Award Portfolio Oversight and Monitoring

The National Science Foundation
Risk-Based Portfolio Monitoring Strategy

A Gold Standard for Federal Post-Award Monitoring

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November 25, 2008
Arlington, Virginia
Discussion Points

- Portfolio Monitoring Overview
- Risk Assessment
- Monitoring Activities
- Monitoring Coverage
- Tracking and Feedback
- Looking Forward
- Special Items of Interest
  - Integration with Other Awardee-related Activities
  - NSF Monitoring Resources and Contractor Support
  - Monitoring Case Study
Increased funding to support research in science, engineering, and education has spurred NSF’s award portfolio to increase over the past decade

- $21.3 billion in total award funding
- 36,829 active awards
  - Standard Grants
  - Continuing Grants
  - Cooperative Agreements
  - Fellowships
  - Other Awards
- 2,173 awardees
  - Universities / 4-year Colleges
  - Non-profit Institutions
  - For-profit Institutions
  - Community Colleges
  - Other Awardees

Award information as of June 30, 2008
NSF has transformed its post-award monitoring approach to meet evolving oversight needs

Evolution of NSF Post-Award Monitoring Processes

2002
- Formalized monitoring program:
  - Piloted Site Visit procedures
  - Developed basic Risk Assessment Model

2003
- Emphasized post-award monitoring
- Increased business assistance to awardees
- Developed post-award monitoring policies and procedures
- Created Division of Institution and Award Support (DIAS) to align corporate systems with business practices

2004
- Instituted Desk Review program
- Expanded resources for post-award monitoring
- Refined Risk Assessment Model
- Documented Baseline and Advanced Monitoring approach
- Refined Business System Review (BSR) Procedures for large facilities

2005
- Revised Risk Assessment Model to an institution-based approach
- Formalized monitoring follow-up procedures
- Deployed customer feedback survey
- No post-award monitoring findings in financial statement audit report for the first time since 2001
NSF has developed a risk-based portfolio monitoring strategy that integrates post-award monitoring activities and focuses limited resources on institutions administering higher risk awards

The portfolio monitoring strategy contains three key components –

- **Risk Assessment** – Enables NSF to focus limited advanced monitoring resources on awardees managing higher risk awards
- **Comprehensive Monitoring Activities** – Supplements largely automated baseline activities with focused advanced monitoring activities to provide broad coverage of the award portfolio
- **Tracking Monitoring Results and Gathering Feedback** – Enables NSF to better target business assistance activities and to make continuous improvements to the risk assessment model and monitoring procedures
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NSF conducts an annual risk assessment of the awards and awardee institutions within its award portfolio to determine the monitoring priority for each awardee.

- NSF Award Portfolio
- Risk-Based Award Ranking
- 36,829 Awards Ranked by risk points

Risk-Based Awardee Ranking
- 2,173 Awardees Ranked by risk points

Risk Adjustment Criteria
- 1. Institutional factors
- 2. Prior monitoring activities and results
- 3. Award administration and program feedback

Awardee Risk Categories
- Category A: 7% of Awardees
  - Total Obligation > $500K
  - 2009 Risk Points ≥ 27
- Category B: 23% of Awardees
  - Total Obligation > $500K
  - 2009 Risk Points 14-26
- Category C: 70% of Awardees
  - NSF Not Cognizant
  - 2009 Risk Points < 14 or Total Obligation < $500K

Risk Adjustment Screens
- Prioritize monitoring based on:
  - Highest risk points
  - Highest dollars
NSF modifies the risk assessment methodology each year to incorporate stakeholder feedback and lessons learned from the prior year’s monitoring efforts

- NSF’s external auditors provide feedback into NSF’s monitoring practices. Based on 2008 feedback, NSF modified the FY 2009 risk assessment methodology to put additional emphasis on awardees’ total funding – assigning additional risk points to awardees with higher NSF award funding and fewer risk points for awardees with lower NSF funding.

- Each year, Cost Analysis & Audit Resolution (CAAR) requests recommendations for advanced awardee monitoring from the Division of Financial Management (DFM), Division of Grants and Agreements (DGA), and program directorates. In FY 2009, NSF carried forward risk points from the FY 2008 risk assessment for awardees that DFM, DGA, and program directorates had recommended for FY 2008 advanced monitoring activity but, because of resource constraints or other priorities, were not completed in FY 2008.
Risk category thresholds are adjusted to enable NSF to focus its advanced monitoring resources on the 30% of the awardees that administer 94% of the award portfolio funding.
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NSF has developed an integrated set of monitoring activities that provide broad coverage of its award portfolio.

- **Advanced Monitoring**
  - Desk Reviews
  - Site Visits
  - BSRs

- **Baseline Monitoring**
  - Federal Financial Report (FFR)
  - Transaction Testing
  - Grants and Agreements Monitoring
  - Automated Report Screening

Category B selected for advanced monitoring on resource-available basis.

Percentage of Portfolio vs. Increasingly focused and targeted.
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Over the past five years, NSF’s advanced monitoring activities have covered 89% of all funds awarded. Advanced monitoring activities have covered 95% of Category A awardees.
Through the strategic deployment of limited monitoring resources, NSF has achieved comprehensive and cost-effective monitoring coverage of its award portfolio

- NSF has established a gold standard system generating significant interest from other federal agencies, e.g. Department of State, Department of Homeland Security, Department of Education, and General Services Administration
- NSF has completed current advanced monitoring for 89% of all awardee funding
- NSF has completed current advanced monitoring of 95% of funding for institutions administering high risk awards (Category A)
- The FY 2007 Financial Statement Audit Report, for the first time since FY 2001, did not include any findings related to NSF’s post-award monitoring practices
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NSF tracks the results of its monitoring efforts and gathers feedback to improve its monitoring processes and business assistance efforts

- **Track monitoring results**
  - Allows NSF to compile the results of monitoring efforts and identify common award administration deficiencies
  - Enables BFA/DIAS to track follow-up deadlines and prior monitoring activities
  - Provides information for staff conducting other awardee-related activities

- **Solicit feedback from internal stakeholders including DFM, DGA, programs, OIG, and its external auditors**
  - Recommendations that specific awardees be selected for advanced monitoring
  - Suggestions for updating or streamlining monitoring activities
  - Input into business assistance and outreach activities

- **Gather feedback from awardees**
  - Quarterly survey of Desk Review and Site Visit participants provide formal mechanism for obtaining feedback related to costs of monitoring and quality of business assistance
  - Awardees frequently provide unsolicited feedback during BSRs and Site Visits
  - NSF outreach activities provide an alternative venue for awardees to communicate with NSF

**Process Improvements**

- Adjust risk assessment methodology to reflect monitoring priorities
- Update monitoring procedures to efficiently focus on topical issues
- Identify award administration trends to better focus business assistance
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Looking to the future, NSF will continue to strengthen the effectiveness of its monitoring system

- Meet the challenges of a growing and diversified award portfolio
- Maintain comprehensive coverage across the entire award portfolio
- Make continuous improvements to the effectiveness of monitoring and business assistance
- Further integrate post-award monitoring activities
- Explore potential synergies with other NSF processes
- Enhance management systems to better track award monitoring data
- Develop a knowledge base of lessons learned to improve performance of NSF staff and the awardee community
- Share best practices with other agencies
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NSF increases the impact of its monitoring efforts through collaboration among departments responsible for monitoring and other awardee-related activities.
**NSF utilizes contractors to augment monitoring function resources**

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<thead>
<tr>
<th>Risk Assessment</th>
<th>Award Monitoring</th>
<th>Tracking and Feedback</th>
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<tbody>
<tr>
<td><strong>Strategic Direction and Guidance</strong></td>
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<td><strong>Assignment of Tasks / Decisions on Concerns and Follow Up</strong></td>
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<td><strong>Review and Approval of Deliverables</strong></td>
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<tr>
<td>• Prepare annual update to Risk Assessment Manual</td>
<td>• Develop/update standard operating procedures for Desk Reviews, Site Visits, and BSRs</td>
<td>• Deploy database to track monitoring results</td>
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<td>• Use NSF provided portfolio data to generate annual risk assessment output</td>
<td>• Prepare recommendations for Desk Review assignments</td>
<td>• Deploy quarterly survey to gather awardee cost and qualitative feedback</td>
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<td>• Generate coverage statistics</td>
<td>• Conduct FFR Transaction Testing, Desk Reviews, and participate in BSRs</td>
<td>• Prepare regular reports notifying NSF staff of monitoring deadlines</td>
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<td>• Prepare draft awardee notification, report issuance, and follow-up correspondence</td>
<td>• Develop analyses identifying trends and common award administration issues</td>
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<td>• Assist with preparation of BSR reports</td>
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<tr>
<th>NSF Oversight</th>
<th>Contractor Expertise</th>
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<tr>
<td><strong>Support in Developing / Revising Risk-Based Monitoring Approach</strong></td>
<td><strong>Documentation of Standard Operating Procedures and Guidance</strong></td>
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<td><strong>Access to Diverse Functional Experts</strong></td>
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Case Study: Anchorage Children’s Museum

- The Anchorage Children's Museum (ACM) is a non-profit organization with the mission to create a community where play and learning connect. Twenty permanent exhibits and programming spaces provide innovative learning experiences for children and their caregivers.

- ACM has 100 employees and FY 2006 revenue of $10,000,000.

- ACM was implementing 15 NSF awards totaling $12,000,000.

- In October 2006, NSF assigned Booz Allen Hamilton a Desk Review of ACM due to its risk assessment ranking.
Case Study: Anchorage Children’s Museum

ACM Desk Review Timeline

- 11/3/06: Awardee Notification
- 11/6/06: Documents Requested
- 11/22/06: Initial Documents Received
- 12/12/06: Discussion Call
- 12/26/06: Documents Received
- 1/11/07: Technical Review
- 2/6/07: Desk Review Complete

Contact Points

- 11/18/2006
- 12/2/2006
- 12/16/2006
- 12/30/2006
- 1/13/2007
- 1/27/2007
- 2/10/2007

- Booz Allen
- ACM
**Case Study: Anchorage Children’s Museum**

Booz Allen’s Desk Review identified specific areas of concern

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<tr>
<th>Areas of Concern</th>
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<tr>
<td><strong>General Management</strong></td>
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<tr>
<td>‣ Lack of documented policies related to delegation of authority, budget revisions, budget and expenditure monitoring, cost transfers, and expenditure approval</td>
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<tr>
<td><strong>Accounting and Financial</strong></td>
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<tr>
<td>‣ Awardee using an indirect cost rate from an expired negotiated indirect cost rate agreement (NICRA)</td>
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<td>‣ Time and effort report does not appear to comply with federal regulations</td>
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<tr>
<td>‣ Inadequate accounting manual</td>
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<tr>
<td>‣ Lack of standards for determining allowability of costs charged to federally-funded awards</td>
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<tr>
<td>‣ Lack of documented policies and procedures related to the accounting treatment of unallowable costs</td>
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<tr>
<td>‣ Inadequate policies and procedures related to supporting documentation for accounting transactions and record retention</td>
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<tr>
<td><strong>FCTR/FFR Reconciliation</strong></td>
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<tr>
<td>‣ Awardee unable to timely reconcile Federal Cash Transactions Report (FCTR) with corresponding accounting system information</td>
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Case Study: Anchorage Children’s Museum

- Based on the results of the Desk Review, NSF selected ACM for an FY 2008 Site Visit to follow up on the areas of concern noted in the Desk Review report and to review selected higher-risk areas of award administration: time and effort reporting, participant support costs, and sub-awards/sub-recipient monitoring.

- Three serious concerns identified during the Desk Review triggered the Site Visit:
  - Lack of documented policies related to delegation of authority
  - Time and effort report does not appear to comply with federal regulations
  - Awardee unable to timely reconcile FCTR with corresponding accounting system information

- A Site Visit team consisting of a DGA and DIAS/CAAR analyst completed an on-site review between June 3-5, 2008.

- As an overarching theme, the NSF Site Visit team observed that, while ACM had 100 employees, its grants operation was small and appeared new to managing federal awards.
## Areas of Concern

### General Management – Desk Review follow up
- Lack of documented policies related to delegation of authority

### FCTR/FFR Reconciliation – Desk Review follow up
- Awardee unable to timely reconcile FCTR with corresponding accounting system information
- Lack of written policies and procedures related to preparing the FCTR
- No separate accounts to record indirect costs or unallowable costs. Unallowable costs simply removed from the invoice during posting and charged directly to the museum account

### Time and Effort – Desk Review follow up and additional analysis
- Awardee does not require that full-time employees submit time and effort reports
- Awardee has not developed a time and effort documentation system that complies with federal regulations
- Time and effort reporting concerns may compromise accounting system

### Participant Support Costs
- Lack of written policies and procedures
- Participant support costs charged to NSF awards included costs related to the awardee’s employees

### Sub-Awards and Sub-Recipient Monitoring
- Failure to follow established policies and procedures
- Failure to pass through required federal award administration regulations to sub-awardees
Case Study: Anchorage Children’s Museum

As a result of the Site Visit report issued in October 2008, NSF requested that ACM prepare a written response within 30 days. NSF recommended that ACM:

- Develop, document, and implement:
  - Authorization by the board of directors that the president sign award-related agreements
  - Written policies and procedures for FCTR preparation
  - Written policies and procedures for participant support costs in accordance with NSF regulations

- Modify:
  - Written policies and procedures to clearly define who is authorized to enter into sub-award agreements
  - Time and effort policies and procedures to ensure compliance with federal regulations
  - Sub-awardee agreements to define the relationship between ACM and its sub-awardees
  - All NSF sub-award agreements to include required flow-through provisions

- Maintain:
  - Time and effort reports for all employees who charge time to awards
  - File documents for each sub-award

- Review and correct:
  - Controller and project director related labor charges
  - Participant support charges

- Prepare and provide:
  - Journal vouchers to remove controller charges from the grant account
  - Journal vouchers to remove employee costs from participant support charges