Division of Social and Economic Sciences
SES Division and SBE Directorate Responses to the 2010 COV Report

A Committee of Visitors (COV) convened September 22-24, 2010 to review the eight disciplinary programs in the Division of Social and Economic Sciences (SES): Decision, Risk and Management Sciences Program, Economics Program, Innovation and Organizational Change Program, Law and Social Science Program, Methodology, Measurement and Statistics Program, Political Science Program, Science, Technology and Society Program, and Sociology Program. In attendance were 24 COV members, and three members of the Social and Behavioral Sciences Advisory Committee (including one COV Chair), who met in plenary and in program-focused sessions at different times of the meeting, as well as the current SES Program Officers who joined the COV for selected portions of the meeting. SBE Assistant Director Myron Gutmann, SBE Deputy Assistant Director Judith Sunley, SES Division Director Rachel Croson, and SES Deputy Division Director Frank Scioli addressed the COV to brief the members on selected issues including the Government Performance and Results Act, the Directorate and Divisional structure, and conflicts of interest.

The Division of Social and Economic Sciences is extremely grateful for the input provided by the Committee of Visitors, and especially for the leadership of Dr. John King in chairing this process. This document provides a Division and Directorate-level response to the Summary Report portion of the COV Report. Program-level responses are still being considered and written, and should be available by the May Advisory Committee meeting.

The COV report was received from Dr. Michael Goodchild on October 27, 2010. It concluded that

> [T]he SES Division [is] doing an excellent job with respect to integrity and efficiency. There are minor areas of concern, but a careful reading of the comments provided by the program COV teams shows these exceptions to reflect either idiosyncratic characteristics of a given program (*e.g.*, a challenge resulting from a program's special mandate), or general concerns raised in one way or another by all programs (*e.g.*, a need for increases in funding in order to accomplish goals). None of the program COV teams expressed integrity or efficiency issues that warrant remedial attention. In all, the SES Division is doing an outstanding job with respect to efficiency and quality.

We are grateful to the COV in providing this evaluation.

The summary report also raised some broader issues and challenges that are addressed in this response. These can be found in the section of the report titled "Issues of Concern," beginning on page 3. The purpose of this document is to address these issues.

The overreaching issue is one of changing circumstances, and balancing the need to contribute to other areas of science with the need to focus on development of basic research in SES. The report notes:

> The question of whether the SBE sciences are important to the NSF and to the nation has been answered unequivocally, and the answer is *yes.* Science and engineering disciplines in NSF and other federal funding agencies increasingly recognize that the issues they confront require expertise in the human sciences as represented in SBE. This is a significant change from an era when the very legitimacy of the SBE sciences was challenged. The SES sciences, as well as those of SBE broadly, must adjust to a new reality in which demand for the SBE sciences from *outside those sciences* grows more rapidly than the available resources.

The report noted that these changing circumstances create four important challenges for SES, and more generally for SBE, in the upcoming years: workload, moving beyond business-as-usual, organization and information, and something the COV called "the package," which is a shorthand they used to refer to the range of research and other activities that SBE supports. Below we summarize and respond to the COV's concerns in each of these domains.

The summary report noted that these changing circumstances create a significant increase in the workload required of program officers, and recommended that steps be taken to address this issue. The report notes:

> All the program-level COV teams for 2010 reiterated a concern raised by the 2007 SES COV: that professional staff resources are insufficient to deal with the workload. This is in addition to the observation made by every program-level COV that the professional staff attending to the programs is excellent… NSF's tried-and-true model of "leading-by-following" is becoming threatened because professional staff do not have time to collect ideas from the community and synthesize them into new programmatic initiatives.

We agree that program officer workload is serious concern (and NSF-wide), with particularly challenges in SES and SBE. Changing circumstances have significantly added to the need for program officers to participate in "internal outreach" (to other divisions and directorates within the NSF and to other government agencies), leaving them less time for "external outreach" to professional organizations and their communities.

We do not believe that reducing either internal or external outreach is the right path to follow. Instead, we intend to engage in ongoing discussions with program officers and NSF leadership about appropriate ways to address workload issues. Within SBE we have begun an analysis of the flow of work in which program officers and administrative staff engage, and we hope that continued attention to this matter will enable program officers to manage their workloads strategically.

The second challenge is the need to move beyond business-as-usual. The report notes the importance of providing an evaluation not only of the programs as they exist, but also a determination of what the programs should be. This challenge holds for the programs themselves, as well as the other major initiatives (e.g. the General Social Survey, the American National Election Study and the Panel Study of Income Dynamics).

We note that two of our programs have workshops planned over the coming months that are designed to provide just this kind of self-evaluation: Decision Research and Management Science and Law and Social Science are each bringing together leading scholars in their fields to discuss what their future focus should be and to provide guidance to program officers and NSF leadership. During the summer of 2010, a similar workshop was held for the three big surveys: the General Social Survey, American National Election Study and Panel Study of Income Dynamics. A recent initiative has been soliciting input from the academic community, the SBE Advisory Committee and other sources in order to identify the future of SBE research more generally, and to inform the Directorate leadership about strategic future directions. We agree with the COV that more introspection along these lines would be valuable.

In its third area of concern, the COV notes:

> The information infrastructure that supports the SES, and by extension the rest of SBE and NSF, has been evolving to fit the realities of the organization over time, but this infrastructure is by necessity designed to be backward-looking. As information infrastructure has evolved to support organizational activity, the NSF organization itself has been pushed by circumstances in new directions. There is a disconnect between backward-looking information infrastructure that is typically expensive and hard to implement, thus becoming "embedded" in the organization, and the need for the organization to evolve in new directions.

We share the COV's concerns about the current information infrastructure, and agree that it often does not provide the information necessary to evaluate our changing circumstances, nor to guide us in determining what changes should be actively pursued and what changes should be avoided. We intend to pursue opportunities to refine the information infrastructure in order to improve the quality of the data collected and used by NSF leadership (and provided to future COVs). Three initiatives are currently underway in order to address this NSF-wide issue.

First, the STAR METRICS program (headed by Julia Lane of SBE) collects detailed data from awardee institutions in order to evaluate and assess the impacts of the grants we make. This program is just beginning, but we are hopeful that the data collected will be useful for meeting the challenges that the COV has identified. Second, the NSF Working Group on Enabling Effective Performance Measures of NSF Investments (on which Julia Lane is the SBE representative) is identifying the NSF's need to develop a (new) Management Information System whose goal is not simply to manage grants but to inform leadership about what has been effective and what has not, and to guide our

strategic thinking on what opportunities we should pursue. The committee is outlining the requirements for these new systems in a forthcoming memo. Third, the SBE Advisory Committee, jointly with the CISE Advisory Committee, formed a subcommittee to advise NSF on using recent advances in information technology to better understand its research portfolio. A subcommittee report is expected shortly.

We believe that each of these initiatives has substantial merit, and we intend to continue our involvement with and commitment to each of them.

The final challenge that the COV identified in its summary document has to do with leveraging the findings of basic science that we support, into policy-relevant results that are critical to meet our nation's needs. The report notes:

> SES and SBE together need a sophisticated and refined strategy for articulating and acting on the interdependency of fundamental and practical knowledge. Addressing problems of national significance must also serve to build competence and knowledge in the core disciplines.

The tension between research that is curiosity-driven and research that is problem-driven is long-standing, and Foundation-wide. We agree with the COV that striking the right balance, and encouraging the right interdependencies, between these two missions is a difficult and important task. We intend to continue to encourage strong basic research that has the potential to create broader impacts, but will pay special attention to how we might better translate the research that is already being done into policy-relevant results.

In sum, we agree with all points raised in the summary of the COV report. We are exceptionally grateful for the assessment and careful consideration provided by its members. We share the COV's concerns about changing circumstances and the changes that they create. But we also concur that these are challenges that SES sciences are well-poised to meet, and we anticipate that our efforts will be useful for the Division, the Directorate, and the NSF more generally.