National Science Foundation

Grant Management

Larry Weber
June 27, 2007

International cooperation in research and education is not a luxury; it is a necessity—and the foundation for all of our futures. The issue for research funding agencies is no longer whether we should work together, but how we can work together more effectively—smarter, faster, cheaper, and with greater impact on the generation of new knowledge and the development of innovative technologies.

Arden Bement, Director, NSF, June 2007

National Science Foundation

- **Discovery – Advancing frontiers**

- **Learning – Workforce and literacy**

- **Research Infrastructure – instrumentation and facilities**

National Science Foundation

- **Independent government agency**

- **FY 2007 budget = $6 billion**

- **Operates no labs**

- **Makes grants to fund science and engineering research and education**

NSF Proposal Statistics (2006)

42,352 proposals

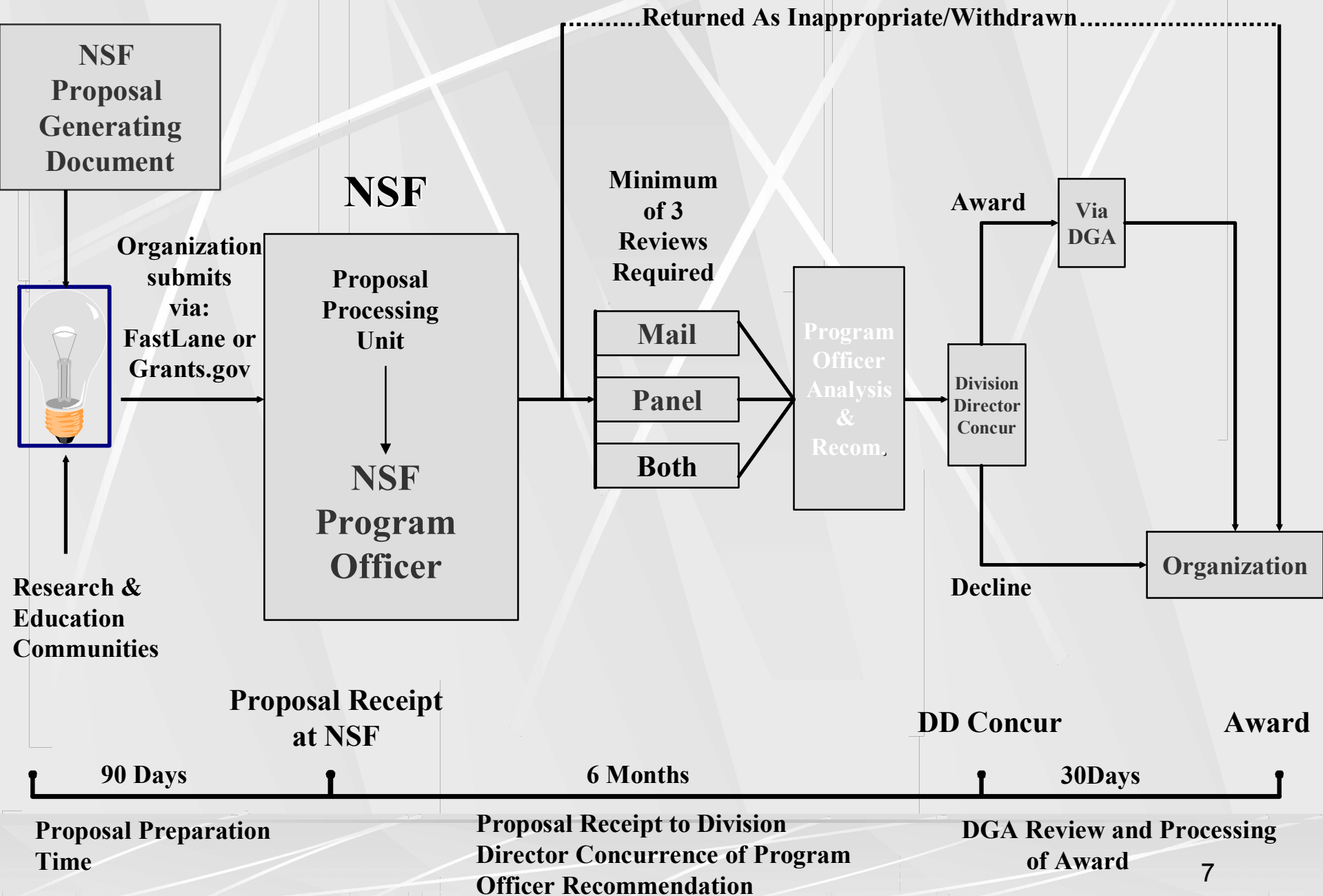**239,149 reviews**

41,989 reviewers

10,425 awards

25% funding rate

Proposals to NSF

- **Submitted by <u>institutions</u> – not by individual researchers**

- **Institutions certify personnel and budget items**

- **Submitted, reviewed, and administered electronically**

NSF Proposal and Award Process and Timeline

.........Returned As Inappropriate/Withdrawn.........................

NSF Proposal Generating Document

Organization submits via: FastLane or Grants.gov

Research & Education Communities

NSF

Proposal Processing Unit

NSF Program Officer

Minimum of 3 Reviews Required

Mail

Panel

Both

Program Officer Analysis & Recom.

Division Director Concur

Award

Via DGA

Decline

Organization

Proposal Receipt at NSF

DD Concur

Award

90 Days	6 Months	30 Days

Proposal Preparation Time

Proposal Receipt to Division Director Concurrence of Program Officer Recommendation

DGA Review and Processing of Award

7

NSF Directorates/Offices

- **Biological Sciences**
- **Computer & Info. Science & Engineering**
- **Education & Human Resources**
- **Engineering**
- **Geosciences**
- **Mathematical & Physical Sciences**
- **Social, Behavioral & Economic Sciences**
- **Integrative Activities**
- **Polar Programs**
- **Cyberinfrastructure**
- **International Science and Engineering**

Proposal Review Criterion
Intellectual Merit

- **Potential to advance knowledge**

- **Qualifications of investigators**

- **Creativity and originality**

- **Conceptualization and organization**

- **Access to resources**

Proposal Review Criterion
Broader Impacts

- **Promote teaching/training/learning**
- **Participation of underrepresented groups**
- **Enhance research/education infrastructure**
- **Dissemination of results**
- **Benefits to society**
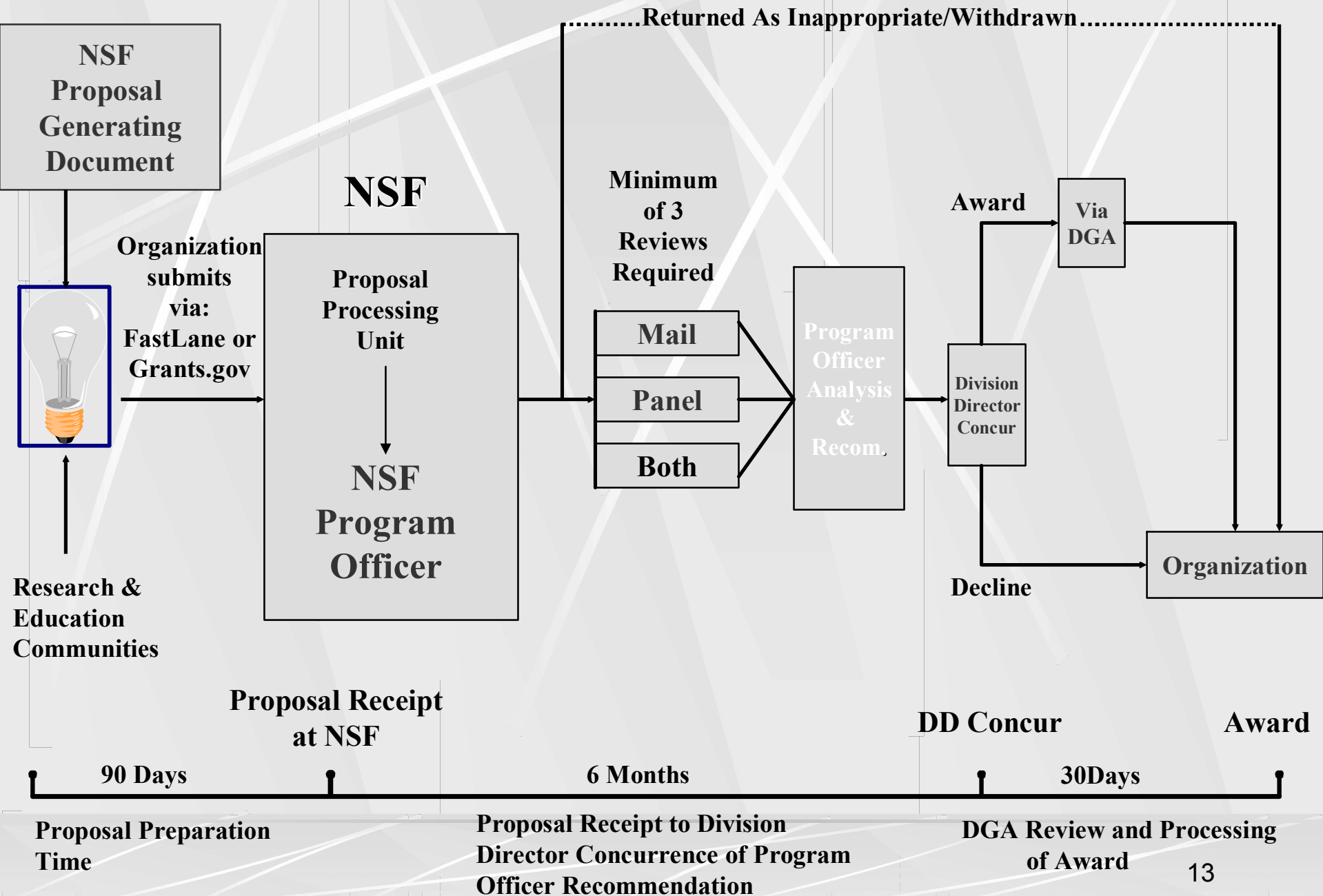- **International collaboration**

NSF Program Officers

- **Seek <u>advice</u> of peer reviewers**

- **Recommend fund or decline**

- **Review/negotiate <u>bottom-line</u> budgets**

- **Consider type of award instrument**

- **Communicate results to PI**

NSF Program Officers

- **<u>Program</u> managers**

- **Not Project managers**

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NSF Grants

- **Made to <u>institutions</u> –
  not to individual researchers**

- **Institutions are accountable for personnel, budget and project oversight**

- **Transactions are done electronically**

Role of the Grantee

- **Grantee has full responsibility for the project and for adherence to the grant conditions**

- **Grantee agrees to comply with applicable Federal requirements and for prudent management of all expenditures and actions, consistent with grant conditions**

- **Expenditures must be allowable, allocable, and reasonable, and all actions must --**

  - **be consistent with NSF and grantee policies**
  - **represent effective utilization of resources, and**
  - **not constitute a significant project change**

NSF Division of Grants and Agreements (DGA)

- **Administers over 30,000 active awards each year**

- **Reviews, negotiates & obligates funding for over 11,000 new awards each year**

- **Responsible for monitoring the business practices of all NSF grantees**

Considerations for DGA

- **Type of awardee institution – universities, community colleges, non-profits, local school systems, local governments, for-profits, foreign**

- **Type of award – Grant (standard, continuing) or Cooperative Agreement**

- **Financial factors – Award amount, cost sharing, indirect cost rate, significant subawards**

- **Administrative factors – type of award, conditions that apply, cognizant federal agency, subcontracts**

Types of NSF Grants

- **Standard Grant (typically 3 years)**
  - Entire budget is obligated at start
  - Funds are not tied to individual fiscal years
  - Grantee can do one-year no cost extension

- **Continuing Grant (typically 5 years)**
  - Budget committed up front, but funds are obligated annually, based on expenditures and progress
  - Grant year does not equal fiscal year
  - Funds can be carried over from year to year
  - Grantee can do one-year no cost extension

Who Is Responsible???

- **Shift between budget categories?**

- **Approve individual expenditures?**

- **Financial accounting/reporting?**

- **Carry over funds between fiscal years?**

- **One-year no cost extension?**

The Grantee Institution!!!

NSF Division of Institution and Award Support (DIAS)

- **Policy Office**

- **Systems Office**

- **Cost Analysis and Audit Resolution Branch**

Policy Office

- **Develop and implement policies and procedures for the NSF proposal & award process**

- **Leadership in developing government-wide grants policy**

- **NSF clearance process**

- **eGrants system administration**

- **Outreach**

Systems Office

- **Systems oversight/accountability/security**
- **Review/analyze system specifications and requirements**
- **Coordinate/monitor systems re-engineering**
- **Test systems enhancements/modifications**
- **Business resource for systems applications and cross-system functionality**
- **Oversight of Continuing Grant Increment functionality**
- **Interagency system interface**
- **Streamlining of award processes**

Cost Analysis and Audit Resolution Branch

- **Pre-award reviews**

- **Indirect rate negotiations**

- **Audit resolution**

- **Take lead in post-award monitoring in partnership with DGA**

- **Accounting system and financial capability reviews**

Award Monitoring by DGA and DIAS

- **Focus on risk assessment**
  - **Type of awardee institution**
  - **Financial factors**
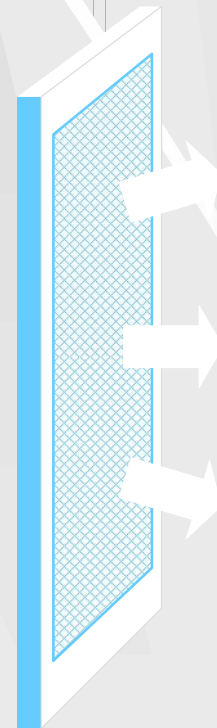 - **Administrative factors**

Risk-based Identification Model

NSF Award Portfolio

- 2,900 Institutions
- 35,600 Awards
- $19 Billion

Data Driven Risk Factors

- Current Award Amount
- Total Planned Award Amount
- New Institution
- NSF Cognizant Agency
- Type of Award Organization
- Award Instrument Complexity
- Cost Sharing
- Subawards
- Participant Support
- Equipment
- EOFY Award

High Risk

Medium Risk

Low Risk

Monitoring Strategy

ACTIVITIES	Category A	Category B	Category C
Site Visits Targeted Review Areas Follow-up Desk Review	✓		
Desk Reviews	✓	✓	
FCTR Transaction Testing	✓	✓	✓

Category A - Awardees with at least one high-risk award
Category B - Awardees (not Category A) with at least one medium-risk award or for which NSF is cognizant Agency
Category C - All other awardees

Risk-based Breakout of NSF Awards, Obligations, and Institutions

- **High Risk (Category A)**

  - 8% of awardees; 67% of obligations; 53% of awards

- **Medium Risk (Category B)**

  - 17% of awardees; 26% of obligations; 31% of awards

- **Low Risk (Category C)**

  74% of awardees; 7% of obligations; 15% of awards

By focusing monitoring on 25% of highest risk awardees, NSF can cover 93% of its award portfolio dollars.

Key Principles of NSF Grant Management

- **Grantee institutions administer grants to their individual researchers**

- **Separation of program management and project management**

- **Risk-based monitoring of grantee institutions**

FLEXIBILITY

Accessing Documents on the NSF Web site

- **Web Address:** http://www.nsf.gov

- **Click:** *Visit NSF – Budget, Finance, Award Management*

- **Click:** *Division of Institution & Award Support* [http://www.nsf.gov/bfa/dias/]

  - **Click:** *Policy & Guidance*, *Policy Office* to get to Proposal & Award Policies & Procedures Guide (PAPP) which contains --
    - Grant Proposal Guide (GPG)
    - Award & Administration Guide (AAG)

  - **Click:** *Grant & Agreement Conditions*
    - Grant General Conditions (GC-1)
    - Federal Demonstration Partnership (FDP)

    or

- **Click:** *Division of Grants & Agreements* [http://www.nsf.gov/bfa/dga/]

  - **Click:** *NSF Prospective New Awardee Guide*
    - OMB Circulars