b>790,205</b>	<b>256,041</b>	<b>318,793</b>	<b>93,561</b>	<b>6,874,398</b>
Distributed Offsetting Receipts	-	-	-	-	(37,834)	(37,834)
Net Agency Outlays	<b>\$ 5,415,798</b>	<b>790,205</b>	<b>256,041</b>	<b>318,793</b>	<b>55,727</b>	<b>\$ 6,836,564</b>

## **Other Information**

### **Combined Schedule of Spending**

For the Fiscal Years ended September 30, 2016 and 2015

The Combined Schedule of Spending (SOS) was developed to make information about government spending more accessible and transparent to the public. To help achieve this goal, specific line items found in the Statement of Budgetary Resources (SBR), which relate to government spending, have been simplified and reorganized to help readers better understand accounting terminology. The focus of the SOS is to provide a user-friendly report that answers the following questions:

- 1) **What money is available to spend?** This section ties directly to the SBR and indicates the total resources available less funds that were unobligated or unavailable for spending.
- 2) **How was the money spent/issued?** This section presents total obligations incurred and shows the most significant goods or services purchased, as well as payment types, by appropriation category. The Other line is comprised of miscellaneous management expenses.
- 3) **Who did the money go to?** This section presents total obligations incurred by the type of entity to which the funds were awarded. The presentation is similar to the RSSI Investments in Research and Human Capital Activities section; however, the SOS presents performance organization data for new obligations incurred and the RSSI presents performance organization data for expenditures incurred.
- 4) **How does the SOS compare to the SBR and USASpending.gov?** This section describes the similarities and differences between the SOS, SBR, and the USASpending.gov website.

**National Science Foundation  
Combined Schedule of Spending  
For the Year Ended September 30, 2016  
(Amounts in Thousands)**

	<u>Research and Related Activities</u>	<u>Education and Human Resources</u>	<u>Major Research Equipment</u>	<u>OIG, AOAM and NSB</u>	<u>Special and Donated</u>	<u>Total</u>
<b>What Money is Available to Spend?</b>						
Total Resources	\$ 6,227,863	927,794	278,711	409,071	313,550	8,156,989
Less: Amount Available but Not Agreed to be Spent	(17,311)	(5,394)	(28,538)	(24,639)	(84,431)	(160,313)
Less: Amount Not Available to be Spent (Unexpired)	(3,219)	(2,023)	(8,674)	(115)	(14,131)	(28,162)
Less: Amount Not Available to be Spent (Expired)	(123,011)	(30,420)	-	(6,359)	-	(159,790)
<b>Total Amounts Agreed to be Spent</b>	<b>\$ 6,084,322</b>	<b>889,957</b>	<b>241,499</b>	<b>377,958</b>	<b>214,988</b>	<b>7,808,724</b>
<b>How Was the Money Spent/Issued?</b>						
Compensation and Benefits	\$ 764	121	-	228,823	43	229,751
Travel and Transportation of Persons	15,927	1,399	-	6,307	578	24,211
Contracts	384,091	15,474	329	106,556	(1,196)	505,254
Rent, Communications, and Utilities	1,184	190	-	36,131	6	37,511
Grants, Subsidies and Contributions	5,682,357	872,767	241,170	143	215,532	7,011,969
Other	(1)	6	-	(2)	25	28
<b>Total Amounts Agreed to be Spent</b>	<b>\$ 6,084,322</b>	<b>889,957</b>	<b>241,499</b>	<b>377,958</b>	<b>214,988</b>	<b>7,808,724</b>
<b>Who did the Money go to?</b>						
Universities	\$ 4,833,051	765,985	38,853	21,444	191,341	\$ 5,850,674
Industry	201,407	11,384	329	18,494	(1,206)	\$ 230,408
Federal Agencies	154,427	7,146	-	61,992	260	\$ 223,825
Small Business	219,689	24,933	-	40,164	1,222	\$ 286,008
FFRDC	146,787	2,660	112,970	(2)	12,164	\$ 274,579
Non- Profit	359,696	80,833	89,347	1,608	11,325	\$ 542,809
Other	169,265	(2,984)	-	234,258	(118)	\$ 400,421
<b>Total Amounts Agreed to be Spent</b>	<b>\$ 6,084,322</b>	<b>\$ 889,957</b>	<b>\$ 241,499</b>	<b>\$ 377,958</b>	<b>\$ 214,988</b>	<b>\$ 7,808,724</b>

**National Science Foundation  
Combined Schedule of Spending  
For the Year Ended September 30, 2015  
(Amounts in Thousands)**

	<u>Research and Related Activities</u>	<u>Education and Human Resources</u>	<u>Major Research Equipment</u>	<u>OIG, AOAM and NSB</u>	<u>Special and Donated</u>	<u>Total</u>
<b>What Money is Available to Spend?</b>						
Total Resources	\$ 6,329,343	931,357	202,818	361,783	319,116	8,144,417
Less: Amount Available but Not Agreed to be Spent	(6,836)	(3,577)	(56,390)	(18,891)	(138,029)	(223,723)
Less: Amount Not Available to be Spent (Unexpired)	(8,811)	(2,033)	(1,668)	-	(7,108)	(19,620)
Less: Amount Not Available to be Spent (Expired)	(114,948)	(31,382)	-	(4,854)	-	(151,184)
<b>Total Amounts Agreed to be Spent</b>	<b>\$ 6,198,748</b>	<b>894,365</b>	<b>144,760</b>	<b>338,038</b>	<b>173,979</b>	<b>7,749,890</b>
<b>How Was the Money Spent/Issued?</b>						
Compensation and Benefits	\$ 823	129	-	224,928	19	225,899
Travel and Transportation of Persons	15,694	1,685	-	6,167	314	23,860
Contracts	505,151	26,829	-	70,380	528	602,888
Rent, Communications, and Utilities	723	109	-	36,237	5	37,074
Grants, Subsidies and Contributions	5,676,275	865,598	144,760	159	173,095	6,859,887
Other	82	15	-	167	18	282
<b>Total Amounts Agreed to be Spent</b>	<b>\$ 6,198,748</b>	<b>894,365</b>	<b>144,760</b>	<b>338,038</b>	<b>173,979</b>	<b>7,749,890</b>
<b>Who did the Money go to?</b>						
Universities	\$ 4,873,185	761,891	40,000	13,984	152,441	5,841,501
Industry	259,329	15,304	-	29,874	1,501	306,008
Federal Agencies	139,474	4,808	-	44,803	414	189,499
Small Business	215,516	19,620	-	16,857	2,389	254,382
FFRDC	143,343	316	104,760	-	12,347	260,766
Non- Profit	335,451	91,988	-	1,889	4,249	433,577
Other	232,450	438	-	230,631	638	464,157
<b>Total Amounts Agreed to be Spent</b>	<b>\$ 6,198,748</b>	<b>894,365</b>	<b>144,760</b>	<b>338,038</b>	<b>173,979</b>	<b>7,749,890</b>



## How Does the SOS Compare to the SBR and USASpending.gov?

The SOS, SBR, and the USASpending.gov website all serve a purpose to provide transparency to the general public regarding how federal agencies obtain funding and where those funds are spent. These reports display NSF spending information at various levels of detail to provide a wide range of information to the readers. The SBR is prepared using the United States Standard General Ledger (USSGL) trial balance and provides information about how budgetary resources were made available as well as their status at the end of the period. Data reported on the SBR is ultimately reconcilable with data reported in the Budget of the United States Government. The SOS presents total budgetary resources and the total amounts agreed to be spent which equates to fiscal year-to-date obligations reported on the SBR. This schedule provides the reader with detailed agency information that describes the types of activities NSF's resources will be used for and who these resources will be given to. Like the SOS, USASpending.gov<sup>1</sup> also provides agency obligation information on awards and contracts that have been obligated over the past ten fiscal years. Variances between USASpending.gov and SOS data can be attributed to the following:

- USASpending.gov includes obligation information for contracts and grants, only. The SOS includes additional obligation information to include travel, employee salaries and benefits, and rent.
- USASpending.gov includes grant and contract data associated with specific Budget Object Classes. The SOS classifies a larger population of Budget Object Classes as a grant or contract.
- USASpending.gov excludes contracts where the total amount funded does not exceed \$25.0 thousand. The SOS includes all contracts, regardless of dollar value.
- USASpending.gov does not include awards made to other Federal agencies via Outgoing Interagency Agreement (IAA); whereas, the SOS includes these awards.
- The SOS includes accruals and other financial information applicable to, but posted subsequent to September 30, 2016 and 2015. USASpending.gov data is based on financial information that is included in the financial system on September 30.

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<sup>1</sup> USASpending.gov website: <https://www.usaspending.gov/Pages/default.aspx>

## **Other Information**

### **Undisbursed Balances in Expired Grant Accounts**

## Undisbursed Balances in Expired Grant Accounts

In FY 2016, NSF funded research and education in science and engineering through grants and cooperative agreements to 1,883 colleges, universities, and other institutions. NSF grants are funded in one of two ways: 1) the grant may be funded fully at the time of award, called a standard grant, or 2) the grant may be funded incrementally (one year at a time), called a continuing grant. In both cases, all costs on the grant must be incurred by the grantee during the term of the grant period. At NSF, grantees typically have 120 days after the grant expires to complete final drawdowns and expenditures.

The information provided here pertains to the agency’s two grant making appropriation accounts: Research and Related Activities (R&RA) and Education and Human Resources (EHR). The data reported are based on the following definitions:

- An expired grant is a grant award that has reached the grant end date and is eligible for closeout. For NSF, this means grants whose period of performance has expired.
- Undisbursed balances on expired grants represent the unliquidated obligation amounts that remain available for expenditure on an expired grant award before it is closed out.

Once a grant has expired, NSF takes actions to close out the grant both administratively and financially. The financial closeout action takes place 120 days after the award expiration date when the undisbursed balances are de-obligated from the award. Administrative closeout is initiated after financial closeout is completed.

The methodology used to develop undisbursed balances on expired grant awards is consistent with the U.S. Government Accountability Office (GAO) conclusions documented in their April 2012 report, GAO-12-360, *Grants Management: Action Needed to Improve the Timeliness of Grant Closeouts by Federal Agencies*, along with discussion and clarifying information from GAO. The data reported here reflects the amount of undisbursed balances in grant accounts that have reached their end date and are eligible for closeout.

**1. In the preceding three fiscal years, provide the total number of expired grant accounts with undisbursed balances (on the first day for each fiscal year) for the department, agency, or instrumentality and the total amount that has not been obligated to specific grant or project remaining in the accounts.**

The number of expired grants with undisbursed balances for the preceding three fiscal years is provided in Table 2.1. The numbers and balances reflect a point in time before expired awards are closed out during normal processes described above. For FY 2016, there were 5,132 expired grants with undisbursed balances of \$113,215,313. The increase in the number of expired grants between FY 2015 and FY 2016 is attributed primarily to over 850 grants with undisbursed balances under \$25.

**Table 2.1 – Status of Undisbursed Balances in Expired Grants**

	FY 2016 (as of 9/30/16)	FY 2015 (as of 9/30/15)	FY 2014 (as of 9/30/14)
Number of expired grants	5,132	4,406	4,295
Undisbursed balances prior to closeout	\$113,215,313	\$72,275,377	\$72,612,661

**2. Details on future action the department, agency, or instrumentality will take to resolve undisbursed balances in expired grant accounts.**

NSF continually monitors its grant awards throughout their lifecycle following a comprehensive post-award monitoring process. NSF grants are closed based on their period of performance end date. 120 days after the grant period has expired, all unliquidated (or undisbursed) award balances are de-obligated. Having small undisbursed balances at the end of the grant period is a routine occurrence, as not all grantees fully spend all of the funds obligated in the course of their research.

**3. The method that the department, agency or instrumentality uses to track undisbursed balances in expired grant accounts.**

NSF completes financial closeout of expired grant awards on a daily basis using a set of automated and manual activities. Eligibility for closeout for all NSF awards begins 120 days after the award expiration date. The NSF closeout process automatically de-obligates any unliquidated (unspent) award balance, produces an award closeout transaction to flag the award as financially closed, and sends the financial closeout date to NSF's award management system. This initiates final administrative closeout procedures in the award management system.

The expected award closeout date is made available to awardees and staff through the Award Cash Management Service (ACM\$). ACM\$ requires the submission of award level payment amounts and expenditures each time funds are requested by awardees and allows NSF to complete post-award monitoring at the individual award level throughout the lifecycle of the award.

**4. Process for identification of undisbursed balances in expired grant accounts that may be returned to the Treasury of the United States.**

When a grant is closed out, the unliquidated (or undisbursed) balances are de-obligated. The de-obligated grant balances are treated one of three ways:

- If the source appropriation is still active, the balances are recovered by NSF and remain available for valid new obligations until the source appropriation's expiration date.
- If the source appropriation has expired but funds have not yet been canceled, the grant balances are recovered by NSF and remain available for upward adjustments on other existing obligations within the source appropriation.
- If the source appropriation has been canceled, the grant balances are returned to the Treasury.

Prior to September 30, 2016, all undisbursed grant balances in canceling appropriations were de-obligated. These grant balances will be returned to Treasury.