PART I: SUMMARY INFORMATION AND JUSTIFICATION

In Part I, complete Sections A, B, C, and D for all capital assets (IT and non-IT). Complete Sections E and F for IT capital assets.

Section A: Overview (All Capital Assets)

(1) Date of Submission: 09/08/2008
(2) Agency: 422
(3) Bureau: 00
(4) Name of this Capital Asset: IT Infrastructure, Office Automation, and Telecommunications
(5) Unique Project (Investment) Identifier: 422-00-02-00-01-0032-00
(6) What kind of investment will this be in FY2010? Operations and Maintenance
Please note: Investments moving to O&M in FY 2010, with Planning/Acquisition activities prior to FY 2010, should not select O&M. These investments should indicate their current status.
(7) What was the first budget year this investment was submitted to OMB? FY2001 or earlier

(8) Provide a brief summary and justification for this investment, including a brief description of how this closes in part or in whole an identified agency performance gap: (2500 Char Max)

NSF’s physical and IT-enabled business infrastructure supports the operation of mission-essential IT applications and Office Automation activities, including its Telecommunications requirements. NSF has established an overall program for managing all Infrastructure, Office Automation, and Telecommunications (I/OA/T) projects to ensure that these investments are integrated and managed across NSF in an overall strategy consistent with NSF’s strategic vision and enabling both project and technical consolidation and integration across NSF. This investment provides basic maintenance and operations levels for ongoing operations and supports new efforts essential for system modernization, additional system redundancy to increase operational stability, and expanded and automated services to accommodate an increasingly distributed 24x7 user community. Infrastructure support and services will allow implementation of key initiatives such as: deploying the next generation network, hosting business applications on a modern technology platform, modernizing email redundancy and archiving capabilities, and providing additional remote access capabilities to support and increase the productivity of teleworkers and traveling staff. NSF is also transitioning hosting of applications to offsite commercial data centers leveraging a cloud computing environment. NSF’s adoption of cloud computing through the hosting of applications at the offsite commercial data centers has allowed NSF to offer users an unprecedented level of service - higher availability (99.99% uptime), greater flexibility, and the ability to quickly add capacity. This approach has proved efficient and effective for NSF because it enables
NSF to deliver higher quality service and to pay fees for these services rendered in lieu of making costly capital investments. The offsite data centers, which offer built-in redundancy for power, network, and cooling, also promote green IT efforts by conserving energy and housing equipment in a shared location with many other businesses and agencies.

(9) Did the Agency’s Executive/Investment Committee approve this request? yes
(9a) If "yes," what was the date of this approval? 09/04/2008

(10) Did the Project Manager review this Exhibit? yes

(11) Contact Information of Project Manager?
Name: William Altmire
Phone Number: 703-292-4201
E-Mail: waltmire@nsf.gov

(11a) What is the current FAC-P/PM (for civilian agencies) or DAWIA (for defense agencies) certification level of the project/program manager?
New Program Manager

(11b) When was the Project Manager assigned? 12/30/2008

(11c) What date did the Program/Project Manager receive the FAC-P/PM certification? If the certification has not been issued, what is the anticipated date for certification?
12/30/2009

(12) Has the agency developed and/or promoted cost effective, energy-efficient and environmentally sustainable techniques or practices for this project? no

(12a) Will this investment include electronic assets (including computers)? yes

(12b) Is this investment for new construction or major retrofit of a Federal building or facility? (answer applicable to non-IT assets only)
[12b1] If “yes,” is an ESPC or UESC being used to help fund this investment? Select...
[12b2] If “yes,” will this investment meet sustainable design principles? Select...
[12b3] If “yes,” is it designed to be 30% more energy efficient than relevant code? Select...

(13) Does this investment support one of the PMA initiatives? yes

If "yes," select all that apply:

<table>
<thead>
<tr>
<th>President's Management Agenda (PMA) Initiatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expanded E-Government</td>
</tr>
</tbody>
</table>
Investment in the NSF infrastructure supports the President's Management Agenda goals by providing direct support to key government-wide E-Government initiatives such as Grants.gov, E-Authentication, and Research.gov. NSF completed the development of Research and Related data sets for Grants.gov; implemented E-Authentication applications; and will continue with “business process” deployments for Research.Gov functionality as a consortia lead.

(14) Does this investment support a program assessed using OMB’s **yes** Program Assessment Rating Tool (PART)?

   (14a) If “yes,” does this investment **no** address a weakness found during a PART review?

   (14b) If “yes,” what is the name of the PARTed program? **Select...**

   (14c) If “yes,” what rating did the PART receive? **Select...**

(15) Is this investment for information technology? (see section 53 for definition) **yes**

If the answer to question 15 is "Yes," complete questions 16-23 below. If the answer is "No," do not answer questions 16-23.

(16) What is the level of the IT Project (per CIO Council PM Guidance)? **Level 2**

(17) In addition to the answer in 11(a), what project management qualifications does the Project Manager have? (per CIO Council PM Guidance): **(1) Project manager has been validated as qualified for this investment**

(18) Is this investment or any project(s) within this investment identified as “high risk” on the Q4-FY 2008 agency high risk report (per OMB’s Memorandum M-05-23)? **no**

(19) Is this a financial management system? **no**

   (19a) If “yes,” does this investment address a FFMIA compliance area? **Select...**

   [19a1] If “yes,” which compliance area:

   [19a2] If “no,” what does it address?

   (19b) If “yes,” please identify the system name(s) and system acronym(s) as reported in the most recent financial systems inventory update required by Circular A–11 section 52:

(20) What is the percentage breakout for the total FY2010 funding request for the following? (This should total 100%)
Hardware %: Software %: Services %: Other %: Total %

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24</td>
<td>15</td>
<td>55</td>
<td>6</td>
<td>100</td>
</tr>
</tbody>
</table>

(21) If this project produces information dissemination products for the public, are these products published to the Internet in conformance with OMB Memorandum 05-04 and included in your agency inventory, schedules and priorities?

n/a

(22) Contact information of individual responsible for privacy related questions:

Name: Leslie A. Jensen
Phone: 703-292-8060
Title: NSF Privacy Act Officer
E-Mail: ljensen@nsf.gov

(23) Are the records produced by this investment appropriately scheduled with the National Archives and Records Administration’s approval? yes

(24) Does this investment directly support one of the GAO High Risk Areas? no
Section B: Summary of Funding (All Capital Assets)

(1) Provide the total estimated life-cycle cost for this investment by completing the following table. All amounts represent budget authority in millions, and are rounded to three decimal places. Federal personnel costs should be included only in the row designated “Government FTE Cost,” and should be excluded from the amounts shown for “Planning,” “Full Acquisition,” and “Operation/Maintenance.” The total estimated annual cost of the investment is the sum of costs for “Planning,” “Full Acquisition,” and “Operation/Maintenance.” For Federal buildings and facilities, life-cycle costs should include long term energy, environmental, decommissioning, and/or restoration costs. The costs associated with the entire life-cycle of the investment should be included in this report.

Table 1: SUMMARY OF SPENDING FOR PROJECT PHASES (REPORTED IN MILLIONS)

(Estimates for BY+1 and beyond are for planning purposes only and do not represent budget decisions)

<table>
<thead>
<tr>
<th></th>
<th>PY-1 &amp; Earlier (Spending Prior to 2008)</th>
<th>PY 2008</th>
<th>CY 2009</th>
<th>BY 2010</th>
<th>BY+1 2011</th>
<th>BY+2 2012</th>
<th>BY+3 2013</th>
<th>BY+4 2014 and beyond</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning</td>
<td></td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
</tr>
<tr>
<td>Acquisition</td>
<td></td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
</tr>
<tr>
<td>Subtotal Planning &amp; Acquisition</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
</tr>
<tr>
<td>Operations &amp; Maintenance</td>
<td>$87.600</td>
<td>$23.228</td>
<td>$31.270</td>
<td>$27.720</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$169.818</td>
</tr>
<tr>
<td>TOTAL</td>
<td>$87.600</td>
<td>$23.228</td>
<td>$31.270</td>
<td>$27.720</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$0.000</td>
<td>$169.818</td>
</tr>
</tbody>
</table>

Note: For the multi-agency investments, this table should include all funding (both managing partner and partner agencies). Government FTE Costs should not be included as part of the TOTAL represented.

(2) Will this project require the agency to hire additional FTE’s? **No**

(2a) If "yes," How many and in what year?

| Number of FTE represented by cost | 19 | 19 | 19 | 19 | 76 |

(3) If the summary of spending has changed from the FY2009 President’s budget request, briefly explain
Section C: Acquisition/Contract Strategy (All Capital Assets)

(1) Complete the table for all (including all non-Federal) contracts and/or task orders in place or planned for this investment. Total Value should include all option years for each contract. Contracts and/or task orders completed do not need to be included.

<table>
<thead>
<tr>
<th>Contract or Task Order Number:</th>
<th>DSI/D040008</th>
</tr>
</thead>
</table>

Type of Contract/TO Used (in accordance with FAR Part 16):
- GSA Schedule,
- Time and Material
- Delivery Order

Has the Contract been awarded? **yes**
If yes, what is the date of the award? If not, what is the planned award date? **12/01/2003**

Contract/TO Start Date: **12/01/2003**  Contract/TO End Date: **10/31/2009**

Contract/TO Total Value ($M): **$40.110**

Is this an Interagency Acquisition? **no**

Is it performance based? **no**  Competitively awarded? **yes**

What, if any, alternative financing option is being used? **NA**

Is EVM in the contract? **no**

Does the contract include the required security and privacy clauses? **yes**

Contracting Officer (CO) Contact Information:

CO Name: Greg Steigerwald

CO Contact Information (Phone/Email):
703-292-5074, gsteiger@nsf.gov

CO FAC-C or DAWIA Certification Level: **3**
If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? **Select...**

<table>
<thead>
<tr>
<th>Contract or Task Order Number:</th>
<th>AMTI/B040008</th>
</tr>
</thead>
</table>

Type of Contract/TO Used (in accordance with FAR Part 16):
Has the Contract been awarded? **yes**

If yes, what is the date of the award? If not, what is the planned award date? 12/01/2003

Contract/TO Start Date: 12/01/2003  Contract/TO End Date: 10/31/2009

Contract/TO Total Value ($M): $29.300

Is this an Interagency Acquisition? **yes**

Is it performance based? **no**  Competitively awarded? **yes**

What, if any, alternative financing option is being used? **NA**

Is EVM in the contract? **no**

Does the contract include the required security and privacy clauses? **no**

Contracting Officer (CO) Contact Information:

CO Name: Greg Steigerwald

CO Contact Information (Phone/Email): 703-292-5074, gsteiger@nsf.gov

CO FAC-C or DAWIA Certification Level: 3

If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? Select...
Contract or Task Order Number:
Touchstone/08D153

Type of Contract/TO Used (in accordance with FAR Part 16):
Time and Materials

Has the Contract been awarded? yes
If yes, what is the date of the award? If not, what is the planned award date? 09/19/2008

Contract/TO Start Date: 10/15/2008 Contract/TO End Date: 10/14/2013

Contract/TO Total Value ($M): $5.100

Is this an Interagency Acquisition? no
Is it performance based? no Competitively awarded? yes
What, if any, alternative financing option is being used? NA
Is EVM in the contract? no
Does the contract include the required security and privacy clauses? yes

Contracting Officer (CO) Contact Information:

CO Name: Greg Steigerwald

CO Contact Information (Phone/Email):
703-292-5074, gsteiger@nsf.gov

CO FAC-C or DAWIA Certification Level: 3
If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? Select...

Contract or Task Order Number:
TBD

Type of Contract/TO Used (in accordance with FAR Part 16):
TBD

Has the Contract been awarded? no
If yes, what is the date of the award? If not, what is the planned award date? 09/01/2009

Contract/TO Start Date: Contract/TO End Date: 

Contract/TO Total Value ($M): $61.200

Is this an Interagency Acquisition? no
Is it performance based? no Competitively awarded? yes
What, if any, alternative financing option is being used? NA
Is EVM in the contract? no
Does the contract include the required security and privacy clauses? yes

Contracting Officer (CO) Contact Information:

CO Name: Greg Steigerwald
CO Contact Information (Phone/Email):
703-292-5074, gsteiger@nsf.gov

CO FAC-C or DAWIA Certification Level: 3
If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? Select...

Contract or Task Order Number: TBD

Type of Contract/TO Used (in accordance with FAR Part 16):
TBD

Has the Contract been awarded? no

If yes, what is the date of the award? If not, what is the planned award date? 09/01/2009

Contract/TO Start Date: Contract/TO End Date:

Contract/TO Total Value ($M): $40.800

Is this an Interagency Acquisition? no

Is it performance based? no Competitively awarded? yes

What, if any, alternative financing option is being used? NA

Is EVM in the contract? no

Does the contract include the required security and privacy clauses? yes

Contracting Officer (CO) Contact Information:

CO Name: Greg Steigerwald

CO Contact Information (Phone/Email):
703-292-5074, gsteiger@nsf.gov

CO FAC-C or DAWIA Certification Level: 3
If N/A, has the agency determined the CO assigned has the competencies and skills necessary to support this acquisition? Select...

(2) If earned value is not required or will not be a contract requirement for any of the contracts or task orders above, explain why:

Project is specific to operations and maintenance work thus EVM is not required.

(3) Do the contracts ensure Section 508 compliance? yes

(3a) Explain why not or how this is being done?

Section 508 compliance is reviewed in the planning and implementation stages of Infrastructure activities

(4) Is there an acquisition plan which reflects the requirements of FAR Subpart 7.1 and has been approved in accordance with agency requirements?

yes
Section D: Performance Information (All Capital Assets)

In order to successfully address this area of the exhibit 300, performance goals must be provided for the agency and be linked to the annual performance plan. The investment must discuss the agency’s mission and strategic goals, and performance measures must be provided. These goals need to map to the gap in the agency's strategic goals and objectives this investment is designed to fill. They are the internal and external performance benefits this investment is expected to deliver to the agency (e.g., improve efficiency by 60 percent, increase citizen participation by 300 percent a year to achieve an overall citizen participation rate of 75 percent by FY 2xxx, etc.). The goals must be clearly measurable investment outcomes, and if applicable, investment outputs. They do not include the completion date of the module, milestones, or investment, or general goals, such as, significant, better, improved that do not have a quantitative or qualitative measure.

Agencies must use the following table to report performance goals and measures for the major investment and use the Federal Enterprise Architecture (FEA) Performance Reference Model (PRM). Map all Measurement Indicators to the corresponding "Measurement Area" and "Measurement Grouping" identified in the PRM. There should be at least one Measurement Indicator for each of the four different Measurement Areas (for each fiscal year). The PRM is available at www.egov.gov. The table can be extended to include performance measures for years beyond the next President's Budget.

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Strategic Goal(s) Supported</th>
<th>Measurement Area IT</th>
<th>Measurement Grouping</th>
<th>Measurement Indicator</th>
<th>Baseline</th>
<th>Target</th>
<th>Actual Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>Stewardship</td>
<td>Customer Results</td>
<td>Customer Satisfaction</td>
<td>Provide 95% Customer HelpDesk Satisfaction</td>
<td>90%</td>
<td>95%</td>
<td>95%</td>
</tr>
<tr>
<td>2008</td>
<td>Stewardship</td>
<td>Technology</td>
<td>Availability</td>
<td>Provide 99.9% Service Availability</td>
<td>99.9%</td>
<td>99.9%</td>
<td>99.9%</td>
</tr>
<tr>
<td>2008</td>
<td>Stewardship</td>
<td>Mission and Business Results</td>
<td>Availability</td>
<td>Provide 99.9% of Proposal, Grants and Financial Business Applications Availability</td>
<td>99.9%</td>
<td>99.9%</td>
<td>99.9%</td>
</tr>
<tr>
<td>2008</td>
<td>Stewardship</td>
<td>Processes and Activities</td>
<td>Security</td>
<td>Deploy 99% of OS Critical Patches</td>
<td>99%</td>
<td>99%</td>
<td>100%</td>
</tr>
<tr>
<td>2008</td>
<td>Stewardship</td>
<td>Processes and Activities</td>
<td>Security</td>
<td>Establish provisioning of 100% user accounts</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>Year</td>
<td>Stewardship</td>
<td>Mission and Business Results</td>
<td>Technology</td>
<td>Availability</td>
<td>Security Management</td>
<td>IT Infrastructure Maintenance</td>
<td>Customer Satisfaction</td>
</tr>
<tr>
<td>------</td>
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<td>--------------</td>
<td>-------------------</td>
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<td>----------------------</td>
</tr>
<tr>
<td>2008</td>
<td>Stewardship</td>
<td>Mission and Business Results</td>
<td>IT Infrastructure Maintenance</td>
<td>100% of Network Backbone Equipment is IPv6 capable and is running IPv6 capable software/firmware.</td>
<td>100%</td>
<td>100%</td>
<td>100%</td>
</tr>
<tr>
<td>2009</td>
<td>Stewardship</td>
<td>Customer Results</td>
<td>Customer Satisfaction</td>
<td>Provide 96% Customer HelpDesk Satisfaction</td>
<td>95%</td>
<td>96%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Stewardship</td>
<td>Technology</td>
<td>Availability</td>
<td>Provide 99.9% Service Availability</td>
<td>99.9%</td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Stewardship</td>
<td>Mission and Business Results</td>
<td>Availability</td>
<td>Provide 99.9% of Proposal, Grants and Financial Business Applications Availability</td>
<td>99.9%</td>
<td>99.9%</td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>Stewardship</td>
<td>Processes and Activities</td>
<td>Security Management</td>
<td>Deploy 99% of OS Critical Patches</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Stewardship</td>
<td>Mission and Business Results</td>
<td>IT Infrastructure Maintenance</td>
<td>100% of NSF's Network Backbone Equipment is IPv6 capable and is running IPv6 capable software/firmware. Completed testing requirements for June 2008 OMB deadline. Awaiting OMB validation of NSF IPv6 tests.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Stewardship</td>
<td>Customer Results</td>
<td>Customer Satisfaction</td>
<td>Provide 96% Customer HelpDesk Satisfaction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Stewardship</td>
<td>Processes and Activities</td>
<td>Security Management</td>
<td>Deploy 99% of OS Critical Patches</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>Stewardship</td>
<td>Technology</td>
<td>Availability</td>
<td>Provide 99.9% Service Availability</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section E: Security and Privacy (IT Capital Assets Only)**

In order to successfully address this area of the business case, each question below must be answered at the system/application level, not at a program or agency level. Systems supporting this investment on the planning and operational systems security tables should match the systems on the privacy table below. Systems on the Operational Security Table must be included on your agency FISMA system inventory and should be easily referenced in the inventory (i.e., should use the same name or identifier).

For existing Mixed-Life Cycle investments where enhancement, development, and/or modernization is planned, include the investment in both the “Systems in Planning” table (Table 3) and the “Operational Systems” table (Table 4). Systems which are already operational, but have enhancement, development, and/or modernization activity, should be included in both Table 3 and Table 4. Table 3 should reflect the planned date for the system changes to be complete and operational, and the planned date for the associated C&A update. Table 4 should reflect the current status of the requirements listed. In this
context, information contained within Table 3 should characterize what updates to testing and
documentation will occur before implementing the enhancements; and Table 4 should characterize the
current state of the materials associated with the existing system.

All systems listed in the two security tables should be identified in the privacy table. The list of systems
in the “Name of System” column of the privacy table (Table 8) should match the systems listed in
columns titled “Name of System” in the security tables (Tables 3 and 4). For the Privacy table, it is
possible that there may not be a one-to-one ratio between the list of systems and the related privacy
documents. For example, one PIA could cover multiple systems. If this is the case, a working link to the
PIA may be listed in column (d) of the privacy table more than once (for each system covered by the
PIA).

The questions asking whether there is a PIA which covers the system and whether a SORN is required for
the system are discrete from the narrative fields. The narrative column provides an opportunity for free
text explanation why a working link is not provided. For example, a SORN may be required for the
system, but the system is not yet operational. In this circumstance, answer “yes” for column (e) and in the
narrative in column (f), explain that because the system is not operational the SORN is not yet required to
be published.

Please respond to the questions below and verify the system owner took the following actions:

(1) Have the IT security costs for the system(s) been identified and integrated into the overall
costs of the investment: **yes**

   (1a) If "yes," provide the "Percentage IT Security" for the budget year: 4.0

(2) Is identifying and assessing security and privacy risks a part of the overall risk management
effort for each system supporting or part of this investment. **yes**

(3)

**Systems in Planning and Undergoing Enhancement(s), Development, and/or Modernization -- Security Table**

<table>
<thead>
<tr>
<th>Name Of System</th>
<th>Agency Or Contractor Operated System?</th>
<th>Planned Operational Date</th>
<th>Date of Planned C&amp;A update (for existing mixed life cycle systems) or Planned Completion Date (for new systems)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(4)

**Operational Systems - Security Table**

<table>
<thead>
<tr>
<th>Name Of System</th>
<th>Agency Or Contractor Operated system</th>
<th>NIST FIPS 199 Risk Impact Level (High, Moderate, Low)</th>
<th>Has the C&amp;A been completed using NIST 800-37?</th>
<th>Date C&amp;A Complete</th>
<th>Date Completed Security Control Testing</th>
<th>Date Contingency Plan Tested</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSF Network/LAN GSS Contractor and Government</td>
<td>Moderate</td>
<td>yes</td>
<td>09/25/07</td>
<td>FIPS 200 / NIST 800-53</td>
<td>04/30/08</td>
<td>02/09/09</td>
</tr>
</tbody>
</table>

(5) Have any weaknesses, not yet remediated, related to any of the systems part of or supporting this
investment been identified by the agency or IG? **no**
(5a) If "yes," have those weaknesses been incorporated into the agency's plan of action and milestone process? **Select...**

(6) Indicate whether an increase in IT security funding is requested to remediate IT security weaknesses? **no**

(6a) If "yes," specify the amount, a general description of the weakness, and how the funding request will remediate the weakness.

(7) How are contractor security procedures monitored, verified, and validated by the agency for the contractor systems above?

Yes, NSF uses a range of methods to review the security of operations through contract requirements, project management oversight and review, certification and accreditation processes, IG independent reviews, proactive testing of controls through penetration testing and vulnerability scans to ensure services are adequately secure and meet the requirements of FISMA, OMB policy, NIST guidelines and NSF policy. The system is operated on-site by a team of contractors and NSF personnel with system administrators tightly controlling access to the systems as well as signed "rules of behavior". Only administrators with current need have access to the system, and strict code migration, quality control, and configuration management procedures prevent deployment of hostile or vulnerable software on the systems. Contractors are trained in the same security measures as NSF employees. All NSF employees and contract staff are required to complete an on-line security training class each year, including the rules of behavior. IT security requirements are stated in the contract's statement of work. Contractor security procedures are monitored, verified, and validated by the agency in the same way as for government employees. Background checks are updated when contracts are renewed. Once on board, contractors are allowed access to the NSF systems based on their specific job requirements. Audit logs are also implemented to monitor operating system changes - these audit logs are reviewed regularly (at least weekly) by the system administrators. Additionally, IT roles and responsibilities are separated to allow for checks and balances between infrastructure and application teams.

(8)

**Planning and Operational Systems - Privacy Table:**

<table>
<thead>
<tr>
<th>(a) Name Of System</th>
<th>(b) Is this a new system?</th>
<th>(c) Is there at least one PIA which covers this system? (Y/N)</th>
<th>(d) Internet Link or Explanation</th>
<th>(e) Is a System Records Notice (SORN) required for this system?</th>
<th>(f) Internet Link or Explanation</th>
</tr>
</thead>
<tbody>
<tr>
<td>NSF Network/LAN GSS</td>
<td><strong>no</strong></td>
<td><strong>no</strong></td>
<td><strong>No, because a PIA is not yet required to be completed at this time.</strong></td>
<td><strong>no</strong></td>
<td><strong>No, because the system is not a Privacy Act system of records.</strong></td>
</tr>
</tbody>
</table>

**Details for Text Options:**

Column (d): If yes to (c), provide the link(s) to the publicly posted PIA(s) with which this system is associated. If no to (c), provide an explanation why the PIA has not been publicly posted or why the PIA has not been conducted.

Column (f): If yes to (e), provide the link(s) to where the current and up to date SORN(s) is published in the federal register. If no to (e), provide an explanation why the SORN has not been published or why there isn’t a current and up to
date SORN.

Note: Working links must be provided to specific documents not general privacy websites. Non-working links will be considered as a blank field.
Section F: Enterprise Architecture (EA) (IT Capital Assets Only)

In order to successfully address this area of the capital asset plan and business case the investment must be included in the agency’s EA and Capital Planning and Investment Control (CPIC) process and mapped to and supporting the FEA. The business case must demonstrate the relationship between the investment and the business, performance, data, services, application, and technology layers of the agency’s EA.

(1) Is this investment included in your agency’s target enterprise architecture? **yes**

(1a) If "no," please explain why?

(2) Is this investment included in the agency’s EA Transition Strategy? **yes**

(2a) If “yes,” provide the investment name as identified in the Transition Strategy provided in the agency’s most recent annual EA Assessment.

(2b) If “no,” please explain why?

(3) Is this investment identified in a completed and approved segment architecture? **yes**

(3a) If “yes,” provide the six digit code corresponding to the agency segment architecture. The segment codes are maintained by the agency Chief Architect. 404-000

(4) Identify the service components funded by this major IT investment (e.g., knowledge management, content management, customer relationship management, etc.). Provide this information in the format of the following table.

### Service Component Reference Model (SRM) Table:

<table>
<thead>
<tr>
<th>Agency Component Name</th>
<th>Agency Component Description</th>
<th>FEA Service Type</th>
<th>FEA SRM Component (a)</th>
<th>FEA Service Component Reused (b)</th>
<th>Internal or External Reuse? (c)</th>
<th>BY Funding Percentage (d)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ITHCS</td>
<td>Help Desk Support</td>
<td>Customer</td>
<td>Call Center Management</td>
<td>Select...</td>
<td>No Reuse</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Relationship</td>
<td>Management</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Network</td>
<td>Network/LAN Infrastructure Services</td>
<td>Organizationa</td>
<td>Network Management</td>
<td>Select...</td>
<td>No Reuse</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td></td>
<td>l Management</td>
<td>Management</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Datacenter</td>
<td>Operations and Business Application Infrastructure Support Services</td>
<td>Systems</td>
<td>System Resource Monitoring</td>
<td>Select...</td>
<td>No Reuse</td>
<td>46</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Management</td>
<td>Monitoring</td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Email</td>
<td>Electronic Mail Infrastructure Services</td>
<td>Collaboration</td>
<td>Email</td>
<td>Select...</td>
<td>No Reuse</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
a. Use existing SRM Components or identify as “NEW”. A “NEW” component is one not already identified as a service component in the FEA SRM.

b. A reused component is one being funded by another investment, but being used by this investment. Rather than answer yes or no, identify the reused service component funded by the other investment and identify the other investment using the Unique Project Identifier (UPI) code from the OMB Ex 300 or Ex 53 submission.

c. ‘Internal’ reuse is within an agency. For example, one agency within a department is reusing a service component provided by another agency within the same department. ‘External’ reuse is one agency within a department reusing a service component provided by another agency in another department. A good example of this is an E-Gov initiative service being reused by multiple organizations across the federal government.

d. Please provide the percentage of the BY requested funding amount used for each service component listed in the table. If external, provide the percentage of the BY requested funding amount transferred to another agency to pay for the service. The percentages in this column can, but are not required to, add up to 100%.

(5) To demonstrate how this major IT investment aligns with the FEA Technical Reference Model (TRM), please list the Service Areas, Categories, Standards, and Service Specifications supporting this IT investment.

**Technical Reference Model (TRM) Table:**

<table>
<thead>
<tr>
<th>FEA SRM Component (a)</th>
<th>FEA TRM Service Area</th>
<th>FEA TRM Service Category</th>
<th>FEA TRM Service Standard</th>
<th>Service Specification (b) (i.e., vendor and product name)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Call Center Management</td>
<td>Service Platform and</td>
<td>Delivery Servers</td>
<td>Application Servers</td>
<td>Siebel</td>
</tr>
<tr>
<td>Network Management</td>
<td>Service Platform and</td>
<td>Delivery Servers</td>
<td>Application Servers</td>
<td>Radia</td>
</tr>
<tr>
<td>System Resource Monitoring</td>
<td>Service Platform and</td>
<td>Hardware / Infrastructure</td>
<td>Local Area Network (LAN)</td>
<td>CISCO Switches &amp; Routers</td>
</tr>
<tr>
<td>System Resource Monitoring</td>
<td>Service Platform and</td>
<td>Hardware / Infrastructure</td>
<td>Servers / Computers</td>
<td>SUN One</td>
</tr>
<tr>
<td>Email</td>
<td>Service Access and</td>
<td>Access Channels</td>
<td>Collaboration /</td>
<td>Exchange</td>
</tr>
<tr>
<td>Email</td>
<td>Service Access and</td>
<td>Access Channels</td>
<td>Wireless / PDA</td>
<td>Blackberry</td>
</tr>
<tr>
<td>Voice Communications</td>
<td>Service Access and</td>
<td>Access Channels</td>
<td>Collaboration /</td>
<td>Siemons Hicom PBX</td>
</tr>
</tbody>
</table>

a. Service Components identified in the previous question should be entered in this column.

Please enter multiple rows for FEA SRM Components supported by multiple TRM Service Specifications.

b. In the Service Specification field, Agencies should provide information on the specified technical standard or vendor product mapped to the FEA TRM Service Standard, including model or version numbers, as appropriate.
(6) Will the application leverage existing components and/or applications across the Government (i.e., USA.gov, Pay.Gov, etc)? **no**

(6a) If “yes,” please describe.

PART III: For “Operation and Maintenance” Investments ONLY (Steady State)

*Part III should be completed only for investments which will be in “Operation and Maintenance” (Steady State) in response to Question 6 in Part I, Section A above.*

**Section A: Risk Management (All Capital Assets)**

You should have performed a risk assessment during the early planning and initial concept phase of this investment’s life-cycle, developed a risk-adjusted life-cycle cost estimate and a plan to eliminate, mitigate or manage risk, and be actively managing risk throughout the investment’s life-cycle.

Answer the following questions to describe how you are managing investment risks.

(1) Does the investment have a Risk Management Plan? **yes**

(1a) If “yes,” what is the date of the plan? 

**07/01/2004**

(1b) Has the Risk Management Plan been significantly changed since last year’s submission to OMB? **no**

(1c) If “yes,” describe any significant changes:

(2) If there currently is no plan, will a plan be developed? **Select...**

(2a) If “yes,” what is the planned completion date? 

(2b) If “no,” what is the strategy for managing the risks?
Section B: Cost and Schedule Performance (All Capital Assets)

(1) Was an operational analysis conducted? **Yes**

(2a) If "yes," provide the date the analysis was completed. **03/31/2006**

(2b) If "yes," what were the results? (Max 2500 Characters)

Plan provided recommendation to re-engineer existing network to accommodate next generation Network Services.

(2c) If "no," please explain why it was not conducted and if there are any plans to conduct an operational analysis in the future? (Max 2500 Characters)

(2) Complete the following table to compare actual cost performance against the planned cost performance baseline. Milestones reported may include specific individual scheduled preventative and predictable corrective maintenance activities, or may be the total of planned annual operation and maintenance efforts). Indicate if the information provided includes government and contractor costs:

(2a) What costs are included in the reported Cost/Schedule Performance information (Government Only/Contractor Only/Both)? **Contractor Only**

(2b)

**Comparison of Plan vs. Actual Performance Table**

<table>
<thead>
<tr>
<th>Description of Milestone (Max 50 Characters)</th>
<th>Planned Completion Date</th>
<th>Total Cost ($M)</th>
<th>Actual Completion Date</th>
<th>Total Costs ($M)</th>
<th>Baseline Schedule Variance (#Days)</th>
<th>Baseline Cost Variance ($M)</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY03 Steady State Operations</td>
<td>09/30/2003</td>
<td>$18.200</td>
<td>09/30/2003</td>
<td>$18.300</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY04 Steady State Operations</td>
<td>09/30/2004</td>
<td>$18.200</td>
<td>09/30/2004</td>
<td>$17.800</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY05 Steady State Operations</td>
<td>09/30/2005</td>
<td>$16.200</td>
<td>09/30/2005</td>
<td>$16.200</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY06 Steady State Operations</td>
<td>09/30/2006</td>
<td>$19.200</td>
<td>09/30/2006</td>
<td>$19.200</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY07 Steady State Operations</td>
<td>09/30/2007</td>
<td>$16.100</td>
<td>09/30/2007</td>
<td>$16.100</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY08 Steady State Operations</td>
<td>09/30/2008</td>
<td>$23.228</td>
<td>09/30/2008</td>
<td>$23.228</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY09 Steady State Operations</td>
<td>09/30/2009</td>
<td>$31.270</td>
<td></td>
<td>$0.000</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY10 Steady State Operations</td>
<td>09/30/2010</td>
<td>$27.720</td>
<td></td>
<td>$0.000</td>
<td>0</td>
<td>$0.000</td>
</tr>
<tr>
<td>FY11 Steady State Operations</td>
<td>09/30/2011</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>FY12 Steady State Operations</td>
<td>09/30/2012</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>FY13 Steady State Operations</td>
<td>09/30/2013</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>FY14 Steady State Operations</td>
<td>09/30/2014</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

**Total Planned Costs:** $170.118  **Total Actual Costs:** $110.828