National Support Center Plan

A. FUNDING TABLE:

Agency funding listed by program, project, and activity categories, as possible. Funds returned to the program or any offsetting collections received as a result of carrying out recovery actions are to be specifically identified.

Funding Table by Fiscal Year

(Dollars in Millions)

	FY 2009	FY 2010	FY 2011 - FY 2012
Total Obligations	**$0**	**$20**	**$480**
Planning, developing site criteria, conducting research and studies, and ultimately purchasing land	$0	$20	$0
Contract award for the design and construction; and Information Technology (IT) services and IT start-up equipment	$0	$0	$480

B. OBJECTIVES:

A general Recovery Act description of the program's Recovery Act objectives and relationships with corresponding goals and objectives through on-going agency programs/activities. Expected public benefits should demonstrate cost-effectiveness and be clearly stated in concise, clear and plain language targeted to an audience with no in-depth knowledge of the program. To the extent possible, Recovery Act goals should be expressed in the same terms as programs' goals in departmental Government Performance Results Act strategic plans.

SSA's strategic plan includes four goals. They are to (1) eliminate our hearings backlog and prevent its recurrence; (2) improve the speed and quality of our disability process; (3) improve our retiree and other core services; and (4) preserve the public's trust in our program. As our strategic plan states, "Our success in achieving these goals depends on the key foundational element of information technology." The construction of a National Support Center is at the core of SSA's information technology strategy. Thus, this initiative supports all four strategic goals contained in SSA's strategic plan. Our strategic plan can be found at http://www.ssa.gov/asp/index.htm.

SSA's current National Computer Center (NCC) houses computer operations essential to the prompt and accurate payment of benefits to Americans. While once a state-of-the-art data center designed for mainframe use, it is over 30 years old and the facility infrastructure systems have exceeded their useful life of 15-20 years. In addition, technology has changed radically since the building was designed, and we must upgrade the building's cooling, electrical, and fire suppression systems to accommodate these new

technologies. As a result, the NCC's infrastructure systems will not be capable of accommodating the information technology necessary to handle our increasing volumes of work, our new and expanded responsibilities, and our new ways of doing business. Our transition to full electronic processing of our core workloads and the growth of electronic service delivery over the last decade resulted in a dramatic increase in our needs for data storage and network capacity. While we have modernized our hardware, we are facing finite limitations on our ability to distribute electrical power to our servers and mainframes.

Updated servers and mainframes have significant electrical requirements. Until recently, each server required only one power supply to operate. Now, a server requires two to four power supplies to function, which the NCC can accommodate at this time. However, based on FY 2008 projected workload growth trend of adding approximately 25 devices each month (e.g., servers, network routers and switches, special IT appliances, etc.), the secure area of the NCC building which houses SSA IT production equipment will reach maximum electrical distribution capacity within 4 years. At that point, we will no longer be able to add IT equipment.

As the NCC has aged, we have continuously upgraded and repaired structural, electrical, and data processing capabilities. Incrementally upgrading a facility of this kind is a best industry practice for maintaining facilities beyond their life cycle. We must incrementally repair these infrastructure systems because we cannot totally replace them in the existing NCC. To replace them, we would have to shut down the building completely for an extended period of weeks or months.[1] Such a shutdown would result in an unacceptably long interruption of service to the public.

We also considered the possibility of renovating the existing building; however, renovations of this magnitude would require us to vacate the building and design and lease a facility to temporarily house the data and employees. The expense of doing this would be almost as costly as simply building a new, up-to-date data center and would create a risk of a major interruption in service.

Even if we could overcome the obstacles to repair and upgrade the NCC and its infrastructure, we would still have a building designed around a 1970s' mainframe environment. In the seventies, redundant electrical, heating, and cooling systems were not state-of-the-art requirements for data centers. In addition, fire suppression systems were not designed to cover an entire floor.

In short, the current facility will not be able to meet the industry standards for data centers in the future.

In February 2008, we received a report from Lockheed Martin, whom we had asked to independently analyze the condition of the NCC's infrastructure and recommend ways to upgrade it, if necessary. The Lockheed Martin consultants identified no chronic structural defects and verified that over the years, we have maintained the building well.

[1] Presently, we have only a single 30-hour window each year to perform all maintenance on the NCC.

Lockheed Martin also confirmed the NCC's structural limitations and recommended we build a new facility.

With $500 million received in recovery funds, SSA is taking timely action to ensure a new facility will be built and operational.

C. ACTIVITIES:
Kinds and scope of activities to be performed (e.g. construction, provision of services, conduct of research and development, assistance to governmental units or individuals, etc.)

The Recovery Act provides $500 million to build a National Support Center. This includes funds for construction and infrastructure equipment such as generators and uninterrupted power source; and upon completion of construction, the agency plans to use all remaining funds towards the purchase of IT services and IT start-up infrastructure and equipment such as cabling, power strips, cabinets, and network.

The General Services Administration (GSA) has the authority to own/lease federal facilities on behalf of the SSA; therefore, it will manage the design and construction activities for the project. SSA is working very closely with GSA and will actively participate in the design and construction of the National Support Center.

SSA plans to transfer funds to GSA under reimbursable work authorizations in fiscal years 2010 through 2011. We will transfer funds to GSA to perform necessary research and studies to procure the land, and to design and construct the facility. The GSA/SSA project team is discussing the possibility of using some of the funds in the third quarter of fiscal year 2009 to acquire IT consultant assistance for the planning process and in the fourth quarter of fiscal year 2009 to accelerate the schedule for site related services (including *National Environmental Policy Act* (NEPA), appraisals, real estate broker services, etc.). We will have much better estimates for specific items and amounts to be spent on these processes in May 2009 after the procurement strategy meetings for site design/construction with Jacobs, the construction management firm, are completed.

We are reserving funds in fiscal year 2012 for IT services and IT start-up infrastructure and equipment. This money may also be used in earlier fiscal years to cover costs associated with site and utility improvements, IT services, wiring, and infrastructure as they are identified in the program of requirements.

Following is a description of the general planning process with GSA. Once a specific project plan is completed, we will be able to provide more specific milestones.

Prior to requesting Recovery Act funds, SSA and GSA were pursuing a lease prospectus request to acquire a new data center. In 2008, SSA submitted a reimbursable work authorization for $1 million to GSA to start that process. That request was withdrawn since we received Recovery Act funds for a federally owned building. Using those funds, on April 1, 2009 GSA awarded a contract to Jacobs, a construction management firm. The construction management firm, Jacobs, is responsible for preparing the detailed Program of Requirements (POR) (scope of work) with GSA and SSA project team members. This process includes the development of site criteria and program of requirements which run in parallel with each other. The contractor is in the process

of getting necessary background information from GSA/SSA to be fully versed on the project intent and goals.

Since the receipt of Recovery Act funding, the GSA/SSA team has continued with the detailed planning process, including developing site criteria, conducting research, gathering data to develop the POR, and working with Jacobs to develop the first overall project plan (time line). This planning process includes coordinating the IT strategy with the facility infrastructure requirements. The team will be working with Jacobs and an IT consultant group to quantify existing and future SSA IT requirements that will define the building and infrastructure requirements. After the site selection criteria are final, the site evaluation process will begin. GSA may use a real estate broker to assist in identifying available sites for consideration. A GSA/SSA technical team will evaluate the sites against the site selection criteria related to SSA's data center requirements. This process will result in our evaluating a short list of potential sites. Preferred sites will then be evaluated and appropriate studies will be conducted (for example, the *National Environmental Policy Act* [NEPA], Environmental Testing [Geotech]) and finally appraisals completed. The process is lengthy, but ultimately GSA plans to purchase the land by March 2010.

From March 2010 until the fall of 2010, SSA/GSA will refine the POR for the building design and prepare the scope to issue a Solicitation for Offers (SFO). GSA expects the SFO to be issued to acquire a design/build contractor in October 2010. After the SFOs from interested parties are received the source selection process begins. This too is a lengthy process of extensive evaluations to identify the most qualified contractor. GSA expects to award the design/build contract in March 2011. Once the contract is awarded, we will use the POR to begin the work of designing all aspects of the facility infrastructure systems as well as space and security requirements. Final construction is projected to be completed by October 2013.

After final construction, certificate-of-occupancy, commissioning, and resolution of punch list items have been completed, we will start the build out of the IT infrastructure to include cabling, network equipment, servers, storage, mainframes, etc. Testing will begin once the IT equipment is installed in the National Support Center and workload migration will begin after the IT infrastructure has been installed. It is expected to take between 12 and 18 months from "punch list resolution" to terminating SSA's production IT processing and services in the NCC.

D. <u>CHARACTERISTICS:</u>

Types of financial awards to be used (with estimated amount of funding for each), targeted type of recipients, beneficiaries and estimated dollar amounts of total Recovery Act funding for Federal in-house activity, non-federal recipients and methodology for award selection.

SSA plans to transfer funds to GSA under reimbursable work authorizations in fiscal years 2010 through 2011. The funds are being transferred to GSA to perform necessary research and studies to procure the land, and to design and construct the facility. The GSA/SSA project team is discussing the possibility of using some of the funds in the third quarter of fiscal year 2009 to acquire IT consultant assistance for the planning process and in the fourth quarter of fiscal year 2009 to accelerate the schedule for site related services (including NEPA, appraisals, real estate broker services, etc.). We will have much better estimates for specific items and amounts to be spent on these processes

in May 2009 after the procurement strategy meetings for site design/construction with Jacobs, the construction management firm, are completed.

We are reserving funds in fiscal year 2012 for IT services and IT start-up infrastructure and equipment. This money may also be used in earlier fiscal years to cover costs associated with site and utility improvements, IT services, wiring, and infrastructure as they are identified in the program of requirements.

E. DELIVERY SCHEDULE:
Schedule with milestones for major phases of the program's activities (e.g. the procurement phase, planning phase, project execution phase, etc., or comparable) with planned delivery date(s).

As GSA and SSA complete the planning and design processes, more detailed information about the project activities will be available. Below is a general outline of the major milestones:

FY 2010, 2nd quarter (March 2010)
Planning, developing site criteria, conducting research and studies, and ultimately purchasing land required for the construction of the National Support Center including the development of a program of requirements (scope of work), a detailed project plan and timeline.

FY 2011, 1st quarter (October 2010)
Expected solicitation for a design/build contract.

FY 2011, 2nd quarter (March 2011)
Expected contract award for the design and construction. The contract will be awarded by GSA.

FY 2014, 1st quarter (October 2013)
Expected construction completion date.

F. ENVIRONMENTAL REVIEW COMPLIANCE*:*
Description of the status of compliance with National Environmental Policy Act, National Historic Preservation Act, and related statutes.

GSA will comply with the *National Environmental Policy Act* (NEPA). In accordance with the Recovery Act guidance, GSA will complete NEPA compliance expeditiously with the lowest level of analysis possible. This analysis begins with a categorical exclusion checklist and, if warranted, develops into an Environmental Assessment or Environmental Impact Statement.

G. SAVINGS OR COSTS:
Expected increases or reductions in future operational costs (e.g., savings due to energy efficient facilities or increased operational costs as a result of having more buildings to manage and maintain).

The facility will be a state-of-the-art data center. The program of requirements is being designed to meet the Uptime Institute's standards for a tier three data center providing 99.982% availability. We have listed below examples of some of the prospective energy efficiencies

expected from the new construction compared to the existing design. The facility will incorporate the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings*. GSA is engaging industry experts in data center technology, including experts in energy efficiency in data center design and operations during the project development stages of this project.

- The emergency generators will be state-of-the-art. The newer diesel generators will burn fuel more efficiently, reduce environmental concerns and be sized to meet ongoing requirements;

- The cooling towers will be smaller in size than the NCC's cooling towers with each cooling tower containing approximately 25,000 gallons of water, or less. Technology has improved the efficiencies of cooling towers which will result in reduced operating and maintenance costs;

- The new chillers will be state-of-the-art. They are designed to be more energy efficient. Thus, they consume less electricity and freon, which will drive down the operational costs;

- New lighting systems will take advantage of the latest technology to control lighting throughout the facility and reduce costs with energy efficient lighting systems;

- Window, door and shell systems will be designed to be more energy efficient. Newer designs will allow for a building that will be more in line with Leadership in Energy and Environmental Design (LEED) certifications. The newer designs will provide substantial savings to the agency and will include advanced technologies and provide a "greener" building; and

- The Uninterrupted Power Source (UPS) systems will be energy efficient and provide critical redundancy for the National Support Center. A new UPS system will provide modern technology that enhances system integrity and will help the agency achieve Uptime Institute's standards for a tier three data center.

Construction projects of this magnitude may present unexpected challenges. Therefore, the agency will closely monitor the construction of the National Support Center to ensure mitigation of any unexpected challenges.

H. <u>MEASURES:</u>

Expected quantifiable outcomes consistent with the intent and requirements of the legislation and the risk management requirements of Section 3.5, with each outcome supported by a corresponding quantifiable output(s) (in terms of incremental change against present level of performance of related agency programs or projects/activities specified in the plan) – agencies must specify the length of the period between measurements (e.g., monthly, quarterly), the measurement methodology, and how the results will be made readily accessible to the public. The measures currently used to report programs' performance in relationship to these goals (consistent with Administration policy) should be retained. In addition to reducing burden on

grant recipients and contractors, use of existing measures will allow the public to see the marginal performance impact of Recovery Act investments.

SSA plans to work closely with GSA to develop a more specific project plan including dates for accomplishing milestones throughout the project. Information will be updated as it is available and the procurement process unfolds. The current measures of success in the utilization of the Recovery Act resources include tracking the dates listed below. The results will be made readily accessible to the public by posting updates to SSA's recovery website at www.socialsecurity.gov/recovery/.

- **FY 2010, 2nd quarter (March 2010)**
  Planning, developing site criteria, conducting research and studies, and ultimately purchasing land required for the construction of the National Support Center including the development of a program of requirements (scope of work), a detailed project plan and timeline.

- **FY 2011, 1st quarter (October 2010)**
  Expected solicitation for a design/build contract.

- **FY 2011, 2nd quarter (March 2011)**
  Expected contract award for the design and construction. The contract will be awarded by the General Services Administration.

- **FY 2014, 1st quarter (October 2013)**
  Expected construction completion date.

SSA and GSA will also use the following as performance measures to monitor this initiative.

- **Construction On Schedule**
  The project can be measured using the same reporting mechanism used for capital construction projects – tracking the planned schedule of spending (work in place) against the actual value of the work in place – which provides a barometer of project performance. By quantifying "work-in-progress", we can determine if a construction project is on schedule to be completed as planned.

  The measure results are computed using the "Earned Value" concept to determine how projects are performing. This analysis compares the planned schedule of spending (work in place) with the actual value of work in place on the project using information from the Project Information Portal as the source for estimating the value of the placement of work during the life of the project. A project is considered on schedule if it remains within 10% of its scheduled duration.

- **Construction On Budget**
  The project can be measured using the same reporting mechanism used for capital construction projects – tracking the financial performance of prospectus level projects – which provides a barometer of the performance of the project's financial performance. By quantifying this "work-in-progress", GSA can

determine if its construction projects are on target to be completed within the planned budget.

The measure results are computed using the "Earned Value" concept to determine how projects are performing. This analysis compares the planned schedule of spending (work in place) with the actual value of work in place on the project using in the Project Information Portal as the source for estimating the value of the placement of work during the life of the project. A project is considered on budget if it remains within its available funding.

- **Design On Schedule**
  The project can be measured using the same reporting mechanism used for capital construction projects – tracking the progress of the design process against the design schedule to provide a barometer of project performance. By quantifying the progress of the design work we can determine if the design effort is on schedule to be completed as planned.

  This analysis will compare the planned design schedule with the actual design schedule using the Variance Tracking Report derived from the Project Information Portal.

- **Energy**
  The project's energy performance can be measured and tracked for compliance with energy requirements set forth in the *Energy Independence and Security Act* (EISA) 2007, the *Energy Policy Act* (EPACT) 2005, and Executive Order 13423.

I. MONITORING/EVALUATION:

Description of the agency process for periodic review of program's progress to identify areas of high risk, high and low performance, and any plans for longer term impact evaluation.

SSA will monitor the overall progress in achieving the objectives of this program plan through the oversight and leadership of our Senior Accountable Official. The Senior Accountable Official will work with the SSA executives that have lead responsibility for the planning and execution of the program plan. We have set up an infrastructure of periodic status meetings at both the executive level and the staff level to discuss implementation status to date and issues that may arise. We will monitor the progress in achieving the performance measure targets discussed above (*Section H. Measures*) in these status meetings.

SSA will also work closely with GSA on all aspects of the project. We have established a project team including technical representatives with the necessary knowledge and experience in our IT program requirements. These experts include mechanical engineers, fire protection engineers, project managers, occupational safety and industrial hygiene experts, physical security experts, network and IT engineers, etc. These representatives will participate in the development of requirements and oversight activities from the facility design through construction. They will attend all progress review meetings with GSA. Office of Facilities Management, Office of the Associate Commissioner will be responsible for managing the project. SSA will also leverage its

recent experience gained in the development and construction of its Durham data center as we move forward with this effort.

J. TRANSPARENCY:

Description of agency program plans to organize program cost and performance information available at applicable recipient levels.

As described in *Section C. Activities*, SSA plans to release two reimbursable work authorizations to GSA to complete construction of the facility. Once SSA releases the reimbursable work authorizations, GSA will begin its tracking and reporting processes in compliance with the Recovery Act. Furthermore, SSA plans to continue coordinating with GSA in providing updates, reports, and communications detailing the major activities and milestones associated with construction. Updates will be posted as required on the Recovery.gov website as well as SSA's website http://www.ssa.gov/recovery/.

K. ACCOUNTABILITY:

Description of agency program plans for holding managers accountable for achieving Recovery Act program goals and improvement actions identified.

SSA has taken steps to ensure executives and staff are held accountable for achieving the goals of this initiative. First, the performance plan of the agency's Senior Accountable Official has been modified to specifically include responsibility and accountability for completion of this project as well as all initiatives for which SSA has been provided Recovery Act funds to execute. Also, oversight groups at both the executive and staff levels within SSA have been formed and are actively working to ensure this initiative is successfully implemented. These groups periodically report progress to higher levels within SSA's leadership. The project is incorporated into the performance plans for the Associate and Deputy Associate Commissioners for Facilities Management. We will hold ongoing meetings with GSA executives at both the Deputy Commissioner and Associate Commissioner levels to review the status of this project and any other Recovery Act funded projects provided by GSA for SSA facilities.

L. BARRIERS TO EFFECTIVE IMPLEMENTATION:

A list and description of statutory and regulatory requirements, or other known matters, which may impede effective implementation of Recovery Act activities and proposed solutions to resolve by a certain date.

Projects of this size and scope are subject to potential contractor protests and challenges. SSA proposes, in consultation with GSA, to use highly defined selection criteria for both the site selection process and the design/build contract. Both SSA and GSA, intend to use their most seasoned technical experts and project managers on this project who are familiar with large scale construction projects.

Environmental and other construction-related statutes and studies could pose barriers to effective implementation. We intend to minimize this risk by using tightly defined criteria including the requirements of all applicable statutes.

Construction projects of this magnitude may present unexpected challenges. Therefore, the agency will closely monitor the construction of the National Support Center to ensure mitigation of any unexpected challenges.

M. FEDERAL INFRASTRUCTURE INVESTMENTS:

A description of agency plans to spend funds effectively to comply with energy efficiency and green building requirements and to demonstrate Federal leadership in sustainability, energy efficiency and reducing the agency's environmental impact.

The sustainability, energy efficiency and environmental impact resulting from the project are dependent on the initial building design, IT equipment selections, and ongoing operations of the data center.

SSA will be working with Jacobs (the construction management firm) and an IT consultant group to quantify existing and future SSA IT requirements that will define the building and infrastructure requirements. Within this process, we are committed to incorporating energy efficient IT solutions as part of the ongoing operations of the National Support Center. We will be able to provide more specifics after we have coordinated with Jacobs and the IT consultant group.

SSA and GSA will also ensure the building is designed and constructed to comply with the *Energy Policy Act of 2005* and the *Energy Independence and Security Act of 2007*. The goal for the National Support Center is to achieve a Leadership in Energy and Environmental Design (LEED) silver rating through sustainable design principles. The facility will also incorporate the *Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings*.

We are committed to investigate available cutting edge technologies with a goal to provide equipment and controls that meet the highest standards for energy efficiency and sustainability. For example, some of the following issues will be investigated to optimize the performance of the facility:

- Employ integrated design principles to coordinate facility design and operations;
- Conduct building commissioning throughout the design and construction process;
- Optimize energy performance utilizing efficient equipment and controls strategies, expanding environmental parameters for temperature and humidity, and implementing strategies that take advantage of local climate conditions;
- Investigate on-site renewable energy sources, such as heat recovery, photovoltaics, etc.;
- Employ water conservation strategies through efficient equipment designs and usage requirements;

- Enhance indoor environmental quality through ventilation, natural lighting (where applicable), and sustainable product selections; and

- Reduce the environmental impact by utilizing sustainable products and waste management plans.

We are engaging industry experts in data center technology and energy efficiency during the project development stages of this project. As part of the Program of Requirements, an Energy Optimization Study will be performed in order to identify specific design directives and energy performance goals for the construction and operations.