

National Science Foundation

Section 1: Highlights of Agency E-Government Activities

A. Enhanced Delivery of Information and Services to the Public - Sec. 202(g)

Section 202(g) of the E-Gov Act requires agencies to provide information on how electronic Government is used to improve performance in delivering programs to constituencies. In no more than 250 words, describe one IT agency activity or initiative that enhances the delivery of information and services to the public and others, or makes improvements in government operations. This example should highlight how electronic government improved the effectiveness, efficiency, and quality of services provided by your agency.

In 2015 NSF made great strides in its efforts to support a mobile workforce. NSF provides staff with the tools and technologies needed to securely connect to NSF information while they are away from the office. As the number of teleworkers increase and the need to support ongoing operations during environmental related events has become a priority it has become key to support the NSF workforce from anywhere at anytime. In order to support this goal of an anywhere/anytime workforce NSF has embarked upon several initiatives including: Improving the reliability of our remote access capabilities—NSF upgraded our remote access methods which resulted in improvements in both performance consistency and response time. The remote user experience has greatly improved due to this effort. Providing a standard seamless mobile laptop configuration- Implementation of standard laptop configurations provided support for the upgraded remote access technologies , allowed patching and upgrades to happen more efficiently, streamlined desktop support and has been very instrumental in support of the mobile workforce. Since 2013 NSF has gone from 13 to 1,510 seamless mobile computing devices. Implementing virtual desktop capabilities will allow NSF staff to access their work from any computer to support them at times when their seamless mobile devices are unavailable. NSF will continue to improve these capabilities in 2016 and continue migration to the Seamless Mobile Laptop Configurations while working toward the full implementation of virtual desktop capabilities.

B. Public Access to Electronic Information - Sec. 207(f)(1)(B)

Section 207(f)(1)(B) of the E-Gov Act requires that agency websites assist public users to navigate agency websites, including the speed of retrieval of search results and the relevance of the results. Provide the updated URL(s) that contains your agency's customer service goals and describes activities that assist public users in providing improved access to agency websites and information, aid in the speed of retrieval and relevance of search results, and uses innovative technologies to improve customer service at lower costs. For example, include the URL to your agency's Customer Service Plan.

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.nsf.gov/policies/egov_inventory.jsp	
http://www.nsf.gov/pubs/2014/nsf14043/nsf14043.pdf	

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://nsf.gov/open/	
http://www.nsf.gov/digitalstrategy/	
http://www.nsf.gov/oirm/dis/	

Section 2: Compliance with Goals and Provisions of the E-Gov Act

A. Performance Integration - Sec. 202(b)

The E-Gov Act requires agencies to develop performance metrics that demonstrate how electronic government supports agency objectives, strategic goals, and statutory mandates. In no more than 250 words, describe what performance metrics are used and tracked for IT investments and how these metrics support agency strategic goals and statutory mandates. Please discuss performance metrics that focus on customer service, agency productivity, innovative technology adoption and best practices. If applicable, include a description of your agency's evaluation model and how it is used. Provide applicable URL(s) for performance goals related to IT.

NSF’s information technology systems support the key business processes related to the agency’s mission: identifying and funding work at the frontiers of science and engineering. The Federal IT Dashboard includes metrics tied to NSF’s key IT investments, covering a range of goals related to the agency systems that support the mission. The IT Dashboard is available on ITDashboard.gov. For example, NSF’s investment metrics have demonstrated that the processing of research proposals, our core mission, is performed in an automated environment from receipt of the proposal through to the actual award 100% of the time. This high level of automation contributes to agency productivity, but can also be a hindrance where aging infrastructure and legacy capabilities are in need of update to provide efficiencies. As such, a new metric to capture the Agency’s commitment to “Improve technology, tools, functionality and/or business processes” has been added this year. Improvements should also be evidenced by an eventual decrease in “% of tickets escalated to Tier III Customer Support” for business applications. Similarly, our IT Infrastructure, Office Automation, and Telecommunications investment includes several metrics related to customer service and agency productivity. NSF metrics indicate a high level of system and network availability, which contributes to the efficient operational performance of the agency.

B. Accessibility - Sec. 202(c) and (d)

The E-Gov Act requires agencies to consider the impact of implementing policies on persons without access to the internet, and ensure accessibility to people with disabilities. Provide the URL(s) for your agency's website which describes actions taken by your agency in accordance with Section 508 of the Rehabilitation Act of 1973 (29 U.S.C. 794d).

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.nsf.gov/policies/access.jsp	
http://assistive.usablenet.com/tt/www.nsf.gov/index.jsp?un_jtt_redirect	

C. Government-Public Collaboration - Sec. 202(e)

The E-Gov Act requires agencies to sponsor activities that use information technology to engage the public in the development and implementation of policies and programs. In no more than 250 words, describe one example of how your agency utilized technology

to initiate government-public collaboration in the development and implementation of policies and programs.

On June 12, 2015, NSF participated in the National Maker Faire that was the kickoff event for the National Week of Making June 12-18, 2015. The week celebrates the growing wave of innovators enabled by access to new resources and knowledge, known as the maker movement. NSF directly supported many of the exhibitors--known as "makers"--participating in the faire, with even more exhibitors using NSF-funded tools and technologies, such as 3-D printing and computer-aided design. In 2015 and before, NSF has provided vital support to fundamental science, engineering and education research, citizen science, and the integration of research and education activities--all of which form the foundation for makers. At this year's expanded event, NSF joined other federal agencies, companies, academic institutions, nonprofits and communities nationwide in an effort to provide students and entrepreneurs with access to tools, spaces and mentors to participate in making and to study the impact of making on learning. In addition to supporting the fundamental research that led to maker tools, NSF supports researchers who are working to ensure that diverse and underrepresented populations are participating in maker activities. Examples include a makerspace at a Massachusetts high school and a program enabling individuals with diverse abilities to design assistive technologies at the University of Maryland Baltimore County.

D. Credentialing - Sec. 203

The E-Gov Act seeks to achieve interoperable implementation of electronic signatures for appropriately secure electronic transactions with Government. In no more than 250 words, describe current activities your agency is undertaking to achieve the interoperable implementation of electronic credential authentication for transactions within the Federal Government and/or with the public (e.g. agency implementation of HSPD-12 and/or digital signatures).

Using InCommon technology developed under a NSF-funded grant, researchers can use their university-issued user ID and password to login to Research.gov and access agency grants management services. This improves ease of access to NSF information and services by the public. Additionally, NSF has implemented "Open ID," which allows the public to use Gmail to log on to Research.gov's public-facing functions. In accordance with HSPD-12, NSF is currently implementing Smart Card authentication to ensure secure access to the agency's network and information systems. This year, NSF made significant progress towards meeting OMB's targets for smart card enforcement with 87% of the user community currently using their smart card to login to the laptop/desktop to get into NSF network. NSF is executing a comprehensive enforcement campaign that includes technical, communications and enforcement execution strategies. We are moving forward on the campaign in accordance with the agency plan for achieving OMB enforcement targets.

E. USA.gov activities - Sec. 204 and Sec. 207(f)

In accordance with Section 204 of the E-Gov Act, www.USA.gov serves as an integrated internet-based system for providing the public with access to government information and services. In accordance with Section 207(f)(3), provide the URL(s) your agency's activities on www.USA.gov.

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.usa.gov/directory/federal/national-science-foundation.shtml	

F. eRulemaking - Sec. 206

The E-Gov Act seeks to assist the public, including the regulated community, in electronically submitting information to agencies under Federal requirements, by reducing the burden of duplicate collection and ensuring the accuracy of submitted information. In no more than 250 words, provide a description of your agency's use of online electronic regulatory submission capabilities, specifically the usage of www.Regulations.gov and the Federal Docket Management System (FMDS).

NSF's support of fundamental science and engineering research requires the Foundation to maintain constant contact with the research community. Regulations.gov, the E-Rulemaking online portal, provides the research community (as well as members of the public) with a one-stop web-based, central location to track regulations proposed by NSF and to provide comment when applicable. The Federal Docket Management System (FDMS) allows NSF to manage its regulatory information in a system developed through other agency best-practices and collaboration. The Foundation typically publishes only one to three proposed regulations per year. During FY15, NSF published one proposed rule.

G. National Archives Records Administration (NARA) Recordkeeping - Sec. 207(d-e)

The E-Gov Act requires agencies to adopt policies and procedures to ensure that chapters 21, 25, 27, 29, and 31 of title 44, United States Code, are applied effectively and comprehensively to Government information on the Internet and to other electronic records. In no more than 250 words, describe your agency's adherence to NARA recordkeeping policies and procedures for electronic information online and other electronic records. Additionally, please indicate the number of electronic records that have been scheduled with NARA and any pending scheduling for electronic systems at your agency.

NSF recognizes the importance of managing all of its records. The agency continuously reviews NARA-approved records schedules to ensure they correctly represent the organization's current business practices. NSF's largest permanent electronic records group is for Grant/Proposal Awards. During FY15 no NSF electronic records have been transferred under the agency's NARA approved record schedule (N1-307-88-2). NSF is using the Electronic Records Archives (ERA) to transfer eligible permanent electronic records to NARA for archival. The records office and the IT office's collaborative efforts ensure that records and archival management functions are incorporated into the design of new electronic systems and are compliant with NARA guidelines. The Official Electronic Award Record Archival project, currently in development, will ensure NSF is in compliance with NSF Bulletin 09-21, issued in December 2009, which identifies the Official Record for Awards for transmission to NARA. The implementation is planned for early 2016. NSF has implemented an Electronic Records Management System (ERMS), Documentum. The agency is working to bring all legacy paper records and electronic records into an ERM system. The organization is analyzing every opportunity to transition its business practices from paper-based record keeping to electronic

records management. These opportunities continue to present themselves as legacy systems are replaced and the life-cycles of their record outputs are evaluated and brought into alignment with current organizational goals and practices. NSF also recognizes the importance of records management training for all agency staff. An on-line records training course was launched in July 2014 and added to all employees training requirements. The agency has enhanced the training program to make sure all employees are aware of their responsibility to identify and protect agency official records.

H. Freedom of Information Act (FOIA) - Sec. 207(f)(A)(ii)

The E-Gov Act requires agency websites to include direct links to information made available to the public under the Freedom of Information Act. Provide the updated URL for your agency's primary FOIA website.

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.nsf.gov/policies/foia.jsp	

I. Information Resources Management (IRM) Strategic Plan - Sec. 207(f)(A)(iv)

The E-Gov Act requires agency websites to include the strategic plan of the agency developed under section 306 of title 5, US Code. Provide the updated URL to your agency's IRM Strategic Plan. This plan should encompass activities in FY14. If your agency does not have an updated plan, please provide the URL to the most recent plan and indicate when an updated plan will be available.

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.nsf.gov/oirm/dis/irmplan0214.pdf	

J. Research and Development (R&D) - Sec. 207(g)

If your agency funds R&D activities, provide the updated URL(s) for publicly accessible information related to those activities, and specify whether or not each website provides the public information about Federally funded R&D activities and/or the results of the Federal research.

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.nsf.gov/	NSF publishes information about how federally funded research and development (R&D) grant dollars are being spent and what results are being achieved
http://www.nsf.gov/recovery/	NSF publishes information about how federally funded research and development (R&D) grant dollars are being spent and what results are

Public Facing Agency URL(s)	Brief Explanation (if necessary)
	being achieved
http://www.research.gov/	NSF publishes information about how federally funded research and development (R&D) grant dollars are being spent and what results are being achieved
http://www.nsf.gov/news/special_reports/public_access/	NSF publishes information about how federally funded research and development (R&D) grant dollars are being spent and what results are being achieved
5. https://www.usaspending.gov/transparency/Pages/AgencySummary.aspx?AgencyCode=4900&FiscalYear=2015	NSF publishes information about how federally funded research and development (R&D) grant dollars are being spent and what results are being achieved

K. Privacy Policy and Privacy Impact Assessments - Sec. 208(b)

The E-Gov Act requires agencies to conduct a privacy impact assessment; ensure the review of the privacy impact assessment by the Chief Information Officer, or equivalent official, as determined by the head of the agency; and if practicable, after completion of the review under clause, make the privacy impact assessment publicly available through the website of the agency, publication in the Federal Register, or other means. In no more than 250 words, describe your agency's adherence to this provision, including adherence to OMB's guidance pertaining to the use of IT to collect, maintain, or disseminate identifiable information, or when new systems are procured for this purpose. In addition, describe your agency's process for performing and updating privacy impact assessments for IT.

NSF is compliant with privacy provisions of the E-Government Act of 2002 (Section 208), which established Government-wide requirements for conducting, reviewing, and publishing Privacy Impact Assessments (PIA), and with subsequent OMB guidance on PIAs. NSF has a documented PIA process to address how IT systems are used to collect and store PII and what controls are in place to protect the information. The PIA is a vehicle to address privacy issues and information types in information systems. PIAs are developed during the project initiation phase and are reviewed when there are major changes to an application. All PIAs are reviewed by the NSF Privacy Office, in which NSF's Chief Information Officer (CIO) serves as the agency's Chief Privacy Officer. NSF's PIAs and Privacy Act Systems of Record Notices are available, as appropriate, on the agency's public-facing website. NSF has established a risk-based approach for the protection of sensitive information. A risk-based approach helps prioritize, evaluate, and implement the appropriate risk-reducing controls in an environment or system. NSF recognizes the importance of protecting sensitive information and implements policy and best practices to safeguard information from inappropriate access, use, or disclosure. NSF conducts annual Security and Privacy Awareness training for employees, which requires that employees sign Rules of Behavior in order to successfully complete the training. NSF

employs a “sensitive information” module as part of the annual Security and Privacy Awareness Training to emphasize the importance of protecting sensitive information.

K2. Privacy Policy and Privacy Impact Assessment Links - Sec. 208(b)

In addition to the narrative provided above in section K., provide the updated URL(s) for your agency's privacy policy and the website where your agency's privacy impact assessments are available.

Public Facing Agency URL(s)	Brief Explanation (if necessary)
http://www.nsf.gov/policies/privacy.jsp	
http://www.nsf.gov/policies/pia.jsp	

M. Agency IT Training Programs - Sec. 209(b)(2)

The E-Gov Act calls for agencies to establish and operate information technology training programs. The act states that such programs shall have curricula covering a broad range of information technology disciplines corresponding to the specific information technology and information resource management needs of the agency involved; be developed and applied according to rigorous standards; and be designed to maximize efficiency, through the use of self-paced courses, online courses, on-the-job training, and the use of remote instructors, wherever such features can be applied without reducing the effectiveness of the training or negatively impacting academic standards. In no more than 250 words, describe your agency's IT training program, privacy training program, cross-agency development programs, and competencies reviews for IT workforce.

NSF’s mission depends on information systems that operate continuously, maintain high availability and protect information from inappropriate disclosure. NSF recognizes the importance of maintaining a first-rate IT workforce, and has implemented IT training programs for NSF staff and contractors to that end. Consistent with Government-wide guidance, NSF requires all staff and contractors to complete IT Security and Privacy Awareness training course as mandated by the Federal Information Security Management Act (FISMA). All staff and contractors must complete the IT Security training each year. Staff also have the option of attending an instructor-led session to review IT Security and Privacy Awareness issues. In recent years, NSF has achieved 99.6 % Foundation-wide completion rate for IT Security and Privacy Awareness training. In alignment with federal IT workforce initiatives and other drivers, NSF conducts periodic IT competency assessments to evaluate the current and future needs of the agency’s technology staff. As appropriate, NSF uses the results of competency assessments in developing strategies related to recruitment, retention, and training of the agency’s IT workforce.