Challenges, Opportunities and New Directions

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Ask Us Early, Ask Us Often!!

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Coverage

- Challenges, Opportunities & The Long Hard Road Ahead
  - Tom Cooley

- Electronic Initiatives
  - Jean Feldman
Challenges, Opportunities & the Long Hard Road Ahead
What’s the latest on …..

Challenges and Opportunities
- Political Landscape/Deficit Reduction/Constrained Budgets
- Continuing Management Challenges
- Congress and the Budget
- Research Business Models Subcommittee
- Grants Policy Committee
Challenges

- Political Landscape/Deficit Reduction/Constrained Budgets
  - “War Time” Environment
  - Hurricane Katrina/Rita Relief
  - Economic/Job Uncertainty
  - Export Controls

- Continuing Management Challenges
  - Award Size, Duration and Success Rate
  - Financial Statement Audits (ours & yours)
  - Improper Payments
Hurricane Katrina Relief

What is happening on the legislative front?
- Two supplemental funding bills over $60 billion.
- A third supplemental is now at OMB for review – on the order of $200 billion with a fourth supplemental probably early next year.

What is the higher education community in Washington doing?
- Working with affected universities and host institutions
- Working to enhance the Administration's third supplemental

What is the focus of the efforts to help students and institutions?
- Short-term needs of students and institutions
- Financial Assistance to host institutions
- Replacement of lost revenue to institutions
- Assistance for rebuilding and revitalization
- Incentives for students and faculty to return
Why do we . . . ?

Several Reasons

- Congressional Intent (laws, regulations, authorizing language, etc.)
  - Example: Improper Payments Improvement Act of 2002

- Administration Practices or policies (OMB guidance, Administration’s political platform, etc.)
  - Example: Nanotechnology Initiative

- Agency/Department Policy (grants policies, terms and conditions, operating guidance, etc.)
  - Example: NSF Cost sharing policy

- Community Drivers (NAS, FDP, COGR, AAU, NASCULGC, professional societies, etc.)
  - Example: Success rates, award size and duration
Award Size/ Duration

- Surveys of PI’s & Institutions in 2001
- Study Results Published July 2002
- New average grant size goal
  - From $100K/3 years to $250K/5 years
  - Over time: currently at $138K/2.9 years
  - Declining success rates (33% → 25%)
- Trade-offs will have to be made
Financial Statement Audits

- **Ours and Yours**
  - Issue: Recording expenditures properly

- **Federal Government**
  - More scrutiny of FCTR’s will require more documentation
  - Heightened scrutiny of A-133 reports
  - Site visits to high-risk awardees

- **You Guys**
  - Better accounting system; segregation of costs
  - Better documentation
  - Clean A-133 audits (OIG reviews/recommendations)
Improper Payments Information Act of 2002

History

- The Federal Government makes more than $45 billion in improper payments each year in programs that represent $1 trillion in outlays.

- IPIA requires agencies to report on programs or activities with estimated improper payments exceeding $10 million and detail actions the agency is taking to reduce these improper payments.

- OMB further expanded the definition: An erroneous or improper payment includes any payment that was made to an ineligible recipient or for an ineligible service.

- NSF is the only research grant-making agency required to measure improper use of grant funds. All others are required to report entitlement or block grants programs.
Improper Payments Information Act of 2002 (cont’d)

Current Action

- NSF sampled improper payments on all site visits to high-risk grantees as identified in our Award Monitoring Program

- Continue innovative efforts for administering an improper payments program as part of a holistic grants monitoring approach, which assures accurate award institution identity and grant eligibility

Message: Federal Government following taxpayer funds down to the last dollar
Congress and the Budget:
The Future is Dimly Lit
and
For R&D the Future May be Dim
NSF’s Key Congressional Players

- House and Senate Budget Committees

- Authorization Committees
  - House Science Committee/Sub-committees
  - Senate Health, Education, Labor & Pensions Committee
  - Senate Commerce, Science & Transportation Committee

- Appropriations Committees
  - New committee structure: House and Senate – new staff
In FY 2005, they dispersed > $820 billion of discretionary funds.

Work with Congressional leadership and members to address priorities of budget resolution.
Subcommittee Changes for FY 2006

New Subcommittees for NSF

Both the House and Senate reorganized their Appropriations Subcommittee structures.

The House reduced its number of subcommittees from 13 to 10. As a result, NSF is now under the purview of the Science, State, Justice and Commerce Subcommittee.

The Senate reduced its number of subcommittees from 13 to 12; NSF is now under the purview of the new Commerce-Justice-Science Subcommittee.

The Subcommittees are distributing ~$840 billion for FY 2006.
Percentage Composition of Federal Government Outlays

Fiscal Year
40 44 48 52 56 60 64 68 72 76 80 84 88 92 96 00

Total Outlays for FY 2004 = $ 2,318 Billion

Payments to Individuals
$1,254 B

All Other
$475 B

Net Interest
$156 B

National Defense
$433 B

National Defense
Net Interest
All Other
Payments to Individuals

$1,254 B
$475 B
$156 B
$433 B

Total Outlays for FY 2004 = $ 2,318 Billion
FY 2005 and 2006 R&D Budget Highlights

**FY 2005**
- DHS: 20% over 2004
- Agriculture: 7.8% over 2004
- Defense: 7.9% over 2004
- NASA: 2.0% over 2004
- NIH: 2.6% over 2004
- Commerce: 4.6% over 2004
- Energy: $3.3 B in 2005
- USGS: 0.3% under 2004
- EPA: 2.8% under 2004

**FY 2006***
- DHS: 23.8% over 2005
- Agriculture: 15.6% under 2005
- Defense: 0.6% over 2005
- NASA: 4.9% over 2005
- NIH: 0.5% over 2005
- Commerce: $565 M - NOAA
- Energy: $3.0 B in 2006
- USGS: 4.6% under 2005
- EPA: Decrease to $569 M

* Impact of appropriations not yet known
## R&D Budget

<table>
<thead>
<tr>
<th>Budget Authority (dollar amounts in millions)</th>
<th>2006 Proposed*</th>
<th>Percent Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Defense</td>
<td>70,839</td>
<td>1%</td>
</tr>
<tr>
<td>Health and Human Services</td>
<td>28,807</td>
<td>0%</td>
</tr>
<tr>
<td>NASA</td>
<td>11,527</td>
<td>5%</td>
</tr>
<tr>
<td>Energy</td>
<td>8,528</td>
<td>-1%</td>
</tr>
<tr>
<td>National Science Foundation</td>
<td>4,194</td>
<td>3%</td>
</tr>
<tr>
<td>Agriculture/USDA</td>
<td>2,039</td>
<td>-16%</td>
</tr>
<tr>
<td>Veterans Affairs</td>
<td>786</td>
<td>0%</td>
</tr>
<tr>
<td>Commerce</td>
<td>1,013</td>
<td>-11%</td>
</tr>
<tr>
<td>Homeland Security</td>
<td>1,467</td>
<td>24%</td>
</tr>
<tr>
<td>Transportation</td>
<td>808</td>
<td>8%</td>
</tr>
<tr>
<td>Interior</td>
<td>582</td>
<td>-5%</td>
</tr>
<tr>
<td>Environmental Protection Agency</td>
<td>569</td>
<td>-1%</td>
</tr>
<tr>
<td>Other</td>
<td>1,145</td>
<td>-8%</td>
</tr>
<tr>
<td>TOTAL</td>
<td>132,304</td>
<td>1%</td>
</tr>
</tbody>
</table>

*Impact of appropriations not yet known
Opportunities

Research Business Models Subcommittee, Committee on Science, National Science and Technology Council

- Coordinating across Federal agencies to address important policy implications arising from the changing nature of interdisciplinary and collaborative research, and
- Examining the effects of these changes on business models for the conduct of scientific research sponsored by the Federal government.
- Working with the FDP, COGR, and others
SUCCESS!

- Three of Ten Initiatives Approved in January ’05!
  - Dr. Marburger, Director, OSTP signed a memo to research agency heads to implement a policy to acknowledge multiple PIs
  - Dr. Kathie Olsen, Assoc. Dir. For Science, OSTP and the Controller, OMB signed a memo endorsing the FDP subagreement as an effective practice
  - FDP “research terms” were published in the Federal Register as a proposal to implement more broadly and routinely across all agencies (were due 2/29)

- See the RBM web site for the latest news
CONTINUING PROGRESS!

Several Activities are in the Pipeline

- Streamlined and consistent progress report formats across agencies -
  - will be discussed at May FDP meeting
  - will also be published in the Federal Register for comments

- Enhanced A-133 compliance supplement on subrecipient monitoring
  - Describe risk management and streamlined review for “Prime” subrecipients with satisfactory audits
  - Possible implementation in the 2006 compliance supplement
Activities in the Pipeline (cont’d)

- Uniform Conflict of Interest policy
  - Request for Information may be published for comment this Spring, if it’s not confused by NIH issues
  - When finalized, for assistance awards, it could be published in OMB Circular A-110

- Models of Support for Instrument Operations and Maintenance (O/M)
  - Will address a variety of effective practices in supporting O/M for mid-size instrumentation
  - May attempt to address both institutional and agency practices that enhance ability to deal with unanticipated future O/M requirements
Conflict of Interest

- New Intramural Policy at NIH
- Extramural policies in place at NIH and NSF
- Community seeking broader clarification, government-wide
- RBM attempting to provide such clarification
Federal Government Future Directions

Consolidation:
- Started with payroll functions
- Spreading to include:
  - Financial accounting functions
  - Grants management functions
  - Procurement functions
  - Human resources functions

Streamlining:
- Grants.gov: FIND and APPLY
- 424R&R dataset
- Terms and Conditions
- Project Reports
Electronic Initiatives
What’s the Latest On?

- Grants.gov
- Grants Management Lines of Business (GMLoB)
The Grants.gov Initiative

- Mandate - President’s Management Agenda and PL 106-107
- Originally called the E-Grants Initiative
- Participation includes 26+ Grants-making agencies of the Federal Government
- Provides a single, unified “storefront” for all customers of Federal grants to find and apply electronically
  - Grants.gov Find – Launched in February 2003
  - Grants.gov Apply– Launched in October 2003
SF 424 (R&R) Background Information

- There was early recognition that the SF 424, as a stand-alone package, would not be appropriate for research proposals;
- Developing a research specific application package was vital for the research agencies;
- Rule imposed was two or more agencies required element for inclusion in the dataset; and
- Application has been built into “components.” With the exception of the Cover Page, all other components are optional. Agency will specify in the announcement or agency specific instructions which components are required.
SF 424 (R&R) Components

- Cover Pages 1 and 2 – (Includes certification and assurance language)
- Research and Related Project/Performance Site Location(s)
- Research and Related Other Project Information
- Research and Related Senior/Key Person Profile(s)
- Research and Related Personal Data (PD/PI and co-PD/PI only)
- Research and Related Budget
## Application for Federal Assistance

**SF 424 (R&R)**

### 1. Type of Submission
- [ ] Pre-application
- [ ] Application
- [ ] Corrected/Corrected Application

### 2. Date Submitted

### 3. Date Received by State

### 4. Date Received by Grants.gov

### 5. Applicant Information

- **Legal Name:**
- **Department:**
- **Address 1:**
- **Address 2:**
- **City:**
- **County:**
- **State:**
- **ZIP Code:**

### 6. Employer Identification Number (EIN) or TIN:

### 7. Type of Applicant: (Enter appropriate letter in box)
- [ ] Nonprofit
- [ ] Other (Specify):

### 8. Type of Application:
- [ ] New
- [ ] Revision

### 9. Name of Federal Agency:

### 10. Catalog of Federal Domestic Assistance Number:

### 11. Descriptive Title of Applicant’s Project:

### 12. Areas Affected by Project (Cities, countries, states, etc.)

### 13. Proposed Project:

- **Start Date:**
- **Ending Date:**

### 14. Congressional Districts of:
- [ ] Applicant
- [ ] Project

### 15. Project Director/Principal Investigator Contact Information

- **Prefix:**
- **First Name:**
- **Middle Name:**
- **Last Name:**
- **Suffix:**
- **Position/Title:**
- **Department:**
- **Address 1:**
- **City:**
- **State:**
- **ZIP Code:**
- **Country:**
# RESEARCH & RELATED Other Project Information

1. Are Human Subjects involved?  
   - Yes  
   - No

1.a. If YES to Human Subjects
   - Is the IRB review Pending?  
     - Yes  
     - No
   - IRB Approval Date: 
   - Exemption Number: 1 2 3 4 5 6
   - Human Subject Assurance Number: 

2. Are Vertebrate Animals Used?  
   - Yes  
   - No

2.a. If YES to Vertebrate Animals
   - Is the IACUC review Pending?  
     - Yes  
     - No
   - IACUC Approval Date: 
   - Animal Welfare Assurance Number: 

3. Is propriety/privileged information included in the application?  
   - Yes  
   - No

4.a. Does this project have an actual or potential impact on the environment?  
   - Yes  
   - No

4.b. If yes, please explain:  

4.c. If this project has an actual or potential impact on the environment, has an exemption been authorized or an environmental assessment (EA) or environmental impact statement (EIS) been performed?  
   - Yes  
   - No

4.d. If yes, please explain:  

5.a. Does this project involve activities outside the U.S. or partnership with International Collaborators?  
   - Yes  
   - No

5.b. Provide countries with which international cooperative activities are involved:  

5.c. Optional Explanation:  

6. Project Summary/Abstract  
   - Attach File

7. Facilities & Other Resources  
   - Attach File

8. Equipment  
   - Attach File

9. Bibliography & References Cited  
   - Attach File

10. Current and Pending Support  
    - Attach File

11. Project Narrative  
    - Attach File

12. Other Attachment  
    - Attach File
Grants.gov Current Status and Next Steps

- All 26 grant-making agencies are required to post all discretionary grant programs in the Grants.gov Find

- OMB has directed agencies to post in Grants.gov Apply:
  - 25% of their funding opportunities in FY 2005;
  - 75% of their funding opportunities in FY 2006;
  - 100% of their funding opportunities in FY 2007.
Grants.gov and NSF

- NSF is able to accept proposals through Grants.gov
- Unless otherwise specified in the funding opportunity, FastLane may be used to submit proposals to NSF
- 23 application packages were posted to Grants.gov for submission in FY 2005 (that met the 25% goal)
- 75% of NSF’s application packages will be posted to Grants.gov for submission in FY 2006.
- Application package will include:
  - SF 424 (R&R) and the NSF’s Grants.gov Application Guide
Submitting an Application to NSF through Grants.gov

1. Applicant* navigates to Grants.gov website
2. Applicant searches for program announcements
3. Applicant finds a program announcement and downloads application package (PureEdge forms) and instructions
4. Applicant completes application package
5. AOR submits application package to Grants.gov
6. Confimations are sent by both Grants.gov and NSF
7. NSF downloads submitted application packages and validates and inserts the information into FastLane

* Applicant or Researcher
Highlights of NSF Grants.gov Implementation Process

- NSF’s Grants.gov Application Guide - has been posted with application package and on Policy website.

- A HTML page for proposers to select the NSF unit of consideration and enter on NSF Cover Page.

- Process to register new organizations and individuals with FastLane using information provided with the proposal submitted via Grants.gov.
Note Section 3.2.1, Creating PDF Files

- Non-Adobe Acrobat Users
  - Can use Convert Files to PDF available under Quick Links in FastLane through Proposal Preparation or Research Administration

- Adobe 6.0/7.0 Users
  - Must use FastLane Job Options File
NSF Grants.gov Apply Challenges

- Subaward capability will be available to the agencies and NSF will include the subaward form in the NSF application package by early 2006
  - Approximately 20% of NSF proposals contain subawards
- Separately submitted collaborative proposals cannot be submitted through Grants.gov at this time
  - Approximately 10% of NSF proposals are separately submitted collaborative proposals
- Applicant System to System Process – MIT and InfoEd are testing the entire end-to-end business process with NSF
Lines of Business Opportunities

- **Common Solution**
  - A business process and/or technology based shared service made available to government agencies.

- **Business Driven (vs. Technology Driven)**
  - Solutions address distinct business improvements that directly impact LoB performance goals.

- **Developed Through Architectural Processes**
  - Solutions are developed through a set of common and repeatable processes and tools.

- **Current LoBs**
  - Financial Management (FMLOB)
  - Human Resources Management (HRLOB)
  - Grants Management (GMLoB)
  - Federal Health Architecture (FHALOB)
  - Case Management (CMLOB)
Grants Management Line of Business (GMLoB)

- Big dollars spread over many agencies/programs:
  - $ 540 B
  - 26 agencies
  - > 900 programs

- Significant spending on Grant Management systems. Fiscal Year 2005:
  - $144 million Development Modernization and Enhancement
  - $3.8 billion in Operations and Maintenance

- Opportunities for increased efficiencies, improved oversight and management, and customer-centric focus
# GMLoB - Vision & Goals

<table>
<thead>
<tr>
<th>Vision</th>
<th>A government-wide solution to support end-to-end grants management activities that promote citizen access, customer service, and agency financial and technical stewardship.</th>
</tr>
</thead>
</table>
| Goals  | - Improve customer access to grant opportunities  
       | - Increase efficiency of the submission process  
       | - Improve decision making  
       | - Integrate with Financial Management processes  
       | - Improve the efficiency of the reporting procedures in order to increase the usable information content  
       | - Optimize the post-award and closeout actions  |
GMLoB Participating Agencies

Managing Partners:
- National Science Foundation
- Department of Health and Human Services

Participating Agencies:
- Department of Agriculture
- Department of Veterans Affairs
- Department of Commerce
- Agency for International Development
- Department of Defense
- Corporation for National Service
- Department of Education
- Environmental Protection Agency
- Department of Energy
- Department of Homeland Security
- Institute for Museum and Library Services
- Department of Housing and Urban Development
- NASA
- Department of the Interior
- National Archives and Records Administration
- Department of Justice
- National Endowment for the Arts
- Department of Labor
- National Endowment for the Humanities
- Department of State
- Department of Transportation
- Small Business Administration
- Department of the Treasury
- Social Security Administration
GMLoB - Accomplishments

- GMLoB operating model and approach
- Common Grants Management process
- Evaluation of Request for Information
- Common solution white paper
- Target architecture
- Business case development
GMLoB – Current Status

Governance established
- HHS and NSF to be co-leads in implementation
- Grants Executive Board to provide guidance and oversight
- Grants Policy Committee to continue Policy Development and input and liaison to Grants Executive Board

GMLoB and Grants.gov have begun to discuss streamlining opportunities in back office and front office processes and data

Managing partners are working with Grants Executive Board to identify initial 3 consortia
- Prove the concept
- Standardize methodologies and consortia operating model
- Identify additional consortia in late FY06 / early FY07
GMLoB - Process for Identifying Consortia

**Purpose**
- Develop transparent process for the grant-making community to recommend initial 3 consortia that are most prepared to move ahead

**Outcome**
- At least three named consortia
- Agreement by the grants-making community to move forward with the named consortia

**Approach**
- Ask agencies to submit a “Declaration of Intent” to communicate interest in leading a consortium or participating in one as a member
- Assemble committee out of the Grants Executive Board to rank Declarations of Intent and recommend 3 consortia leads
GMLoB – Next Steps

- Recommend and name initial 3 consortia
- Work with consortia to develop action plans
- Reach out to grantee community
- Begin documenting policy, technical, data, process guidelines and standards
- Ensure consistency with common operating model and common business process
- Share learning across consortia