National Science Foundation Advisory Committee for Business and Operations Executive Summary for Spring 2010 Meeting May 18-19, 2010

Executive Summary of our findings and recommendations for the spring Committee

On behalf of the Advisory Committee for Business and Operations, this serves as an

Finalized on July 15, 2010

Sally Marshall Mary Ellen Sheridan

meeting held at the National Science Foundation on May 18-19, 2010.

Co-Chair Co-Chair

Committee members in attendance:

Jake Barkdoll Consultant

Marti Dunne New York University

Mike Gooden Integrated Systems Analysts, Inc Charlene Hayes Johns Hopkins University Philip Joyce George Washington University Sally Marshall Human Resource Solutions Kathryn Newcomer George Washington University

Gloria Rogers ABET, Inc.

Katy Schmoll University Corporation for Atmospheric Research

Dick Seligman California Institute of Technology Mary Ellen Sheridan University of Chicago (retired)

Cynthia White Belmont University
Don Worden Training Consultant

Committee members absent:

Greg Jackson EDUCAUSE

Mildred Smalley Southern University and A&M College (retired)

E. Jennings Taylor Faraday Technology

Meeting commenced at 1:00 pm on, May 18, 2010

Post Award/Policy Updates

Jean Feldman, Head of Policy Office, provided updates on several topics:

Recipient Reporting and Activities under ARRA

- Since June 2009 there have been six different memos from OMB that have tweaked
 the process for reporting. With each memo the updates have become more specific
 and prescriptive.
- NSF issued an update to reporting instructions on May 4, 2010 to make sure
 guidance is consistent with updates provided by OMB. There were five changes
 which align with OMB updates and emphasize the importance of following OMB guidance (for example, for award number data field).

 NSF has created a help sheet to provide recipients with new information. Also, more people are using Research.gov for their information, which improves the quality of what is available.

America Competes Act

- NSF instituted a compliance check of proposals that looks for a mentoring plan as required by Section 7008.
- NSF has implemented requirements of Section 7009, Responsible Conduct of Research and has updated relevant policy documents. This section requires institutions to have a plan to train undergrads, grads, and postdocs on responsible and ethical conduct of research (RCR).
- Effective Jan 4, 2010, new awards and funding increments will incorporate the new Reporting of Research Results requirement. No reports have needed to be submitted yet, but will come live this summer.
- Since release of NSB report on cost sharing, NSF has been working on the principles of cost sharing, working closely with OMB office of Federal Financial Management, since they defined the "cost sharing" term. NSF has received positive feedback from OMB in our interactions with them.

Data Management Policy and Research Performance Progress Report (RPPR)

- In the future, NSF will require a data management plan in the form of a supplemental document, up to 2 pages. The plan will describe how the proposal will conform to NSF policy on data management. It will be OK for proposals to state that there is no detailed plan needed, as long as a clear and valid justification is required.
- The RPPR Policy Letter was signed by OMB and OSTP in April 2010. Each agency is required to post an implementation plan on their web site and say whether they will use paper or electronic format for the reports. NSF will use Research.gov to provide an online service for preparing and submitting the report.

Recommendations:

 NSF might want to consider developing standard descriptions that will fit Item 27 of the ARRA quarterly report on activities of the ARRA project – brief descriptions to convey what has taken place on the project.

Performance Evaluation Assessment

Shelley Metzenbaum, Assistant Director of Performance and Personnel Management, Office of Management and Budget provided the presentation.

- The presentation covered three main points: what Obama administration wants to
 do with performance management; evaluation and performance measurement in
 management and how they fit together; the challenges of measuring and managing
 R&D in the lab and in grant-giving.
- Dr. Metzenbaum stated that she hopes NSF will be a leader in outcomes-focused management. The real test is whether a particular performance area is actually being used.
- The President \$\overline{\sigma}\$ FY11 budget identifies the high performance goals of the 24 CFO act agencies and identifies three performance strategies: using performance information to lead and learn to improve outcomes; communicating performance

- information to improve results and transparency; strengthening problem-solving networks.
- The challenge of R&D evaluation is the long lag time between the time of funding
 and outcome. Dr. Metzenbaum thought it would be interesting if NSF could look at
 three successful and three unsuccessful projects, come up with a theory about why
 some were successful and others unsuccessful, and apply the theory to a larger set of
 projects.

OIRM (Office of Information and Resource Management) Updates

Anthony Arnolie, Director of OIRM and Chief Human Capital Officer, provided updates on several topics:

Customer Satisfaction Survey 2009

• Overall score of 3.64 down slightly from 2008. One reason could be the pressures put on the agency in 2009 due to ARRA.

NSF Ambassador Program

- Rotators returning to their home institutions are potential recruiters for new IPAs if given materials and encouragement.
- NSF will hold focus groups with goal of completing in August 2010. BIO and GEO have agreed to pilot it with agency roll out expected near the end of calendar year 2010.

Great Flood of 2010

- On February 20, 2010, a "leak" turned into thousands of gallons of water that affected 6% of the building or 27,000 square feet, 160 people and 180 computers. A clean water pressure valve (PRV) broke on the 7th floor restroom.
- The event occurred on a Saturday and by Monday, temporary workspace was available for all affected employees.
- OIRM response was seen as successful by many in NSF due to the dedication, organization skills and communication of the team involved.
- The Committee recommends that lessons learned be disseminated to staff, perhaps via employee newsletter.

CIO (Chief Information Officer) Updates

Andrea Norris, Acting CIO, provided updates on a few topics:

- NSF is aware of a number of priorities of the current administration and is working on them as necessary.
 - o Effective IT investments and management: NSF is in the process of moving all its work to commercial facilities off-site to help in this area.
 - Cloud computing: NSF is looking at this for e-mail services. NSF is also looking at other business practices that might be candidates for cloud computing.
 - o Open Government: the administration has made transparency and information sharing a priority. A team has been formed at NSF, led by Jose Munoz, to assess the many aspects of the initiative.
- Research.gov: the "Find Reviewers" tool has been launched and should be very helpful to aid program officers in locating reviewers for their merit review processes. The broad concept of Research.gov is right in line with the administration priority of openness and transparency.

BFA (Budget, Finance, and Award Management) Updates

Marty Rubenstein, CFO, provided updates on a few topics: Stewardship/AOAM Initiatives:

- The CFO reported that NSF competed with other agencies and were funded by the Administration for these activities:
 - * Assessment & Evaluation Capabilities NSF received funding and FTEs for this effort.
 - * Acquisition Workforce funding Top down directive from the White House.
- The CFO provided a brief report on ARRA reporting Online reporting system is cumbersome; it requires that information be entered more than once. Nonetheless, an IG analysis of NSF ARRA reporting data said that we are doing well and have some best practices; the IG made no recommendations for NSF. This kind of effort takes a great deal of resources to successfully complete, which impinges on other aspects of our operations. We don't fully know the implications of that yet, but everything we learn from ARRA will help us in the future.
 GAO review on reliability of ARRA reporting data NSF responded fully and received a positive remark in GAO's report to the Hill.
- The Obama Administration has issued key themes for government-wide grants policy. One is a call for a stronger management series for Grants Specialist to deal with issues found by IGs government-wide.
- Customer Service Survey: The CFO received the results of the customer service survey, but is not sure what they mean. Only 280/~1300 employees responded. Marty hasn't decided whether there is ongoing value to the survey yet.
- Financial Statement Audit update: The CFO reported that the 2010 Financial Statement Audit has started. The 2009 corrective action plan is in place for deficiency.

Open Government Initiative

Jose Munoz reported that an NSF working group for open government has been organized.

- An Open Government directive was issued by OMB in 12/09. The memo put together a series of milestones and timelines. Open Data Strategic Plan completed April 2010, published for public comment; NSF Data Quality Plan plan submitted to OMB 4/10 and completed 5/10.
- NSF is generally very open, but under the guidelines we need to do more to meet the
 directive. Requirements include: data must be online and machine readable; data
 must be of high-value (responsive to public needs and demands); NSF must develop
 a system to gather public comment and provide responses.

The Committee is concerned about the amount of overhead and resources NSF will have to commit to this exercise. What is NSF Is policy going to be about how much data to post? How many 'hits I'! How will NSF respond to queries – each one individually or certain high volume comments?

NSF Strategic Plan Revision – 2010-2015

• The Committee believes that NSF Strategic Plan is improved from the prior Plan. Even so, the Committee recommends some key changes that it believes will greatly improve the Plan.

- o Sample Indicators: there are too many, which could lead to too much cost to administer and/or too high expectations. The mix of monitoring and evaluative measures in this section may confuse the reader. Near and midterm measures should be more concretely "measureable."
- o Perform as a Model Organization: not sure that this strategic goal should be on the same level as the other two. Alternative wording for this goal would be "Leader as a Learning Organization" and "Results-Oriented Organization."
- o Evaluation Resources: outside of some of the OMB-granted resources, who will perform the evaluation function at NSF? Assuming there is a resource issue, NSF should consider internal rotations and details. Also, the Committee recommends an internal evaluation write-up in the Evaluation and Assessment section of the Plan.
- The Committee is concerned that only 6% of NSF employees submitted comments on the Plan. Are the employees feeling connected and are they bought-in to the Plan? NSF should conduct some focus groups to find out.
- The Committee notes that NSF should think about its overall planning process going forward. Is the Plan for "show" or for "go?" How is the plan going to be used? Who is its audience? What will be the continuing planning process and who will run it? The answers to these questions are not clear.

Future NSF- 2013 Lease Expiration

The lease for the current NSF buildings expires in the December 2013. Mignon Anthony provided background and updates as to the current effort leading up to this key decision point.

Key facts (new from prior meeting):

- The business case lease prospectus was delivered to OMB April, 2010.
- The Program of Requirements (POR) is nearing completion.
 - o Contains elements such as staffing plan, space standards, technology needs, energy efficiency, etc.
 - o Key issue: rental rate assumption. FY 11 program rate is \$38/square foot; GSA is hoping to increase the assumption to \$41/sf; NSF estimates that the market cost will be \$45-\$46/sf. Thus, there is a possible funding gap of \$20-\$80 million which would have to be funded by NSF.

Recommendations:

- The Committee notes that it will be hard to achieve the goal of "single building functionality" on its current site given the projected growth in staffing by 2014.

 Another building would need to be annexed in this scenario. It is hoped that visitors could work in the same building as NSF employees so that they can feel inclusive.
- The Committee is concerned that the goal of facility that reflects science and engineering, etc., both internally and externally, will be difficult to achieve in its current site.
- The Committee recommends that NSF prioritize the six summary descriptive goals.
- The Committee joins NSF in its concern that the market rental rate in FY 2011 will likely be higher than the rate at which OMB will fund. The Committee urges to plan ahead and assess the administrative and/or programming impact of this early on.

NSF Workforce Management/Leadership Development

Joe Burt, HR director, talked about leadership development and management training.

- New regulations exist in regards to management training. Training must be received within one year of appointment and every three years thereafter.
- NSF has created several courses that meet the strategic goals of NSF has well as the requirements of the new regulations. These courses enjoy positive reviews from NSF employees.
- In regards to continuing executive development, NSF will recommend establishment
 of Executive Development Plans (EDPs) in the next SES performance appraisal
 period.
- Succession planning is also a requirement. NSF is addressing this through expansion
 of the New Executive Transition (NExT) program as well as future development of
 a Senior Leadership Development Program to develop highly graded, high potential
 non-SES employees.

Recommendations:

- The Committee feels that NSF is ahead of the curve on leadership management initiatives, as supported by the high participation rates and good participant feedback.
- NSF should stress continuous learning activity and move away from the term "training." In particular, the learning concept will help rotators feel more part of the overall Team.
- Regulations use the term "mandatory" or "required", but NSF doesn® have to do
 the same. NSF should look to incent participation and emphasize "management for
 results." NSF should develop a systematic goal setting process, which would include
 periodic checkpoints on staff progress (more than twice-a-year performance
 reviews).
- The Committee recognizes that NSF has been using new delivery technologies, in
 addition to traditional classroom learning, and would emphasize to continue to
 utilize creative learning methods in the ever-changing workplace. NSF should not
 rely solely on generic learning programs but take a more strategic approach to ensure
 it is developing the key competencies.
- The Committee notes that NSF must invest in these programs—provide the human and fiscal resources needed to implement them effectively.

Committee Discussion with NSF Acting Deputy Director, Dr. Cora Marrett

The Committee discussed all topic areas with Dr. Marrett. Please see the individual topics above as well as the summary dated 12/3/09 for details and recommendations.

- Post Award/Policy: Dr. Marrett agreed that the new requirements place burdens on faculty and noted that they also burden NSF staff. There is a need to convey to academia the responsibilities associated with public funds.
- Post Award/Policy: Dr. Marrett expressed that she would like to see professional societies take the lead in developing statements for use in quarterly report summaries

- and addressing cost-sharing. She believes this approach will elicit ideas reflecting the very best from the community.
- Updates: Dr. Marrett would like to see a subcommittee of this Committee to work in partnership with NSF and offer advice on responding to the Open Government Initiative
- Workforce Management/Leadership Development: Dr. Marrett would like to see a task force with members of this Committee address this topic. NSF needs more time for a detailed review of the issues involved to better respond to the agency needs.

Committee Discussion/Other Issues:

- The Committee recommended that someone with expertise in public relations be consulted to assist with NSF is response to the Open Government Initiative.
- The Committee thanked Don Worden for his service as he retires after this meeting.