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Report to the Subcommittee on Labor, Health and Human Services, Education, and Related Agencies, Committee on Appropriations, House of Representatives

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SOCIAL SECURITY ADMINISTRATION

Risks Associated With Information Technology Investment Continue

GAO

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**Accounting and Information
Management Division**

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The Honorable Neal Smith
Acting Chairman
The Honorable John Edward Porter
Ranking Minority Member
Subcommittee on Labor, Health and
   Human Services, Education, and
   Related Agencies
Committee on Appropriations
House of Representatives

As requested, this report provides you with background information on the
Social Security Administration's (SSA) efforts and challenges, and our
evaluation of SSA's progress in addressing the concerns we have previously
raised regarding implementation of intelligent workstations (i.e., personal
computers) and local area networks (IWS/LAN). During our review, we
provided written advice on specific issues that should be addressed before
SSA fully implements its planned IWS/LAN system of over 90,000 personal
computers and 2,700 local area networks.[1] This report includes
recommendations on additional action needed by SSA to assure that the
implementation of new technologies improves operations and service to
the public.

The largest single component of the planned system is a 5-year,
$1.125 billion effort to acquire 64,000 intelligent workstations and 2,200
local area networks.[2] Referred to as its automation investment fund
project, this component is a critical initiative because SSA will need to fully
utilize new technology to efficiently and effectively handle rapidly
increasing workloads. This 64,000-computer acquisition is in addition to
computers SSA already possesses and computers it plans to purchase under
different funding accounts.

Although SSA could increase staff levels and continue to support its
outdated work processes with new technology, budgetary realities and the
need for better customer service call for a fundamental reassessment of its
work processes. These processes have evolved over decades without

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[1]Letter from the Director, Human Resources Information Systems, Information Management and
Technology Division, GAO, to the Acting Commissioner of SSA, March 30, 1993.

[2]Unlike SSA's "dumb" terminals that only interface with centralized computer systems, SSA's
intelligent workstations are personal computers that have their own data storage and processing
capabilities. SSA's local area networks will interconnect these intelligent workstations within an office
and to other SSA systems.

taking advantage of dramatic technological advances that could provide quantum efficiency gains.

Our work included reviewing SSA operations and interviewing officials representing SSA, the Office of Management and Budget, the Office of Technology Assessment (OTA), and state disability determination services (DDSS). We conducted our work between October 1992 and June 1994 in accordance with generally accepted government auditing standards. Appendix I provides more details on the objective, scope, and methodology of this review.

Results in Brief

SSA's ability to serve an increasing recipient base will depend greatly on improving the efficiency and effectiveness of its work processes. Accordingly, SSA has initiated efforts to acquire new information technology, reengineer its disability determination process, and develop business and service delivery plans. However, because these efforts are not being carried out in proper sequence, SSA's nationwide IWS/LAN system implementation is continuing with unnecessary risk. This is because SSA's planning and reengineering efforts—which could significantly impact the number, location, and capabilities of personal computers required—are not far enough along to help identify SSA's new information technology requirements. SSA's effort to reengineer its business processes is an effort we have encouraged and supported; but SSA's implementation of IWS/LAN—that was planned before this effort—has not been refocused to support it and is instead directed at SSA's current, inefficient work processes.

As a result, we are concerned that SSA is incurring an unnecessary risk by constructing a network of over 90,000 personal computers, without showing that all are needed to support short- or long-term requirements. Without linking its new technology acquisition to these requirements, SSA is expending limited resources on technology solutions, which could cost $5 to $10 billion over the next 10 years and may not be needed to support operational needs and improve public service.

SSA has also not established measurable cost and performance goals that can be tested, assessed, and used to refine plans and goals annually to further reduce the risk currently associated with implementing IWS/LAN. Without these goals, SSA and its oversight authorities have no means to assure that planned systems and other resources are being focused on

helping SSA staff to process all future workloads and to deliver improved service to the public.

Background

In the 1980s, SSA began upgrading its systems to address growing service problems. From 1982 to 1990, SSA's reported costs for operating and upgrading its systems capabilities were over $4 billion. The agency acquired significant capacity through hardware upgrades of its computers and converted much of its data stored on tape to direct access storage devices. From 1987 to 1990, SSA also installed dumb terminals in its about 1,200 field offices and linked them via telecommunications lines to its national computer center in Maryland.

Past Service Delivery Efforts

SSA's systems efforts helped provide some service delivery improvements. However, the efforts did not provide the support needed to adequately handle all essential services. For example, by 1992 the average processing time for supplemental security income disability claims had already more than doubled the approximately 59 days it took in 1982. This degradation in service can be attributed, in part, to increasing workloads and a 20 percent staff reduction in the 1980s. However, as we previously reported, SSA's efforts were not focused on fully utilizing technology to significantly reduce the need for manual work to process its continually increasing workloads.

Since 1979, we have detailed the need for SSA to improve the efficiency of its service delivery efforts. Appendix II summarizes our products which addressed this issue. Specifically, we have called on SSA to fully develop and implement a strategic management process to guide planning, implementation, and evaluation of long-range initiatives. Without such a plan, we noted that SSA risked being overwhelmed by huge increases in beneficiaries that loomed on the horizon.

Our recently issued report on improving mission performance identifies information resources management practices that have worked for both private and public sector organizations.[3] The report notes that senior managers in leading organizations consistently used a set of practices to improve mission performance through strategic information management. Although organizations applied these practices differently, our analysis suggests a strong tie between their consistent, effective use and successful
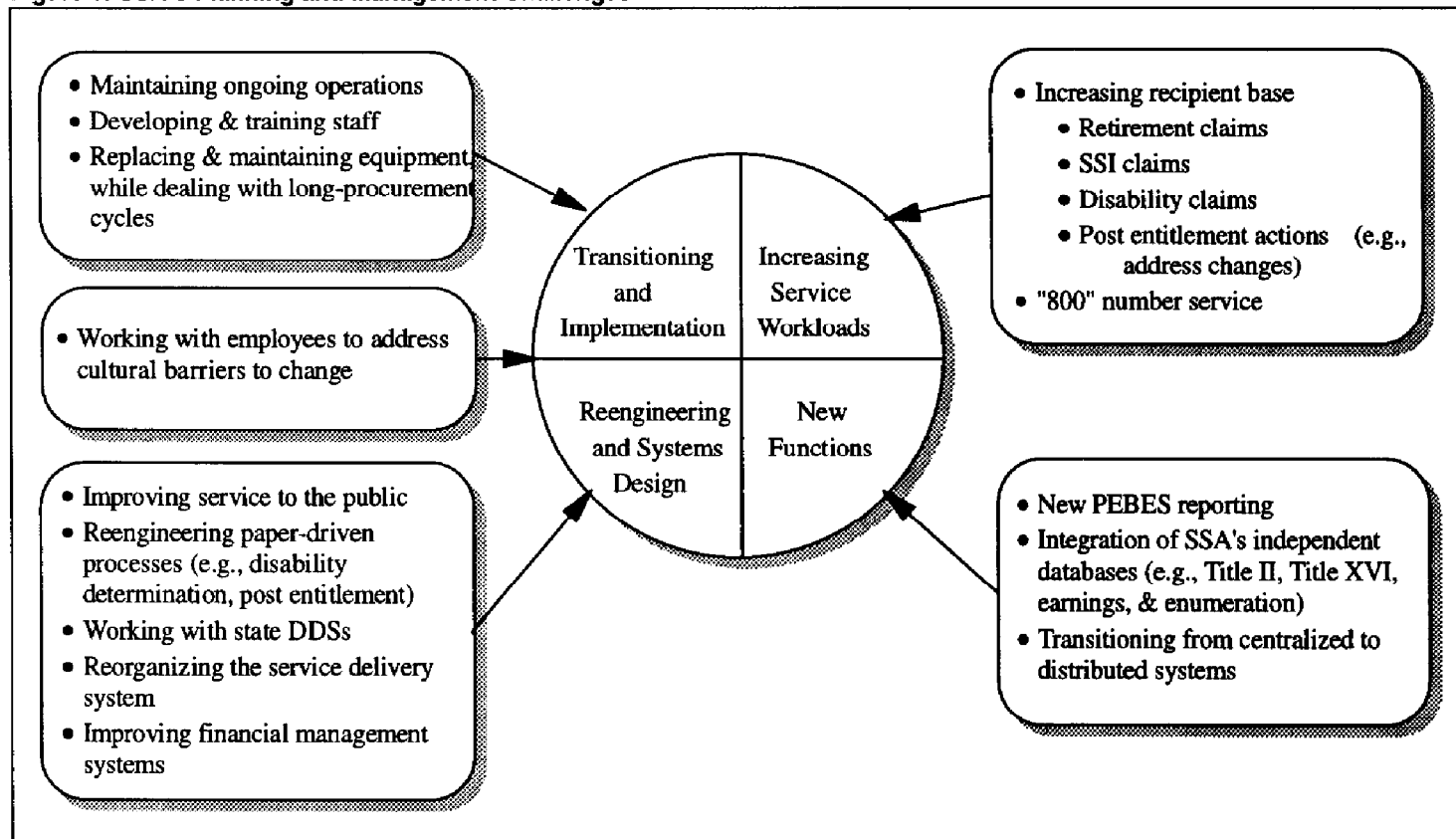
[3]Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

performance outcomes. We concluded that the practices worked because they institutionalized new ways of doing business that are required to capture the value of information and information technology.

SSA Faces Many Challenges

Planning and reengineering are essential to address the many significant challenges facing SSA. For example, figure 1 shows some of the challenges that SSA must address to: (1) adequately handle significantly increasing workloads, much of which will result from an increasing recipient base, (2) implement new operational functions, such as reporting requirements starting in 1995 for personalized earnings and benefit estimate statements (PEBES), (3) reengineer its business processes and implement new systems designs, and (4) transition and implement to new ways of doing business.

Figure 1: SSA's Planning and Management Challenges

- Maintaining ongoing operations
- Developing & training staff
- Replacing & maintaining equipment while dealing with long-procurement cycles

- Working with employees to address cultural barriers to change

- Improving service to the public
- Reengineering paper-driven processes (e.g., disability determination, post entitlement)
- Working with state DDSs
- Reorganizing the service delivery system
- Improving financial management systems

Transitioning and Implementation

Increasing Service Workloads

Reengineering and Systems Design

New Functions

- Increasing recipient base
  - Retirement claims
  - SSI claims
  - Disability claims
  - Post entitlement actions (e.g., address changes)
- "800" number service

- New PEBES reporting
- Integration of SSA's independent databases (e.g., Title II, Title XVI, earnings, & enumeration)
- Transitioning from centralized to distributed systems

Handling increasing service workloads is a critical challenge facing SSA. It is processing a growing number of claims for social security retirement, supplemental security income (SSI), and disability. SSA estimates that it will face an unprecedented growth in beneficiaries over the next few decades. It bases this growth on many factors, including the following.

- The population continues to age. By 2005 there will be 4.8 million more persons aged 65 and over than in 1990.
- Life expectancies are continuing to increase.
- The number of disability beneficiaries is expected to more than double, from about 4.2 million in 1990 to over 8.7 million in 2005.

Figure 2 shows SSA's projected growth in beneficiaries through the next four decades.

Figure 2: Projected Increases in Social Security Beneficiaries
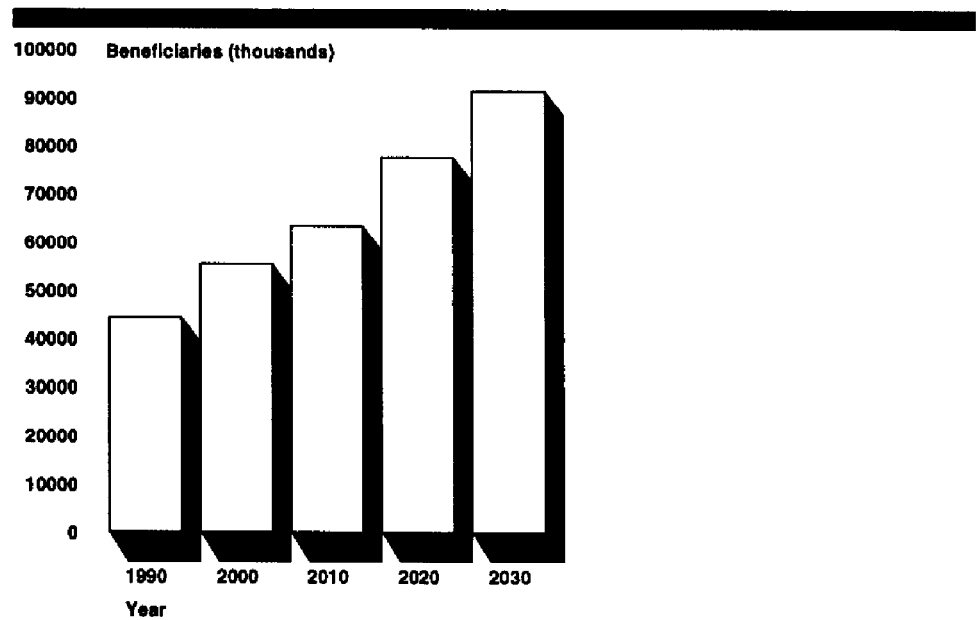
Source: Social Security Administration.

Also, recent legislation requires SSA to meet new reporting functions. SSA is to start sending personalized earnings and benefit estimate statements by

1995 to all individuals 60 to 65 years old who are not receiving SSA benefits.[4] Further, in 2000, statements are to be sent to workers age 25 years or older and not yet entitled to social security retirement benefits.

Over the past decade, SSA has seen resources for its missions decline, while workload has increased. SSA recognizes that its best course of action is to reengineer its processes and systems. Otherwise it will be very difficult, if not impossible, to provide the level of service the public is demanding today and the volume of service SSA is expected to handle tomorrow.

Ongoing Efforts To Improve Operations

SSA has initiated a number efforts to better serve the public. For example, three key initiatives are focused on acquiring new information technology, reengineering its disability determination process, and developing business and service delivery plans. However, we continue to be concerned that SSA's acquisition initiative is preceding its planning and reengineering initiatives.

Acquisition of New Technology Continues To Precede Planning and Reengineering

SSA's multiple and ongoing purchases heighten our previously expressed concerns that SSA is starting to implement IWS/LAN at locations nationwide, including about 1,300 field offices, without first determining operational requirements and resource needs. It currently plans to start purchasing and installing an additional 56,000 personal computers and 1,700 LANs with $220 million in no-year funds[5] appropriated in fiscal year 1994—the first year of its planned 5-year automation investment fund.[6] The implementation is not focused on how and where new technology can best be used, either in the short or long term.

In our March 1993 letter, we noted that SSA should not be fully implementing IWS/LAN without first defining its business strategy. SSA's IWS/LAN pilot locations were focused on measuring improvements that personal computers provided to its current, inefficient processes. In addition, the pilot locations were operating with more personal computers than staff, when a much lesser ratio could have provided SSA with a more cost-efficient solution. SSA's national implementation has been sized to

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[4]42 U.S.C. 1320b-13.

[5]No-year funds are available until expended; they do not have to be obligated in the year appropriated.

[6]Thirty percent of this total is for computers and local area networks, twenty seven percent is for furniture, twenty eight percent is for planning and reengineering, with the remaining fifteen percent for telecommunications, support services, and training.

provide it with 1.3 personal computers for each of its employees. Although SSA indicates that its field offices need personal computers for each employee and for interview and reception areas, it currently operates with far fewer "dumb" terminals and it has not shown us any analysis supporting this new unsubstantiated high ratio.

SSA Initiates a Reengineering Effort

During our review, we had numerous meetings with senior SSA managers to discuss the need to reassess and reengineer its business processes, so that the agency could begin to fully utilize the benefits that today's technology can provide. Subsequently, SSA decided to start a reengineering effort of its disability determination process.

In October 1993, the SSA Commissioner testified that it would be unrealistic to believe that merely hiring additional staff or continuing to support large amounts of overtime would allow SSA to keep up with growing workloads if they are managed under SSA's current business practices, which are based, in large part, on procedures that have evolved over 50 years. She noted that given current budget realities, it was unrealistic to expect significant increases in staffing, and therefore SSA was reviewing how to "reengineer" its business practices. The Commissioner stated that the objective of this reengineering review is to fundamentally rethink and radically redesign business processes as a whole, from start to finish, so SSA can become many times more efficient and, as a result, significantly improve service to the public.

In April 1994, SSA issued a proposal on the agency's first reengineering project—the disability determination process. During our review, we had observed inefficient, paper-driven operations at SSA district offices and state disability determination services and briefed SSA management on the need to reengineer before automating. This disability process is complex, involving up to 26 people to reach an initial disability decision. SSA reports that the average claimant waits up to 155 days from initial contact with SSA for an initial decision, although only about 13 hours are spent actually working on a claim. Most of the time is associated with waiting for medical evidence, handing off the case to the next step in the process, and waiting in queue after these hand-offs.

In April 1994 testimony, we stated that SSA's reengineering proposal is a valid attempt to address major fundamental changes needed to

realistically cope with disability determination workloads.[7] Combining top management leadership with the necessary staff and resources resulted in a credible proposal that documents the existing disability determination problems and recommends a solution to dramatically change the process. However, like any major reform effort, many difficult implementation issues will need to be addressed. These include new staffing and training demands, developing necessary automation requirements, and confronting the entrenched cultural barriers to change.

Reengineering is a formidable undertaking that involves difficult and strenuous work since it requires an organization's managers and employees to change the way they think and work. For example, after senior management recognizes the need for change and commits to reengineering, it then must direct the effort. Existing processes should be described and analyzed and measurable improvement goals should be set. In addition, senior management must also support the reengineering effort by identifying training needs and determining whether outside expertise is necessary. New business processes should then be designed and the organizational culture, structure, roles, and responsibilities should be changed to support these new processes. Finally, new business processes should be implemented by acquiring and installing new technology or redesigning existing technology to support the new processes.

Business and Service Delivery Planning Effort Not Completed

SSA intends to augment its agency strategic plan, which defines an overall planning approach, with separate business and service delivery plans. These plans should define specific business and service delivery needs, and provide the framework needed to determine systems requirements. SSA is not expediting these critical planning efforts, which are needed to provide the framework for the implementation of IWS/LAN.

While an October 1993 draft service delivery concept paper offered the first indication that the effort was starting to define specific goals and identify how and where SSA planned to conduct business in the future, a subsequent February 1994 service delivery draft did not provide this essential planning guidance. SSA is now meeting with the public, employees, and interest groups to establish its service delivery goals. In addition, a March 1994 draft of SSA's business plan also did not provide the essential planning guidance needed to define systems requirements.

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[7]Social Security Administration: Major changes in SSA's Business Processes Are Imperative (GAO/T-AIMD-94-106, April 14, 1994).

SSA Has Not Yet Identified Its IWS/LAN Needs

Despite fully recognizing the need for reengineering, SSA is proceeding with its efforts to implement IWS/LAN before completing the necessary planning to help define how IWS/LAN will ultimately be used to meet the agency's challenges. Such planning initiatives would identify how, where, and when new technology can best be used with its facilities and human resources to improve work processes and the delivery of services to the public.

A major advantage of the planned acquisitions is to allow SSA to move from a computing system that relies primarily on centralized mainframe computers to a system that can also rely on the computing power provided by personal computers. Referred to as cooperative processing, such a system can be used to provide a more cost-effective and responsive infrastructure to improve operations.

We support the cooperative processing concept and understand SSA's concern to start the lengthy implementation cycle. However, in our March 1993 letter to SSA, we detailed five initiatives that we believed were necessary to successfully implement IWS/LAN. These are:

- documenting the justification for SSA's technical solution,
- linking technology system redesigns to long-range business strategy,
- better defining the need for IWS/LAN,
- developing an accountability methodology by establishing ways to track and account for cost and performance goals of its systems redesign efforts, and
- better defining state disability business requirements.

In November 1993, SSA responded that it had adequately addressed our five issues. However, we disagreed and explained our concerns in a December 1993 letter (see appendix II).

Addressing the five issues is particularly important because ongoing planning and reengineering efforts could significantly impact the number, location, and capabilities of personal computers required. Until these efforts are far enough along to identify system needs, SSA risks unnecessarily spending hundreds of millions of dollars to acquire and install equipment that may not meet its needs. The Office of the Deputy Commissioner for Systems is working on an initiative that outlines how SSA might be able to better tie its systems effort to planning and reengineering efforts. However, until SSA's planning and reengineering efforts are far enough along to provide the guidance needed, the Office of

the Deputy Commissioner for Systems is only presuming what the requirements might ultimately be.

We agree that SSA has adequately addressed most of our first issue, which was to provide documentation supporting its choice of the IWS/LAN technology. We believe it is a viable technical solution that could provide SSA with improved baseline automation capabilities if it is designed and tested to support both short- and long-term needs, without restricting future technical solutions to vendor-specific systems. However, as discussed in the following sections, SSA has not adequately addressed the remaining four issues dealing with the need for (1) long-range planning, (2) short-range planning, (3) cost and performance goals, and (4) coordination with states.

Long- and Short-Range Planning

SSA's lack of a long-term business strategy resulted in an information systems plan that focuses technology upgrades on automating current, inefficient processes. Without a long-term business strategy, SSA lacks a principal prerequisite needed to guide information systems planning to focus on adequately handling all short- and long-term workload requirements and improving service to the public. SSA's approach runs counter to what we highlighted in our May 1994 report on entities that had successfully implemented new systems. A clear principle emerging from that analysis is that successful organizations do not proceed with major systems proposals unless they are based on forward-looking business plans.[8]

SSA officials told us that by initiating its reengineering and planning efforts, it is ready to proceed with IWS/LAN. In November 1993, SSA told us that it should proceed because, even if its reengineering efforts result in radically altered business processes that IWS/LAN cannot support, the scope of these changes would be so large that it would be unlikely that the changes would be made before the end of SSA's 5-year life-cycle for the new IWS/LAN equipment. We believe SSA should be able to identify service delivery goals and reengineer at least some of its operations well before the end of this 5-year life.

Although we support SSA's reengineering effort, the results of the effort—not the effort alone—will determine how well the agency can best plan to use technology to handle increasing workloads and improve

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[8]Executive Guide: Improving Mission Performance Through Strategic Information Management and Technology (GAO/AIMD-94-115, May 1994).

service to the public. Like any major reform effort, many difficult implementation issues still need to be addressed. These include new staffing and training demands, developing necessary automation requirements, and confronting the entrenched cultural barriers to change.

Purchasing equipment without defining future business processes and equipment needs inherently accepts an unnecessary risk of not improving service and handling all projected workloads at a reasonable cost. It also places SSA at risk of not achieving its reengineering goals, but merely automating current processes. This is particularly important given that SSA's planned $1.125 billion, 5-year acquisition of personal computers and local area networks, only provides the first items of its new enabling technology for a much larger systems development effort that could easily cost between $5 billion and $10 billion over the next 10 years. This larger effort should be focused on identifying the processing and functional capabilities needed to adequately handle future workloads.

The number of personal computers being purchased is also an issue. SSA is establishing a new IWS/LAN architecture that it will have to support and may want to replace with new equipment about every 5 years. In this regard, a March 1993 private sector study noted that buying personal computers does not cost as much as operating and supporting them.[9] This study noted that although the acquisition costs for personal computers are falling, businesses generally spend $40,000 per computer over a 5- year period after considering the cost of making and keeping it operational on an ongoing basis. In connection with IWS/LAN implementation, SSA, in response to labor arbitration, is acquiring and installing ergonomic furniture, which it estimates will cost about $5,600 per unit. Based on the $40,000 estimate, operating and supporting 90,000 personal computers could end up costing upwards of $3.6 billion. If it does not really need over 90,000 personal computers, it could be unnecessarily overspending by hundreds of millions of dollars.

We are also concerned that there are also unidentified costs for many other systems improvements (e.g., integrating its various mainframe databases) that have to be made to fully utilize the benefits of a cooperative processing system. SSA has not identified the number of new personal computers needed, or how they will be efficiently used in a defined cooperative processing environment that improves operations and provides better service to the public. For example, SSA is assessing the use

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[9]Management Strategies: PC Cost/Benefit and Payback Analysis (Gartner Group/R-824-107, March 24, 1993).

of video conferencing on IWS/LAN. If it decides to implement this new feature, SSA may later have to upgrade its IWS/LAN system (e.g., replacing an undefined number of new personal computer monitors with video conferencing monitors that currently cost about $10,000 each).

Realizing that SSA has to support short-term needs by upgrading some technology in its offices, we noted in our March 1993 letter that SSA could also identify how a limited deployment of IWS/LAN technology could augment current operations, until long-range planning is far enough along to start driving systems efforts. However, SSA decided not to pursue this option because of the long lead time needed to procure and install IWS/LAN and the desire to implement a more capable system. SSA told us it is important to proceed with IWS/LAN to replace existing equipment that it believes could be at risk of malfunctioning in the future and negatively impacting current service delivery levels. It also believes that IWS/LAN will provide it with an enabling technology to implement future process improvement. Although we understand SSA's desire to move ahead with a more capable technology, this decision places increased importance on accelerating its planning and reengineering efforts to reduce the risk of installing new equipment which may not adequately support still undefined business requirements.

Cost and Performance Goals

In our March 1993 letter, we also discussed our concern that SSA is focusing on a major technology upgrade without first (1) establishing measurable cost and performance goals for service delivery that can be attained through reengineering operations, (2) developing plans that address these goals and establish time frames to achieve them, and (3) identifying the financial, information, and human resources that are needed. We were also concerned that SSA was not planning full functioning pilot tests. For example, it is not testing how information will be electronically shared between SSA and the state disability determination services, nor is it currently planning to test how technology will support new work processes emerging from reengineering efforts. Such pilots could be used to assess the feasibility and projected results of planned initiatives.

In our May 1994 report on improving mission performance, we noted that successful organizations rely heavily upon performance measures to operationalize mission goals and objectives, quantify problems, evaluate alternatives, allocate resources, track progress, and learn from mistakes.[10]

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[10]GAO/AIMD-94-115, May 1994.

Performance measures also help assess whether information systems projects are really making a difference. Without establishing measurable cost and performance goals and an accountability methodology to annually report progress to its oversight authorities, SSA cannot annually support the need for new systems.

Although SSA is initiating action to identify cost and performance goals and to develop an accountability methodology, this action is not complete. It has an ongoing effort with the General Services Administration to develop a "yardstick" to measure the benefits that IWS/LAN will provide the public. This effort—resulting from the National Performance Review—is intended to require agencies to include performance measures on all information technology purchases of $100 million or more. However, it is not clear whether this effort will result in providing the cost and performance goals needed.

Coordination With States

Our March 1993 letter noted that SSA appeared to be imposing its IWS/LAN technology solution on state-operated DDSs without adequately considering state business needs. Currently, SSA is working on a number of initiatives to better coordinate its efforts with state officials. However, states are still concerned that SSA is not adequately obtaining their input on SSA planning, reengineering, and systems efforts that affect them. For example, in response to SSA's reengineering proposal, the National Council of Disability Determination Directors, which represents all state DDSs, noted that they were very concerned that the DDSs be appropriately involved in the implementation of all aspects of the reengineering proposal.

We continue to encourage SSA to work closely with the states, rather than merely imposing systems requirements on the states. This is particularly important given that various state systems are continuing to be upgraded or replaced to meet SSA systems requirements that may not be needed to meet current and future operational needs.

Others Have Raised Similar Concerns

Many of our issues have also been raised by others, including SSA's Office of the Deputy Commissioner, Finance, Assessment and Management; the National Research Council; and the Office of Technology Assessment (OTA). These organizations questioned whether SSA had adequately justified its new technology. For example, an April 1994 report by OTA stated that SSA has not:

- defined how IWS/LAN will support expected improvements in service delivery;
- estimated the costs, benefits, and performance impacts of IWS/LAN;
- planned true pilot tests which model the desired functionality for disability processing; and
- conducted a joint SSA-state review on how to modernize states' disability determination processes and make best use of available funds.[11]

Conclusion

SSA's proposed IWS/LAN acquisition has not been driven by plans that identify how and where SSA can best use its new technology and other resources to adequately handle increasing workloads and improve public service. We have encouraged and supported recent efforts by SSA to reengineer its disability determination process and establish overall service delivery goals because they are important steps in identifying future resource needs. However, national IWS/LAN implementation is proceeding independently of these initiatives and at risk because SSA has not adequately defined its technology needs.

Recommendations

We recommend that the Commissioner of Social Security better define IWS/LAN requirements by linking the agency's planning and reengineering efforts to its automation initiatives. The specific actions necessary to accomplish that goal include:

- accelerating planning and reengineering efforts, and if necessary, delaying the installation of IWS/LAN until these efforts are far enough along to substantiate the number, location, and capabilities of personal computers required to support business and service delivery needs;
- implementing fully functioning pilots to assess the ability of IWS/LAN to support reengineered processes (e.g., whether IWS/LAN provides expected time savings, improves case processing including the electronic transfer of files, and operates smoothly with the planned remote monitoring of field office systems) at locations offering the most potential benefits; and
- working closely with states in reassessing systems requirements for state disability determination services to assure that they support SSA's business and service delivery needs and state requirements.

We also recommend that the Commissioner of Social Security estimate and annually report the total cost and benefits of process and systems

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[11]U.S. Congress, Office of Technology Assessment, The Social Security Administration's Decentralized Computer Strategy: Issues and Options (OTA-TCT-592, April 1994).

changes. This should include establishing measurable cost and performance goals that will provide SSA and its oversight bodies with adequate information to assess the reasonableness of SSA's goals and progress during testing and implementation of IWS/LAN.

Agency Comments and Our Evaluation

In its comments on a draft of this report, SSA noted that it is taking action in order to address many of the issues that we have communicated to them during this review. SSA has been progressive and is taking steps to improve its business planning and to reengineer its disability determination process. These actions, however, are not far enough along to define and justify its current IWS/LAN implementation strategy. Appendix III contains a copy of SSA's comments.

In responding to our first recommendation to accelerate planning and reengineering efforts to provide a solid basis for IWS/LAN implementation, SSA expressed concern that completing a detailed master plan would unduly delay implementation, thereby creating unacceptable risk to mission performance. SSA said that it would continue its current long-range planning of all its major business processes concurrent with acquiring new technology. As discussed earlier in this report, given practical realities, SSA does not need to complete all aspects of detailed planning before proceeding with implementation; however, planning should be far enough along to justify SSA's purchases in terms of number, location, and capabilities of personal computers required to support business and service delivery needs.

We recognize that SSA will need to replace equipment to support existing operations while the reengineering process is underway and to adequately handle its future workload. Planning for these ongoing needs should not be difficult or result in undue delays in implementing IWS/LAN technology at field offices. It is critical that SSA's ability to carry out its mission not be impaired by lack of computers. Our concern is that SSA has plans to install over 90,000 personal computers before establishing that such a large number are needed to efficiently and effectively handle workload increases predicted for both the short and long term. Until its planning progresses to a point that provides more definitive guidance, SSA will not have an adequate decision-making foundation. This view is consistent with that of the Office of Technology Assessment which recently reported that SSA's chances for success with IWS/LAN would be increased if planning were strengthened.[12]

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[12]OTA-TCT-592, April 1994.

In responding to our second recommendation that it implement fully functional pilot tests, SSA said it had piloted the system in 10 operating offices to measure actual benefits before deciding to implement IWS/LAN nationwide. These pilot projects focused on current work processes and only demonstrated that certain tasks had been streamlined, thus offering some time-saving efficiencies. However, SSA did not (1) test IWS/LAN's capabilities to handle increased workloads and (2) determine whether the same gains could have been achieved with fewer personal computers. In this regard, SSA commented that it was addressing the above concern by conducting additional pilot studies on various computer-to-worker ratios. SSA added that it would acquire only the quantities of computer equipment justified on the basis of service delivery and economic operations. We believe it is important in conducting future pilots that SSA ensure that the tests encompass the full range of envisioned system and process changes.

Our final recommendations concerned SSA's working more closely with state disability determination services to better identify their needs and improving accountability through the establishment of measurable cost and performance goals for process and systems changes (and annually reporting on the costs and benefits of these changes). SSA agreed in both cases and plans to take appropriate action. Our continuing work at SSA will include focusing on the agency's progress in these important areas.
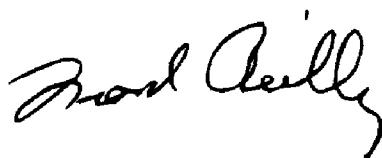
SSA also noted that it was taking action to mitigate the risks associated with the IWS/LAN investment by following guidance outlined in our recent report on strategic information management.[13] Following this guidance should help mitigate risks associated with systems development. Our research of leading organizations showed that the 11 management practices outlined in our strategic information management report take time to effectively implement and refine. It also showed that agencies are typically strong in two or three management practices, but that real improvement does not occur until all are implemented as an integrated set. As we continue our work, we will evaluate how well the agency is progressing in implementing this guidance and explore possible enhancements.

We are sending copies of this report to the Chairman and Ranking Minority Members of the Senate Committee on Governmental Affairs, House Committee on Government Operations, and other interested

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[13]GAO/AIMD-94-115, May 1994.

congressional committees, and to the Director, Office of Management and Budget. We will also make copies available to others upon request.

Please contact me at (202) 512-6408 if you have any questions about this report. Major contributors are listed in appendix IV.

Frank W. Reilly
Director, Health, Education, and
    Human Services Information Systems

Contents

Abbreviations

DDS	disability determination service
IRM	information resources management
IWS/LAN	intelligent workstation/local area network
OTA	Office of Technology Assessment
PEBES	personalized earnings and benefit estimate statements
SSA	Social Security Administration
SSI	supplemental security income

Objective, Scope, and Methodology

Our objective was to assess whether SSA's planned $1.125 billion IWS/LAN investment is directed to supporting SSA's effort to improve service delivery to its increasing recipient base. Our work focused on SSA's progress in addressing the advice we provided in our March 30, 1993 letter. The House and Senate reports on SSA's 1994 appropriations stated that SSA should report the actions taken on this advice before obligating any further IWS/LAN funds.[1]

To meet our objectives, we met with agency officials responsible for systems planning activities, agency operations, and budgeting. We also met with budget and information resource management (IRM) officials from the Office of Management and Budget, as well as officials from the Office of Technology Assessment, who were conducting a review of SSA's automation program. We reviewed relevant systems and strategic planning documents, draft service delivery proposals, as well as the results of IWS/LAN pilot tests. We also reviewed past GAO and other reports on SSA's systems efforts.

To help determine the impact of IWS/LAN, we observed operations at a variety of pilot and non-pilot offices. This includes 21 district and branch offices, and 3 teleservice and 2 program service centers, and state disability determination services in the following states: Alabama, California, Colorado, Florida, Georgia, Illinois, Indiana, Maryland, Massachusetts, New Mexico, New York, North Carolina, Rhode Island, Virginia, Texas, and Wisconsin, as well as the District of Columbia.

We conducted our review from October 1992 through June 1994, in accordance with generally accepted government auditing standards. We have discussed the contents of this letter with SSA officials, and have incorporated their views where appropriate.

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[1]House Report 103-156 and Senate Report 103-143.

Past GAO Products Related to Inadequate SSA Planning

1. Major Changes in ssa's Business Processes Are Imperative (GAO/T-AIMD-94-106, Apr. 14, 1994).

We testified that ssa's April 1 proposal to redesign its disability determination process is a valid, credible attempt to address the major fundamental changes needed to cope with ssa's increasing disability workload. However, we said that ssa still needed to identify how, where, and when automation would be used to adequately support the reengineered process. Further, the concerns of ssa employees and state administrators would have to be addressed, including their natural resistance to changes in their roles and responsibilities.

2. Letter from the Director, Human Resources Information Systems, Information Management and Technology Division, U.S. General Accounting Office, to the Principal Deputy Commissioner, Social Security Administration, Dec. 23, 1993.

We said that we did not fully support funding ssa's planned IWS/LAN acquisition, because ssa had not adequately addressed five key issues that we had identified in our March 30, 1993 letter to ssa. For example, although ssa identified its disability determination process as a key area to reengineer, it had not refocused its planned IWS/LAN deployment to support this effort. In addition, we suggested ssa reassess the number of computers it was purchasing, that is, whether its offices need to have a ratio of more than one computer per person.

3. Social Security: Sustained Effort Needed to Improve Management and Prepare for the Future (GAO/HRD-94-22, Oct. 27, 1993).

We reported that ssa had strengthened strategic management planning by defining high-level service in its September 1991 agency strategic plan. However, we noted that ssa had not fully implemented a strategic management process to guide planning, implementation, and evaluation of long-range strategic initiatives. It also had not completed a service delivery or business plan that specified how and where ssa would provide service in the future. Without such a plan, ssa lacked a prerequisite for its resource and facility plans.

4. Letter from the Director, Human Resource Information Systems, Accounting and Information Management Division, U.S. General Accounting Office, to the Acting Commissioner of ssa, Mar. 30, 1993.

We detailed five issues that we believed SSA must address to justify funding
for its planned IWS/LAN acquisition. Specifically, that SSA needed to:
(1) document the justification for its technical solution, (2) link technology
system redesigns to a long-range business strategy, (3) better define SSA's
need for IWS/LAN, including how a limited IWS/LAN deployment could best
augment current operations until a long-range strategy is defined,
(4) develop an accountability methodology to track and account for the
cost and performance goals for its systems redesign efforts, and (5) better
define state disability business requirements.

5. SSA Computers: Long-Range Vision Needed to Guide Future Systems
Modernization Efforts (GAO/IMTEC-91-44, Sept. 24, 1991).

We reported that after 10 years of systems modernization
activities—without a long-range plan—SSA risked being overwhelmed by
the huge increases in beneficiaries that loomed on the horizon.

6. Social Security Administration's Systems Modernization Plan
(GAO/T-IMTEC-89-11, Sept. 28, 1989).

We testified that SSA believed that it could improve its service delivery
methods through its agency strategic plan. However, the plan did not
identify specific functions the agency would perform to support the type
of service envisioned, the levels of service quality and timeliness to be
achieved, and the level and type of resources needed. Without such
information, SSA could not accurately determine the value of an enhanced
information processing environment or its costs.

7. ADP Systems: SSA's Modernization Efforts Need Redirection
(GAO/IMTEC-87-16, Apr. 10, 1987).

We reported that SSA's systems modernization efforts were proceeding
without the benefit of a service delivery plan that sets service delivery
goals and approaches, and defines the desired organizational structure.

8. Social Security Administration Needs to Continue Comprehensive
Long-Range Planning (GAO/HRD-79-118, Sept. 20, 1979).

We reported that SSA had not established long-range plans to respond to
future program needs and service level requirements, and to help design
ADP systems that can support future as well as present agency operations.

Comments From the Department of Health and Human Services

DEPARTMENT OF HEALTH & HUMAN SERVICES   Social Security Administration

Refer to: Office of the Commissioner
                                                   Washington DC 20201

AUG 15 1994

Mr. Gene L. Dodaro
Assistant Comptroller General
U.S. General Accounting Office
Room 6101
441 G Street, NW
Washington, D.C.   20548

Dear Mr. Dodaro:

This is in response to your draft report titled "Social Security
Administration: Risks Associated with Information Technology
Investment Continue," which focuses on the Social Security
Administration's (SSA) National Intelligent Workstations/Local
Area Networks (IWS/LAN) Project.

This report concludes that SSA risks acquiring IWS/LANs that may
not be well matched to future business processes. To address
this concern, it recommends that SSA (1) accelerate planning and
reengineering efforts and delay the installation of IWS/LANs
until required quantities, locations and capabilities can be
linked to these efforts; (2) implement fully functioning pilots
to assess the ability of IWS/LANs to support reengineered
processes; (3) work closely with States in assessing systems
requirements for State Disability Determination Services and (4)
establish cost and performance goals for the IWS/LAN investment
to provide a baseline for goal assessment and progress
monitoring.

SSA is already doing much of what is recommended. Most
importantly, we are following the guidance outlined in the
General Accounting Office's (GAO) recent executive guide titled
"Improving Mission Performance Through Strategic Information
Management and Technology." This guide discusses 11 fundamental
practices that led to performance improvements, both short- and
long-term, in leading private and public organizations. Attached
is an analysis of how SSA's strategic information management
approach incorporates each of these practices.

We do not, however, agree with the recommendation in this draft
report that IWS/LAN implementation be delayed until SSA performs
more complete and detailed long-range planning covering all of
its major business processes, rather than proceed, as SSA plans,
in parallel with ongoing planning efforts. The time required to
complete such a master plan would unacceptably delay the

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implementation of the needed IWS/LAN infrastructure. As the
panel of experts selected by the Office of Technology Assessment
from the public sector, private sector, academic community, State
agencies, labor and advocacy groups to advise it on policy
options concerning SSA's automation program concluded, deeper
levels of planning and the IWS/LAN infrastructure investment
should proceed in parallel.

Delaying the implementation of IWS/LAN would result in
unacceptable short- and long-term mission performance risks that
are greater than the risk of proceeding. The risk that the
IWS/LAN may not be well matched to business process changes or
require modifications to implement new capabilities, such as
IWS/LAN-based video conferencing, which SSA may decide to
implement in the future is mitigated by the modular and flexible
nature of the chosen architecture and SSA's piloting strategy.
The IWS/LAN initiative will provide a technology infrastructure
that is capable of meeting SSA's current and future business
process requirements over its 7-year equipment life.

This report acknowledges that the IWS/LAN is a viable technical
solution. The Office of Technology Assessment has also reviewed
the IWS/LAN initiative and concluded that the IWS/LAN technical
solution is sound, is well within widely accepted government and
private sector practice, will provide a flexible low-cost
platform which can be upgraded as needed and has the potential to
improve service delivery. In the event that SSA's reengineering
efforts result in radically altered business processes that
IWS/LAN cannot support, the scope of these changes would be so
large that it would be unlikely that the changes would be made
before the end of the IWS/LAN equipment life.

Another issue raised in this report focuses on the ratio of IWSs
to workers. The suggestion in this report that the ratio should
be reduced is based on GAO's observation that some terminals were
not in use at all times at IWS/LAN pilot offices. This is like
recommending that any telephone not in use at all times be
removed from an employee's desk. Moreover, this report fails to
mention that the single thing that managers most often told the
GAO reviewers was that they needed additional terminals to get
the work done. After 8 years of practical experience operating
without enough terminals to process the current workloads, it
does not make sense that we would continue this same approach as
SSA is trying to handle growing workloads, and especially the
more difficult disability cases.

SSA will need at least a 1-to-1 ratio of IWSs to workers in
teleservice and processing centers. Our practical experience in
pilot offices demonstrates to us that workers in a
knowledge-based environment need access to terminals at all times
to do their jobs. It is impossible for workers to serve our

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customers without dedicated terminals. Furthermore, we estimate
that SSA will need a higher ratio of IWSs to workers in field
offices to accommodate front-end interviewing and training center
needs. According to the National Academy of Sciences, a 1.3-to-1
ratio is not unusual when training and common work areas are
considered.

Nevertheless, SSA is conducting a thorough pilot analysis of
alternative IWSs-to-workers ratios. The actual configurations of
IWS/LAN equipment installed will reflect the results of this
additional piloting to define the appropriate ratio of
workstations to employees, considering such factors as workload,
staffing and economy. SSA will acquire only the quantities of
IWS/LAN equipment that are needed and justified on the basis of
service delivery and economy of operations.

About 56,000 IWSs and 1,700 LANs will be available through the
Phase I IWS/LAN acquisition. Though requirements for the
Phase II IWS/LAN acquisition have not been fully defined, we
currently anticipate that about an additional 8,000 IWSs and
500 LANs would be acquired to meet the rest of SSA's
requirements. Therefore, SSA would acquire a total of about
64,000 IWSs and 2,200 LANs, rather than the 100,000 IWSs and
2,700 LANs stated in this draft report, through the Automation
Investment Fund National IWS/LAN Project.

SSA is prioritizing Phase I IWS/LAN installations based on
opportunities for greatest overall benefit to the Agency
considering the need to replace its aging national terminal
network, support expert systems to improve 800 number service,
automate administrative workloads to obtain productivity
increases and implement a reengineered disability process. The
implementation strategy will give priority to the States with the
largest disability workloads and to employees who serve national
800 number callers.

Since the acquisition and installation of the Phase I IWS/LANs
will take about 3 years, SSA needs to proceed now with IWS/LAN
implementation to avoid a sharp deterioration in service as the
current terminals wear out and customer service demands increase.
The current computer network is essential to the performance of
critical business processes including taking claims and providing
service to national 800 number service callers. Sixty percent of
this equipment has already exceeded its planned period of usage
and all of this equipment will be well outdated within the
3 years it will take SSA to procure and install replacement
equipment. If these terminals are not replaced, SSA will not be
able to process claims for benefits.

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As we replace the terminals, IWS/LAN will also allow automation
of many administrative tasks now performed manually. Over a year
of operational testing and an evaluation of productivity benefits
resulting from IWS/LANs show that automation of the
administrative tasks in SSA's field facilities will provide
nearly 2,000 workyears annually that we can use to process
growing workloads and to improve service.

SSA's challenge for the future is to provide a very high level of
customer service within an environment of constrained resources.
At the same time, SSA must handle ever increasing workloads with
little prospect for commensurate increases in staff resources.
The Agency projects that, at the fiscal year (FY) 1993
productivity levels and without the benefits from projects
currently under way, workloads in FY 1999 would require 17,000
additional workyears and those in FY 2000 would require 29,000
additional workyears.

Clearly, fiscal and personnel constraints preclude a strategy of
dealing with increasing workloads through additional hiring.
IWS/LAN is the foundation for SSA's strategy to improve the
quality of service to the American people without substantial
increases in workyears. The critical improvements we expect,
whether service- or savings-related, cannot be attained without
the IWS/LAN platform.

Our more complete comments concerning the recommendations in this
report follow.

<u>Accelerate Planning and Reengineering Efforts</u>

SSA is following the strategic information management approach
recommended by GAO and is ensuring that its planning is anchored
in customer needs and mission goals. As SSA prepares to update
its Agency Strategic Plan and develop a Customer Service Plan,
customer input is being assessed to ensure that our service
objectives are the right ones, set at the right levels. SSA will
follow a systematic approach to identify and prioritize business
processes in need of reengineering to improve service delivery
and productivity. A general business plan addressing all of
SSA's workloads is under development. It will identify how SSA
will deal with increasing workloads and improve service delivery.
This plan will drive supporting human resources, facilities and
information system planning.

Significant progress has been made in the planning area,
including the development of a high-level vision of a
reengineered disability determination process. Disability
consumes over half of SSA's workyears and is the key problem that
the Agency must address. The Agency is also exploring
alternatives for capitalizing on the capability of SSA's national

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800 number service to deliver world class service. Basically,
SSA will pursue a two-pronged strategy to improve service
delivery and productivity. We will reengineer as many processes
as possible and necessary and we will obtain the benefits of
automation even in those processes we choose not to reengineer.
While we will proceed with all deliberate speed to perform needed
planning, the scope, complexity and importance of SSA's business
processes preclude a rapid completion of these activities.

SSA is also committed to the continued strengthening of its
planning process. In this regard, we have recently strengthened
SSA's planning group by combining resources for strategic
planning, process reengineering and information resources
management under the direction of a member of the SSA Executive
Staff who reports directly to the Commissioner of Social
Security. Additional steps will be taken to further augment the
planning group, where necessary, with additional resources and
capabilities.

Implement Fully Functional Pilots

For the IWS/LAN project, SSA performed (1) technology testing on
its demonstration system in the National Computer Center,
(2) simulated actual workloads with users through the Model
District Office test environment and (3) piloted the system in an
operational environment for over a year at ten representative
sites to measure actual benefits before making the decision to
implement nationwide.

The Reengineered Disability System, as well as any other systems
that SSA develops for the IWS/LAN, will go through a similar
progression of technology, simulated production and limited
operational testing before a decision is made to field it
nationwide. SSA believes that the importance of the workloads we
support and the complexity of online systems warrant this
measured approach to implementation and benefit verification.

Work Closely With States

SSA is continuing to work closely with the States to assure that
the reengineered disability process meets SSA's business and
service delivery needs as well as State requirements. State DDS
personnel participated in the disability process reengineering
review on both the Executive Steering Committee and the project
team. Input from the States, as well as other stakeholders, will
be considered in reaching decisions on the reengineered
disability process. This close coordination with States and
appreciation of State requirements will be further assured
because the SSA Executive Staff member selected to direct the
implementation of the reengineered disability process is a former

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State Disability Determination Service director who has served as
President of the National Council of Disability Determination
Directors.

Establish Cost and Performance Goals

We agree that the cost and performance goals for the IWS/LAN
investment should be used as a baseline for cost, schedule and
performance monitoring. SSA is developing a tracking and
accounting system that will permit the Agency to assess critical
initiatives, such as IWS/LAN, at key decision points to determine
whether we should proceed as planned or be redirected. This
system will provide information to compare actual results to
cost, schedule and performance goals and will facilitate
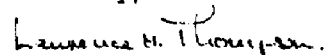assessment of whether progress is within acceptable parameters.

In summary, SSA is following the strategic information management
approach recommended by GAO, is making good progress in its
planning efforts and will continue to strengthen its planning
capabilities, where necessary. We are taking appropriate actions
to mitigate the risk associated with the IWS/LAN investment.
However, we cannot delay the IWS/LAN implementation because this
would result in unacceptable mission performance risks.

SSA must replace its aging equipment to avoid jeopardizing the
performance of its mission. In fact, the IWS/LAN architecture
could alone be justified as replacement technology for SSA's
current highly centralized computer architecture which is rapidly
becoming obsolete and incapable of supporting service delivery.
SSA also needs to obtain the administrative savings that
implementation will provide.

As important, we must provide the infrastructure required to
implement major business process changes that will be necessary
to process increasing workloads and to improve service delivery.
The IWS/LAN infrastructure is the enabling technology for some of
the Agency's major reengineering initiatives including paperless
processing, expert systems, electronic exchange of data and
electronic access to records. Therefore, IWS/LAN implementation
must proceed.

Thank you for the opportunity to review and comment on this draft
report.

Sincerely,

Lawrence H. Thompson
Principal Deputy Commissioner
of Social Security

Enclosure

HOW SSA IS IMPROVING MISSION PERFORMANCE THROUGH STRATEGIC INFORMATION MANAGEMENT AND TECHNOLOGY

The General Accounting Office reports that, "Despite spending more than $200 billion on information management and systems in the last 12 years, the government has too little evidence of meaningful returns."[1] In May 1994, as what the GAO called "the first step of many toward defining what federal executives must do to modernize their operations"[2] and ensure meaningful returns for our information systems dollars, they published an Executive Guide to Improving Mission Performance through Strategic Information Management and Technology. GAO contends in this guide that change is needed, and they identify a set of 11 practices, grouped according to three key functions, that effective private and public organizations have used to improve mission performance through strategic information management.

The suggestions in this report have been studied at SSA, and we agree that agencies that use the 11 practices consistently and effectively would be more likely to experience successful performance outcomes than those that do not. Indeed, at this time of great change in SSA we are using the guidance in the report to help us assess and improve our approaches to managing information. Our initial assessment is that we at SSA have recognized the critical role of information management in the success of our mission and that we have implemented in great measure the process of change that GAO describes. We intend to make further major improvements based on this and other GAO guidance as we evolve.

This paper describes some of the highlights of SSA's approach to using the eleven practices in GAO's guide. All of the activities discussed below, and many more that have been undertaken, have been described to, and in some cases were actually recommended by, the GAO.

I. DECIDE TO CHANGE

Practice 1 -- Recognize and communicate the urgency to change information management practices

SSA began years ago to change the way we manage our information systems, and we have since been continually improving our management practices. The pivotal activity we have undertaken that communicates our recognition of the urgency to change has been the publication of an Agency strategic plan (ASP).

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[1] U.S. General Accounting Office, "Executive Guide Improving Mission Performance Through Strategic Information Management and Technology" GAO/AIMD-94-115 May 1994 p.3

[2] *Ibid.*

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The ASP published in 1991 describes the SSA of the future in
terms of service delivery, both by setting forth specific,
measurable performance objectives and by presenting an
operational vision of how service would be delivered. It
identifies our current performance in achieving our service
objectives and describes the very serious consequences to the
public and the government of failing to close the gap between
current and desired performance.

Two of the five Agency priorities identified in that plan are the
establishment of an essentially paperless Agency that depends on
information technology for the movement of information both
within the Agency and to and from outside sources and the
building of a cooperative processing environment that would
provide the flexibility to accommodate those process changes we
envisioned in the plan and others that could not be foreseen.
The naming of these and the other three priority areas spawned
important major information-management initiatives, including the
creation of a distributed processing environment for programmatic
applications and the establishment of paperless processing
centers.

Early attempts to thoroughly review our systems performance can
be seen in the Systems Baseline Documents written in the late
1980s. These have been superseded by the regular publication of
a comprehensive Information Systems Plan that includes a
description of our current systems architecture and the problems
inherent in it, our target architecture, and the costs associated
with moving from the current to the target. SSA's information
management needs are thoroughly documented in the ISP, the
underpinnings of which include our capacity planning activity and
our operational ADP planning process. These are carefully
coordinated to ensure consistency with and support of the Agency
Strategic Plan.

With the change in Agency leadership in 1993, ever more
cognizance of the need for change has been in evidence. The most
visible program that Commissioner Chater has put in place and the
one most likely to result in early recognizable improvements is
the establishment of a process-reengineering program at SSA. We
expect through reengineering to identify the radical changes that
SSA must make in its policies, systems, and processes if we are
to meet the challenges ahead in a fiscally-constrained
environment.

Our first reengineering project undertook the design of a new
initial-decision process for the disability programs, our most
problem-fraught area. Many of the changes that would result from
the proposal made by the design team are dependent upon the
responsible and creative use of information systems technology to
facilitate data movement, decision making, case management, and
communication with all participants in the process, from the

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claimant to the medical provider. The proposal is clear evidence
of our commitment to using information technology to enable a
fundamental change in the way we conduct our business at SSA.

Not only is the meat of the proposal a commitment to change but
the process by which the proposal was created is one as well; it
supports all three of the practices that make up the key function
that GAO calls "Decide to change." The disability redesign
process began with a team of 18 individuals from a variety of SSA
and State disability determination service (DDS) backgrounds.
The team was diligent in ensuring the active participation in the
process of every type of stakeholder: they spoke with numerous
employees to document the current disability determination
process and its problems, obtained process improvement
recommendations from over 3,600 individuals and groups internal
and external to the disability claim process, and reviewed the
procedures of a number of public and private sector
organizations. Once the proposal was drafted, the team
distributed the proposal, using both traditional and electronic
means, as widely as possible throughout SSA and the DDSs and to
interested public and private organizations.

During the comment period, the team received over 6,000 written
responses from SSA and DDS employees, employee unions,
professional associations, members of the public, claimant
representatives, and many other interested individuals and
groups. Additionally, group employee-feedback discussions were
held in over 80 sites across the country and facilitated
discussions were held with almost 2,000 SSA and DDS employees.
Team members also conducted numerous briefings and spoke with
more than 3,000 individuals about their reactions to the proposal
during this same period.

Further evidence of our decision to change can be seen in our
recent establishment of an Agency focal point for benchmarking to
encourage the practice at SSA. In requiring that benchmarking
procedures be developed and implemented, Commissioner Chater has
in effect mandated that we document our current processes and
committed us to adapting others' practices to improve our own.

Practice 2 -- Get line management involved and create ownership

Involving line management is a key aspect of change at SSA.
However, we believe that involvement of employee organizations,
particularly unions, is also essential. Thus, specific executive
committees have been established to steer the Agency as it
undertakes major change efforts. As one example, throughout the
design phase of the disability reengineering project, an
Executive Steering Committee, which included leaders from all SSA
unions and professional associations as well as key executives,

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provided ongoing advice. As another example, the Agency's
initiative to develop customer standards was developed and guided
by an "Executive team" of line managers and union officials.

SSA's tactical planning process has done much to support the
ownership by line management of major information-management
projects. Plans to accomplish major Agency initiatives that are
directed toward a specific program or service-delivery change are
written and managed by the component whose business they will
improve. On the other hand, where a cross-cutting systems
initiative must be undertaken and managed by the systems
component, affected non-systems components maintain a strong
involvement in its planning and implementation.

An organization-wide information-management steering committee
has existed since the Executive-level Systems Review Board was
established several years ago. The SRB meets regularly to
consider the relative implications at the Agency level of
systems-oriented initiatives and makes recommendations to the
Commissioner on the priorities that should be attached to them.

Practice 3 -- Take action and maintain momentum

The very process of planning our strategies for the future, in
addition of course to the ASP itself, has instilled in our line
managers a deep appreciation for and understanding of how
information management and information technology can make a
difference in Agency performance. For example, several years ago
the Commissioner established in her immediate office an Office of
Information Resources Management to ensure that a high-level,
Agency-wide consideration of IRM issues would regularly occur.
The Deputy Commissioner for Operations, whose employees are
responsible for nearly all of the public-contact work carried out
by SSA, created in her office an Office of Automation Support to
guarantee close, day-to-day relationships with our systems
professionals and to provide her with expert advice on
information-systems issues.

There are many other examples of our attempts to ensure an
educated management team. Executives and staff have visited
private-sector and other government agencies to learn how they
have implemented major changes such as imaging and other
technologies. And representatives of our line and other staff
components put greater efforts into such mundane but important
activities as attending the annual conference put on by the
systems component and attending classes designed to raise the
systems-sophistication level of non-systems employees.

SSA is participating as a pilot agency under the Government
Performance and Results Act. By acting as a pilot, we are hoping
to gain knowledge and experience that will help the evolution of
the strategic management process at SSA. In addition,

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acknowledging the impressive strides that the Internal Revenue
Service (IRS) has made, we have recently conducted a series of
discussions with the IRS to learn exactly how they have
integrated their tax modernization plans with their strategic
planning effort. We expect to adapt some of their ideas to our
own program.

Even more broadly, SSA has also begun a systematic program of
helping managers and employees understand and embrace the
profound changes that are occurring. Beginning in the fall of
1993, in conjunction with the reengineering program, a nationwide
training cycle began, including all senior executives as well as
managers and union officials across the country from regional
offices, field offices, DDSs, and Hearings Offices. This cycle,
completed in March 1994, focused on reengineering principles and
managing change.

SSA is now more than halfway through a second series of regional
forums, led by the Commissioner and Principal Deputy
Commissioner, which will reach an even broader audience of local
managers, supervisors, and union leaders. These sessions are
focused particularly on achieving SSA's goals through change.
Major headquarters organizational components are also taking
specific steps to help employees deal with change.

II. DIRECT CHANGE

*Practice 4 -- Anchor strategic planning in customer needs and
mission goals*

The customer focus recommended by GAO is one that has been
"Hammered home" by the Vice-President's National Performance
Review, and it is one with which we completely agree. Indeed,
Vice-President Al Gore, in his visit to bestow three Hammer
Awards on groups at SSA, complemented the Agency on being at the
forefront of developing an Agency designed to "put customers
first"--a major change for government agencies and one of which
we are justifiably proud.

While SSA has always tried to stay attuned to the needs of its
many customers, during the last year we have undertaken an
intensive structured effort to seek input from the Agency's
stakeholders. Using NPR's theme of "Giving Customers a Voice,"
SSA's customer-service initiative includes:

o   A series of focus groups conducted throughout the country
    with Social Security beneficiaries and the general public to
    find out directly from customers what they need and expect
    from SSA. Using employees trained as moderators, SSA
    institutionalized a focus-group process that is now used for
    a wide range of Agency initiatives, including disability
    reengineering and bridging communications barriers. SSA's

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focus-group methodology is also serving as a model for a
number of other government agencies, including the Veterans'
Administration and the Office of Personnel Management.

o   Direct surveys, conducted in-person or by phone, with over
     10,000 of our customers. These surveys will provide SSA
     with detailed data about the level of customers'
     satisfaction with SSA's current service. They will also
     provide information about customer expectations in several
     areas, including the methods by which we do business, the
     aspects of service most important to customers, and
     suggestions for improving service.

o   Comment cards sent by mail to 22,000 customers or completed
     over the phone with 4,000 additional customers. These cards
     will help SSA define some of its quantifiable objectives,
     such as how long it should take to receive a social security
     card after applying. The comment cards will also solicit
     additional suggestions the public may have for providing
     good service.

o   Questionnaires completed by and discussions with external
     organizations who have a keen interest in how SSA provides
     service. This initiative includes over 100 advocacy groups,
     Congressional staff, State entities, and monitoring
     organizations, including the General Accounting Office.

o   Benchmarking the service provided by other organizations
     considered to be the best in business. This will provide
     SSA with information about the customer-service standards in
     use by other organizations and allow us to identify
     innovative "best practices."

Clearly, SSA has gone "all out" to get comprehensive input from
the public and other external organizations. But the effort does
not stop there. SSA has also asked its internal customers, its
employees, to help the Agency define what SSA's mission and goals
should be. In partnership with its employee unions, SSA has
begun an unprecedented initiative called "Giving Employees a
Voice." As part of this initiative, questionnaires were
distributed to all 65,000 employees to seek their views on what
world-class service means at SSA, to ask them what barriers
prevent them from providing it, and to solicit their ideas on
ways to overcome the barriers. Over 2,500 employees, chosen from
all grade levels and position types, have participated in
interactive group discussions about how SSA can best provide
world-class service.

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All of this information is now being evaluated and used to set
the standards for SSA's Customer Service Plan (being prepared in
response to Executive Order 12862). It will play a critical role
in renewing our Agency Strategic Plan over the next several
months.

*Practice 5 -- Measure the performance of key mission delivery
processes.*

As we complete the integration of customer needs and strategic
planning, we are also working to develop and orient performance
measures toward key service-delivery processes. GAO is familiar
with the comprehensive array of management information reports
and surveys which we prepare and use today. To mention just a
few, these include the exhaustive data on all SSA operations that
are presented in the Commissioner's "Blue Book"; reports on
"Selected Workload Unit Costs" and the "Workload Trend Report";
and regularly scheduled customer-satisfaction surveys. We have
recently augmented this considerable amount of management
information with focus-group surveys, a major Service-Delivery
Evaluation, and reports of internal and external Stakeholder
Activity.

Our next step will be to align measures more directly with
outcomes. For example, we will establish systems to capture
indicators of greater consequence to our customers, such as total
elapsed claims-processing time and field-office waiting times,
and to create alerts that will allow us to give notice of claims
delays. We will continue to conduct and enhance our customer-
satisfaction surveys, and we will institutionalize our comment-
card system. As a supplement to our customers' perceptions, we
will work in partnership with the unions to develop ways of
assessing and enhancing employee job knowledge.

Finally, we intend to link organizational performance measures as
firmly as possible to customer needs. Some of these concepts are
expressed as a "service perspective" philosophy of measurements
and management information in the Disability Claim Process
redesign proposal.

*Practice 6 -- Focus on process improvement in the context of an
architecture.*

SSA strongly endorses the concept of aligning structured process
redesign and systems architecture, and we have already completed
or set in motion a number of actions designed to establish the
organized framework GAO describes.

Since first publication and through regular updates, the ISP has
served as source document for direction and standardization of
all aspects of systems design and development in the Agency. The
ISP establishes the target environment and defines direction

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through the 1990s for everything from mainframe capacity
management and programmatic and administrative application-
software development through the distributed IWS/LAN
architecture, data management standards, and telecommunications.
Emphasis throughout the ISP centers on compliance with applicable
federal, industry, and international standards.

Supporting the ISP are the ADP planning process for introducing,
prioritizing, and tracking software-development projects and the
review processes of the Information Technology Systems Review
Staff (as staff to the SRB), overseen and supplemented as
necessary with personal direction from the SSA Deputy
Commissioners. Together, these and other activities create an
orderly progression in all facets of systems development.

The recent decision to integrate the Process Reengineering
Program with the planning and information resources management
functions, along with the structure established earlier in the
ISP creates a disciplined approach to identifying and launching
new reengineering activities. At the same time, it precludes
incompatibility, fragmentation, and other information systems
dangers that GAO correctly warns against. Close working
relationships within the SSA Executive team guarantee the linkage
GAO seeks between information systems initiatives and benefits in
customer satisfaction.

Practice 7 -- Manage information systems projects as investments

SSA has continued to strengthen its management of information
systems projects as investments. The $1.25 billion that SSA
requested to rebuild its automation infrastructure--called, not
coincidentally, SSA's *automation investment* fund (AIF) request--
was based on extensive planning that started with the Agency
Strategic Plan. Tactical plans for the major initiatives in the
Information Systems Plan that support the AIF include both a
discussion of how the initiative will support SSA's service-
delivery objectives and a cost/benefit analysis. The
cost/benefit analyses in the plans have been and are being based
on information gathered during extensive pilot testing; pilot
testing is a method we use regularly to ensure the program and
technical feasibility and operability of new initiatives.

To ensure that cost/benefit analyses are done at the appropriate
decision points for all major SSA initiatives, SSA published an
instructional guide on cost/benefit analysis in November 1993.

An independent review is made of all information technology
procurements by the Systems Review Board, which independently
reviews procurements to ensure cost and service justification for
the expenditure of funds on information systems.

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*Practice 8 -- Integrate the planning, budgeting, and evaluation
processes.*

SSA has improved its planning process each year. This planning
process, aptly named the Planning and Budgeting System (PBS),
ensures that the Agency's plans guide the formulation and
execution of its budget.

Within the PBS, SSA in effect "translates" the provisions of the
ASP through the development of detailed Agency-level tactical
plans. The tactical-planning process originated to direct Agency
attention and resources toward attainment of the improvements
envisioned in the five strategic priority areas of the ASP.

The PBS proceeds on an annual cycle, keyed primarily to the
externally-imposed annual budget cycle. It routinely includes a
budget review of Agency base operations, an update of the
Agency's resource plans (particularly its ISP), modifications to
products of Agency-level supplemental planning activities (such
as the Information Resources Management Plan) and ongoing
revisions to Agency tactical plans. Built into the PBS cycle is
a series of annual Executive-level meetings where the
Commissioner and senior staff review and prioritize the Agency's
plans and determine the funding level that the budget request
will reflect for each.

The PBS has the flexibility to accommodate new plans as they are
developed, such as those that will be written to implement the
Disability Process Redesign and recent legislation. Plans
stemming from the reengineering program and any other new vehicle
for identifying process improvements easily fit into the Agency's
planning and budgeting system, and by doing so they can compete
side by side with the other Agency priorities as we develop each
year's budget request.

As an adjunct to the PBS, SSA is building a tracking and
accounting system that will permit the Agency to assess critical
initiatives, such as IWS/LAN, at key decision points to determine
whether we should proceed as planned or redirect resources. As
we improve our tracking and monitoring capabilities, we expect to
integrate our plans more completely, measure performance more
appropriately, and target responsibility more completely.

Our ability to integrate the planning, budgeting, and evaluation
processes is further enhanced by combining the Agency staffs
responsible for information resource management, reengineering,
and Agency-level planning. This streamlining action will
facilitate all of our efforts to maximize SSA's mission
performance.

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III. SUPPORT CHANGE

*Practice 9 -- Establish customer/supplier relationships between
line and information management professionals*

SSA has established strong relationships between the users in the
Agency's line positions and the information management
professionals who design, develop, implement and maintain SSA's
information systems. In fact, in the mid-1980s SSA pioneered in
this area by establishing a model district office (MDO) to use in
implementing its important Claims Modernization Project. Now as
then, line employees in the MDO play a critical role in the
design and validation of new applications systems.

A team approach is used for ADP projects, and line users are
important team members. We use the Joint Application Development
(JAD)/ Rapid Application Design (RAD) process to develop systems.
We also include users in the ADP Planning Process. Users help
define priorities for ADP projects, and they work with
information systems professionals during implementation,
especially in conducting pilots, to ensure that the final system
will meet user requirements.

*Practice 10 -- Position a Chief Information Officer as a senior
management partner*

The Deputy Commissioner for Systems (DCS) is responsible for
working with users to build new information systems and to
reengineer and maintain existing systems. Although the SSA does
not have a senior official whose title is Chief Information
Officer (CIO), the DCS is the *de facto* CIO.

The DCS is one of the six Deputy Commissioners who work as
executive managers with the Commissioner of Social Security and
the Principal Deputy Commissioner. In fact, SSA reestablished
the position of the senior information-systems official as an
executive position in response to a recommendation from the GAO
report of July 1989, "Social Security: Status and Evaluation of
Agency Management Improvement Initiatives."

*Practice 11 -- Upgrade skills and knowledge of line and
information management professionals*

We have been working to upgrade the skills and knowledge of both
line and information-management professionals in many ways in the
last several years. We have specialized programs, such as the
systems rotational associates (SRA) program and the graduate
level training (GLT) program. In the SRA program, selected
information-systems personnel rotate during a year through three
to four assignments in any of the six Office of Systems

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components. They obtain cross-training in the varied aspects of
the systems-development life cycle and related technology. This
program has been a great success since it began in 1986.

The GLT program is also a one-year program through which selected
information-systems professionals attend graduate schools for one
year to complete course work toward a graduate degree in
information systems. This program began in 1989; to date, 30
mid-level managers and technicians have received master's degrees
from schools such as Johns Hopkins University and the University
of Maryland.

We also offer vendor-taught and in-house training classes to
staff of the Office of Systems and, in a very limited way, of
other SSA components. In both 1992 and 1993, OS staff
successfully completed over 1900 vendor-taught courses. During
the same period, staff successfully completed over 2,800 in-house
courses. In the period from 1991 to 1993, over 21,000 student
days were spent in training.

The Office of Systems also offers self-taught courses in its
Individual Learning Center (ILC), which is used by employees from
all SSA components. Over 13,000 hours in over 7,000 visits were
logged by employees in the ILC during the period from 1991 to
1993. During the same period, more than 1,200 off-site training
opportunities were provided to individual employees.

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