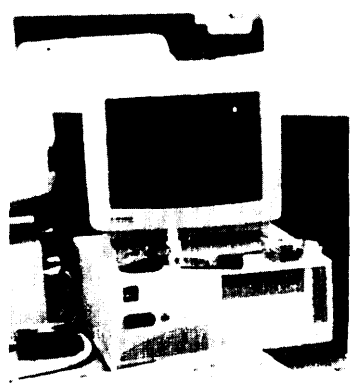
Summary and Policy Options 1

The Social Security Administration, in many respects, is our nation's largest government service agency. More than 47 million people receive over $350 billion each year in SSA benefit payments. SSA has issued about 360 million Social Security numbers, of which roughly 205 million are active. In 1992, SSA issued nearly 7 million new and 10 million replacement cards, and tracked the earnings of 140 million people. Millions of older, disabled, and/or low-income Americans depend on SSA benefits to make ends meet. [1]

The ability of SSA to deliver services quickly, efficiently, and responsively is of vital concern to Congress, the Administration, and the public. Congressional committees and the General Accounting Office (GAO) have urged action on the many management, personnel, and technology challenges facing SSA.[2] The Administration's "National Performance Review" has assigned high priority to improving delivery of SSA services,[3] as have senior citizens' and disability advocacy groups.[4]



[1] See ch. 2 for a discussion of trends in SSA's workload.

[2] See, for example, U.S. Congress, General Accounting Office, Report to the Commissioner, Social Security Administration, *Social Security: Sustained Effort Needed To Improve Management and Prepare for the Future,* GAO/HRD-94-22 (Gaithersburg, MD: October 1 993).

[3] See Vice president Al Gore, *Creating a Government That Works Better & Costs Less: Report of the National Performance Review* (Washington, DC: U.S. Government Printing Office, September 1 993).

[4] See, for example, statements of Robert Shreve, American Association of Retired Persons; Ethel Zelenske, National Senior Citizens Law Center; and Stan Kress, President, National Council of Disability Determination Directors before a hearing on "Reinventing the Social Security Administration" held by the House Committee on Ways and Means, Subcommittee on Social Security, Oct. 28, 1993.

Today, information technology is essential to SSA in carrying out its mission. Indeed, SSA would literally collapse without the use of computers and telecommunications. Management expertise and human resources are equally important, but technology is frequently the focal point for debate over the quality and future of SSA services.

INTRODUCTION

In its early years, SSA was in the forefront of information technology and was one of the first users of mainframe computers. A decade ago, SSA embarked on a "Systems Modernization Plan" to upgrade its technology bases The results of this upgrade have been dramatic, as reflected in significant reductions in the time required for SSA to issue Social Security cards (cut from 6 weeks to 10 days), recompute annual benefit levels (cut from 4 years to 6 months), and post annual earnings reports (cut from 39 to 6 months).[6]

But an ever-increasing workload (see chapter 2), combined with possible staff reductions,[7] once again threatens SSA's ability to meet congressional and public expectations for service delivery. The use of toll-free 800 telephone numbers, for example, has become a key part of SSA's service delivery strategy. But during peak periods, the telephone system is overloaded to the point where most callers receive a busy signal on their first attempt. SSA's Disability Insurance (DI) and Supplemental Security Income (SSI) programs are medically and/or means tested. This necessitates periodic reviews to assure that recipients continue to be eligible based on their medical and financial condition. The joint federal-state program for initial and continuing reviews of eligibility for disability benefits is in serious distress.[8] Initial determinations can take up to several months, with a current backlog of over 725,000 cases. The backlog of continuing reviews is even larger. For SSI, the estimated error rate is about 3.5 percent, roughly three-quarters of a billion dollars per year.[9] The error rate for D] is not regularly measured, but probably is at least similar to SSI. These errors include overpayments to eligible recipients or payments to ineligible recipients. An unknown number of eligible people receive underpay merits or no payments at all because benefits were erroneously denied or the persons did not apply. [10]

This Office of Technology Assessment (OTA) study focuses on SSA's current proposal for its next round of technology modernization-a 5-year, $1.1 25-billion Automation Investment Fund scheduled to run from FY 1994 through FY 1998. The investment proposal is commonly re-

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[5] U.S. Congress, Office of Technology Assessment, *The Social Security Administration and Information Technology,* OTA-CIT-3 1 I (Washington, DC: U.S. Government Printing Office, October 1986).

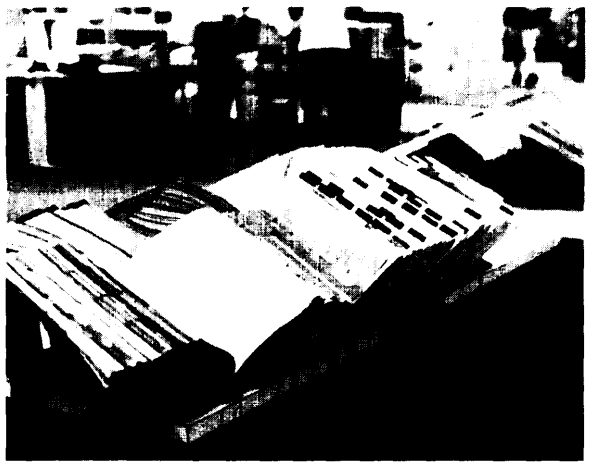
[6] See Social Security Administration, *Information Systems P/an* (Baltimore, MD: September 1993), p. 1-6 and figure I -1. SSA has implemented several technology-based services, such as automatic enumeration and issuance of Social Security cards at birth, and automated issuance of personal earnings and benefit statements.

[7] SSA's full-time equivalent staffing level dropped from about 83,000 persons in FY 1983 to 63,000 in FY 1990, and has remained stable since. Further cuts due to government-wide downsizing are possible.

[8] See U.S. Congress, General Accounting Office, *Social Security: Increasing Number of Disability Claims and Deteriorating Service*, GAO/HRD-94-11 (Gaithersburg, MD: Nov. 14, 1993).

[9] See U.S. *Congress,* House *committee* on Ways and Means, *Overview of Entitlement Programs: 1992 Green Book*, WMCP 102-44 (Washington, DC: U.S. Government Printing Office, May 15, 1992), p. 1605. Also see Vice President Gore, op. cit., footnote 3, p. 109; Jane L. Ross, U.S. General Accounting Office, "Processing of Continuing Disability Reviews," testimony before the House Select Committee on Aging, Mar. 9, 1993, GAO/T-HRD-93-3; and Jane L. Ross, U.S. General Accounting Office, "SSA Needs To Improve Service for program Participants," testimony before the House Committee on Ways and Means, Subcommittee on Social Security, Mar. 25, 1993.

[10] The National Caucus and Center on Black Aged estimates that 1.5 million elderly poor people eligible for SSI are not receiving benefits. See Joyce T. Berry, former U.S. Commissioner on Aging, U.S. Department of Health and Human Services, statement before the Congressional Black Caucus Forum on "Aging: A Black Financial Crisis," Sept. 17, 1993.



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SSA is using information technology to he/p make the transition from a paper based to an electronic agency
Top: *SSA* has *thousands of pages of regulations that take up several feet of shelf space per set*
Bottom left: *Many SSA employees still work in a sea of paper.*
Bottom right: Individual disability *case files frequent/y generate thick folders of documents that are moved around by pushcart,*

ferred to as the "IWS/LAN Technology Program," and is separate from SSA's operating budget. IWS/LAN is short for "intelligent work station (IWS) and local area network (LAN)." The workstations are current generation off-the-shelf microcomputers, and the LANs are a widely implemented means of interconnecting microcomputers in local networks that can, in turn, be tied together into larger networks. The SSA Automation Investment Fund includes more than just microcomputers and LANs, which account for about 30 percent of the total anticipated expenditures. Ergonomic furniture and site preparation represent another 30 percent, and training and telecommunications about 10 percent. Unspecified reengineering accounts for the remaining 30 percent. [11]

Consideration of SSA's modernization program is complicated by several factors. First, SSA's technology planning historically has led strategic and operational planning by several years. Prior GAO, National Research Council,

[11] SSA has revised its estimated allocation of the $1.125 billion as follows (original allocation followed by current estimates): IWS/LAN (decreased from $341 million to $316 million); ergonomic furniture and site preparation (increased from $307 million to $422 million); support services and training (decreased from $42 million to $25 million); telecommunications and maintenance (increased from $122 million to $125 million); and reengineering Agency Strategic Plan implementation (decreased from $313 million to $237 million),

and OTA reports, among others, have criticized SSA for inadequate strategic planning. [12] SSA has made notable progress in developing its "Agency Strategic Plan" in 1991 and followup tactical plans. [13] Service delivery planning is still weak, giving rise to concerns about the ability of SSA to properly execute the modernization program. A service delivery plan can be viewed as a mid-level plan that establishes linkages between strategic and tactical planning. Second, the Administration's "National Performance Review" [14] and OTA's *Making Government Work,* [15] among other reports, [16] have highlighted the importance of information technology in reinventing government and improving service delivery. But these studies also emphasize the major challenges facing SSA and other agencies moving into the era of electronic service delivery. This is not an easy transition under the best of circumstances. Third, the tightly constrained federal budget, with little real increase in discretionary spending, means that all agency proposals are being more rigorously scrutinized. In prior decades, agency information technology programs were approved largely on faith without the more detailed explanations and justifications now required.

The Administration requested congressional approval of the entire $1.125 billion in no-year funds (that could be obligated over a 5-year period) as part of the SSA appropriation for FY 1994. GAO took issue with the SSA's Automation Investment Fund, citing concerns about documentation for SSA's technical solution, service delivery benefits and total resource requirements, measurement of performance and costs, and implications for state disability determination activities. [17] The House Committee on Appropriations shared GAO's concerns and asked SSA to address these concerns before obligating the $330 million

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12 See U.S. Congress, General *Accounting* Office, *Social Security Administration: Stable Leadership and Better Management Needed To Improve Effectiveness*, GAO/HRD-87-39 (Gaithersburg, MD: March 1987; *Social Security: Status and Evaluation of Agency Management Improvement Initiatives*, *GAO/HRD-89-42,* July 1989; *Health and Human Services Issues*, GAO/OCG-93-20TR, December 1992, pp. 11-16; *Social Security: Sustained Effort Needed,* op. cit., footnote *2.* National Research Council, Computer Science and Telecommunications Board, *Elements of System Modernization for the Social Security Administration* (Washington, DC: National Academy Press, 1991). U.S. Congress, Office of Technology Assessment, *The Social Security Administration and Information Technology,* OTA-CIT-311 (Washington, DC: U.S. Government Printing Office, October 1986). John Harris, Alan F. Westin, and Anne L. Finger, Reference Point Foundation, "innovations for Federal Service: A Study of Innovative Technologies for Federal Government Services to Older Americans and Consumers," contractor paper prepared for the Office of Technology Assessment, February 1993, see esp. pp. 47-64. Office of inspector General, Department of Health and Human Services, "Social Security Client Satisfaction: Fiscal Year 1993," June 1993.

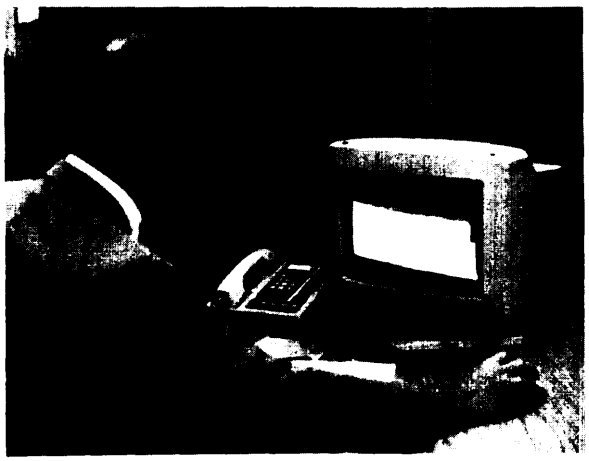
13 See Social Security Administration, "The Social Security Strategic Plan: A Framework for the Future," September 1991; "SSA Strategic Priority Transition Guidance,' 'June 1992; and "Implementation of the Social Security Administration's Strategic Plan-A Status Report," June 1993.

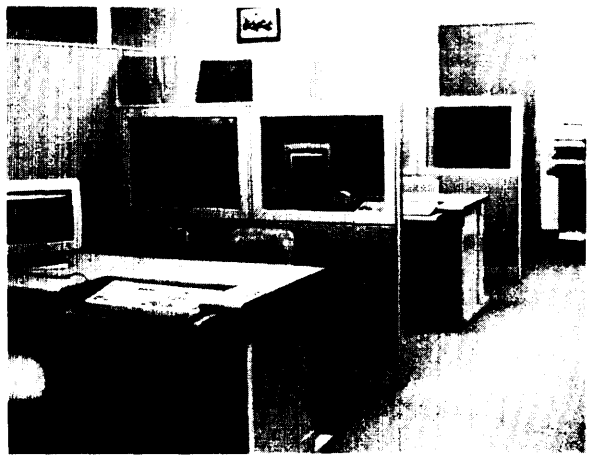
14 Vice President Gore, op. cit., footnote 3.

15 U.S. *congress,* Office Of Technology Assessment, *Making Government Work: Electronic Delivery of Federal Services*, OTA-TCT-578 (Washington, DC: U.S. Government Printing Office, September 1993).

16 Also *see* U.S. *Genera]* Services *Administration, Service to the Citizens: Project Report,* KAP-93-1 (Washington, DC: GSA, information Resources Management Service, February 1993).

17 See letter from Frank W. Reilly, Director, Human Resources Information Systems, Information Management and Technology Division, U.S. General Accounting Office, to Louis D. Enoff, then Acting Commissioner of the Social Security Administration, Mar. 30, 1993. SSA engaged in lengthy discussions with GAO. In a Nov. 17, 1993, letter from Lawrence H. Thompson, SSA's Principal Deputy Commissioner, to Donald A. Chapin, Assistant Comptroller General, SSA stated its belief that actions to date "are adequate to address all issues in GAO's letter and that the IWS/LAN project should proceed." In a Dec. 23, 1993, letter from Frank W. Reilly, Director, Health, Education, and Human Services Information Systems, Accounting and Information Management Division, to Lawrence H. Thompson, SSA's Principal Deputy Commissioner, GAO responded that "we do not believe the issues [previously raised by GAO] have been addressed adequately to fully support funding your [SSA's] planned IWS/LAN acquisition."





SSA's Intelligent work station and local area network program is intended to provide most SSA employees with a personal computer and ergonomic furniture.
Top: *Personal computers can support walk-in counter service in an SSA office*
Bottom left: An *SSA employee demonstrates use of the graphical user interface on a personal computer.*
Bottom right: *Personal computers can help SSA employees conduct client interviews in an SSA office.*

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appropriated for FY 1994.18 The Senate Committee on Appropriations, citing similar concerns about inadequate SSA justification as well as general funding constraints, appropriated $220 million.[19] The House and Senate compromised on a $300-million FY 1994 appropriation for the IWS/LAN automation program.[20]

The House Committee on Appropriations asked OTA to conduct a review of the SSA's automation program and address the concerns of the

18 U.S. Congress, House Committee on Appropriations, *Departments of Labor, Health and Human Services, and Education and Related Agencies Appropriations Act, Fiscal Year 1994,* House Report 103-156 (Washington, DC: U.S. Government Printing Office, June 24, 1993), pp. 90-91

19 U.S. Congress, Senate Committee on Appropriations, *Departments of Labor, Health and Human Services, and Labor and Re/fllpdA~Cncies Appropriations Act, Fiscal Year 1994,* Senate Report 103-143 (Washington, DC: U.S. Government Printing Office, Sept. 15, 1993), pp. 152-153. The Senate Committee on Appropriations expressed similar concerns in language accompanying FY 1993 appropriation for SSA. See U.S. Congress, Senate Committee on Appropriations, *Departments of Labor, Health and Human Services, and Labor and Related Agencies Appropriations Act, Fiscal Year 1993,* Senate Report 102-397 (Washington, DC: U.S. Government Printing Office, Sept. 10, 1992), pp. 169-170.

20 The $300 million was appropriated as "no-year" funds, meaning the funds do not have to be obligated in the year appropriated. See Social Security Administration, "Apportionment and Reapportionment Schedule: Fiscal Year 1994," OMB Form 132, Nov. 23, 1993.

committee and GAO. The committee directed SSA to defer obligation of the FY 1994 appropriations until OTA completed its review, SSA could respond to the OTA findings (as well as any continuing GAO questions), and SSA reports back to the committee.[21]

This chapter summarizes OTA's findings on each of the issues raised by the House Appropriations Committee and GAO, and then presents and discusses a range of relevant policy options. Subsequent chapters discuss in greater depth: SSA's increasing workload that drives the need for modernization; SSA's strategic and information systems planning process; SSA's plans to use IWS/LAN technology; and opportunities for electronic delivery of SSA services.

FINDINGS ON SSA's IWS/LAN TECHNOLOGY PROGRAM

OTA's key findings are presented below in the context of the concerns originally raised by GAO and reiterated by the House Committee on Appropriations in its request for the OTA review.

Documentation for SSA's Technical Solution

GAO originally found that SSA had not documented the basis for its selection of IWS/LAN technology.[22] From a narrow technical perspective, OTA concludes that SSA's planned evolution from "dumb" terminals (with only minimal local processing or storage capacity) to networked microcomputers is well within widely accepted practices of both the government and private sector.[23] Many agencies and companies have already made this transition. OTA found that SSA has adequately documented the selection of IWS/LAN.[24] (GAO has now reached a similar conclusion.)

The recommended microcomputer (using a 486 computer chip and IBM-compatible operating system) and local area network (token ring, also IBM-compatible) are proven technologies available off the shelf at competitive prices. The term intelligent workstation is actually misleading because it suggests a more powerful (and more expensive) workstation than is planned. PC/LAN would be a more descriptive term for this technology.

The shift to networked microcomputers will allow SSA employees to benefit from the word-processing, records management, integrated file access, distributed processing, and other computer applications that are difficult or impossible using dumb terminals networked to mainframe computers.[25] With microcomputers, all of these applications can be executed with user-friendly windows-type screen displays (known as graphical user interfaces). Microcomputers, when fully utilized, should help decentralize SSA's computer resources and increase its overall computer capacity and flexibility. The local area networks permit microcomputers to be linked together at the local office level, and perhaps by regions or other geographic areas, and still be connected via file

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21 U.S. Congress, House Committee on Appropriations, op. cit., footnote 18.

22 Letter from Frank W. Reilly, U.S. General Accounting Office, Mar. 30, 1993, op. cit., footnote 17.

23 The National Research Council reached a similar conclusion in prior studies. See National Research Council, Computer Science and Telecommunications Board, *Systems Modernization and/he Strategic Plans of the Social Security Administration* (Washington, DC: National Academy Press, 1990); and National Research Council, op. cit., footnote 12.

24 See ch. 4 discussion, SSA conducted numerous studies and tests resulting in dozens of papers and reports. For the primary documentation, see Social Security Administration, "The Social Security Administration Analysis of the Alternative Architectures for the Distributed Data Processing Pi lots," May 24, 199 1; "The Social Security Administration's Analysis Methodology of the Performance and Benefits from the Distributed Data Processing Pi lots," Jan. 17, 1992; "The Social Security Administration's Analysis of Costs, Benefits, and Performance from the Distributed Data Processing Pi lots," 1993 draft; and "Flexibilities and Capabilities of the Social Security Administration's IWS/LAN Architecture," December 1993.

2s The Social Security Administration has identified 13 applications and 38 other software packages currently operating at various IWS/LAN sites, and 59 tactical plans and 39 automatic data-processing plans that depend on IWS/LAN implementation.

servers and telecommunication links to SSA's mainframe computers.

SSA's selection of IBM-compatible microcomputers and LANs is a judgment call, but technically defensible. SSA operates an IBM-compatible mainframe computing system, and this real it y was weighted heavily in the technical evaluation process, especially for the token ring selected as the local area network technology. OTA reviewed whether the selection of 486 microcomputers is overkill with regard to the computing power really needed on most SSA desktops, or, on the other hand, whether the 486 microcomputer will be obsolete by the time the procurements are actually executed and deployed, necessary software written and installed, and users properly trained.

OTA believes that the 486 microcomputer is a prudent choice because it is off-the-shelf technology available at a low per-unit cost, and because software and application advances usually require more, not less, disk storage capacity and processing speed. Also, SSA has stated that the microcomputer specifications will be modified at the time of actual procurement, if warranted (e.g., if, by then, next-generation microcomputers are available off the shelf at low cost). SSA has specified a flexible microcomputer platform that will allow memory and application upgrades as needed and available.

In the course of examining the IWS/LAN plan, OTA also briefly reviewed the SSA mainframe computer operation at the National Computer Center in Baltimore, MD, and concluded that SSA has substantially upgraded its mainframe computers and peripheral equipment since the 1986 OTA report on SSA automation. The mainframes and disk storage units are the best available off-the-shelf technology. However, the ability of the computer center to remotely manage, monitor, and maintain a network of tens of thousands of IWSs and hundreds of LANs has not been established.[26] SSA needs to anticipate possible technical and staff adjustments to address network management problems that may develop as IWS/LAN testing and implementation are scaled up.

Relationship of Technical Solution to Service Delivery Strategy

GAO concluded that SSA has not completed its service delivery plan and has not linked its proposed technology strategy to specific service delivery improvements. GAO questioned SSA's plans to implement IWS/LAN without first determining the service delivery improvements that could result from IWS/LAN. GAO believes that SSA may be missing significant opportunities to use information technology to improve the quality and cost-effectiveness of service delivery. GAO further noted the absence of performance goals, schedules, and resource requirements necessary to improve service delivery .27

Before the GAO review, SSA did address service delivery in the context of the 1991 '*Agency Strategic Plan" (ASP),[28] the "Information System Plan" (ISP, first issued in 1991, and updated in 1992 and in late 1993),[29] and various tactical plans intended to implement aspects of the ASP and ISP. GAO credited SSA for improvements in agency strategic planning, but concluded that this effort fell well short of that needed to identify specific service delivery improvements.

Since the GAO review, SSA has agreed to prepare a service delivery plan and has taken some initial steps in this direction. SSA upgraded its service delivery planning to the level of the chief policy officer (who reports directly to the principal deputy commissioner), who has prepared two

26 SSA does centrally manage the current 40,000 dumb terminals, plus the IWS/LANs at pilot-test sites.

27 Frank Reilly, GAO, letter, op. cit., footnote 17, Mar. 30,1993.

28 Social Security Administration, op. cit., footnote 13.

29 Social Security Administration, *Information Systems Plan* (Baltimore, MD: September 1991, 1992, 1993).

drafts of a service delivery concept paper.[30] The drafts develop some goals and principles for service delivery. The first draft included a fairly detailed discussion of delivery alternatives and implications for reorganizing SSA. SSA's senior management concluded that this latter discussion was premature; thus, the second draft is philosophical and conceptual in nature. SSA also developed an outreach strategy for obtaining further input on strategies for service improvement,[31] although its status is uncertain given the absence of detailed service delivery scenarios and the apparent lack of consensus on which scenarios warrant serious consideration.

OTA's review of prior and current SSA planning efforts indicates that, while strategic and information system planning has improved markedly in recent years, service delivery planning is still in the very early stages. SSA appears to have made only limited progress since the 1991-92 timeframe when GAO[32] and National Research Council (NRC)[33] reports found SSA's service delivery planning to be inadequate. About 1 year ago, SSA set a goal of completing a service delivery plan by the end of 199334—a goal it was unable to meet. The limited effort on service delivery planning over the last 3 years contrasts sharply with the substantial staff and resources devoted to the planning, testing, and implementation of IWS/LAN.

SSA also has been slow to develop a human resources plan, although a draft now exists.[35] The plan provides a useful conceptual framework for developing and managing human resources, but does not address specific staffing, training, or work environment issues associated with IWS/LAN deployment or reengineering. SSA has prepared numerous tactical plans for implementing aspects of the 1991 Agency Strategic Plan, which SSA is currently updating. But it is unclear how the ASP update ties into service delivery and human resources planning; perhaps the several efforts should be fully integrated.

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30 Social Security Administration, "Improving Service Delivery at the Social Security Administration: A Conceptual Proposal," drafts dated Oct. 21, 1993, and Dec. 30, 1993.

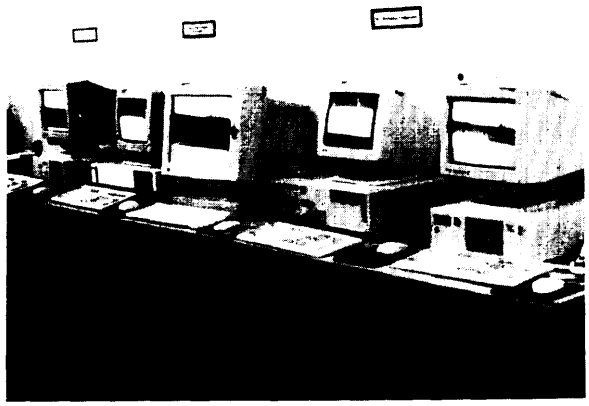
31 Social Security Administration, Memorandum, "Next Steps in Service Delivery Planning—-Action," Nov. 10, 1993.

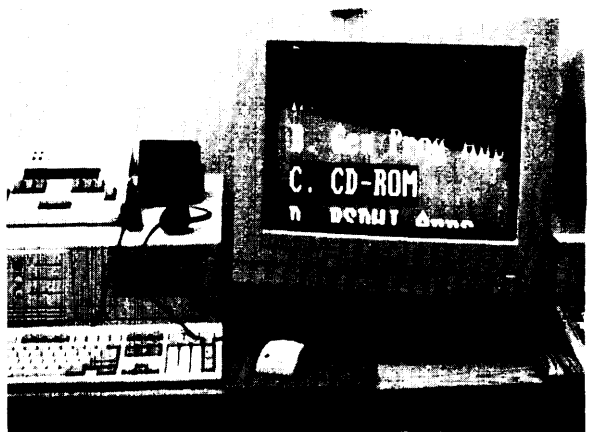
32 U S Congress, General Accounting offic, Report to the Chairman, Senate Special committee on Aging, *SSA Computers: Long-Range Vision Needed To Guide Future Systems Modernization Efforts*, GAO/IMTEC-91-44 (Gaithersburg, MD: September 1991), p. 10, recommended that SSA "articulate a clear, consistent vision of how it intends to use information technology to do business in the future. The vision should go beyond automating current processes; instead, it should be based on a fundamental reconsideration of the agency's organization and business processes in light of opportunities offered by current technology." U.S. Congress, General Accounting Office, *Information Management and Technology Issues*, GAO/OCG-93-5TR (Gaithersburg, MD: December 1992), p. 1I, noted that '*For the most part, however, SSA has focused on automating its existing paper-driven, labor-intensive work practices in an incremental, piecemeal fashion. While resulting in some immediate benefits in improved service, this approach will not put SSA in a position to cope with the surge in beneficiaries looming on the horizon. To capture the critically needed benefits of modernization, SSA must direct its system modernization efforts toward fundamentally improving the way it does business."

33 National Research Council, op. cit., footnote 12, p. 3, concluded that "The SSA does not have a vision for its information systems that encompasses what will be needed to support the agency's mission and operations into the next century. "'The SSA does not today have well-defined targets for levels of service to the public, nor does it convey the view that its operations are governed by such targets" (p. 27). Willis H. Ware, Chairman, Committee on Review of SSA's Systems Modernization Plan and Agency Strategic Plan, Computer and Telecommunications Board, National Research Council, Letter Report, June 30, 1992, p. 1, concluded that "'Although the SSA has made important strides in automating its processes, it still has a long way to go before the full benefits of automation can be real ized. In particular, SSA needs to develop an overall management approach that encourages active, continual improvements in quality and productivity, rather than electronically embalming current practices. "

34 See Social Security Administration, "Report to the Senate Appropriations Committee on the IWS/LAN Project," Apr. 5, 1993, pp. 2,28.

35 Social Security Administration, "Human Resources Strategy and Implementation Plan," draft, January 1994.





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Top: *SSA's "System Zero" serves as a test bed for evaluating personal computer applications.*
Bottom left: An *SSA employee demonstrates the varied uses of personal computers that SSA hopes to implement nationwide,*
Bottom right: *SSA is testing personal computer applicatlons for employees with hearing or visual Impairments.*

Also, SSA management only recently has included meaningful customer and labor participation in planning efforts. The first round of SSA-sponsored customer focus groups took place in late 1993.[36] And SSA appears to be moving toward more productive labor-management collaboration on agency planning and other matters, spurred in part by the National Performance Review's emphasis on labor-management councils.

In the absence of a service delivery plan, SSA has been unable to link the IWS/LAN technology program to specific planned improvements measured against the service delivery objectives. SSA argues that the IWS/LAN technology should be viewed as part of an SSA information technology infrastructure that is flexible enough to support whatever objectives and alternatives ultimately result from service delivery planning, and that delivery alternatives are unlikely to be so dramatic as to disrupt the planned IWS/LAN deployment.[37] GAO continues to believe that SSA should be able

36 An OTA contractor conducted a limited series of focus groups during the same timeframe. See partners in Enterprise, Inc., "Improving Social Security Services: Focus Group Discussions in the Washington, DC, Area," contractor paper prepared for the Office of Technology Assessment, November 1993.

37 SSA has identified 59 tactical plans and 39 automated data-processing plans that depend on IWS/LAN implementation.

to make better linkages or connections between the technology and measurable improvements in service delivery, even if only as an interim step in completing the delivery plan.

OTA concludes that, while the IWS/LAN is a flexible technology and can be properly viewed as part of the SSA infrastructure for service delivery, a tighter connection needs to be made between the technology and expected service delivery improvements to make best use of IWS/LAN. OTA's review suggests, however, that strengthening and accelerating the planning effort for improving service delivery will require the allocation of more staff operating with full authority from the SSA commissioner and principal deputy commissioner. Also, the planning group needs authority for integrated strategic planning and management that cuts across all SSA offices and programs. OTA believes that a larger full-time planning staff and stronger coordination are essential. The integrated planning and management group needs to cover the strategic, operational, service delivery, technology, human resources, and facilities components that will, collectively, determine SSA's future directions and performance. The group also needs people who have strong expertise in electronic service delivery.[38]

The recently initiated SSA reengineering project may provide results helpful to both the process and substance of service delivery planning. "Reengineering" is intended to be a fundamental rethinking about how an organization, in this case SSA, carries out its mission. The objective is to identify new, radically improved ways of doing business, not just marginal improvements to current activities. SSA initiated its reengineering task force activities in mid-1993 and decided to focus initially on the disability benefit determination process-generally agreed to be the SSA service in greatest difficulty. SSA top management has thrown its full weight behind reengineering by providing seminars, teleconferences, videos, and an 18-person staff (on 6-month detail) that reports directly to SSA's commissioner.[39] The staff has already conducted over 1,000 interviews and visited SSA offices and Disability Determination Service (DDS) offices in a majority of states.[40] A draft report on disability reengineering, expected by March 31, 1994, will give a strong indication of SSA's ability to identify ways to dramatically improve service delivery and to leverage the role of information technology—including IWS/LAN—in making those improvements.

Documentation and Rationale for Planned Use of IWS/LAN

GAO concluded that SSA had not adequately evaluated and justified its proposals for widespread deployment of IWS/LAN. GAO noted that SSA did not assess a range of alternative technical solutions and deployment strategies.[41] The issue here, as framed by OTA, is not whether IWS/LAN is an appropriate evolution from dumb terminals (OTA concluded that it is, as discussed earlier), but whether SSA has adequately assessed alternative ways to deploy and use IWS/LAN alone and in concert with other information technologies.

SSA's current plan envisions the purchase of about 95,000 personal computers—82,000 for SSA offices and 13,000 for state DDS offices. About 13,000 computers were funded out of FY

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38 SSA could reengineer its top management by, for example, transforming the deputy commissioner for finance, assessment, and *management* into a deputy commissioner for strategic planning and management.

39 See outline of SSA seminar by Michael Hammer, Management Consultant, "Reengineering: From Concept to Reality," November 1993; and an SSA-produced video on '. Creating Change" in which the SSA commissioner and principal deputy commissioner discuss SSA's service delivery planning and reengineering activities.

40 See Social Security Administration, "Internal Communications Plan--Action," disability reengineering project memorandum, Nov. 9. 1993.

41 See Frank Reilly, GAO, letter, op. cit., footnote 17, Mar. 30, 1993.

1992 and FY 1993 budgets and are, or will be, installed in selected SSA offices and a few DDS offices. The remaining 82,000 are to be funded out of the proposed $1. 125-billion IWS/LAN automation investment program, placing first priority on modernizing the SSA field offices and second priority on other SSA offices and the state DDS offices.

OTA's review suggests that SSA has been approaching IWS/LAN planning primarily as an infrastructure initiative. SSA has prioritized IWS/LAN installation according to current SSA operational and service delivery needs-essentially automating marginal improvements in the status quo. SSA has placed less emphasis on identifying priority needs that, if met, would translate into more dramatic improvements in service delivery. The lack of more aggressive performance improvement objectives for IWS/LAN is understandable, given the absence of a service delivery plan (or working performance measurement program, see later discussion), but not desirable.

SSA has deferred DDS office modernization in most states, awaiting full development and pilot testing of the Modernized Disability System (MDS) that preceded the current disability reengineering project.[42] Also, prior SSA-sponsored studies have suggested that the role of automation in improving the disability process will be small in comparison to the effects of radically changing the organization and flow of disability work.[43] It remains to be seen whether SSA's disability reengineering task force will identify opportunities to accelerate improvements using information technology.

OTA's review also suggests that SSA's electronic delivery program is exploring a wide range of technologies and applications,[44] but is underfunded and missing some key information technology opportunities. As a consequence, SSA is not developing a complete understanding of how IWS/LAN technology fits into the larger context of electronic delivery. Again, this situation is understandable, given the lack of an SSA service delivery plan and because the SSA strategic and information systems plans—while well done—predate the heightened interest in, and knowledge about, electronic delivery. Also, OTA concludes that SSA is overly conservative in its assessment of the ability of current and future customers to use electronic delivery (see figures 1-1 and 1-2), and is moving too slowly on developing and testing electronic delivery options.[45] A more aggressive, innovative, creative approach is needed—one that engages the range of options and issues presented in OTA's 1993 report, *Making Government Work: Electronic Delivery of Federal Services.*[46]

OTA applied the analytical framework of electronic delivery ● 'success factors" developed in *Making Government Work*[47] to current SSA acti-

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42 Social Security Administration, "Modernized Disability System," n.d.

43 Williams, Adley & Co. and Planning Analysis Corp., "Review and Anal ysis of Office Automation Questionnaire for the State Disability Determination Services," contractor report prepared for the Social Security Administration, Information Technology Systems Review Staff, June 30, 1993.

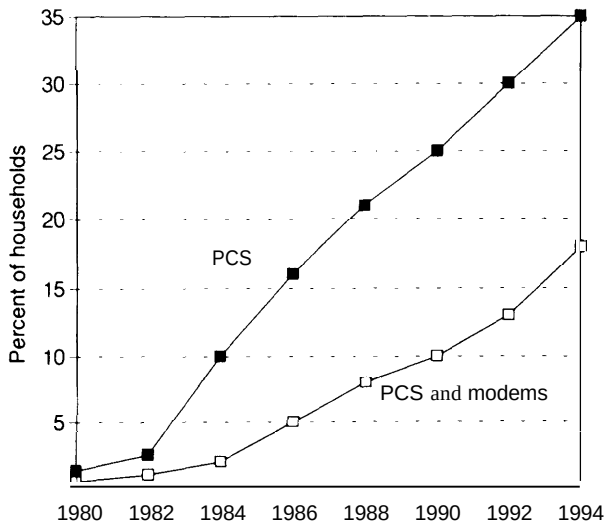
44 Including, for example, optical disk storage, 800-number expert systems, paperless records storage and processing, videoconferencing, and numerous r]~lcr(~'t~rl~pl]ter-based projects. See Social Security Administration, *Information Systems Plan*, op. cit., footnote 6.

45 See ch. 5 disc.ussl(~n. The community of persons with disabilities, for example, has found computers and computer networking to be valuable and co lst-effect ive. Also see Richard P. Adler and Mary S. Furlong, SeniorNet, "Electronic Del i very of Social Security Services," contractor paper prepared for the Office of Technology Assessment, February 1994; William A. Beasley, National Public Telecomputing Network. "The OTA NPTN Teleforum Project: Use of Telecommunications Resources by the Social Security Administration," contractor paper prepared for the office of Technology Assessment, Feb. 10, 1994; and Nancy G. Shor, National Organization of Social Security Claimants' Representatives, "SSA Service Delivery: A Presentation of Current Problems and Opportunities for Improvement," contractor paper prepared for the Office of Technology Assessment, Jan. 13, 1994.

46 11 S Congress Office of Technology Assessment, op. cit., footnote 15.

47 Ibid.

FIGURE 1-1: Percent of U.S. Households With PCs and Modems, by Year 1980-1994



SOURCE. Institute for the Future, cited in Richard P Adler and Mary S Furlong, "Electronic Delivery of Social Security Services, " contractor paper prepared for the Off Ice of Technology Assessment, February 1994, p 4

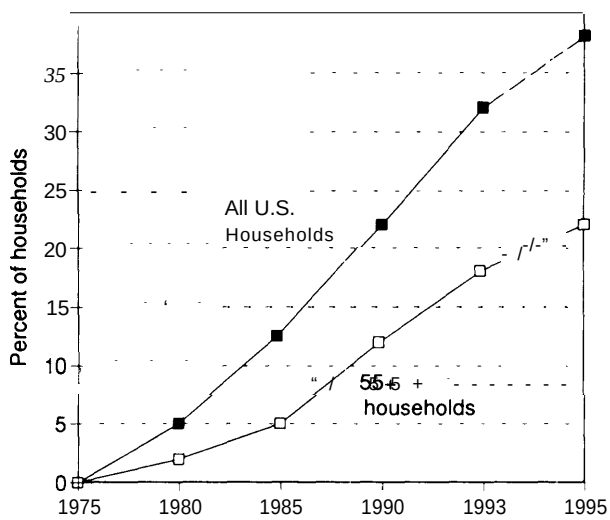
vities. The results suggest that SSA could justifiably give higher priority and increased funding to:

- grassroots involvement of SSA's customers in electronic delivery—including local advisory groups, focus groups, pilot studies, and user evaluations;
- development and involvement of the community infrastructure (e.g., libraries, schools, and senior citizen centers) directly or as intermediaries in electronic delivery of SSA services;
- encouraging innovation in electronic delivery of SSA services through budget set-asides, staff development, performance awards, and other incentives;
- creating and participating in electronic directories to SSA services-as part of larger government-wide and private sector directories; and
- strategic partnering in SSA service delivery—including collaboration with other federal and state agencies responsible for delivery of social and other (e.g., employment and medical) services.

OTA identified several specific electronic delivery initiatives that warrant intensified SSA attention: 1) full-scale pilot testing of integrated electronic records and automated disability determination; 2) multiprogram electronic benefits transfer (using magnetic stripe, smart, and hybrid card technology); 3) electronic interagency eligibility determination; 4) electronic bulletin boards and computer networks; and 5) "one-stop shopping" for electronic services.

SSA has intensively pursued and implemented the use of toll-free 800 telephone numbers for service delivery, electronic data interchange for filing of earnings reports by businesses, and direct electronic deposit of benefit payments. SSA eventually intends to fully test integrated electronic records and automated disability determination, but needs a more aggressive, innovative pilot test strategy—including abetter developed evaluation component. SSA tends to underfund true pilot tests in favor of what are really pre-operational tests. SSA is underinvesting in exploratory, devel-

FIGURE 1-2: All U.S. Households and Households Headed by Ages 55+ With PCs, by Year 1975-1993



SOURCE SeniorNet, cited in Richard P Adler and Mary S Furlong, "Electronic Delivery of Social Security Services," contractor paper prepared for the Off Ice of Technology Assessment, February 1994, p 12

opmental pilot activities. SSA is participating in electronic benefits transfer (EBT) and electronic kiosk projects, but at minimal levels,[48] and its limited electronic bulletin board and computer network projects do not as yet involve SSA recipients.

Again, SSA's Agency Strategic Plan and followup tactical and implementation plans recognize many of the technical areas of opportunity mentioned in OTA's report *Making Government Work*. However, electronic delivery oriented toward end users is given low priority and minimal funding, and there is no ● 'mid-level" service delivery plan that links high-level strategic goals and directions with specific "low-level" tactical pilot tests and implementation plans.

SSA has argued that the full, on-schedule deployment of IWS/LAN technology is imperative to: 1) provide an infrastructure that will stimulate and support electronic delivery and reengineering initiatives; 2) avoid problems and expenditures that will result from breakdowns of the existing dumb terminals;[49] and 3) minimize the delays that inevitably accompany large-scale federal information technology procurements. GAO and others contend that deploying the IWS/LAN technology before electronic delivery and reengineering opportunities are understood means that the technology will be underutilized, perhaps mislocated, and possibly even obsolete before full implementation.

GAO believes that SSA has not adequately justified either the total number of terminals or their deployment. GAO also notes that judicious use of the many dumb terminals with useful life remaining could allow for a more flexible IWS/LAN deployment than proposed. GAO is concerned that, in the absence of service delivery plans and goals, IWS/LAN technology could be deployed in offices that might be reorganized. The technology might then need to be reconfigured or physically moved, depending on the results of ongoing reengineering and service delivery planning efforts. This could, in turn, result in inefficient or wasteful use of funds spent on equipment, site preparation, wiring, and furniture.

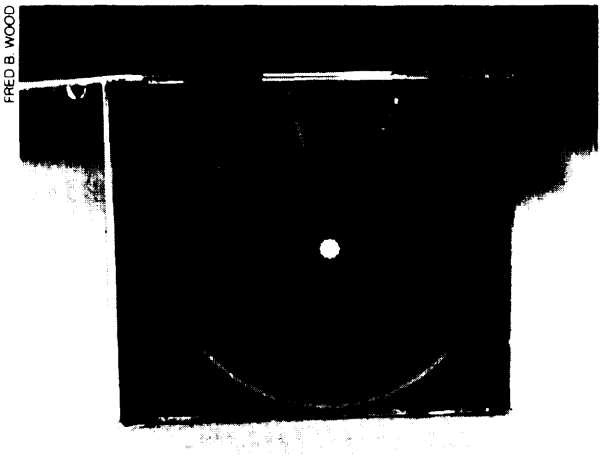
In balancing these considerations, OTA believes that resources could be reprioritized and reallocated to significantly increase—not decrease—the chances that the IWS/LAN technology program will succeed. IWS/LAN is a logical successor to the dumb terminals and is arguably a key part of SSA's future infrastructure. But SSA has not persuasively documented the urgency or need for the full complement of microcomputers (13,000 already procured or in the pipeline; 41,000 in a phase 1 buy with FY 1994 funds; another 41,000 in a phase 2 buy with FY 1995-98 funds). OTA concludes that SSA's current IWS/LAN automation investment program can be improved. A range of modifications warrant serious consideration (see later policy discussion).

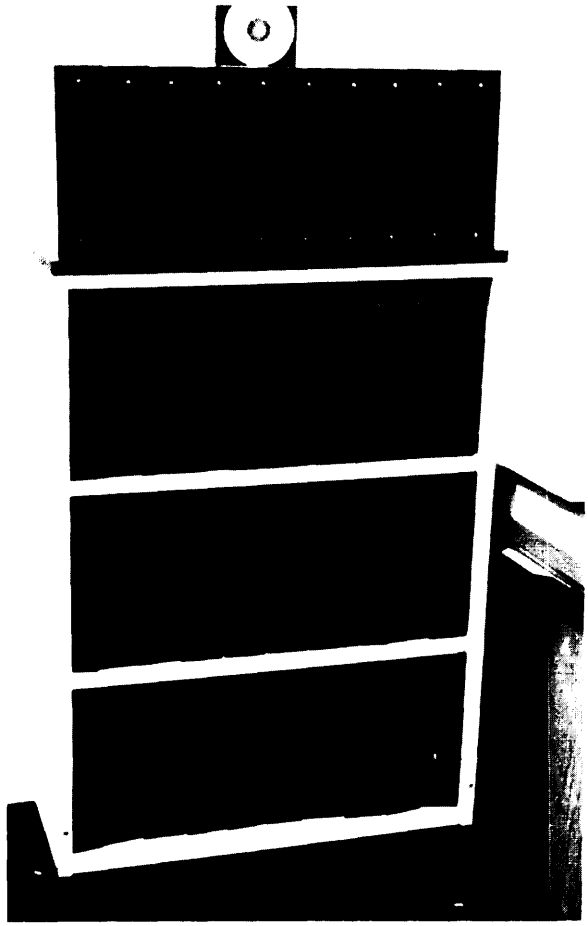
Methodology for Measuring and Tracking Results of IWS/LAN

GAO concluded that SSA had not developed a framework for tracking the costs and benefits of automation—including IWS/LAN—and for comparing the impacts of automation against specific performance goals. As a consequence, GAO said, establishing accountability of SSA's automation program will be difficult or impossible. GAO noted that other agencies, such as the Inter-

[48] See for example, Social Security Administration, "Visual Communications Plan," April 1993, for discussion of kiosk projects. See generally, Social Security Administration, 1993, op. cit., footnote 6.

[49] Assuming a 5-year life for the dumb terminals, SSA estimates that, in FY 1995, 26 percent of the dumb terminals will be 3 years beyond expected life, 34 percent will be 2 years beyond, and 9 percent will be 1 year beyond.





Left: The POMS compact disc includes material that in paper form would require an entire bookcase, Right: *SSA has placed its entire set of regulations on one compact optical disc, known as the "Program Operations Manual System" or POMS disc, that is accessible via personal computer,*

nal Revenue Service, are implementing specific accountability programs to measure the costs and benefits associated with major automation initiatives.[50]

OTA's review suggests that SSA's limited ability to estimate the costs, benefits, and performance impacts of IWS/LAN is primarily due not to the lack of methodology for assessing such impacts, but to deficient use of existing methodology and to inadequate planning for service delivery. SSA has a comprehensive planning and budgeting system that requires a cost-benefit analysis for all tactical plan initiatives where implementation is proposed (and updated cost-benefit analyses for ongoing projects if benefits or costs change sign ificantly).[51] SSA does not require a cost-benefit analysis for demonstrations, prototypes, and studies. SSA issued comprehensive cost-benefit analysis instructions in November 1993.[52] SSA requires that all tactical plan initiatives include: 1) a schedule of deliverables; 2) an analysis of the anticipated impact on SSA work processes; and 3) a description, quantified where possible, of likely effects on the service delivery goals and objectives stated in the Agency Strategic Plan. SSA has identified 7 broad goals and 64 more specific objectives for improving service delivery that flow from the strategic plan:[53]

1. issue Social Security numbers properly *(4* objectives);
2. maintain earnings records properly (6 objec - tives);
3. pay benefits correctly (12 objectives);
4. pay benefits when due (13 objectives);
5. provide prompt, courteous service (16 objectives);
6. inform the public of its rights and responsibilities (8 objectives); and
7. ensure integrity of payments and records (5 objectives).

Even with an acceptable method, SSA has difficulty developing meaningful cost, benefit, and performance impacts of infrastructure technologies like IWS/LAN because these technologies work in concert with other technologies (along with current, modified, or even reengineered work processes) to affect service delivery. A service delivery plan would seem to be essential as part of the framework for understanding and estimating the impacts of IWS/LAN. Even if the Agency Strategic Plan and the individual tactical plans continued to be substantially valid, a service delivery plan might well suggest significant changes in priority and funding for testing and implementing the tactical plans—based on new cost, benefit, and performance estimates.

For all these reasons, SSA did not, and perhaps could not, conduct a full cost-benefit analysis of IWS/LAN. SSA based its analysis on comparisons of the time required to perform certain functions before and after IWS/LAN installation in 10 pilot-test offices. SSA extrapolated results from a few hundred terminals at the 10 test offices to a projected 41,000 terminals at more than 1,300 SSA offices. SSA estimated a cost-benefit ratio of 2.5 to 1 (benefits to costs), suggesting that IWS/LAN is a cost-effective replacement for the dumb terminals.[54] The SSA results have limited appli-

[50] Frank Reilly, GAO, letter, op. cit., footnote 17, Mar. 30, 1993.

[51] social Security Administration, "Planning & Budgeting System: Schedule and Instructions for Fiscal Year 1996 Cycle," January 1994.

[52] Social Security Administration, "Agency-Level Comprehensive Cost Benefit Analysis Instructions," November 1993.

[53] Social Security Administration, "Agency Strategic Plan," op. cit., footnote 13, pp. 51 -55; Social Security Administration, "*office* of Technology Assessment Orientation Briefing Materials," Aug. 10, 199.3.

[54] Social Security Administration, "Report to the Senate Appropriations Committee on the IWS/LAN Project," Apr. 5, 1993. Note, however, that SSA reduced the IWS/LAN cost by the amounts needed to purchase ergonomic furniture (that would be needed anyway, SSA argues) and to replace and operate dumb terminals (if I WS/LANs were not installed). Without the ergonomic furniture {) ffset, the cost-benefit ratio would have been 2 to 1; and without both offsets, the cost-benefit ratio would have been I to 1.

cability for understanding major opportunities to improve service delivery because:

1. SSA assumed no significant changes in work processes;
2. most of the projected work-year savings were marginal in nature—more than half due to SSA employees not having to walk from their desks or wait in line to use a shared personal computer;
3. the personal computers in the pilot offices were used primarily in terminal emulation mode—-meaning most functions were dependent on the mainframe computers as they are with dumb terminals; and
4. SSA assumed no significant additional requirements for training and staffing due to IWS/LAN (SSA proposes to monitor and maintain the IWS/LAN networks from the National Computer Center in Baltimore, MD).

OTA believes that IWS/LAN, if properly deployed, could contribute to major improvements in service delivery. But SSA's currently available cost-benefit analysis provides little help in determining the optimal IWS/LAN deployment strategy or in understanding the potential of IWS/LAN to improve service delivery or reinvent SSA work processes. The absence of a service delivery plan also impairs SSA's ability to develop cost estimates of long-term automation, beyond IWS/LAN. GAO estimated total costs in the $5-billion to $ 10-billion range over a 5- to 7-year period.[55] SSA disputes these estimates, noting that they include significant costs for normal upgrades of mainframe computers and other technologies that would be needed regardless of the modernization and service delivery strategies ulti - mately adopted. SSA is developing its own estimates (not provided to OTA). But whatever the numbers, GAO's point is that the $1.125 billion is not a total cost for SSA modernization. Also, OTA believes that the $3 13-million reengineering component[56] of the $1.125 billion is simply a placeholder, and cannot be credibly detailed until completion of reengineering and service delivery plans.

Another GAO concern is tying actual performance of IWS/LAN (and other information technologies) to projected service delivery improvements. GAO would like to see greater accountability for results. An SSA contractor is currently developing a methodology for improving accountability y of automation projects .57 The contractor is reviewing methodologies used by other agencies such as the Internal Revenue Service. Implementation of an accountability methodology will depend, however, on establishing realistic and specific performance improvement objectives and on credibly linking these objectives to modernization activities—again, difficult to do in the absence of reengineering and service delivery plans.[58]

Relationship of IWS/LAN to the State Disability Determination Process

GAO concluded that SSA has not considered a range of alternatives on how automation could improve the disability determination process, in which states have major responsibilities. GAO noted that SSA appears to be imposing its technical solution on the states without adequate consideration of the needs of states or the implications for their role in delivering SSA programs.

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55 See US Congress, General Accounting Office, Op. cit., footnote 2. An SSA contractor estimated costs in the $5-billion to $10-billion range over a 12-year period, but SSA does not have confidence in this work. See George M. Kolenaty and Charles F. Swett, Birch & Davis Associates, Inc., "Preliminary Cost Estimates for the Social Security Agency's Agency Strategic Plan," contractor paper prepared for the Social Security Administration, July 22, 1991.

56 Decreased to $237 million in SSA's revised budget estimates.

57 See Brown & Co., "Methodology Outline: SSA Strategic Planning Initiative—Project Tracking and Accountability," contractor project conducted for SSA, Nov. 2, 1993, draft.

58 Also see U.S. Congress, General Accounting Office, op. cit., footnote 2

The initial and continuing determination of eligibility for disability benefits is acknowledged as the most troubled SSA service. At present, applicants apply for disability at their local SSA field office, which forwards the paperwork to the nearest state Disability Determination Service (DDS) office. State DDS offices do the actual evaluation, obtain necessary medical evidence and examinations, make the initial decisions on eligibility, and conduct continuing reviews of eligibility. State DDS decisions may be appealed to SSA's Office of Hearings and Appeals for consideration by an administrative law judge. SSA's federal DDS office provides backup to the states as needed, and serves as a model office to test new technologies and work processes.

State DDS offices are fully funded by SSA, but staff are state, rather than federal, employees and operate pursuant to numerous state, as well as federal, regulations and procedures. The SSA's IWS/LAN technology program includes modernization of the state DDS offices, whether as part of the Modernized Disability System or alternative approaches developed by SSA's disability reengineering task force. Experts differ on the role of technology in improving disability processing. SSA's disability reengineering task force is studying how to best leverage the IWS/LAN and other information technologies.

SSA has funded the modernization of about one-fourth of the state DDS terminals from the FY 1992-93 budget—about 4,000 terminals and about 70 LANs principally in eight states (Alabama, Alaska, California, Illinois, Michigan, Oregon, Pennsylvania, and Virginia).[59] Although procured separately from the formal IWS/LAN program, the terminals are consistent with the IWS/LAN concept but may vary slightly in terms of technical specifications and configuration, depending on the state. The remaining 12,000 terminals and 155 LANs for state DDS offices are included in the SSA's IWS/LAN technology program.[60] SSA is proposing to accelerate state DDS modernization by providing additional funds from the SSA's $1.1-billion annual budget for state DDS operations.[61]

OTA's review, based in part on input from the National Council of Disability Determination Directors and selected state DDS and information management officials, indicates strong overall support among the states for modernization of state DDS offices, but considerable concern about federal-state relationships.[62] One major concern centers around SSA's perceived inflexibility in attempting to impose its IWS/LAN technical solution on state DDS offices. States vary widely in their level and type of automation. State DDS officials would like to see a more flexible-and perhaps a more functional, rather than hardware/software-specific-modernization approach that can more easily accommodate individual state information technology plans and procurement procedures. Some state officials feel SSA is acting as if the state DDS offices were federal, rather than state, offices. Another concern is perceived redundancy and inconsistency in the SSA approval process where multiple signoffs are required and one branch or level of SSA may contradict another. A further concern is SSA's inadequate attention to initial and continuing training and maintenance requirements for IWS/LANs installed in state DDS offices.

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59 Social Security Administration, "DDS System Life Cycle to IWS/LAN—Status of the FY93 Funding Cycle," Dec. 2, 1993.

60 Ibid.

61 This effort could focus on the 10 states that collectively account for over half of the total DDS workload—California, New York, Texas, Florida, Illinois, Ohio, Michigan, Pennsylvania, Georgia, and Louisiana. Also see Social Security Administration, "Draft SSA Modernized Disability System Implementation Plan and Coordination with IWS 'LAN Installation," Oct. 19, 1993.

62 See statement of Stan Kress on behalf of the National Council of Disability Determination Directors before a hearing of the House Committee on Ways and Means, Subcommittee on Social Security, Oct. 28, 1993. Also see Charles Jones, President, National Council of Disability Determination Directors, letter to OTA, Jan. 13, 1994.

FRED B. WOOD

SSA is participating in the development and pilot testing of electronic kiosks for delivering selected services Early prototypes are limited to dissemination of basic informatlon, later applications may include transactional services,

Some tension and disagreements between state and SSA officials are inevitable whenever a federal] y funded and monitored state procurement is involved. SSA is trying to assure itself that state DDS offices are pursuing cost-effective, compatible, and technically sound modernization. SSA is showing some flexibility regarding both technical solutions and procurement procedures, but is insisting, understandably, that state DDS proposals be cost competitive and interoperable with the evolving SSA-wide IWS/LAN system. Continuing differences in federal and state perspectives suggest that a joint SSA-state review is in order to attempt to further streamline the process and to make best use of available funds.

A joint SSA-state review team might also reconsider SSA's priorities for IWS/LAN installation in state DDS offices. The logic of the current deployment plan is not convincing. SSA needs to determine, in collaboration with the states, what deployment plan will be most highly leveraged in improving disability processing as soon as possible *and* will be compatible with the Modernized Disability System (MDS) or reengineered disability process when implemented. A joint SSA-state team could review SSA's disability reengineering report (when available) regarding implications for IWS/LAN deployment. SSA also needs to assess relative priorities between state DDS office modernization and IWS/LAN installation at SSA offices. A further acceleration of state deployment might make a significant difference (SSA appears to be moving in this direction).

MDS also highlights what OTA believes to be confusion at SSA over the distinction between pilot testing and pre-operational testing. SSA's current schedule calls for the first full state MDS pilot test to begin in June 1995 in Northern Virginia and expand to the rest of Virginia in January 1996; pilot testing would be expanded to four other states in July 1996. These pilot tests are actually part of MDS implementation, and are more accurately described as pre-operational, not pilot, tests. One reason for the delay is to allow time for development of the software to run MDS on an operational basis. A true pilot test would, for example, attempt to model the desired MDS functionality in one or a few locations using software/database adaptations and simulations. SSA would benefit from true pilot tests in MDS and other areas of SSA modernization and electronic service delivery.

Some state DDS officials expressed concern that SSA did not seem sufficiently aware of broader state plans and initiatives for electronic service delivery, such as electronic kiosks, electronic benefits transfer, electronic bulletin boards, and computer networks. SSA's current electronic delivery program gives minimal attention to related state activities. As a consequence, opportunities for synergy and partnering between MDS and other electronic delivery initiatives may be missed.

POLICY OPTIONS FOR IMPLEMENTING THE IWS/LAN TECHNOLOGY PROGRAM

The policy options relevant to this OTA review involve the timing, levels. allocations, and conditions of funding for SSA's current automation program and, perhaps, for limited aspects of SSA's general management and operations. The FY 1994 House Committee on Appropriations report language already requires SSA to respond to any OTA and GAO concerns and report back to the House Committee on Appropriations at least 30 days before obligation of FY 1994 automation funds ($300 million).[63] If it wished, Congress could ask that SSA meet additional conditions before obligation of the FY 1994 appropriation. Congress could reflect priorities for reengineering and service delivery planning and implementation in language that accompanies the appropriations for FY 1995 (and subsequent years).

This OTA review is limited to consideration of SSA's automation investment fund, specifically the IWS/LAN program, and does not include a broad-scale consideration of SSA's overall information technology programs, the financial health of various SSA trust funds, or proposals for major regulatory or institutional change (e.g., converting SSA to an independent agency or statutory revisions to SSA's charter). OTA notes that frequent changes in SSA's top management make coherent and sustained planning difficult.

Options for Obligation of Fiscal Year 1994 Appropriation

Defer the IWS/LAN Procurement

Congress could request SSA to holdup the IWS/LAN procurement process until much later in FY 1994 or indefinitely (or, theoretically, could ask SSA to reprogram these funds for other purposes).[64]

A lengthy deferral or reprogramming would seem reasonable only if the IWS/LAN technical solution was seriously flawed and/or the SSA organizational structure was so uncertain that no prudent procurements could be made. OTA believes that neither of these conditions applies.

A lengthy deferral could, on the other hand, compromise an orderly procurement process, delay the realization of benefits of IWS/LAN technology, slow the SSA modernization initiative, and possibly incur some additional costs for interim replacement of dumb terminals.

Proceed as Planned With the IWS/LAN Procurement

Congress could allow SSA to proceed with the IWS/LAN procurement as planned. This option would apply if Congress judges that the IWS/LAN technical solution and deployment plan are sound, and that the SSA reengineering/service delivery planning is well balanced and unlikely to result in changes that might significantly affect the IWS/LAN procurement.

OTA concludes that, while the IWS/LAN technical solution is sound, some adjustments in procurement and deployment plans are likely to be needed. OTA also concludes that the service delivery planning needs to be strengthened, and that results of the disability reengineering project (scheduled to be available March 31, 1994) could affect the IWS/LAN procurement.

Proceeding as planned without further conditions or modifications presumably would expedite the procurement process and obligation of FY 1994 funds, and perhaps somewhat accelerate the realization of IWS/LAN benefits. On the other

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63 This is a so-called "no-year" appropriation, meaning that SSA need not obligate the funds in FY 1994. The Senate appropriations report likewise requires SSA to report back to the Senate Committee on Appropriations on IWS 'LAN concerns at least 30 days before obligation of FY 1994 automation funds, See (J. S. Congress, House Committee on Appropriations, op. cit., footnote 18; U.S. Congress, Senate Committee on Appropriations, Senate Report 103-143, op. cit., footnote 19.

64 SSA expects to actually obligate the FY 1994 IWS/LAN funds in FY 1995, since obligation occurs not when the request for proposals is issued, but when a contract is awarded.

hand, this approach would increase the likelihood of a mismatch between the IWS/LAN procurement and reengineering or service delivery priorities, and could result in less than optimal use of FY 1994 funds.

SSA could proceed as planned and issue the request for proposals on IWS/LAN, with the understanding that the final IWS/LAN procurement package and later deployment would be modified, to the extent needed, based on reengineering and service delivery planning results. The concern is that SSA has not satisfactorily responded to prior GAO and congressional committee requests for service delivery plans and more comprehensive IWS/LAN justifications. SSA's credibility on this score is low.

Proceed With a Modified IWS/LAN Procurement

Congress could request that SSA proceed with a modified IWS/LAN procurement, incorporating the results of interim reengineering and service delivery planning, this OTA review, and GAO's continuing evaluation. SSA could both reprogram funds (e.g., from IWS/LAN and ergonomic furniture to reengineering) and prioritize funds within current allocations (e.g., on locations for IWS/LAN installation).

OTA believes that proceeding with prudent modifications to the IWS/LAN procurement need not significantly slow the procurement process or the realization of IWS/LAN benefits. OTA also believes that this option could improve the planning process for reengineering and service delivery. It could also help assure that IWS/LAN technology procurement is optimized and that greater benefits accrue from IWS/LAN than might otherwise be realized.

OTA concludes that SSA would achieve the best results through a combination of modifications including reprogramming and prioritizing of allocated funds. SSA could reprogram a percentage of IWS/LAN (and related ergonomic furniture/site preparation) funds to reengineering and implementation of the Agency Strategic Plan—including service delivery planning and testing. Even 5 percent ($ 15 million) would go a long way toward providing a better balance within the overall SSA automation initiative. (Note: SSA also could reprogram a fractional percentage of its operating budget to free up funds for service delivery initiatives.)

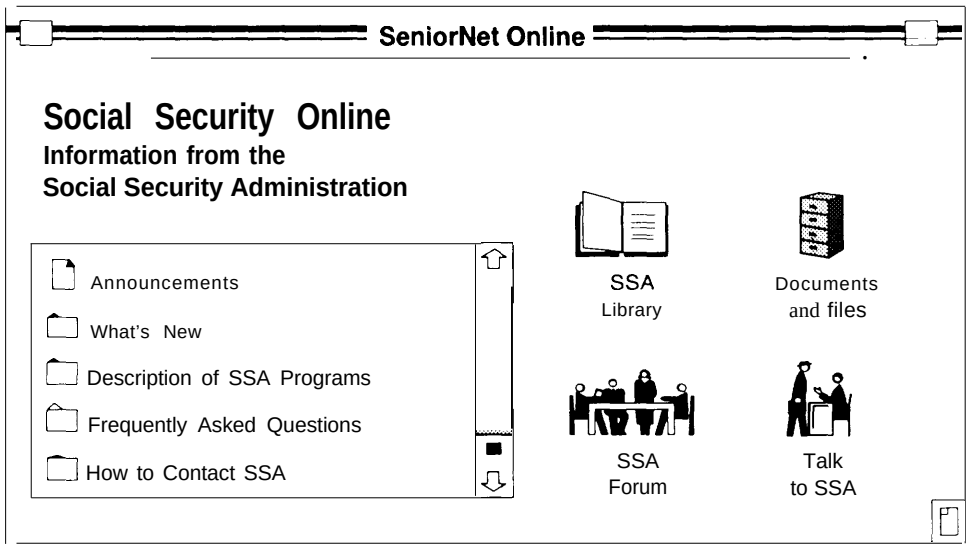
Possible uses for reprogrammed funds include:

1. additional staffing and support for the activities of the reengineering and service delivery teams;
2. implementation of the electronic delivery success factors identified by OTA (e.g., grassroots involvement and community infrastructure development);
3. design and implementation of a new or modified series of pilot tests (e.g., integrated electronic records, automated disability processing, electronic benefits transfer, and computer network services), including testing of ideas emerging from reengineering studies;
4. design and implementation of service delivery performance tests;
5. intensified participation in government-wide electronic delivery pilots and projects; and
6. review and streamlining of state disability automation support.

SSA also could prioritize the FY 1994 IWS/LAN procurement to cover offices and locations that offer the greatest near-term leverage for service improvement, and are most likely to remain stable under a range of reengineering and reorganization scenarios. SSA could, for example, further accelerate the IWS/LAN procurement for some state DDS offices; this, in turn, might affect technical specifications, especially if SSA were to offer more flexibility in meeting state needs. Also, SSA would need to be assured that state requirements for IWS/LAN are consistent with, or at least would not markedly change as a result of, the disability reengineering project.

Early milestones that would increase OTA's confidence in SSA's ability to fully utilize the IWS/LAN technology and significantly improve service delivery include the SSA: satisfactorily completing the disability reengineering project

FIGURE 1–3: Illustrative Personal Computer Menu for a Social Security Online Information Service



SOURCE Richard P Adler and Mary S Furlong, "Electronic Delivery of Social Security Services, " contractor paper prepared for the Off Ice of Technology Assessment, February 1994, p 19

(draft report due March 31, 1994); strengthening its service delivery planning process; improving the balance and increasing the funding for SSA's portfolio of electronic delivery projects (see figures 1-3 and 1-4); and initiating an SSA-state review of the disability modernization program.

Options for FY 1995 Appropriation

Provide Zero Funding for IWS/LAN in FY 1995

Congress could defer appropriation of further funds for the IWS/LAN program. Zero funding for IWS/LAN in FY 1995 would logically apply if the IWS/LAN technical solution was highly uncertain, and SSA's progress on reengineering and service delivery planning was judged unsatisfactory. Assuming funds were otherwise available, zero funding would signal low confidence in SSA's modernization initiative.

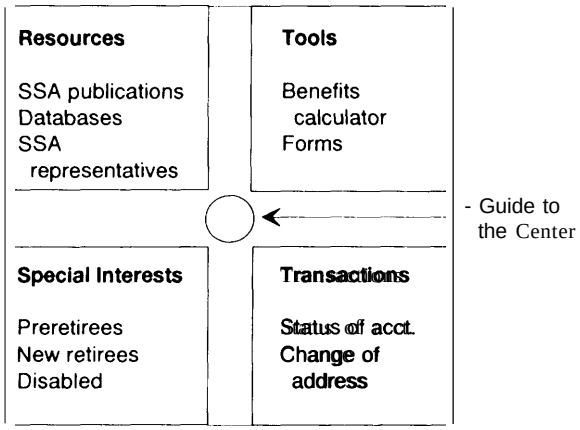
Zero funding for FY 1995 would allow SSA more time to develop reengineering and service delivery plans. It would, however, significantly delay IWS/LAN procurement and installation, and any benefits that might result, and would run the risk of seriously disrupting SSA's modernization.

OTA is modestly optimistic that SSA's planning efforts for reengineering and service delivery will bear fruit, especially if revised and strengthened in accordance with the results of this OTA review.

Provide Requested FY 1995 Funding With No Strings Attached

Congress could appropriate only the $100 million originally requested for FY 1995 or the $130 million SSA intends to request (to make up for the $30 million shortfall in the FY 1994 appropriation) without any conditions or modifications. This option would apply if Congress concludes that the IWS/LAN technical solution is sound, SSA's reengineering/service delivery planning is proceeding satisfactorily, and the requested FY 1995 funding level is adequate.

FIGURE 1–4: Model of a Next–Generation Online Social Security Service Center



SOURCE Richard P Adler and Mary S Furlong, "Electronic Delivery of Social Security Services," contractor paper prepared for the Off Ice of Technology Assessment, February 1994, p 22

This option would allow SSA to continue with the IWS/LAN procurement, but would require SSA to go through separate appropriations requests and justifications for subsequent fiscal years. This would permit additional congressional oversight and opportunities for guidance, but would somewhat complicate SSA's planning and increase the level of uncertainty. OTA believes that SSA maybe able to justify the $100 million or $130 million for FY 1995, contingent on continuing improvements in SSA's service delivery planning, among other areas. Just as OTA's review suggests the need for modifications to SSA's planned use of FY 1994 funds, some combination of conditions and modifications for FY 1995 funding should be helpful.

Provide FY 1995 or 1995-96 Funding With Strings Attached

Congress could appropriate funds with conditions and modifications. This option could include appropriation of funding levels covering 1 or 2 additional years of the SSA budget plan, reprogramming of funds (e.g., from IWS/LAN and ergonomic furniture to reengineering and electronic service delivery), prioritizing within current planned allocations (e.g., on locations for IWS/LAN installation), and establishing benchmarks for SSA progress on reengineering and service delivery improvement.

Appropriating FY 1995 (and perhaps FY 1996) funds with conditions and modifications would allow SSA to continue generally on schedule, but with added incentives to assure best use of available monies. This option should help keep the SSA program on track, while permitting more effective congressional oversight and holding SSA more accountable for performance. Benchmarks **or** milestones could be established as a basis for determining appropriations in subsequent years.

Possible conditions and modifications for SSA's obligation of FY 1995 and FY 1996 appropriations include:

FY 1995

- continued commitment to staff and resources for service delivery planning;
- completion of service delivery plan that addresses the findings of OTA's *Making Government Work*[65] (including success factors for electronic delivery) and GAO's general management review of SSA;[66]
- startup of intensified electronic delivery pilot projects that include opportunities identified by OTA;
- accelerated completion of full-scale pilot testing (as distinguished from pre-operational testing) of IWS/LAN, MDS, and disability reengineering;
- completion of federal-state review of disability automation strategy and priorities;
- completion and initial pilot testing of performance measurement methodology;

65 U.S. Congress, Office of Technology Assessment, op. cit., footnote 15.

66 U.S. Congress, General Accounting Office, op. cit., footnote 2.

- intensified commitment to grassroots involvement and community infrastructure development for SSA service delivery; and
- initiation of followup reengineering study of other (nondisability) service areas.

FY 1996

- achievement of specified service delivery improvements based on use of IWS/LAN and other information technologies;
- implementation of reengineered disability process in selected states;
- implementation of selected electronic delivery improvements;
- completion of second-generation plans for service delivery and reengineering;
- continued commitment to grassroots involvement and community infrastructure development; and
- continued electronic delivery pilot-testing with emphasis on strategic partnering opportunities.

Congress could appropriate only the FY 1995 funds ($100 million or $130 million), but make clear that a strong SSA performance in meeting FY 1995 conditions would favorably influence consideration of a multiyear appropriation in FY 1996 (e.g., for FY 1996-98). Or Congress could make a 2-year appropriation in FY 1995 (for FY 1995-96), but make obligation of the FY 1996 portion ($285 million or $255 million) contingent on satisfactory compliance with conditions placed on fiscal year 1996 as well as FY 1995 funding. OTA's estimation of the merits of a 2-year versus l-year appropriation depends significantly on SSA's ability to meet early milestones for use of the FY 1994 appropriation (see prior discussion). Appropriations beyond FY 1996 would not appear to be prudent at this time (the FY 1995 budget cycle), in OTA's judgment, given the lack of clarity and documentation for use of the out-year funds.

Provide Full Multiyear Funding

Congress could appropriate $825 million ($1. 125 billion less $300 million already appropriated for FY 1994) in no-year funds (i.e., funds that could be used at SSA's discretion during FY 1995-98). This option would warrant consideration if the IWS/LAN technical solution is sound, confidence in SSA's reengineering and service delivery is very high, and funds permit appropriating the rest of the 5-year request in no-year money.

This option would give SSA maximum flexibility in allocation and obligation of funds, send a strong signal of support for SSA's modernization, and eliminate the need for annual appropriations justifications and the uncertainties of future funding actions. Full multiyear funding, especially with no strings attached (and probably even with conditions), would exceed OTA's level of confidence, and would make it more difficult for Congress to set direction or priorities and encourage improvements that OTA believes are needed. Also, SSA has not adequately documented its need for the out-year IWS/LAN procurements. And about one-third of the FY 1996-98 funds is for out-year activities related to reengineering and implementation of the strategic plan that are not, and cannot be, credibly specified at this time.

Attach Conditions to SSA Operating Funds

Congress could appropriate SSA operating funds with conditions and modifications relevant to reengineering and service delivery. The 5-year, $1 .125 -billion SSA automation investment program is separate and apart from the annual SSA operating budget that totals about $5 billion (of which about $250 million funds SSA's annual information technology budget[67]). Funds could be reprogrammed or prioritized within SSA's operating budget to cover reengineering/service delivery priorities, and/or to strengthen SSA's strategic

67 SSA's personnel costs associated with information technology total approximately another $150 million.

management that could be a key to successful reengineering.

This option could permit full funding of IWS/LAN in FY 1995, for example, with additional reengineering/service delivery funding provided or supplemented from operating budgets. Ultimately, the reengineered SSA service delivery, when fully operational, presumably will be funded in large part from the operating budget. The operating budget could be tapped sooner and more aggressive y to fund reengineering and service delivery priorities, which would complement or substitute for funds included in the current automation investment plan.

This option also could provide a greater incentive to SSA to strengthen its strategic management team. This would improve the integration of agency planning for service delivery, information systems, human resources, and facilities across al1 SSA operational components. OTA's review (as did GAO's[68]) concluded that a strengthened strategic management team is necessary and probably essential to assure that SSA meets whatever conditions Congress may place on annual appropriations.

68 U.S. General Accounting office, op. Cit., footnote 2.