The Cost Analysis and Audit Resolution (CAAR) Branch is situated within the Office of Budget, Finance & Award Management (BFA)
Discussion Points

- Overview of NSF’s Award Portfolio and Risk-Based Monitoring Strategy
- Highlights of NSF’s Annual Risk Assessment Process and Key Monitoring Approaches
- Description of Selected Advanced Monitoring Activities – Desk Reviews, Site Visits, and Virtual Visits
- Discussion of Some Common Concerns Identified During Advanced Monitoring

NSF continues to update its post-award monitoring approach to meet evolving oversight requirements and expectations.

Evolution of NSF Post-Award Monitoring Processes
NSF is committed to the responsible stewardship of its $27 billion research award portfolio

- Over $27 billion in total award funding
- Over 40,000 active awards
  - Standard and continuing grants
  - Cooperative agreements
  - Graduate research fellowships
  - Other awards
- Over 2,000 awardees
  - Universities/4-year colleges
  - Non-profit organizations
  - For-profit organizations
  - Community colleges
  - Other awardees (including SBIRs, STTRs)

Awards portfolio information as of June 30, 2014

NSF uses a risk-based portfolio monitoring strategy that integrates its monitoring activities and focuses monitoring activities on awardees administering higher risk awards

NSF’s portfolio monitoring strategy has three key components -

- Annual risk assessment enables NSF to focus limited advanced monitoring resources on awardees more in need of monitoring and business assistance
- Comprehensive monitoring activities augment routine or automated baseline activities with focused advanced monitoring activities to provide broad coverage of the award portfolio. These activities are designed to mitigate the risk of non-compliance with federal grant management regulations (administrative regulations, cost principles, and audit requirements) and NSF award administration requirements
- Gathering feedback and incorporating monitoring results to enable NSF to better target business assistance activities and to make continuous improvements to the risk assessment model and monitoring procedures
Baseline monitoring activities combined with day-to-day award administration with automated monitoring provide broad coverage of the entire award portfolio

- Baseline Monitoring activities consist of:
  - **Automated financial report screening** to identify reporting issues that may need further scrutiny; these tests relate to cash-on-hand balances, interest income, program income, adjustments to closed awards, grants closeout and financial unobligated balances
  - **Grants and Agreements Officer award administration** to provide insight into actual or potential compliance issues; these activities include changes of principal investigator, award transfers, award supplements, no-cost extensions, special payments, and significant budget realignments
  - **Improper Payments - transaction testing** to verify the reasonableness, allocability, and allowability of selected award expenditures. It is also used to ensure source supporting documentation is acceptable.
Advanced monitoring focuses on award administration practices of selected awardees more in need of business assistance

- Advanced monitoring consists of:
  - **Desk reviews** - Assess general management environment, review selected accounting and financial management policies and procedures and obtain financial information submitted by awardees.
  - **Site visits** - Conduct review of selected higher risk award administration areas and follow up on desk review results as needed. Site visits may be conducted on-site or virtually.
  - **Business System Reviews (BSR)** - Combine desk and onsite reviews of large facility business systems to determine whether the operation of those facilities meet NSF’s expectations for business and administrative management.

**NSF’s monitoring activities, combined with other grant-related activities, provide comprehensive coverage of the entire portfolio**
Desk reviews enable NSF to develop reasonable assurance that awardees have the capability to manage NSF-funded grants in compliance with federal regulations

- Desk reviews enable NSF to gain an understanding of an institution’s award administration practices and alert NSF to deficiencies. Desk reviews provide a foundation for the site visit’s targeted review activities.
- NSF completes ~100+ desk reviews a year.
- NSF oversees the desk review process by selecting awardees for desk reviews, authorizing review protocols, approving workpapers and summary reports prepared by a contractor. NSF works with awardees to resolve issues identified during the desk review process.
- Analysts gather information from public sources, discussion calls, and awardee-provided documentation to assess the awardee’s capacity to manage Federal funds.
- Desk reviews provide a cost-effective monitoring alternative to resource-intensive site visits.
- A follow-up site visit or BSR may be scheduled for an awardee if the desk review demonstrates a need for additional business assistance.

Site visits provide a detailed review of selected aspects of the institution’s award management practices

- Site visits assess the extent to which an awardee’s grant management systems enable efficient and effective performance of NSF awards and ensure compliance with federal regulations.
- NSF completes ~30 site visits a year.
- Reviewers assess whether the awardee’s financial management system accurately discloses the financial results of NSF awards and if awardee systems maintain effective control over and accountability for all funds, property, and other assets.
- Through site visits, NSF extends business assistance by offering award administration best practices and answering questions related to NSF expectations and federal award administration policies.
- Awardees with significant deficiencies may be scheduled for follow-up site visits.

Core Functional Review Areas

General Management Survey
- Grants management roles and responsibilities
- Budgetary revisions and expenditure approvals
- Expenditure monitoring
- Cost transfers

Accounting and Financial Management Review
- Accounting policies and procedures documentation
- OMB Single Audit
- Project accounting
- Identification and accounting for unallowable costs

ACME Reconciliation
ARRA Accounting and Reporting Review

Targeted Review Areas

Time and Effort
Fringe Benefits
Travel
Consultants
Cost Sharing
Participant Support Costs
Indirect Costs
Procurement
Subawards & Subrecipient Monitoring
Property and Equipment
Program Income
Virtual visits as an alternative to on-site monitoring visits with advances in technology

- Virtual site visits are now a regular part of NSF site visit protocol. Conducting site visits virtually reduces travel time and cost to NSF as well as reduces the administrative burden on the awardee.
- “Virtual Sessions” are held using WebEx’s integrated audio, video, chat tools, and desktop sharing capabilities; documents are uploaded by NSF or the awardee on a SharePoint site for review.
- Virtual site visits will typically occur through a series of 60-120 minute sessions held over the course of a week.
- Virtual visits are based upon the proven and tested Advanced Monitoring site visit approach with core review areas and selected targeted review areas adapted to the virtual visit approach.

Virtual visits are based on the proven AMBAP site visit methodology but have some distinct differences

<table>
<thead>
<tr>
<th>Site Visits</th>
<th>Virtual Site Visits</th>
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<tbody>
<tr>
<td>In-depth review of award administration practices in 3 - 4 Core Review Areas and 4 - 6 Targeted Review Areas</td>
<td>In-depth review of award administration practices in 3 - 4 Core Review Areas and 4 - 6 Targeted Review Areas adapted for virtual visit methodology</td>
</tr>
<tr>
<td>3 - 4 days of intense meetings</td>
<td>Several virtual sessions scheduled over a week</td>
</tr>
<tr>
<td>Interact in-person with awardees to gather information about grants management policies and procedures</td>
<td>Use virtual collaboration tools to simulate real-time “face-to-face” interactions with awardees</td>
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<tr>
<td>Limited access to subject matter experts (SMEs) during the visit may require follow-up after the site visit team returns to NSF</td>
<td>Greater flexibility in scheduling individual sessions enables the awardee and CAAR team to consult with experts, research issues, and follow up during a subsequent session</td>
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<tr>
<td>Staff travel is resource intensive and both weather and schedule dependent</td>
<td>Greater flexibility in scheduling</td>
</tr>
<tr>
<td>Virtual sessions enable greater participation for staff from multiple sites</td>
<td>Fewer on-site visits reduce travel fatigue and increase staff utilization</td>
</tr>
<tr>
<td>Budget and staffing constraints may limit the number of reviews scheduled</td>
<td>Reduced travel costs and staff travel time optimizes limited monitoring resources</td>
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</tbody>
</table>
The incidence of review areas with concerns appears to be trending higher across most review areas

Note: *Three reviews were completed for FFR in FY 2014 during the transition to ACM$.
**Only three site visits reviewed for indirect costs. The graph also reflects four desk reviews that reviewed for indirect costs.

<table>
<thead>
<tr>
<th>Review Area</th>
<th># of Areas with Issues</th>
<th># of Times Area Reviewed</th>
</tr>
</thead>
<tbody>
<tr>
<td>A – General Management</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>B – Accounting and Financial System</td>
<td>20</td>
<td>10</td>
</tr>
<tr>
<td>C – Federal Financial Report (FFR) Reconciliation</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>F – Consultants</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>G – Cost Sharing</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>H – Indirect Costs</td>
<td>60</td>
<td>30</td>
</tr>
<tr>
<td>I – Participant Support Costs</td>
<td>70</td>
<td>35</td>
</tr>
<tr>
<td>J – Procurement</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>K – Program Income</td>
<td>90</td>
<td>45</td>
</tr>
<tr>
<td>L – Property and Equipment</td>
<td>100</td>
<td>50</td>
</tr>
<tr>
<td>M – Subawards and Subrecipient Monitoring</td>
<td>110</td>
<td>55</td>
</tr>
<tr>
<td>N – Time and Effort Reports for Personnel</td>
<td>120</td>
<td>60</td>
</tr>
<tr>
<td>O – Travel</td>
<td>130</td>
<td>65</td>
</tr>
<tr>
<td>P – Award Cash Management Service (ACM$)</td>
<td>140</td>
<td>70</td>
</tr>
</tbody>
</table>

The lack of written policies and procedures is trending downward in several review areas, but still accounts for 31% of all concerns

Note: No lack of policy and procedure issues were found in 2014 for FFR Reporting, Procurement, Program Income, Property and Equipment, or ARRA Accounting and Reporting.
Site visit results noted a high frequency of concerns in Accounting and Financial, Participant Support, and Subaward Monitoring

### Concerns Explained

- **Accounting and Financial** – 10 of 19 reviews identified concerns
  - Other Severity 1 (6)
  - Lack of written policies and procedures (8)
- **Participant Support** – 16 of 25 reviews identified concerns
  - Other Severity 1 or 2 (8)
  - Awardee has re-allocated proposed participant support cost to other cost categories without NSF approval (4)
  - Participant support costs are not tracked in separate general ledger accounts (3)
  - Inadequate supporting documentation (3)
- **Subaward Monitoring** - 11 of 23 reviews identified concerns
  - Awardee has not passed through required federal award administration regulations to its subawardee(s) (7)
  - Lack of written policies and procedures (6)
  - Awardee did not verify that the subawardee had the capability to manage the subaward (3)
  - Awardee has not ensured that the subawardee has not been debarred or suspended (3)
  - Awardee has not performed cost or price analysis (3)
  - Miscellaneous (5)

### FY 2014 Site Visits and Desk Reviews Results Key Observations

- Awardees managing less than $2 million of NSF funding had the most site visit review areas with concerns, while awardees managing more than $15 million had the fewest review areas with concerns.

- In desk reviews, the prevalence of concerns was relatively consistent across awardee type and total NSF funds managed.

- More concerns were reported than the previous year across most review areas – The increase suggests two potential reasons: 1) lessons learned from prior site visits have led NSF to select those review areas with the most issues, and 2) refinements to the Risk Assessment have resulted in NSF choosing those awardees most in need of business assistance.

- Lack of written policies and procedures remains the most common type of finding.

- Reviews of Accounting and Financial System, Subaward Monitoring, and Participant Support resulted in a comparatively high incidence of concerns – This was also noted last year for Subaward Monitoring and Participant Support; NSF may want to consider how additional outreach or technical assistance might support awardees in building capabilities in these areas.

- The majority of site visits were conducted for academic institutions – NSF may want to consider scheduling more visits to non-profit organizations, which typically have more compliance or grant management issues and, thus, a greater need for business assistance.
Keys to Success for Awardees

- Focus on the objectives of the project/program
- Understand the requirements and expectations (award letter, award terms and conditions, OMB Guidance)
- Implement and adhere to strong internal controls over federal awards
- Document policies and procedures in writing
- Document approvals and conversations between NSF
- *When in doubt...Ask Early and Ask Often!*

Where can I get information on-line?

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Thank You!!