

# Communicating Hurricane Information (CHI)

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## Program Solicitation

NSF 08-551

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### National Science Foundation

Directorate for Social, Behavioral & Economic Sciences  
Division of Social and Economic Sciences

Directorate for Engineering  
Civil, Mechanical and Manufacturing Innovation



National Oceanic and Atmospheric Administration

**Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

June 03, 2008

## SUMMARY OF PROGRAM REQUIREMENTS

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### General Information

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**Program Title:**

Communicating Hurricane Information (CHI)

**Synopsis of Program:**

In a joint announcement, NOAA and NSF call for proposals focusing on advancing fundamental understanding of the communication of hurricane outlooks, forecasts, watches, and warnings both to decision makers (i.e., emergency managers, elected officials) and to the general public.

**Cognizant Program Officer(s):**

- Robert E. O'Connor, Directorate for Social, Behavioral and Economic Sciences, Division of Social and Economic Sciences, 995, telephone: (703) 292-7263, fax: (703) 292-9068, email: [roconnor@nsf.gov](mailto:roconnor@nsf.gov)
- Dennis Wenger, Directorate of Engineering, Division of Civil, Mechanical and Manufacturing Innovation, 545, telephone: (703) 292-8606, fax: (703) 292-8606, email: [dwenger@nsf.gov](mailto:dwenger@nsf.gov)

**Applicable Catalog of Federal Domestic Assistance (CFDA) Number(s):**

- 47.041 --- Engineering
- 47.075 --- Social Behavioral and Economic Sciences

## Award Information

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**Anticipated Type of Award:** Standard Grant or Continuing Grant

**Estimated Number of Awards:** 6 to 12 NOAA and NSF anticipate making approximately a total of 6-12 awards for research projects. These awards will be for 1 to 3 years.

**Anticipated Funding Amount:** \$2,000,000 Pending availability of funds, NOAA and NSF expect to have at least \$2,000,000 available to support total award sizes (including indirect costs) not to exceed \$400,000. This maximum is the total for the project, not a yearly maximum. Projects that exceed this maximum amount of \$400,000 will be returned without review.

## Eligibility Information

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### Organization Limit:

None Specified

### PI Limit:

Eligible research proposals must have at least one investigator from the social, behavioral, or economic sciences, and at least one from the physical sciences or engineering. Proposals that do not meet this requirement will be returned without review.

### Limit on Number of Proposals per Organization:

None Specified

### Limit on Number of Proposals per PI: 1

A social, behavioral, or economic scientist may appear as Principal Investigator (PI), co-PI, or other senior personnel on only one proposal submitted in Fiscal Year 2008 in response to this Program Solicitation. This limitation includes proposals submitted by a lead organization, any sub-award submitted as part of a proposal, or any non-lead collaborative proposal. This restriction applies to this solicitation only and is not meant to inhibit submissions of proposals by social science investigators to other NOAA or NSF activities or programs.

## Proposal Preparation and Submission Instructions

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### A. Proposal Preparation Instructions

- **Letters of Intent:** Not Applicable
- **Preliminary Proposal Submission:** Not Applicable
- **Full Proposals:**
  - Full Proposals submitted via FastLane: NSF Proposal and Award Policies and Procedures Guide, Part I: Grant Proposal Guide (GPG) Guidelines apply. The complete text of the GPG is available electronically on the NSF website at: [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=gpg](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg).
  - Full Proposals submitted via Grants.gov: NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov Guidelines apply (Note: The NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: <http://www.nsf.gov/bfa/dias/policy/docs/grantsgovguide.pdf>)

### B. Budgetary Information

- **Cost Sharing Requirements:** Cost Sharing is not required under this solicitation.
- **Indirect Cost (F&A) Limitations:** Not Applicable
- **Other Budgetary Limitations:** Other budgetary limitations apply. Please see the full text of this solicitation for further information.

## C. Due Dates

- **Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

June 03, 2008

## Proposal Review Information Criteria

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**Merit Review Criteria:** National Science Board approved criteria apply.

## Award Administration Information

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**Award Conditions:** Standard NSF award conditions apply.

**Reporting Requirements:** Standard NSF reporting requirements apply.

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## I. INTRODUCTION

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NOAA and NSF are cooperating to fund research that will provide important new fundamental knowledge regarding the communication of hurricane information. Changing demographics, communication technologies, and forecasting abilities have created an important opportunity to improve communications:

- Americans continue to migrate in large numbers to areas vulnerable to hurricane disasters.
- New technologies and information outlets (e.g., internet, Weather Channel) create challenges and opportunities for risk communicators.
- The information provided by the National Weather Service about threatening hurricanes has become more accurate

and precise.

Although this solicitation will fund research that uses hurricanes as the testbed, the theoretical advances should be relevant to other hazards.

## II. PROGRAM DESCRIPTION

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This solicitation aims to advance basic research in the social, behavioral and economic sciences related to the communication of hurricane outlooks, forecasts, watches, and warnings both to decision makers (i.e., emergency managers, elected officials) and to the general public. Although all proposals addressing this topic will be considered, investigators are urged to consider specific communication concerns:

How are messages received and understood?

- How do risk perceptions vary by demographic and cultural groupings?
- Do messages effectively reach the most vulnerable populations?
- What are the sources of information (the non-linear warning system) for different groupings?
- What are the influences of groups and social networks upon the risk communication process?
- Are key concepts (e.g., hurricane watches and warnings) understood by decision makers as well as the general public?
- Would new concepts (e.g., a “parallel” measure to the Saffir-Simpson scale) be useful to improve communications?
- Would the use of new technologies improve communications?
- How can the use of probabilistic information be improved?

What is the linkage between communications and behavior?

- How do multiple sources of information influence how decision makers (i.e., emergency managers, elected officials) and the public respond?
- How do responses vary by demographic and cultural groups, and among the most vulnerable?
- What are the obstacles to and opportunities for the effective use of hurricane forecasts, watches, and warnings?

Strong proposals may use any of the variety of methods found in social, behavioral, and economic research.

The role of the physical scientist or engineer on each project is to provide expertise about the state of hurricane forecast technologies and what is likely to be available in the near future. This interaction between the social scientists and the physical scientist or engineer should continue throughout the duration of the project. The physical scientist or engineer might also inform the social scientist about possible consequences (e.g., likely damage to built infrastructure, natural environment, loss of life) of forecasted level of hurricane.

## III. AWARD INFORMATION

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**Anticipated Type of Award:** Continuing Grant or Standard Grant

**Estimated Number of Awards:** 6 to 12 NOAA and NSF anticipate making approximately a total of 6-12 awards for research projects. These awards will be for 1 to 3 years.

**Anticipated Funding Amount:** \$2,000,000 Pending availability of funds, NOAA and NSF expect to have at least \$2,000,000 available to support total award sizes (including indirect costs) not to exceed \$400,000. This maximum is the total for the project, not a yearly maximum. Projects that exceed this maximum amount of \$400,000 will be returned without review.

Estimated program budget, number of awards and average award size/duration are subject to the availability of funds.

## IV. ELIGIBILITY INFORMATION

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**Organization Limit:**

None Specified

**PI Limit:**

Eligible research proposals must have at least one investigator from the social, behavioral, or economic sciences, and at least one from the physical sciences or engineering. Proposals that do not meet this requirement will be returned without review.

**Limit on Number of Proposals per Organization:**

None Specified

**Limit on Number of Proposals per PI: 1**

A social, behavioral, or economic scientist may appear as Principal Investigator (PI), co-PI, or other senior personnel on only one proposal submitted in Fiscal Year 2008 in response to this Program Solicitation. This limitation includes proposals submitted by a lead organization, any sub-award submitted as part of a proposal, or any non-lead collaborative proposal. This restriction applies to this solicitation only and is not meant to inhibit submissions of proposals by social science investigators to other NOAA or NSF activities or programs.

## V. PROPOSAL PREPARATION AND SUBMISSION INSTRUCTIONS

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### A. Proposal Preparation Instructions

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**Full Proposal Preparation Instructions:** Proposers may opt to submit proposals in response to this Program Solicitation via Grants.gov or via the NSF FastLane system.

- Full proposals submitted via FastLane: Proposals submitted in response to this program solicitation should be prepared and submitted in accordance with the general guidelines contained in the NSF Grant Proposal Guide (GPG). The complete text of the GPG is available electronically on the NSF website at: [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=gpg](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=gpg). Paper copies of the GPG may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov). Proposers are reminded to identify this program solicitation number in the program solicitation block on the NSF Cover Sheet For Proposal to the National Science Foundation. Compliance with this requirement is critical to determining the relevant proposal processing guidelines. Failure to submit this information may delay processing.
- Full proposals submitted via Grants.gov: Proposals submitted in response to this program solicitation via Grants.gov should be prepared and submitted in accordance with the NSF Grants.gov Application Guide: A Guide for the Preparation and Submission of NSF Applications via Grants.gov. The complete text of the NSF Grants.gov Application Guide is available on the Grants.gov website and on the NSF website at: (<http://www.nsf.gov/bfa/dias/policy/docs/grantsgovguide.pdf>). To obtain copies of the Application Guide and Application Forms Package, click on the Apply tab on the Grants.gov site, then click on the Apply Step 1: Download a Grant Application Package and Application Instructions link and enter the funding opportunity number, (the program solicitation number without the NSF prefix) and press the Download Package button. Paper copies of the Grants.gov Application Guide also may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

In determining which method to utilize in the electronic preparation and submission of the proposal, please note the following:

**Collaborative Proposals.** All collaborative proposals submitted as separate submissions from multiple organizations must be submitted via the NSF FastLane system. Chapter II, Section D.3 of the Grant Proposal Guide provides additional information on collaborative proposals.

**Proposal Format**

Proposals not in conformance with the proposal-preparation requirements of the GPG or NSF Grants.gov Application Guide will be returned without review. Please note, however, that the page limits contained in this solicitation takes precedence over

those given in the GPG and the NSF Grants.gov Application Guide.

Proposals submitted for this competition should clearly specify all relevant parts of the proposed project. With respect to the proposed research, the proposal should outline the theoretical foundations of the project as based in relevant literature. It should specify the questions on which the research will focus, the research methods that will be used, the expertise that different researchers will bring to different facets of the project, and how and where results will be disseminated. With respect to education, the proposal should specify educational goals, what methods will be used to attain those goals, and the expertise of individuals who will participate in educational efforts. The proposal should also identify the proposed educational products, how those products will be disseminated, and how the effectiveness of educational activities will be evaluated.

This program solicitation requests material about the personnel involved in the project. Please use the following definitions to provide the corresponding information.

- Principal Investigators -- Individuals who would assume responsibility for an award resulting from this competition, would manage the award, and are listed on the cover sheet of the proposal.
- Senior Personnel -- All Principal Investigators, as well as any named other senior personnel who will receive salary support, as well as non-salaried senior investigators who will play lead roles in the conduct of the project. This group may include active participants in the research team from outside the U.S.
- Project Participants -- Every person involved with the research project, including students.

### **Proposal Cover Sheet**

Work on the Cover Sheet first. Check that the Awardee and Performing Organizations are correct. Highlight the Program Solicitation Number and click on the "Select" button. Your proposal will automatically be assigned to the correct directorate and division on the Cover Sheet. (Grants.gov users: The program solicitation number will be pre-populated by Grants.gov on the NSF Grant Application Cover Page.) Prepare the remainder of the Cover Sheet.

### **Project Description**

All project descriptions are limited to 15 pages in length. With the exceptions noted below, proposers may organize the different components of the project description as they wish.

### **Biographical Sketches**

A biographical sketch with a 2-page limit must be provided for each investigator and each person identified as senior personnel.

### **Current and Pending Support**

Each person identified as a principal investigator or as senior personnel must submit a current and pending support form. This proposal is considered a pending support activity.

### **Supplementary Documentation**

Include in this section letters of commitment from any entity that is an integral part of the proposed project, such as the involvement of an international collaborator or permission to access sites, materials, or data for research or other associated project activities. Generic letters of endorsement are not allowed, however.

If you wish to do so, you may include in this section Institutional Review Board certifications associated with the use of human subjects or IACUC certifications associated with the use of animal subjects.

Unless authorized here or in the NSF Grant Proposal Guide, no other materials should be included in this section. Survey or interview protocols are not permitted in this section, nor are reprints of articles previously published by the investigators. Proposals that include materials in this section that belong in the project description may be returned without review.

### **Appendices**

No appendices are permitted.

### **Proposals Involving Multiple Institutions**

Proposals involving multiple organizations may be submitted in one of two ways: (1) as a single proposal with one organization serving as the lead organization and with support to other organizations provided through sub-awards, or (2) as separate submissions from eligible organizations. See Chapter II, D.3 of the GPG for instructions regarding the preparation of collaborative proposals and carefully follow on-line instructions regarding their preparation.

### Proposals Involving Collaborators at Foreign Organizations

Proposers are reminded they must provide biographical sketches of all senior project personnel, including those at foreign institutions. In addition, as supplementary documentation, proposals involving foreign collaborators must provide letters of commitment from the foreign counterpart institutions. Please note that although eligibility for this competition is restricted to U.S. organizations, as described in the GPG, collaborations with foreign institutions may be considered. Any funding for non-U.S. organizations must be made through subawards. Those subawards to non-U.S. organizations may not include any indirect costs.

### Human Subjects

If the project involves human subjects, the Institutional Review Board (IRB) of the submitting organization must certify that the proposed project is in compliance with the Federal Government's "Common Rule" for the protection of human subjects. If IRB approval has been obtained and the date of approval is listed on the cover sheet, no other certification is required. If IRB approval is still pending, submit certification of IRB approval in electronic form as soon as approval is obtained to the cognizant program officer. (The name of this program officer will be listed in the Proposal Status module of FastLane.) Delays in obtaining IRB certification may result in NSF being unable to make an award. For more information regarding the protection of human subjects, consult <http://www.nsf.gov/bfa/dias/policy/human.jsp>.

### Pre-Submission Checklist

Proposals must be in compliance with the GPG or the Grants.gov Application Guide and special requirements in the solicitation in order to be considered for review. Proposals not in compliance with these requirements will be returned without review. Please refer to the following checklist to address some of the items required in all proposals:

- Font and margin requirements
- Page numbers on pages
- Project summary that addresses the intellectual merit of the proposed activity AND the broader impacts resulting from the proposed activity
- Project description that is 15 pages
- Biographical Sketches (including collaborators and advisors/advisees) for all senior personnel

## B. Budgetary Information

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**Cost Sharing:** Cost sharing is not required under this solicitation.

**Other Budgetary Limitations:** The CHI competition intends to make awards for up to \$400,000 for the duration of the award. Budgets should be developed at scales appropriate for the project to be conducted. No award may be more than 3 years in duration.

*Research Platform Support:* Specific amounts for research cruises, polar logistics, arctic logistics, or use of aircraft or other atmospheric sciences field facilities should not be included in the budget request. However, the PI should submit with their proposal the appropriate request forms related to his/her research such as: the University-National Oceanographic Laboratory System (UNOLS) request form (see UNOLS website at: <http://www.unols.org>), NSF's Office of Polar Programs logistics request form (see the U.S. Antarctic website at: (<http://www.usap.gov/scienceSupport/polarice/>), or the NSF Lower Atmospheric Observing Facilities request form (see NCARS website at: <http://www.eol.ucar.edu/instrumentation/eol-observing-facilities>).

## C. Due Dates

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- **Full Proposal Deadline(s)** (due by 5 p.m. proposer's local time):

June 03, 2008

## D. FastLane/Grants.gov Requirements

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- **For Proposals Submitted Via FastLane:**

Detailed technical instructions regarding the technical aspects of preparation and submission via FastLane are available at: <https://www.fastlane.nsf.gov/a1/newstan.htm>. For FastLane user support, call the FastLane Help Desk at 1-800-673-6188 or e-mail [fastlane@nsf.gov](mailto:fastlane@nsf.gov). The FastLane Help Desk answers general technical questions related to the use of the FastLane system. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this funding opportunity.

**Submission of Electronically Signed Cover Sheets.** The Authorized Organizational Representative (AOR) must electronically sign the proposal Cover Sheet to submit the required proposal certifications (see Chapter II, Section C of the Grant Proposal Guide for a listing of the certifications). The AOR must provide the required electronic certifications within five working days following the electronic submission of the proposal. Further instructions regarding this process are available on the FastLane Website at: <https://www.fastlane.nsf.gov/fastlane.jsp>.

#### • For Proposals Submitted Via Grants.gov:

Before using Grants.gov for the first time, each organization must register to create an institutional profile. Once registered, the applicant's organization can then apply for any federal grant on the Grants.gov website. The Grants.gov's Grant Community User Guide is a comprehensive reference document that provides technical information about Grants.gov. Proposers can download the User Guide as a Microsoft Word document or as a PDF document. The Grants.gov User Guide is available at: <http://www.grants.gov/CustomerSupport>. In addition, the NSF Grants.gov Application Guide provides additional technical guidance regarding preparation of proposals via Grants.gov. For Grants.gov user support, contact the Grants.gov Contact Center at 1-800-518-4726 or by email: [support@grants.gov](mailto:support@grants.gov). The Grants.gov Contact Center answers general technical questions related to the use of Grants.gov. Specific questions related to this program solicitation should be referred to the NSF program staff contact(s) listed in Section VIII of this solicitation.

**Submitting the Proposal:** Once all documents have been completed, the Authorized Organizational Representative (AOR) must submit the application to Grants.gov and verify the desired funding opportunity and agency to which the application is submitted. The AOR must then sign and submit the application to Grants.gov. The completed application will be transferred to the NSF FastLane system for further processing.

## VI. NSF PROPOSAL PROCESSING AND REVIEW PROCEDURES

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Proposals received by NSF are assigned to the appropriate NSF program where they will be reviewed if they meet NSF proposal preparation requirements. All proposals are carefully reviewed by a scientist, engineer, or educator serving as an NSF Program Officer, and usually by three to ten other persons outside NSF who are experts in the particular fields represented by the proposal. These reviewers are selected by Program Officers charged with the oversight of the review process. Proposers are invited to suggest names of persons they believe are especially well qualified to review the proposal and/or persons they would prefer not review the proposal. These suggestions may serve as one source in the reviewer selection process at the Program Officer's discretion. Submission of such names, however, is optional. Care is taken to ensure that reviewers have no conflicts of interest with the proposal.

### A. NSF Merit Review Criteria

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All NSF proposals are evaluated through use of the two National Science Board (NSB)-approved merit review criteria: intellectual merit and the broader impacts of the proposed effort. In some instances, however, NSF will employ additional criteria as required to highlight the specific objectives of certain programs and activities.

The two NSB-approved merit review criteria are listed below. The criteria include considerations that help define them. These considerations are suggestions and not all will apply to any given proposal. While proposers must address both merit review criteria, reviewers will be asked to address only those considerations that are relevant to the proposal being considered and for which the reviewer is qualified to make judgements.

#### **What is the intellectual merit of the proposed activity?**

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? How well qualified is the proposer (individual or team) to conduct the project? (If appropriate, the reviewer will comment on the quality of the prior work.) To what extent does the proposed activity suggest and explore creative, original, or potentially transformative concepts? How well conceived and organized is the proposed activity? Is there sufficient access to resources?

#### **What are the broader impacts of the proposed activity?**

How well does the activity advance discovery and understanding while promoting teaching, training, and learning? How well does the proposed activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)? To what extent will it enhance the infrastructure for research and education, such as facilities, instrumentation, networks, and partnerships? Will the results be disseminated broadly to enhance scientific and technological understanding? What may be the benefits of the proposed activity to society?

Examples illustrating activities likely to demonstrate broader impacts are available electronically on the NSF website at: <http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf>.

NSF staff also will give careful consideration to the following in making funding decisions:

#### ***Integration of Research and Education***

One of the principal strategies in support of NSF's goals is to foster integration of research and education through the programs, projects, and activities it supports at academic and research institutions. These institutions provide abundant opportunities where individuals may concurrently assume responsibilities as researchers, educators, and students and where all can engage in joint efforts that infuse education with the excitement of discovery and enrich research through the diversity of learning perspectives.

#### ***Integrating Diversity into NSF Programs, Projects, and Activities***

Broadening opportunities and enabling the participation of all citizens -- women and men, underrepresented minorities, and persons with disabilities -- is essential to the health and vitality of science and engineering. NSF is committed to this principle of diversity and deems it central to the programs, projects, and activities it considers and supports.

## **B. Review and Selection Process**

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Proposals submitted in response to this program solicitation will be reviewed by Ad hoc Review and/or Panel Review.

Reviewers will be asked to formulate a recommendation to either support or decline each proposal. The Program Officer assigned to manage the proposal's review will consider the advice of reviewers and will formulate a recommendation.

After scientific, technical and programmatic review and consideration of appropriate factors, the NSF Program Officer recommends to the cognizant Division Director whether the proposal should be declined or recommended for award. NSF is striving to be able to tell applicants whether their proposals have been declined or recommended for funding within six months. The time interval begins on the deadline or target date, or receipt date, whichever is later. The interval ends when the Division Director accepts the Program Officer's recommendation.

A summary rating and accompanying narrative will be completed and submitted by each reviewer. In all cases, reviews are treated as confidential documents. Verbatim copies of reviews, excluding the names of the reviewers, are sent to the Principal Investigator/Project Director by the Program Officer. In addition, the proposer will receive an explanation of the decision to award or decline funding.

In all cases, after programmatic approval has been obtained, the proposals recommended for funding will be forwarded to the Division of Grants and Agreements for review of business, financial, and policy implications and the processing and issuance of a grant or other agreement. Proposers are cautioned that only a Grants and Agreements Officer may make commitments, obligations or awards on behalf of NSF or authorize the expenditure of funds. No commitment on the part of NSF should be inferred from technical or budgetary discussions with a NSF Program Officer. A Principal Investigator or organization that makes financial or personnel commitments in the absence of a grant or cooperative agreement signed by the NSF Grants and Agreements Officer does so at their own risk.

## **VII. AWARD ADMINISTRATION INFORMATION**

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### **A. Notification of the Award**

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Notification of the award is made to *the submitting organization* by a Grants Officer in the Division of Grants and Agreements. Organizations whose proposals are declined will be advised as promptly as possible by the cognizant NSF Program administering the program. Verbatim copies of reviews, not including the identity of the reviewer, will be provided automatically to the Principal Investigator. (See Section VI.B. for additional information on the review process.)

### **B. Award Conditions**

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An NSF award consists of: (1) the award letter, which includes any special provisions applicable to the award and any numbered amendments thereto; (2) the budget, which indicates the amounts, by categories of expense, on which NSF has based its support (or otherwise communicates any specific approvals or disapprovals of proposed expenditures); (3) the proposal referenced in the award letter; (4) the applicable award conditions, such as Grant General Conditions (GC-1); \* or Federal Demonstration Partnership (FDP) Terms and Conditions \* and (5) any announcement or other NSF issuance that may be incorporated by reference in the award letter. Cooperative agreements also are administered in accordance with NSF Cooperative Agreement Financial and Administrative Terms and Conditions (CA-FATC) and the applicable Programmatic Terms and Conditions. NSF awards are electronically signed by an NSF Grants and Agreements Officer and transmitted electronically to the organization via e-mail.

\*These documents may be accessed electronically on NSF's Website at [http://www.nsf.gov/awards/managing/general\\_conditions.jsp?org=NSF](http://www.nsf.gov/awards/managing/general_conditions.jsp?org=NSF). Paper copies may be obtained from the NSF Publications Clearinghouse, telephone (703) 292-7827 or by e-mail from [pubs@nsf.gov](mailto:pubs@nsf.gov).

More comprehensive information on NSF Award Conditions and other important information on the administration of NSF awards is contained in the NSF *Award & Administration Guide* (AAG) Chapter II, available electronically on the NSF Website at [http://www.nsf.gov/publications/pub\\_summ.jsp?ods\\_key=aag](http://www.nsf.gov/publications/pub_summ.jsp?ods_key=aag).

### C. Reporting Requirements

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For all multi-year grants (including both standard and continuing grants), the Principal Investigator must submit an annual project report to the cognizant Program Officer at least 90 days before the end of the current budget period. (Some programs or awards require more frequent project reports). Within 90 days after expiration of a grant, the PI also is required to submit a final project report.

Failure to provide the required annual or final project reports will delay NSF review and processing of any future funding increments as well as any pending proposals for that PI. PIs should examine the formats of the required reports in advance to assure availability of required data.

PIs are required to use NSF's electronic project-reporting system, available through FastLane, for preparation and submission of annual and final project reports. Such reports provide information on activities and findings, project participants (individual and organizational) publications; and, other specific products and contributions. PIs will not be required to re-enter information previously provided, either with a proposal or in earlier updates using the electronic system. Submission of the report via FastLane constitutes certification by the PI that the contents of the report are accurate and complete.

## VIII. AGENCY CONTACTS

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General inquiries regarding this program should be made to:

- Robert E. O'Connor, Directorate for Social, Behavioral and Economic Sciences, Division of Social and Economic Sciences, 995, telephone: (703) 292-7263, fax: (703) 292-9068, email: [roconnor@nsf.gov](mailto:roconnor@nsf.gov)
- Dennis Wenger, Directorate of Engineering, Division of Civil, Mechanical and Manufacturing Innovation, 545, telephone: (703) 292-8606, fax: (703) 292-8606, email: [dwenger@nsf.gov](mailto:dwenger@nsf.gov)

For questions related to the use of FastLane, contact:

- FastLane Help Desk, telephone: 1-800-673-6188; e-mail: [fastlane@nsf.gov](mailto:fastlane@nsf.gov).

For questions relating to Grants.gov contact:

- Grants.gov Contact Center: If the Authorized Organizational Representatives (AOR) has not received a confirmation message from Grants.gov within 48 hours of submission of application, please contact via telephone: 1-800-518-4726; e-mail: [support@grants.gov](mailto:support@grants.gov).

## IX. OTHER INFORMATION

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The NSF Website provides the most comprehensive source of information on NSF Directorates (including contact information), programs and funding opportunities. Use of this Website by potential proposers is strongly encouraged. In addition, MyNSF (formerly the Custom News Service) is an information-delivery system designed to keep potential proposers and other interested parties apprised of new NSF funding opportunities and publications, important changes in proposal and award policies and procedures, and upcoming NSF Regional Grants Conferences. Subscribers are informed through e-mail or the user's Web browser each time new publications are issued that match their identified interests. MyNSF also is available on NSF's Website at <http://www.nsf.gov/mynsf/>.

Grants.gov provides an additional electronic capability to search for Federal government-wide grant opportunities. NSF funding opportunities may be accessed via this new mechanism. Further information on Grants.gov may be obtained at <http://www.grants.gov>.

## ABOUT THE NATIONAL SCIENCE FOUNDATION

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The National Science Foundation (NSF) is an independent Federal agency created by the National Science Foundation Act of 1950, as amended (42 USC 1861-75). The Act states the purpose of the NSF is "to promote the progress of science; [and] to advance the national health, prosperity, and welfare by supporting research and education in all fields of science and engineering."

NSF funds research and education in most fields of science and engineering. It does this through grants and cooperative agreements to more than 2,000 colleges, universities, K-12 school systems, businesses, informal science organizations and other research organizations throughout the US. The Foundation accounts for about one-fourth of Federal support to academic institutions for basic research.

NSF receives approximately 40,000 proposals each year for research, education and training projects, of which approximately 11,000 are funded. In addition, the Foundation receives several thousand applications for graduate and postdoctoral fellowships. The agency operates no laboratories itself but does support National Research Centers, user facilities, certain oceanographic vessels and Antarctic research stations. The Foundation also supports cooperative research between universities and industry, US participation in international scientific and engineering efforts, and educational activities at every academic level.

*Facilitation Awards for Scientists and Engineers with Disabilities* provide funding for special assistance or equipment to enable persons with disabilities to work on NSF-supported projects. See Grant Proposal Guide Chapter II, Section D.2 for instructions regarding preparation of these types of proposals.

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