Division of Social and Economic Sciences
Response to the 2016 COV Report

Executive Summary

The Division of Social and Economic Sciences (SES) Committee of Visitors (COV) met July 11-13, 2016, and included the chair and sub-chairs and at least one member representing each of the ten programs: Cultivating Cultures of Ethical STEM; Decision, Risk and Management Sciences; Economics; Law and Social Sciences; Methodology, Measurement, and Statistics; Political Science; Science of Organizations; Science and Technology and Society; Sociology; and Secure and Trustworthy Cyberspace. The members of the COV met in plenary and in program-focused and cross-program sessions and reported out to Dr. Fay Cook, Assistant Director of the Directorate for Social, Behavioral, and Economic Sciences (SBE), and Dr. Kellina Craig-Henderson, Deputy Assistant Director of SBE, in a closed session. The COV then held an open report-out that was attended by the SES Division leadership, Program Officers, and staff.

The following response document considers and addresses each recommendation made by the COV at the Division level. The Division thanks the COV for its suggestions and recommendations and outlines below its follow-up.

Integrity and Efficiency of Processes and Management

Recommendation 1
We support the 2013 SES COV recommendation that triage occur early in the review process by Program Officers to avoid spending too much time on proposals that have little chance of funding.

Division Response:

The SES Division will continue to explore options for making decisions based on ad hoc review without a formal panel discussion in concert with program management. SES programs have been experimenting with different triage methods, considering when in the review process triage is best fit for both managing workload, as well as assuring that each proposal receives sufficient feedback. The SES Division will continue to experiment and evaluate the best options for triage moving forward.

Recommendation 2
Restrict virtual meetings to panels that request it and find it a reasonable way of operating. Continue regular in-person panel meetings especially for the annual or bi-annual major sessions during which research proposals are discussed and decisions made about funding.

Division Response:

The Division appreciates the COV position on virtual panels. SES has utilized virtual panel attendance as a means to accommodate panelists needs (such as illness, childcare coverage, etc.). SES will keep abreast of the Foundation's discussions regarding virtual panels, and communicate the COV's recommendation to senior management.

Recommendation 3
The 2016 COV recommends that SES Program Officers write to relevant department chairs at well regarded liberal arts colleges to ask for recommendations from their faculty of external reviewers, along with their CVs, after explaining the time commitment and skill set needed to provide high quality external reviews.

Division Response:

The Division agrees with the COV's recommendation. Involving successful scholars from liberal arts colleges would enhance the pool of reviewers, as well as provide the faculty at those institutions with the opportunity to become more familiar with NSF funding and review criteria. The SES Division will work to evaluate the best plan of contacting and recruiting this pool of reviewers.

Recommendation 4
It is recommended that transitions in rotating Program Officers be managed effectively to avoid lack of continuity and to maintain quality of the programs involved.

Division Response:

The Division has been taking this issue seriously and has implemented a set of best practices that address and smooth transition of new Program Officers. In many cases, current Program Officers mentor new Program Officers and provide them with numerous resources and support, regardless of their specific program. Currently, in programs that do not have a permanent Program Officer, new rotating Program Officers overlap with outgoing Program Officers for at least two weeks. In addition, incoming SES Program Officers have the option to attend the "New Employee Orientation", which is specifically tailored to the SBE Directorate, along with the myriad of training opportunities that NSF offers to ensure a smooth and effective transition. The Division plans on assessing the effectiveness of the onboarding procedures and institute new mechanisms when necessary.

Recommendation 5
The COV recommends that programs initiate additional proactive efforts to broaden the base of minority applications across the portfolio of programs.

Division Response:

The Division agrees and takes issues of diversity and inclusion seriously. The Division has been very active in various NSF outreach activities that aim to broaden the base of minority applicants. As noted in some program COV Reports, in addition to funding for proposals, SES funding of dissertation and workshop awards reach minorities and women. These awards are avenues for women and minorities to receive mentoring and support early on in their careers and they increase the diversity within the profession. The Division has taken a lead role in the Science of Broadening Participation group, which focuses on increasing diversity in the sciences as a whole. In addition, some SES programs are experimenting with including junior minority scholars on review panels in order to provide them with an inside glimpse of the review process as well as increase the reach to groups that might not be very familiar with SES and the funding opportunities it has to offer. Further, SES led the Directorate's effort this year in reaching out to minority serving institutions, by organizing an event at Trinity Washington University. Presidents, Vice Presidents, Deans, Sponsored Program Officers, Chairs and Faculty members from Minority Serving Institutions from the DC area (Maryland, Virginia and the District) were

invited to the University for the outreach event, where SES senior staff and program directors discussed the funding opportunities NSF has to offer. A similar event was held at Tennessee State University in Nashville. SES plans on continuing its involvement with this type of outreach activity, and as such, will be participating in the newly established Directorate-wide Minority Serving Institutions Working Group. The Division plans to continue refining these outreach methods, as well as experimenting with new potential avenues for broadening the base of minority applicants.

Emerging Issues and Areas for Potential Support

Recommendation 6
The COV recommends that the Division continue to invest in research that will improve data availability and access, help to lower costs, as well as provide new approaches to data security and privacy.

Division Response:

The Division agrees, and is strategically examining the infrastructure which makes data available to the community. The Division currently invests in surveys such as the General Social Survey (GSS), the Panel Study of Income Dynamics (PSID), and the American National Election Studies (ANES), where the data collected are made available for scholars to use and analyze and where security and privacy are maintained. Other surveys, also accessible and secure, are funded by SES, such as Time-sharing Experiments for the Social Science (TESS), Cooperative Congressional Election Study (CCES), Luxembourg Income Study (LIS), Penn World Tables (PWT), Luxembourg Wealth Study (LWS), and the Beginning School Data Archive (BSD). The surveys form a data infrastructure for social science research, dedicated to data availability and reliability.

The Division works cooperatively with other directorates, especially the Directorate for Computer and Information Science and Engineering (CISE), on issues of data security and availability as well as options for assuring privacy. It also has a lead role in the Restricted-Access Research Centers (RDCs) solicitation, which provides awards for the establishment of new Research Data Centers that provide researchers with access to confidential micro Census data. The Division participates in the Resource Implementation for Data Intensive Research (RIDIR), Critical Techniques, Technologies and Methodologies for Advancing Foundations and Applications of Big Data Sciences and Engineering (BIGDATA), Data Infrastructure Building Blocks (DIBBs), and Smart & Connected Communities (S&CC) solicitations and funding. These types of investments widen the range of data available to all scholars, ease access, and incorporate and explore methods for data security and privacy.

Looking to the future, the Division is partnering with outside entities, such as the National Academies of Science, in order to address data infrastructure costs. In addition, the Division is an active participant in the Foundation-wide working groups that are assessing potential avenues for moving forward on data availability and access issues.

Recommendation 7
The COV recommends that public access to NSF funded research occurs at the point of publication through compliance of researchers with journal encouragement and requirements to specify provisions for disposition of and access to relevant data and metadata used and reported in their published research.

Division Response:

The Division agrees with this recommendation. Effective for awards made after January 25th, 2016, products resulting from NSF funding are publicly available. The NSF Public Access Repository (NSF-PARBETA) serves as the repository and access point for the award products. As stated on the NSF Public Access website: "[T]he NSF system draws upon services provided by the publisher community including CHORUS (Clearinghouse for Open Research of the United States), Crossref, and International Standard Serial Number (ISSN). Over the next year, additional metadata and links to articles will be added as they are submitted to NSF, with anticipated annual growth of 40,000 publicly-accessible articles and manuscripts… When NSF-PAR moves beyond the "beta" period, it will offer distributed full-text access to all NSF-affiliated accepted manuscripts or articles after an embargo, or administrative interval, of 12 months."

Currently, the Division provides funds for some data repositories, such as the Qualitative Data Repository. Awardees can request funds to cover the costs of their data archiving at various repositories, such as Interuniversity Consortium for Political and Social Research (ICPSR). The Division is an active member in the Foundation-wide Public Access Working Group, where issues regarding cost and storage of data collected using NSF funds are discussed. The Division will communicate the COV recommendation to that group.

Recommendation 8
The COV recommends NSF funded research require regular and complete reporting of these resulting publications and incorporated DOIs in annual and final reports, for up to three years following submission of final reports.

Division Response:

The Division will examine possible options regarding this recommendation. It currently requires regular and complete reporting of all the resulting publications from an NSF award. The Division does not have the legal authority to institute a three-year, post award requirement, but will refer this recommendation to relevant Foundation entities.

Note: We give below a unitary response to recommendations 9, 10, 11 and 12 below in order to address both the different and overlapping aspects of the recommendations.

Recommendation 9
The COV recommends that SBE consider including data management plans along with merit and impact statements in the front matter of proposals and in proposal reviews, with the intent to foreground rather than background the attention of researchers to mandated compliance with provisions for data sharing and access.

Recommendation 10
The COV recommends that SBE further consider mandating discussion and review of issues and mechanisms for data access and sharing at the regular meetings of program review committees,

as a means of further institutionalizing the awareness, understanding, and observance of best practices of data sharing and public access.

Recommendation 11
The SBE Directorate should continue to foster engagement of the social science community with NSF-wide efforts to assure robust and reliable science.

Division Responses to Recommendations 9-11:

These are directed to SBE directorate. SES Division in general agrees with these recommendations. SES 2016 retreat (scheduled on October 5) will cover these three areas extensively. In particular, SES has started an internal conversation on making all future funded projects align with the goals of robust and reliable science. We are in the process of developing new plans for implementation, including a workshop for practicing robust and reliable science and economic sciences.

Recommendation 12
The COV recommends that adequacy of the Data Management and Sharing Plan be listed as a third criterion (along with broader impact and intellectual merit) for proposal review and that the plan be explicitly rated and evaluated in the review process.

Division Responses:

These recommendations target the SBE Directorate; however, this response focuses on the practices of the Division. The Division is interested in stimulating research activities that enhance the robustness and reliability of research in the social sciences. In alignment with the Foundation's and Directorate's vision, the Division works closely with senior leadership to promote and foster these activities. The Division's support of data infrastructure development and maintenance through surveys and other forms of data collection gives evidence of a strong commitment to replication, reliability, comparability, and validity.

The Division is committed to further increasing awareness of the importance of both data access and sharing. Consequently, it is involved in significant Foundation-wide data initiatives, such as Resource Implementation for Data Intensive Research (RIDIR) and Critical Techniques, Technologies and Methodologies for Advancing Foundations and Applications of Big Data Sciences and Engineering (BIGDATA). The Division plans on continuing to participate in the data access and sharing discussion at the Foundation.

The Division agrees with the COV regarding the importance of promoting the means for achieving robust and reliable science, and recognizes the connection that the Data Management Plan (DMP) has to this endeavor. Policies of the Foundation also underscore the connection. In particular, the Grant Proposal Guide Ch.II.C.2.j states: "The Data Management Plan will be reviewed as an integral part of the proposal, considered under Intellectual Merit or Broader Impacts or both, as appropriate for the scientific community of relevance." Regarding placement and structure of the DMP in Fastlane, the Division will pass along this suggestion to Foundation-wide groups involved in structuring Fastlane.

Currently, directions which are given to reviewers and panelists include details regarding the DMP. Reviewers examine and comment on the DMP in their written reviews and panelists discuss it and record their evaluation of it in panel summaries. For proposals found to have an

inadequate DMP, a link is provided to the Data Management guidance, specifically tailored for the social sciences.

Going forward, the Division will urge reviewers and panelists to record <u>in more detail</u> the appropriateness of the DMP for the proposed work and give fuller written documentation of their evaluation of its adequacy or lack thereof. Also, the Division will continue its efforts to disseminate information regarding Data Management Plans to reviewers and PIs and to communicate its importance during outreach and consultations.

Recommendation 13
We recommend that these graduate student support data be made available to the next COV and that consideration be given to the adequacy and effectiveness of the various forms of support in conjunction with data on graduate student outcomes (completion, employment, etc.).

Division Response:

The data provided during a Committee of Visitors (COV) review is guided by the NSF-wide COV module. A number of programs in the Division have <u>separate competitions</u> for graduate student research (DDRIs). In addition, support is provided to graduate students as <u>research assistants</u> on regular proposals and as part of <u>special competitions</u> that are aimed at graduate student and post-doctoral training. Further, good professional outcomes for graduate student training are promoted annually through <u>mentoring sessions</u> at local, regional and national professional conferences. Some programs in the Division work in concert with <u>their professional organizations</u> to fund graduate student and/or post-doctoral research. Various programs also fund <u>workshops</u> on particular topics and/or continue over a number of years thereby influencing a number of graduate student cohorts. The Division plans on tracking data that are available to better understand graduate-relevant issues, such as the various modes of graduate student opportunities, support and mentoring in order to assess the ongoing effectiveness of the Division's efforts in training the next generations of social scientists.

Other Topics

The COV made no recommendations on this section of the report.