United States General Accounting Office

GAO

Report to the Congress

October 1988

MANAGING IRS

Actions Needed to Assure Quality Service in the Future

043533 / 137064

GAO/GGD-89-1

GAO United States
General Accounting Office
Washington, D.C. 20548

Comptroller General
of the United States

B-224890

October 14, 1988

To the President of the Senate and the
Speaker of the House of Representatives

This report discusses critical management challenges facing the Internal Revenue Service that must be addressed to assure high quality service to the Nation's taxpayers. It is the result of a joint effort between IRS and GAO wherein both agencies, in consultation with congressional committees and others, agreed upon the major management issues confronting IRS and concentrated on finding solutions.

The report makes specific recommendations for improving IRS' management and helping it better prepare for the future. Given the cooperative nature of our effort and the pressing nature of many of the issues, Commissioner Gibbs already has taken action to implement a number of improvements. However, full implementation of many recommendations will require a sustained commitment from IRS and the support of the Department of the Treasury, the Office of Management and Budget, and Congress.

We are sending copies of this report to the Secretary of the Treasury and the Director of the Office of Management and Budget, as well as appropriate congressional committees and Members of Congress.

Charles A. Bowsher

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Comptroller General
of the United States

Executive Summary

Purpose

The Internal Revenue Service (IRS) routinely serves almost every household and business in the United States and soon will collect $1 trillion annually in taxes. Its performance influences how Congress and the Administration make critical decisions to finance our government. Moreover, IRS plays a crucial role in maintaining public confidence in our voluntary tax compliance system and in shaping public opinion about the quality of federal services. Consequently, it is vital that IRS effectively manage its massive operations and ensure uniform and fair implementation of an ever-changing set of complex tax laws. IRS' management was reviewed in this context to determine how it could improve its operations and better prepare for the future.

Background

IRS has an enormous scope of operations. In fiscal year 1987, it collected about $900 billion, answered over 50 million taxpayer inquiries, and processed over 800 million pieces of taxpayer information. To carry out its mission, IRS has a highly decentralized structure with approximately 94 percent of its 102,000 employees located in 7 regional offices, 63 district offices, and 10 service centers located across the country, as well as in offices in many foreign countries. IRS spent the majority of its $4.4 billion 1987 budget on examining and processing tax returns.

Results in Brief

Given its vast and complex responsibilities, IRS has generally done a capable job in accomplishing its mission. However, it faces a number of critical management challenges that have previously led to major problems and, if not forthrightly confronted, could seriously erode IRS' future ability to adequately serve the public and enforce our Nation's tax laws.

These challenges cannot be conquered quickly. They require a well-formulated, long-term strategy and sustained attention by IRS management. Congress and the Administration also must support the strategy if it is to succeed and provide the necessary level of resources. An agreed-upon strategy can guide effective short-term budget decisions, ensure that large investments in information technology are made wisely, and maximize IRS' performance in assisting taxpayers and collecting the revenue needed to help cope with the budget deficit.

IRS' most pressing challenges are to

- better plan and direct its information systems modernization effort;

- address the deterioration in its ability to attract and retain a quality workforce and leadership cadre;
- strengthen management of financial systems to resolve significant internal control problems;
- devise an effective approach to ensure that a "quality first" mindset permeates the agency's internal culture; and
- ensure more rigorous evaluation of field operations to improve uneven performance and ensure uniform and equitable treatment for all taxpayers.

IRS has taken several recent actions to help address these challenges. It reorganized its top management structure to improve accountability and strengthen communication. It has improved its management decision-making by setting up a strategic management system and initiated efforts to improve the quality of its services. These actions provide a good beginning. But a concerted effort on many fronts is required over the long-term if IRS is to further improve its operations.

Principal Findings

Better Manage Information System Modernization

IRS' most critical long-term challenge is to effectively modernize its computer-based tax processing system. IRS' tax processing system remains basically the same batch processing/magnetic tape storage and transport system that was established in the 1960s. During calendar year 1987, about 65,000 magnetic tapes with taxpayer information moved among IRS' various processing facilities. The current system is outdated and not expected to be capable of meeting IRS' growing work load by the mid-1990s. It is essential that IRS handle this modernization effort well; its ability to serve the public—such as processing returns and issuing refunds—hinges greatly on the performance of its computer systems. Moreover, the modernization will require a large investment of public funds and take several years to plan and implement.

IRS' progress in meeting this critical challenge has been slow, due in part to lack of effective management direction and leadership changes within IRS and Treasury. Since 1982, IRS has pursued four different developmental approaches for the proposed modernization project. None of these approaches has progressed beyond the planning stage despite 5 years of work. (See p. 56.)

One key problem has been the lack of a clearly designated leader for information resources management. IRS recently took positive steps to clarify the leadership structure for its overall management of information technology, including its information systems modernization efforts. The senior executive designated as IRS' information resources management focal point, however, has other significant responsibilities that preclude him from devoting full-time attention to this important area. In addition, more technical expertise is needed at both the operational and senior management levels. Also, responsibilities for telecommunications management should be consolidated. (See pp. 52 and 62.)

Another key problem with the proposed modernization effort has been the need for a detailed long-term plan to direct this complicated effort. IRS' initial computer modernization in the 1960s was successful, in part, because it was guided by a long-term plan. However, the current effort has not been driven by a strategic plan that clearly delineates IRS' long-term goals, objectives, and priorities. Historically, modernization proposals have been rejected by the Treasury Department, in part, because they were not clearly tied to IRS' mission. In March 1988, IRS issued a basic management plan for the redesign. Treasury officials approved the overall direction set forth in this plan. (See pp. 56 and 65.)

Setting Clear Direction

IRS has initiated a new strategic management process to help set agencywide goals, establish mission priorities, guide budget decisions, and create a benchmark for measuring agency progress toward achieving objectives. While this new process represents a sound conceptual approach, many critical implementation issues remain. These include establishing a process to effectively measure and monitor agency progress toward achieving plan objectives; obtaining Treasury, Office of Management and Budget, and congressional concurrence with the plan; and ensuring that budget requests are consistent with the plan's priorities and objectives. (See p. 38.)

Addressing Workforce Quality Concerns

Throughout the 1980s, IRS increasingly has grown concerned about an area critical to its capacity to effectively deal with the public and accomplish its mission—attracting and retaining quality employees. For example, revenue agents hired in 1984 through 1987 on the average scored lower than 80 percent of private sector entry level accountants on the American Institute of Certified Public Accountants Achievement Test. This test measures knowledge in a wide variety of areas, including taxation. (See p. 121.) As another example, skill shortages contributed in 1985 to what IRS has characterized as probably the most difficult and least successful filing season in its history. (See pp. 14 and 123.)

One important factor in attracting and retaining quality employees is competitive pay. GAO believes that federal pay is not competitive for many occupations because federal salary adjustments have not been keeping pace with comparable jobs in the private sector. GAO and IRS agree that the pay issue has contributed to IRS' workforce quality problems. Until the pay issue is resolved, IRS and other federal agencies will not be able to offer sufficiently competitive salaries to attract quality talent to many critical occupational series. (See p. 117.)

While IRS alone cannot resolve this pay disparity, IRS needs to collect better information on workforce quality to understand the full dimensions of the quality issue and to formulate effective solutions. In particular, IRS needs to establish more coordinated human resource planning to deal with the quality issue. Also, greater reliance on technology may change the numbers and skills of people needed to do IRS' work.

IRS needs to address how an increasingly automated work environment will affect thousands of its employees as it plans to implement electronic filing of tax returns and over 100 other automation projects in the next few years. IRS has given greater attention to human resource issues when implementing new automated systems, but such issues need to be considered earlier in the planning stages. (See p. 119 and 126.)

Another key issue is that over half of IRS' senior executives who responded to GAO's survey indicated they will be eligible to retire before 1993, and over 60 percent of those responding said they would leave within a year of eligibility. IRS has a sound executive development program and is developing a new succession planning system. However, IRS should ensure that the system successfully incorporates the results of its efforts to identify the attributes of successful IRS executives into the system's selection and development processes. (See p. 129.)

A closely related workforce management concern is creating a sustained agencywide commitment to quality service. IRS presently spends considerable time and effort correcting tax return errors. A preventive approach toward quality, emphasizing correcting problems before they reach the customer, should be reinforced throughout IRS. (See p. 100.) In 1987, Commissioner Gibbs built upon an agencywide process to improve quality by entering into an agreement with the employees' union, which includes training for employees. This effort is a key step in changing the IRS culture from a production focus to a quality orientation. However, sustained management commitment is needed to transform quality into daily reality at the operating level. To help accomplish this, IRS needs to develop adequate incentive programs to reinforce quality values, and develop and use measures to assess whether or not it is making progress in improving service quality. (See pp. 107 and 109.)

Strengthen Financial Management

Another important task for IRS is to improve its revenue and administrative accounting operations, which consist of old systems with weak internal controls that often produce inaccurate and untimely information. For example, on the revenue accounting side, a 1986 audit estimated that about 721,000 tax deposits amounting to $6.5 billion would result in erroneous bills, penalties, and refunds to businesses because IRS' control systems were unable to promptly identify and resolve errors. Internal control problems also preclude IRS from reliably accounting for the total amounts taxpayers owe the government, which have grown from $18.4 billion in 1981 to $53.7 billion in 1987. Similarly, because of antiquated systems, about 13 million transactions had to be processed manually in 1986. (See p. 76.)

IRS recognizes it must enhance or replace its financial systems and many efforts are well underway. Nonetheless, IRS has had difficulty in successfully solving its accounting systems problems. Its efforts would be enhanced if guided by an overall plan and led by a chief financial officer. (See p. 96.)

Better Evaluation of Field Operations

Because of IRS' highly decentralized structure and the way authority is vested in field personnel, management accountability, particularly national office evaluation of field operations, is vitally important. IRS has long recognized the need for a feedback process to ensure that mission goals are being accomplished, and to effectively address concerns that periodically arise over field office performance of sensitive tax administration responsibilities. However, from 1985 to 1987, IRS' national office review program was suspended because IRS top management believed it was not providing timely and thorough evaluations of IRS' operational performance. In addition, from 1980 to 1988, staff devoted to internal audit—the only internal source of objective evaluation—declined by 13 percent. (See p. 136.)

In reaction to these concerns, IRS recently reinstituted its principal field office review program. However, GAO believes this self-assessment program will not overcome the problems identified with its predecessor because it lacks independence and agreed-upon performance measures. Addressing these concerns is very important, because without an effective, nationwide evaluation process, IRS management may not be fully informed on how well its field offices are doing. (See p. 139.)

Recommendations

The report contains specific recommendations aimed at strengthening IRS' management processes and positioning IRS to meet future challenges. Key recommendations include ensuring that the strategic business plan effectively drives IRS' information systems modernization efforts and the annual budget process; improving critical data processing and accounting operations; developing an agencywide performance measurement system to—among other things—gauge progress toward improving quality service to the public; and strengthening internal evaluations of field activities.

Agency Comments

The Commissioner agreed with the issues addressed in the report and fully supports all of its recommendations. (See p. 152.)

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Abbreviations

AC	Assistant Commissioner
ACS	Automated Collection System
ADP	automated data processing
AFS	Automated Financial System
AICPA	American Institute of Certified Public Accountants
BLS	Bureau of Labor Statistics
ARC	Assistant Regional Commissioner
CHEXS	Check Handling Enhancements and Expert Systems
DEMIS	Decision Enhancing Management Information System
ERAM	Enforcement Resource Allocation Model
ES&D	Executive Selection and Development
FMFIA	Federal Financial Managers Integrity Act
FTD	Federal Tax Deposit
GAO	General Accounting Office
GSA	General Services Administration
HRD	Human Resources Division
HRMS	Human Resource Management and Support
IA	Internal Audit
IMS	Integrated Management System
IRA	Individual Retirement Account
IRP	Information Returns Program
IRS	Internal Revenue Service
ISPB	Information Systems Policy Board
LMQAS	Line Management Quality Assurance System
NCC	National Computer Center
NORP	National Office Review Program
NTEU	National Treasury Employees Union
OMB	Office of Management and Budget
OPM	Office of Personnel Management
PEF	Productivity Enhancement Fund
RORP	Regional Office Review Program
SBP	Strategic Business Plan
SCCB	Service Center Collection Branch
SES	Senior Executive Service
TAS	Tax Administration System

Introduction

Born of the fiscal needs of the U.S. Civil War, the Revenue Act of July 1, 1862, is the foundation of our present Internal Revenue Service. Over the years changes at IRS have reflected the growth of the Nation, its varying revenue needs, and the economic and political philosophies of the times. Table 1.1 lists critical events that have shaped IRS' institutional history.

Table 1.1: IRS History

Year	Event
1913	U.S. Constitution amended to permit a tax on individual incomes.
1917-1920	World War I revenue needs dramatically increase tax collection activities.
1935	Social Security Act of 1935 gives IRS new responsibilities to administer employment taxes.
1943-1945	World War II places unprecedented burden on revenue collection activities. Significant administrative changes include wages and salaries put on a withholding basis for tax collections by the Current Tax Payment Act of 1943 and the adoption of the standard deduction in 1944.
1952	Corruption and embezzlement scandal at IRS leads to major administrative reorganization.
1967	Nationwide automated tax return processing system established to deal with growing work loads.
1985	IRS suffers "nightmare" filing season.
1987	IRS implements the most far-reaching legislative changes to the tax system in 30 years and has an improved filing season.

Although the scope and complexity of IRS' operations have increased significantly over the years, IRS' mission has basically remained constant. Its mission statement reads as follows:

"The purpose of the IRS is to collect the proper amount of tax revenues at the least cost to the public, and in a manner that warrants the highest degree of public confidence in our integrity, efficiency and fairness. To achieve that purpose, we will:

- Encourage and achieve the highest possible degree of voluntary compliance in accordance with the tax law and regulations;
- Advise the public of their rights and responsibilities;
- Determine the extent of compliance and the causes of noncompliance;
- Do all things needed for the proper administration and enforcement of the tax laws;
- Continually search for and implement new, more efficient and effective ways of accomplishing our Mission."

IRS' Current Organizational Profile

IRS' national office, led by the Commissioner, a Senior Deputy Commissioner, and two Deputy Commissioners, plays a critical role in establishing policy direction. These policies and programs are carried out through a massive decentralized field structure composed of 7 regional offices, 63 district offices, and 10 service centers spread throughout the United States. Currently, about 6,000 employees are located in the national office, representing about 6 percent of the IRS workforce. The remaining 96,000 employees are located in field installations throughout the world. IRS' current organizational structure is shown in figure 1.1.

National Office Leadership

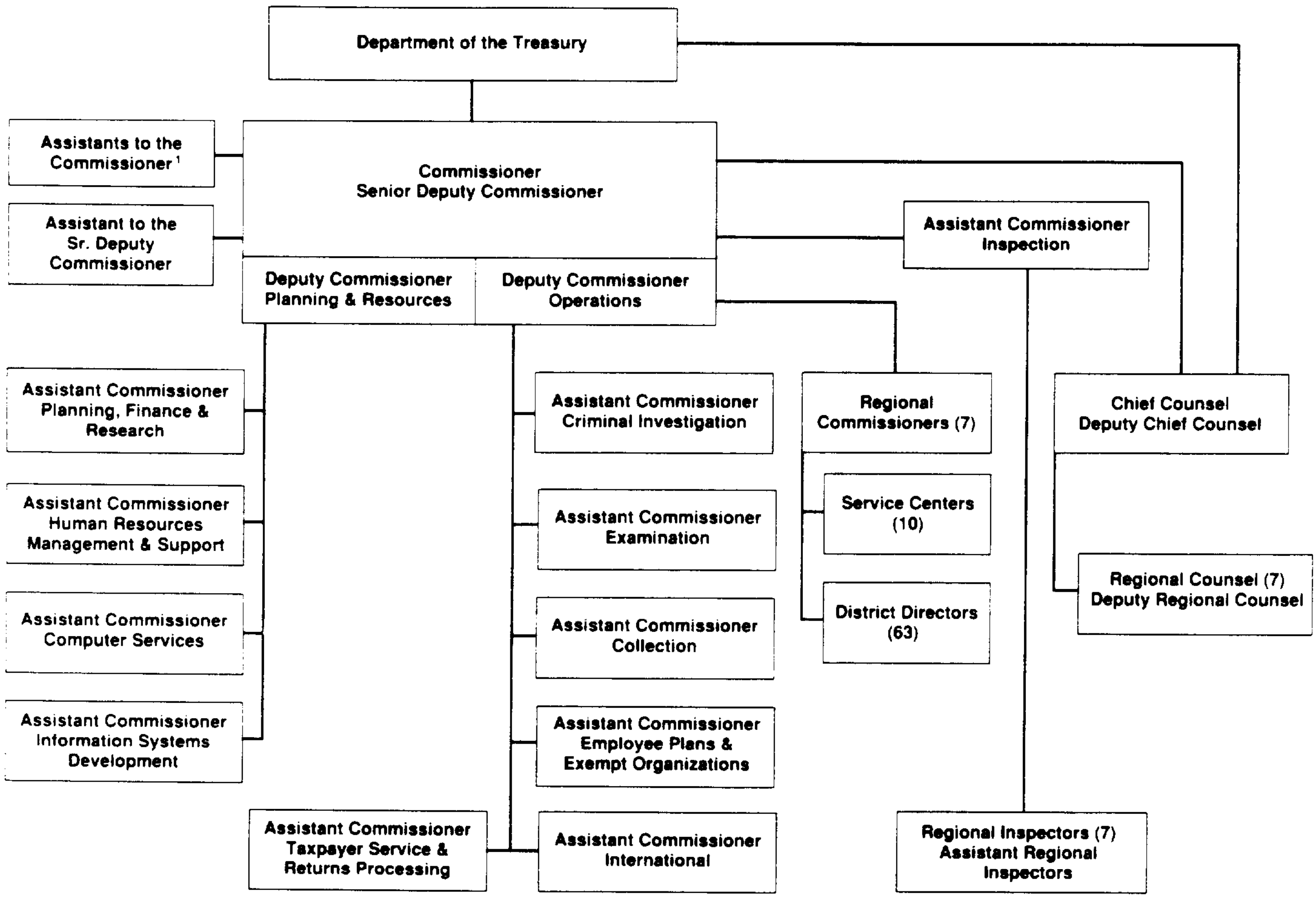
The national office is responsible for overall planning, and for directing, coordinating, and controlling the policies and programs of the IRS. As shown in figure 1.1, IRS currently has 10 functionally based Assistant Commissioners, reflecting, in part, the complexity of IRS' mission. These Assistant Commissioners are responsible for developing an annual program plan for their specific functional areas. In addition, an eleventh Assistant Commissioner is responsible for Inspection.

Over the years, the national office has undergone several reorganizations in an attempt to streamline its structure and improve management direction. In 1987, IRS reorganized its national office to attempt to improve management decisionmaking, accountability, and communications throughout the organization. A significant feature of this reorganization was the establishment of a Senior Deputy Commissioner and two Deputy Commissioners rather than one to help manage IRS' operations. The impetus behind, and purposes of, this reorganization are discussed in chapter 4.

Regional Oversight Responsibilities

IRS' regional offices' structures generally have mirrored the national office, adding more function-specific units as the number of specialized skill areas increased. Regional offices were initially established in 1952 to oversee IRS' scattered field operations. IRS has emphasized placing authority at the lowest possible organizational level. The regional offices operate as somewhat autonomous entities. Under the direction of a Regional Commissioner, the regions execute the broad nationwide policies and programs for administering the internal revenue laws, and direct and coordinate the functions and activities of the district and service center offices within their geographical boundaries. Figure 1.2 illustrates the typical regional office structure.

Figure 1.1: IRS Organization

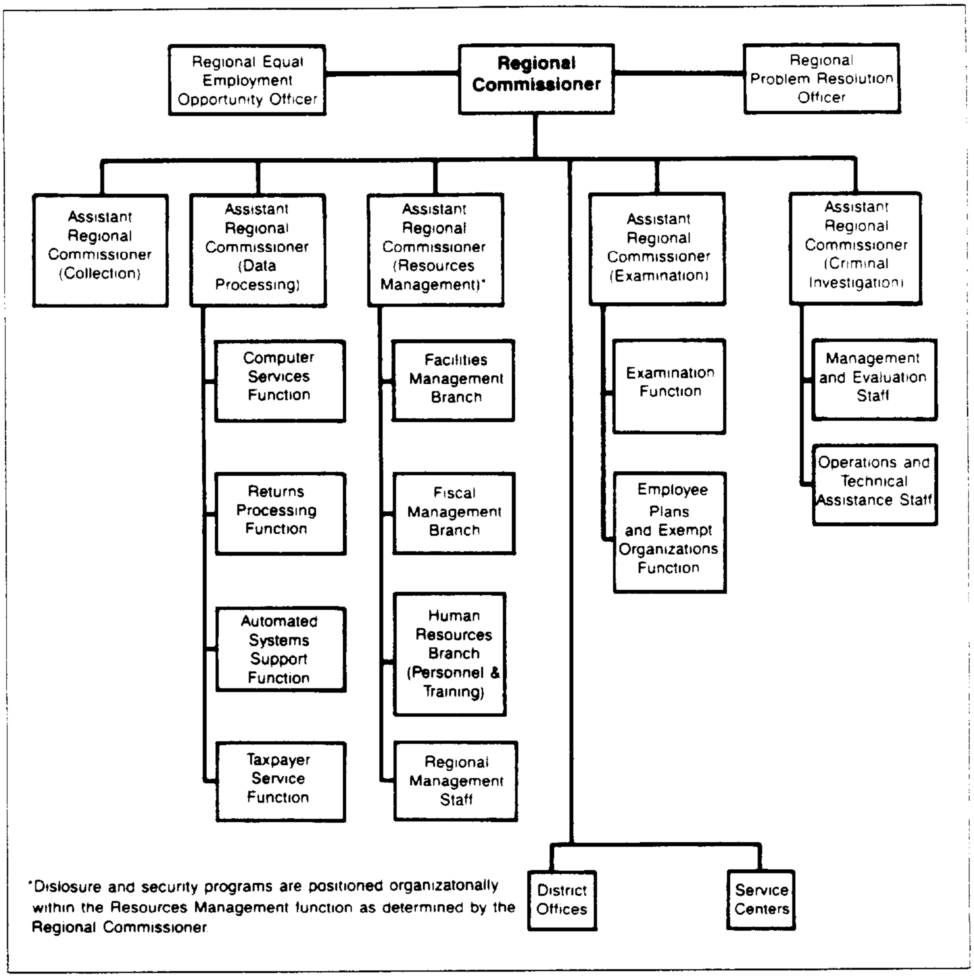


[1] Public Affairs, Legislative Liaison, Taxpayer Ombudsman, Equal Opportunity, Assistants to the Commissioner, Legislative Affairs Division

As of June 15, 1988

Source: IRS Planning Division

Figure 1.2: Regional Office Organization



Source: IRS Planning Division

District Offices Interact With the Public

District offices manage IRS' examination, collection, criminal investigation, and taxpayer assistance functions. As such, they are IRS' principal point of contact with the public. A brief description of each of these functions follows.

Examination

- Examining tax returns to measure the degree of voluntary compliance and reduce noncompliance.

Collection

- Collecting the proper amount of tax revenues in a fair and even-handed manner.

Criminal Investigation

- Detecting, investigating, and referring to the Justice Department for prosecution those individuals who violate the tax laws by willfully not reporting and paying taxes on all income.

Taxpayer Service

- Designing and distributing tax forms and instructions; responding to taxpayer inquiries; providing assistance to taxpayers in the preparation of their tax returns.

Service Centers Process Returns

Ten service centers function as IRS' tax return processing sites. Two key activities are depositing checks and converting tax return information to magnetic tape for posting to taxpayer accounts. These activities are commonly referred to as "pipeline" activities. As figure 1.3 illustrates, these activities include several accuracy checks. Magnetic tapes of tax information are created and shipped from each service center to the National Computer Center (NCC) in Martinsburg, West Virginia, for posting to IRS' master file. At peak periods, service center clerks can open up to a million items in a 24-hour period.

Trends in IRS Resources and Work Load

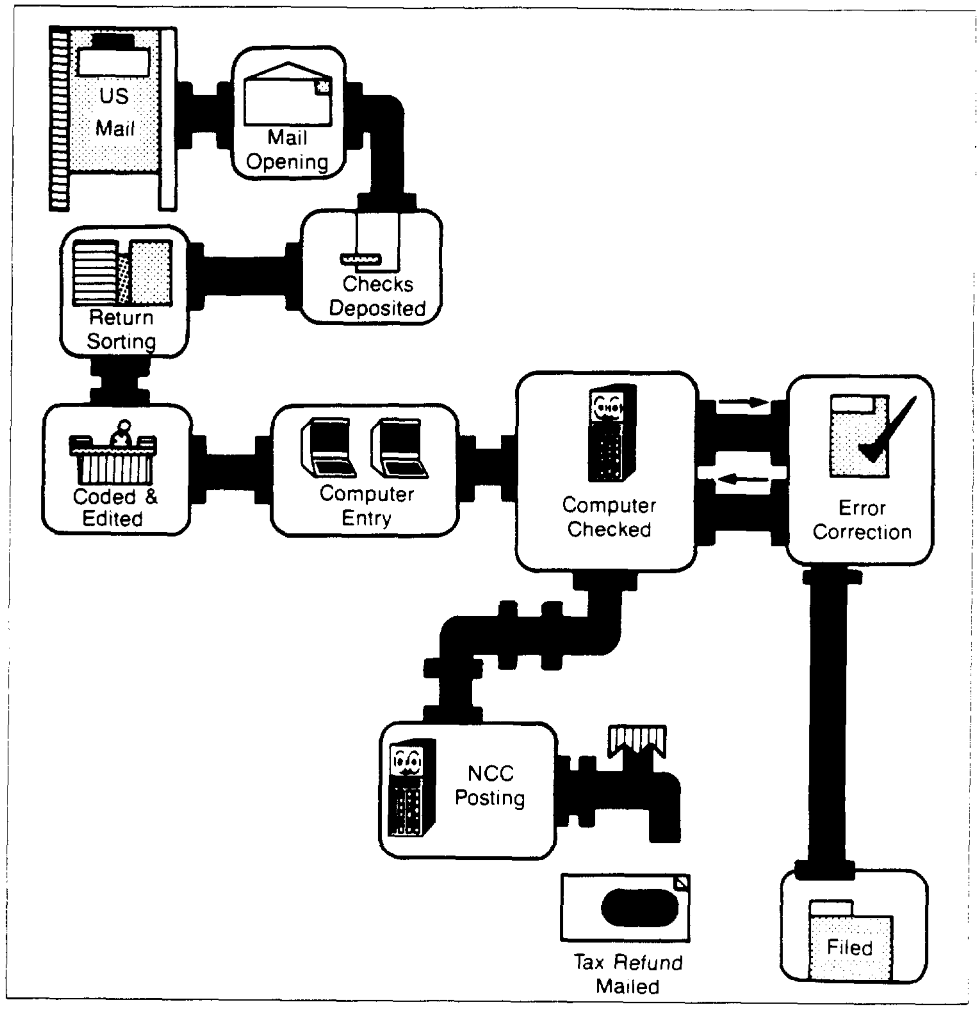
Over the past 30 years, IRS has experienced growth in terms of resources and work load. From fiscal year 1957 through fiscal year 1987,

- operating costs increased from about $300 million to about $1 billion, as expressed in constant 1957 dollars;
- the average number of positions increased from about 51,000 to about 102,000;
- the number of returns filed grew from about 90 million to about 192 million; and
- revenues collected grew from $80 billion to about $886 billion.

Figures 1.4 and 1.5 show a 30-year history of IRS' operating costs and the functional distribution of IRS' costs for fiscal year 1987.

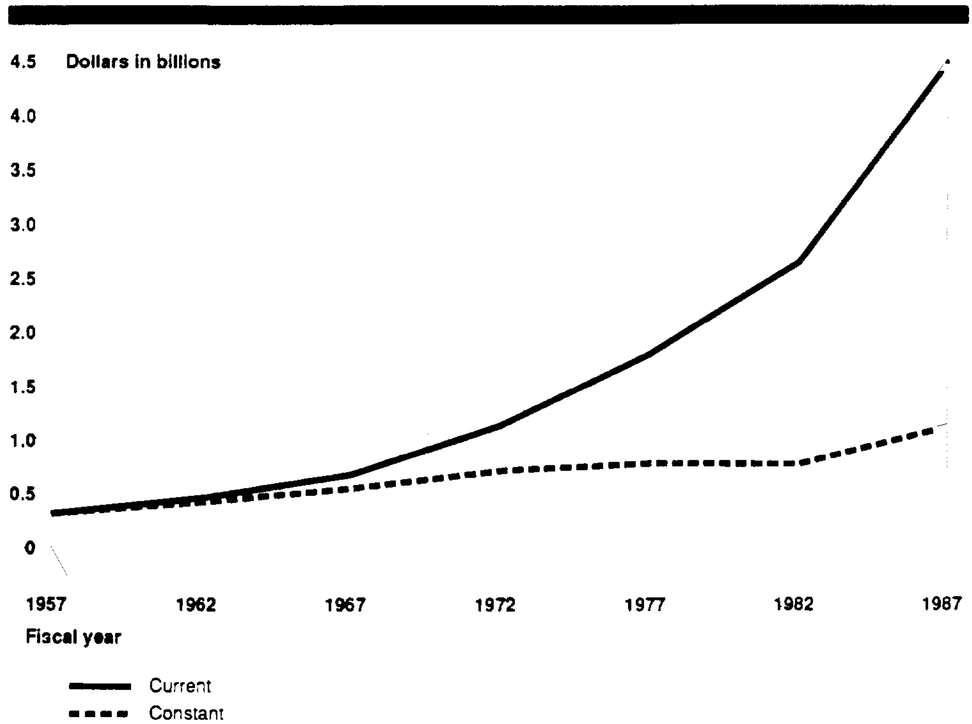
As shown in figure 1.5, Examination, Collection, and Returns Processing activities account for over 70 percent of IRS' total costs.

Figure 1.3: The Tax Processing System



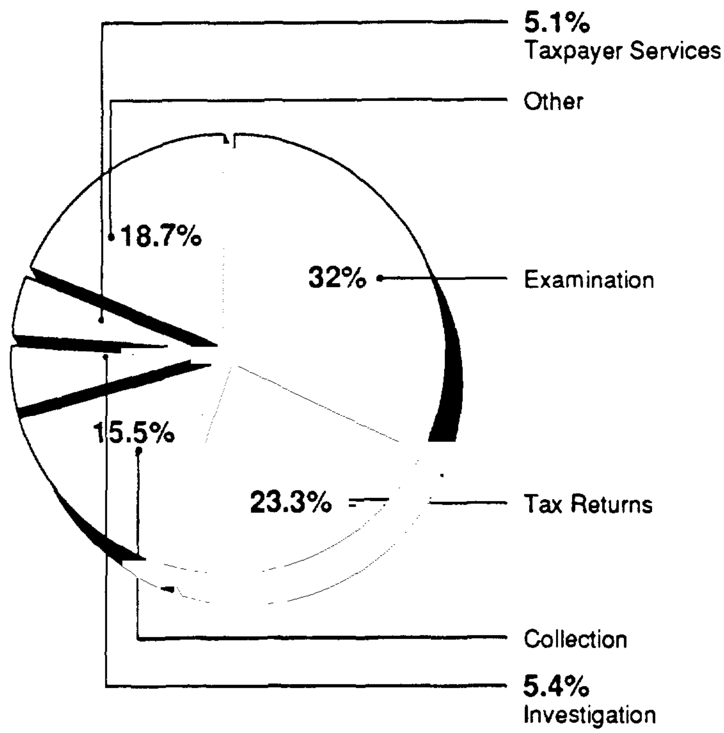
Source IRS Planning Division

Figure 1.4: Operating Cost Increase



Source: GAO Analysis

Figure 1.5: Distribution of IRS Costs by Activity (Fiscal Year 1987)



Source IRS Planning Division

Managing Within IRS' Dynamic Operating Environment

IRS' ability to carry out its mission has been heavily influenced by a variety of environmental factors. Dominant factors shaping IRS' internal environment have been the enormity and complexity of its job. The effective administration of the tax laws requires the following:

- Annually, IRS must process an immense and growing tax information work load. Historically, this constant work load pressure has been a major force behind many operating decisions, including the establishment of dedicated, production-oriented information processing facilities (service centers) in the 1960s and an effort to redesign the current tax processing system.
- IRS must effectively apply a wide variety of technical job skills, including expertise in areas such as law, accounting, and computer technology. Driven largely by a steady stream of tax law changes, this recurring challenge has contributed to the establishment of a very specialized, functionally based organization. Agencywide processes have been established to coordinate functional activities, primarily in reaction to an increasing number of compliance activities that require functional interaction and cooperation.
- All taxpayers must be treated uniformly and equitably. This need contributed to a series of major operational changes to IRS in the early 1950s as a result of a corruption scandal involving inequitable taxpayer treatment. It has also led to the establishment of various internal mechanisms to try to ensure that IRS remains politically independent and that IRS employees are held to high standards of personal conduct in their dealings with taxpayers. The fair and equitable treatment of taxpayers continues to be an extremely sensitive issue, as alleged abuses of taxpayers by IRS have prompted growing congressional interest in strengthening taxpayer protection.
- Millions of taxpayers or their representatives must be contacted directly. This recurring need has contributed to the establishment of a highly decentralized operating structure, wherein significant decisionmaking authority is placed with officials dealing directly with the taxpayers. In addition, this requirement has been a factor behind IRS' continual concern with the quality of its representatives who deal with the public.

Emerging from these mission-related needs is an internal IRS management culture or value system that historically has stressed a production-oriented approach to managing its high volume tax processing activities, a functional orientation toward decisionmaking, and a strong institutional concern for providing fair treatment for all taxpayers.

Managing an Enormous and Growing Tax Information Processing Work Load

IRS' battle with its growing work load began in the 1940s. To pay for World War II, Congress broadened the individual income tax base, collecting individual income tax from tens of millions of taxpayers for the first time. For example, in 1939, taxpayers with income under $5,000 accounted for only 10 percent of the revenue collected. By 1948, these taxpayers accounted for 50 percent of the revenue collected. This expansion caused an explosion in tax administration. From 1941 to 1951,

- tax receipts increased from $5 billion to $50 billion;
- returns increased from 19 million to 82 million; and
- number of IRS employees rose from 22,000 to 37,000.

This work load increase strained IRS' decentralized organizational structure, which had over 200 field offices reporting through 7 semiautonomous divisions in Washington. During this period, a number of administrative refinements were introduced, including the adoption of the short form return, the large-scale withholding of taxes at the source, and the introduction of the standard deduction, which eliminated the need for auditing deductions for 80 percent of all individual returns.

By the mid-1950s, IRS' work load had expanded to the point where its existing facilities for processing tax returns—the district offices—were overwhelmed. A 1956 study documented growing backlogs and characterized district office space as "insufficient, ill-suited, and poorly laid out." The problem was particularly acute in large urban areas, where rising levels of economic activity generated high return volumes. From 1936 to 1956, the number of returns filed increased from one return per 4.7 members of the population to one return per 1.9 persons.

In 1961, following intensive studies, IRS began to automate its returns processing function. It established a conceptual outline for a magnetic tape-based system, which would include "a permanent tax account for each taxpayer through which all transactions, for all taxes and all tax periods, would be cleared before issuance of a net bill or refund." By 1965, a basic automated tax processing system was in place, consisting of seven service centers and a central national computer center that maintained all taxpayer accounts. Three more service centers were in operation by 1972.

This new returns processing system fundamentally changed much of IRS' operations. The system

- significantly reduced the manual verification of return data, a very labor-intensive effort;
- strengthened IRS' ability to quickly screen returns, thereby facilitating the use of returns for examination purposes; and
- replaced several manual procedures for checking taxpayer account accuracy, thereby providing more timely and accurate refunds.

Automating the tax processing system also changed IRS' relationship with the taxpayers in that accountability for errors became more difficult to trace, as a computer program and not a specific individual could be blamed. These types of problems, in part, sparked an emphasis on taxpayer service and the creation of a special problem resolution program in 1977, aimed at helping taxpayers to more quickly resolve their concerns. In 1981, a Taxpayer Ombudsman was appointed to serve as an advocate for taxpayers within IRS. From 1976 to 1987, the problem resolution program's work load grew from 79,000 to 405,397 cases.

In the 1980s IRS has continued to experience work load increases. IRS is now dependent on its automated tax processing system, located in the 10 service centers, to do critical functions such as processing returns and issuing refunds. Advances in computer and telecommunications technology also have occurred in recent years that could make IRS' data more accessible to IRS employees who are serving taxpayers.

However, IRS' tax processing system remains basically the same batch processing/magnetic tape storage and transport system that was established in the 1960s. This system is antiquated and labor-intensive involving large numbers of people transferring information from paper returns to magnetic tapes and physical transportation of the tapes between service centers and the master file facility in West Virginia.

During calendar year 1987, about 65,000 magnetic tapes with taxpayer information flowed from service centers to IRS' master file facility. Another 10,000 tapes were received from other state and federal agencies. At this facility, IRS maintains a central master file tape library of four current sets of the master file that in 1987 required 2,210 reels of tape. Backup sets of tapes bring the total tape library to more than 8,800 tapes. Once the updating of the master files is complete, several output tapes (e.g., for refunds, notices) are produced and transported back to service centers and other facilities.

As early as the late 1960s, IRS has recognized that its massive service center tape processing system was rapidly becoming obsolete. In 1969, IRS set out to redesign the entire system. Its initial efforts produced the Tax Administration System (TAS), which basically envisioned a totally decentralized system under which taxpayer accounts would be maintained at the service centers instead of at one central location. The service centers would have a telecommunications capability to link with one another. In 1977, IRS established a price tag of $1.8 billion for TAS. Congress, however, rejected TAS in 1977 and 1978 citing uncertainties over cost effectiveness and concerns over whether it would violate the rights and privacy of individuals.

Modernizing this outdated system is critical if IRS is to operate in an efficient and economical manner. Moreover, IRS projects that returns processing volume will continue to increase through the 1990s, from 208 million in 1990 to 230 million by 1995.

In the meantime, IRS continues to maintain its old data processing systems by applying a variety of measures to expand the capacity of its mainframe computers. However, the potential for a computer capacity shortage exists in the early 1990s. In February 1988, GAO testified before the House Ways and Means Subcommittee on Oversight that IRS would probably begin to experience capacity limitations sometime in 1992. This would be about 1 to 2 years short of when IRS' proposed tax processing system overhaul was planned to provide new computers and redesigned software. IRS does not believe a capacity problem will occur until 1994 due to planned efforts to redistribute its work load. However, IRS faces a major set of management challenges in both maintaining an old data processing system and phasing in a redesign of its tax processing system. Chapter 5 discusses current IRS information systems challenges.

Ensuring Uniform and Equitable Treatment of All Taxpayers

Many IRS activities that require judgment can, and do, have an effect on the personal financial affairs of individual and business taxpayers. IRS employees are called upon to exercise judgment in carrying out such activities as the examination of returns, assessment of penalties, and collection of delinquent accounts through use of levies and seizures. Because thousands of IRS employees use judgment in millions of such cases every day throughout the country, inequities may arise from differing decisions.

Figure 2.1: IRS Magnetic Tape Files

Taxpayers who receive inconsistent or unequal treatment on such matters may lose confidence in the tax system. They may publicize their complaints or try to circumvent the system, thus weakening its entire base. IRS has a number of management mechanisms in place—many the direct result of a 1951 corruption and embezzlement scandal—that attempt to ensure equitable taxpayer treatment.

A major event in IRS' history was the highly publicized corruption and embezzlement scandal of 1951 that implicated 167 IRS employees. This incident precipitated a significant reorganization, which to this day provides the basic foundation for IRS' organizational structure. This 1952 reorganization

- abolished all presidential appointee positions within the agency except for that of the Commissioner;
- created an independent IRS Inspection Service to "insure maintenance of high standards of conduct and efficiency" by all IRS personnel; and
- established the basis for a three-tiered structure—national office, regional office, and district office—to provide more effective supervision of activities.

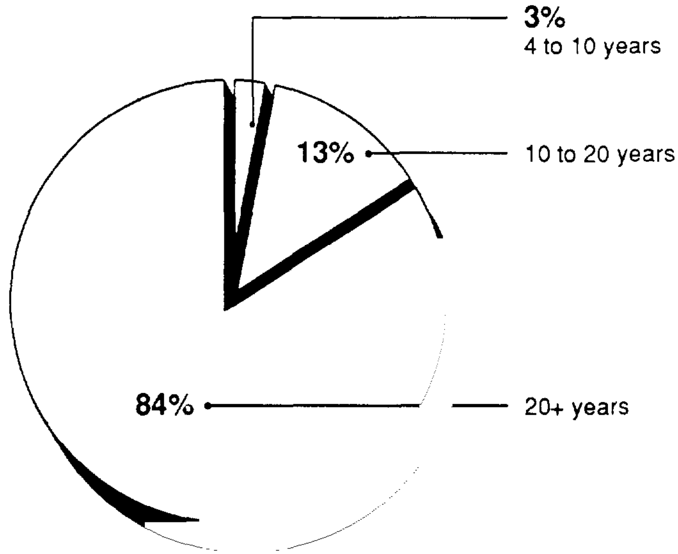
All of these changes helped to shape IRS' politically independent management culture, which also stresses high standards of individual employee conduct.

A key component of the 1952 reorganization was the replacement of politically appointed collectors of internal revenue located throughout the country with career civil servants who would be selected on the basis of competence and promoted on the basis of merit. Unlike the collectors, who had to be residents of the areas they served, key officials under the current system may be transferred within the system.

The elimination of political appointments resulted in an organization that is noted for its organizational stability and political independence. Further, this change also helped create a cohesive stable group of senior managers. Figure 2.2 shows that most of the current leaders have 20 years or more of tenure with IRS.

With the exception of the Commissioner, these executives currently occupy all the senior agency leadership positions. A 1987 Treasury study of IRS' executive selection efforts confirmed that most IRS executives were selected from within, and the study recommended that IRS

Figure 2.2: SES Tenure With IRS



Source: GAO Survey Results

broaden its efforts to develop a better capacity for outside recruitment. Chapter 8 discusses this area in more detail.

A second key component of the 1952 reorganization was the establishment of a regional office structure, situated between the national office and IRS' highly decentralized field operations. Regional offices added two important features to IRS' operations:

- a lower span of control over field operations, thereby enhancing the supervisory review of field office tax administration activities; and
- a shield for field operations against possible political interference from the national office on specific taxpayer cases.

Both of these values—fair, consistent treatment for taxpayers and political independence—are now a part of the fabric of IRS' internal culture.

While these mechanisms historically have helped IRS accomplish its mission, IRS senior managers have been concerned about a regional office field structure that may not be receiving strong oversight from the national office. In addition, the fair treatment of taxpayers continues to be an extremely sensitive issue, as taxpayer allegations of IRS abuses have prompted growing congressional interest in strengthening taxpayer rights. Chapter 9 addresses the current challenges facing IRS' efforts to maintain an effective system of checks and balances, wherein effective national office oversight can be maintained without impeding the effective, politically independent administration of the tax law.

Applying Needed Technical Skills to Accomplish IRS' Mission

The nationwide administration of an increasingly complex set of tax laws has, over the last 40 years, required the adroit application of a wide range of technical job skills. To address this increasing complexity, IRS' organization has, over time, become more functionally specialized. This specialization has in turn led to a growing need for internal mechanisms to effectively coordinate these functional activities in the many areas where they interrelate.

In the past few years, frequent tax law changes have been a significant influence on IRS operations, testing IRS' adaptability. During the 1948 to 1981 period, there have been 25 major revisions, including 7 since 1979. Five of these changes since 1979 have required IRS to implement more than 4,500 actions—such as revising forms, instructions, processing, and computer programs—to adjust its operations. Table 2.1 highlights examples of major tax law changes since 1979.

Table 2.1: Examples of Major Tax Law Changes Enacted Since 1979

Title of Act	Description
Crude Oil Windfall Profit Tax Act of 1980	The act created an excise tax on domestically produced crude oil and included other energy-related tax incentives. The windfall profit tax was described as perhaps the largest and most complex tax ever levied on a U.S. industry. When enacted, it was estimated that the tax would yield over $227 billion in about 10 years. The complex design of the tax required interaction among IRS, producers, operators, and withholding agents. IRS estimated that implementing the tax would require 118 actions and 601 staff years.
Economic Recovery Tax Act of 1981	The act reduced individual income tax rates, created an income tax indexing system, and included business and individual income tax changes designed to stimulate capital formation. For example, one provision of the act extended individual retirement accounts (IRA) to all taxpayers, creating additional administrative burden for IRS. The number of taxpayers claiming deductions for IRAs grew from 3.4 million in 1981 to 13.1 million in 1983, increasing the burden on IRS existing document matching programs. IRS estimated that implementing this act would require 624 actions and 386 staff years.
Tax Equity and Fiscal Responsibility Act of 1982	The act extended information reporting and penalty provisions intended to improve taxpayer compliance, and included other individual, business, employment and excise tax changes. For example, the act placed greater emphasis on the use of penalties to deter noncompliance. However, the penalty provisions are technically complex and require additional processing and training resources. IRS estimated that implementing this act would require 789 actions and 2,408 staff years.
Deficit Reduction Act of 1984	The act was intended to reduce tax sheltering activity, reform taxation of international income, improve administration and efficiency of the tax system, and provide economic incentives for certain investments to promote economic growth. The act required certain tax shelters to register with IRS. By March 1986, 23,500 shelters registered with IRS. IRS estimated that implementing this act would require 1,125 actions and 2,784 staff years.
Tax Reform Act of 1986	The Tax Reform Act of 1986 was the most significant and comprehensive tax legislation pursed since the 1940s. One of the major objectives of the act was to increase the fairness of the tax law. However, with increasing fairness, the complexity of some tax provisions also increased. For example, the net unearned income of a child under age 14 will be taxed at the parent's rate rather than at the child's rate. IRS estimated that implementing this act would require 2,062 actions.

In response to these types of changes, IRS' organization has also changed, becoming increasingly more specialized within an overall functional framework. In 1952, IRS was initially reorganized into a multifunctional national office structure with three Assistant Commissioners—Operations, Technical, and Inspection. By 1988, IRS had 11 Assistant Commissioner (AC) positions. Examples of major changes included:

- The AC (Compliance) position was abolished in 1982 and three positions established—AC (Examination), AC (Collection), and AC (Criminal Investigation).

- An AC (International) position was established in 1986 as a result of an internal study.
- The positions of AC (Computer Services) and AC (Information Systems Development) were established in 1982 and 1987 to handle IRS' burgeoning information resource management responsibilities.
- An AC (Employee Plans and Exempt Organizations) position was established as a result of the Employee Retirement Income Security Act of 1974.

Each of these functions has its own program planning, information, and evaluation systems. As the level of functional specialization has increased, a growing need has emerged for internal mechanisms to effectively coordinate these activities. The interrelationships among these activities have long been recognized, as illustrated in a 1957 study by a consultant for IRS entitled An Evaluation of the Regional Offices of the Internal Revenue Service, which noted that "the integral relationships that exist among the major IRS activities require that they be effectively coordinated." It concluded that "if the total IRS job is to be done well, the various functions must work together smoothly." More recently, IRS' new Strategic Business Plan (SBP) also notes the need for the effective integration of cross-functional activities.

To attempt to facilitate a coordinated agencywide approach to decisions, IRS has initiated a series of planning, implementation, and evaluation processes designed to integrate functional considerations into an agencywide agenda. The many management challenges confronting IRS' efforts to balance functional management needs with agencywide requirements are discussed in chapters 4 and 9.

In addition to these agencywide processes, a major reorganization was implemented in 1987 in order to improve communication throughout the organization, including among the various functions. Chapter 4 discusses the details of this reorganization.

Dealing With Millions of Taxpayers Annually

Annually millions of taxpayers must deal directly with IRS on sensitive financial matters. They may simply be seeking IRS' assistance to complete their filing requirements, or they may be undergoing a full IRS examination of their tax returns. IRS has long recognized the importance of these contacts, noting in a 1957 study that "in the aggregate, the administration of internal revenue legislation involves personal service to or dealings with the majority of the nation's citizens." The study added that "the confidence these citizens have in their government depends in considerable part upon the effectiveness of the members of the IRS organization who make these contacts." More recently IRS' SBP strongly reiterated the importance of these contacts by noting that "customer service and the quality of that service are the foundation on which all service activities rest." Customer service was identified as an area of "Commissioner emphasis."

Traditionally, IRS has initiated a number of efforts aimed at either maintaining or increasing employee quality. For example, in 1956, IRS initiated its "Blue Ribbon" program, which it characterized as "a major effort to increase the effectiveness of the Service by increasing the caliber and productivity of its workforce." This college recruitment and training program was specifically designed to encourage "top caliber" people to join and make a career of IRS. IRS' Strategic Business Plan has recently identified developing and maintaining a high quality workforce as a major area of emphasis.

IRS currently faces serious performance pressures in this area. Computer technology has heightened significantly IRS' exposure to public scrutiny by dramatically expanding its contacts with the public. At the same time, a more educated public is now more aware of their rights as taxpayers. Their expectations of receiving competent, timely service from IRS appear to be higher than ever. While these service demands appear to be rising, IRS' ability to effectively compete for "top caliber" people to join and make a career at IRS appears to be diminishing. Potentially higher service demands coupled with lower service capability put IRS in a potentially high-risk situation.

IRS management has initiated several new efforts to deal with these issues. Chapters 7 and 8 discuss these efforts in detail.

Objectives, Scope, and Methodology

The overall objectives of our management review of IRS were to make an agencywide assessment of management systems and administrative support functions and to develop specific recommendations on how IRS can bring about and sustain needed improvements.

A key feature of this review was that it was made jointly with IRS. Emphasizing cooperation and good communication, this joint evaluation approach stressed the early identification of the major management challenges confronting IRS. This permitted us to focus our efforts primarily on formulating a set of long-range future-oriented recommendations and enabled IRS to take immediate action in several critical areas.

Within this framework we independently evaluated IRS' management effectiveness in

- preparing for the future, by assessing its organizational structure and strategic management systems, including IRS-wide planning, budgeting, and policy implementation processes;
- providing quality service in an effective manner, by reviewing IRS' agencywide quality improvement efforts;
- maintaining workforce quality during a period of rapid change, by reviewing key personnel management efforts; and
- ensuring a strong system of clear management accountability for actions, by reviewing efforts to establish and maintain effective financial management and performance measurement systems throughout IRS, as well as efforts to evaluate program operations and monitor field activities.

IRS established an Executive Level Working Group to react to our work plans and preliminary findings and to facilitate communication and coordination throughout the review. This group consisted of a Deputy Commissioner, two Assistant Commissioners, one Regional Commissioner, one Service Center Director, one District Director, and the Assistant to the Commissioner (Legislative Liaison). The objective of this joint effort was to produce a report which would strive to embody the collective knowledge of both agencies. The review was done in accordance with generally accepted government auditing standards from April 1987 to August 1987, with selected updates of data during 1988, reflecting the latest status of IRS' actions in progress. The operations of the Office of the Chief Counsel were not covered in this review.

Evaluation Approaches Used

Consistent with our overall joint review framework, we used a set of specific measurement criteria and evaluation approaches that stressed early issue identification, open communication of preliminary findings with IRS so that corrective actions could be initiated immediately, and long-term recommendations. A variety of evaluation approaches were used.

To review IRS' management effectiveness in preparing for the future, we evaluated its strategic management systems, focusing primarily on IRS' evolving agencywide strategic planning process. To assess these efforts, we used criteria from our prior general management reviews,[1] planning guidelines issued by the Office of the Auditor General of Canada, and IRS' strategic planning guidelines. While an effective strategic planning process must be tailored to meet the particular needs of each agency, seven major elements seem to be essential to effective strategic planning systems (see table 3.1).

Table 3.1: Elements of Strategic Planning

Elements	Description
Analyze organizational environment	An organization's environment should be appropriately analyzed in terms of customer needs, technological changes, and socioeconomic trends. This analysis should feed into plan formulation efforts.
Assess organizational strengths and weaknesses	Objective assessments of organizational capabilities and performance should be incorporated into plans.
Consider alternatives	Meaningful and appropriate alternatives to current program delivery approaches should be considered in plan formulation.
Establish clear objectives	Objectives should be clear and periodically updated. Subobjectives and project goals should be linked to program objectives and be measurable.
Assign responsibility	Planning responsibilities should be clearly defined and communicated.
Link planning efforts	Strategic, operational, and project planning processes should be linked and be consistent. Planning should drive the budget process.
Establish feedback mechanism	Plan accomplishment should be closely monitored. Revisions should be made in a timely manner.

Using these criteria, we reviewed IRS historical strategic planning efforts and provided IRS with a detailed critique of initial drafts of its new Strategic Business Plan in May 1987. IRS used this critique, along with other

[1] Social Security Administration: Stable Leadership and Better Management Needed to Improve Effectiveness (GAO/HRD-87-39, Mar. 1987). Strong Leadership Needed to Improve Management at the Department of Labor (GAO/HRD-86-12, Oct. 21, 1985). Department of Transportation: Enhancing Policy and Program Effectiveness Through Improved Management (GAO/RCED-87-3, Apr. 1987).

internal feedback, to make adjustments to its plan. We have continued to use these criteria to assess each new draft of the plan.

We also reviewed IRS efforts—such as internal audit—aimed at providing top management with systematic feedback on IRS operations. Our analysis of IRS evaluation activities relies on criteria drawn from the Comptroller General's Auditing Standards and IRS' own evaluation guidelines. The attributes of an effective evaluation process are as follows:

- Agreed-upon performance measures are used to assess program results.
- Evaluation results are provided annually to top management and present a nationwide perspective.
- Evaluation processes are coordinated to ensure that evaluation coverage is properly assigned, sufficient, and nonduplicative.
- Evaluation staff is organizationally independent of program development and implementation.
- Evaluation staff members are well trained in evaluation techniques.
- Evaluation plans clearly delineate evaluation objectives, data collection, and analysis needs and coverage.
- Evaluation follow-up is rigorous to ensure implementation of suggested corrective actions.

Using these criteria, we provided IRS with a detailed critique of its draft review guidelines for its new National Office Review Program (NORP), a key field oversight process to be used by IRS top management, and the pilot test of this process in IRS' Western Region. On the basis of this critique, IRS made several changes to its process. We also reviewed IRS' Regional Office Review Program (RORP), the regional office process used to assess district office performance, by analyzing a sample of 61 IRS RORP reports. (See app. I, p. 149 for more details.)

To assess IRS management efforts to provide quality public service in an effective manner, we concentrated on IRS' quality improvement process. Using the criteria described on p. 103 of this report, we reviewed the formulation, implementation, and evaluation activities associated with this IRS-wide initiative. Our evaluation included using the services of a contractor experienced in quality improvement programs, the Institute for Resource Development, Inc., a Westinghouse Electric Company. We also assessed the effectiveness of the Productivity Enhancement Fund (PEF), an important part of IRS' agencywide productivity through quality effort, by reviewing the current status of 17 PEF projects, which accounted for 70 percent of the funds expended between 1984 and 1986.

To assess IRS management efforts to maintain workforce quality during a period of rapid change, we evaluated the progress of various IRS-wide human resources planning and evaluation strategic initiatives against IRS internal program criteria, and reviewed prior internal and external studies of IRS workforce issues. We also assessed IRS' process for considering personnel issues during the planning and implementation of major automation projects by comparing process procedures against IRS program criteria. In addition, we assessed IRS efforts to establish a new executive succession planning system using IRS internal program criteria.

To assess IRS' efforts to maintain a strong system of clear management accountability, we reviewed prior internal and external studies and assessed the progress of various strategic initiatives aimed at establishing performance measures using IRS program criteria. In addition, we also reviewed performance measurement efforts in three major program areas—Examination, Collection, and Returns Processing.

Using financial and information resource management criteria issued by the Comptroller General, we also reviewed efforts to establish and maintain effective financial and information management systems throughout IRS. Our review of financial management activities included assessing existing studies of IRS' administrative and revenue accounting internal control systems and organizational structure. In addition, we assessed IRS' major systems development efforts in the administrative and revenue accounting areas. Our review of information resource management activities included consulting with six major private sector firms—Aetna Life and Casualty, American Airlines, American Express, Sears Merchandise, Mellon Bank, and Citicorp—who have large decentralized operations similar to IRS, to help us make recommendations for improving IRS' management of information resources. We also drew upon extensive prior and ongoing GAO work in the information resources and the automated data processing (ADP) procurement management areas.

Questionnaires Administered to IRS Employees

To ascertain IRS employee opinions on the management practices of the agency, we sent a questionnaire to a random sample of 3,025 permanent, full-time employees at the GS-5 through GS/GM-15 levels and to all of IRS' senior executives. Using the criteria cited above, we inquired about such matters as strategic planning, resource allocations, staffing, budgeting, computer and financial management systems, automation initiatives, communications, and training and development.

A stratified random sample was drawn from the seven regions and the national office. Our sampling plan was designed to yield a 95-percent confidence level plus or minus 5 percent in making agencywide projections. Of the 3,025 questionnaires that were sent to permanent, full-time employees, 2,591 (85 percent) were returned. (See app. I for a description of our sampling plan, response rate by stratum, and sample errors).

Interviews With IRS Senior Officials

We also completed two sets of detailed structured interviews with senior IRS executives. In the first set of interviews dealing with organizational issues, all Regional Commissioners, Assistant Commissioners, and Service Center Directors (29 people) were included. In addition, we interviewed a representative sample of IRS District Directors (14 people) and a nonrandom sample of IRS' Assistant Regional Commissioners, Regional Directors of Appeals, and Regional Inspectors (19 people). A second set of interviews focused on planning and budgeting processes, personnel planning and evaluation activities, and financial and procurement systems. These were held with the senior IRS officials, all Regional Commissioners, and Assistant Commissioners.

We chose the officials to be interviewed and designed the interview forms. Over 50 percent of the interviews were done by our teams with the remaining done by IRS staff. We determined which officials the IRS teams would interview, tabulated and analyzed the interview results, and reviewed the results of the interviews done by IRS to ensure that no bias was present. We did a statistical analysis of the interview results that showed that our data did not significantly differ.

Discussions Held With Consultants and Former IRS Officials

To help us complete this review, we formed two consultant panels. These panels included four recent IRS Commissioners. Also included were information resource management experts, former congressional staff directors, tax practitioners, experts in general management, a state taxation senior executive, and former top level IRS officials. These panels reviewed our overall evaluation approach, critiqued our preliminary study results and provided comments on our report. Their suggestions were incorporated where appropriate.

Improving Management Direction to Prepare for the Future

Management Challenges

- Implement an effective strategic business planning process.
- Reassess IRS' 1987 reorganization to ensure that objectives have been accomplished.
- Develop a long-term strategy for reorganizing IRS' field compliance activities.

Key Recommendations

- Institutionalize link between the Strategic Business Plan and budget development.
- Assess 1987 reorganization.
- Examine service center-district office compliance roles.

Supporting Recommendations

Enhance effectiveness of the Strategic Business Plan by

- familiarizing other key organizations (OMB, Treasury, Congress) with the plan,
- establishing measures of accomplishments within the planning process, and
- implementing an effective feedback mechanism that measures and monitors IRS progress toward plan goals.

To effectively prepare IRS for the future, top management must deal with certain long-term management challenges. These challenges involve improvements in technology, human resource utilization, and taxpaper assistance. Specifically, IRS officials should concentrate on

- planning and implementing a much needed, multiyear conversion to modern information processing technology. This must be closely tied to a well-defined set of long-term mission priorities.
- effectively applying a wide range of technical job skills to administer an ever-changing tax law. This will require a responsive organizational structure that maintains good communication among technical specialties and clear managerial accountability for the services provided to IRS' clients.
- maintaining effective contacts with taxpayers to facilitate voluntary compliance with tax laws. This will require a field structure that remains responsive to increasing taxpayer demands for prompt and accurate service.

IRS has recognized the limited ability of the annual budgeting process to effectively meet long-term growth needs, take full advantage of technological advances, and improve taxpayer compliance. These issues simply are too large and complex to be met adequately through the exclusive use of a short-term process. An effective long-range or strategic planning process is required.

During the 1960s, IRS used such a long-range planning process to help manage its major multiyear effort to automate and transfer most returns processing activities from district offices to service centers. This plan helped provide the basis for preparing annual budget requests, initiating major taxpayer compliance research efforts, establishing operational priorities, and explaining IRS needs to the Treasury, OMB, and Congress.

These early long-range planning successes, however, were not sustained. Internally, more agencywide emphasis was placed on functional planning. The link between agencywide planning and the budgeting process became weak.

To improve its planning activities, IRS established the Strategic Management System in 1984. This system incorporated IRS' existing long-range and information systems plan. A key system component was the Strategic Plan, now called the Strategic Issues Plan. Stressing the need for IRS to be responsive to changes in its operating environment, the plan established a broad strategic agenda.

The Strategic Issues Plan is aimed at improving the agency's ability to proactively manage changing compliance, technology, and human resource environments. IRS identified four broad strategic issue areas in 1984: strengthening voluntary compliance; developing an information management strategy; enhancing recruitment and retention of employees; and balancing efficiency and effectiveness. In 1987, it added a fifth area, commitment to quality service. These areas were translated into 61 specific strategic initiatives, which addressed such issues as establishing a comprehensive, integrated ADP plan and pursuing cooperative efforts with states to enhance tax administration.

In 1987, IRS refined its Strategic Management System by adding a Strategic Business Plan (SBP) to help strengthen the link between planning and budgeting. Figure 4.1 illustrates the components of the current strategic management process.

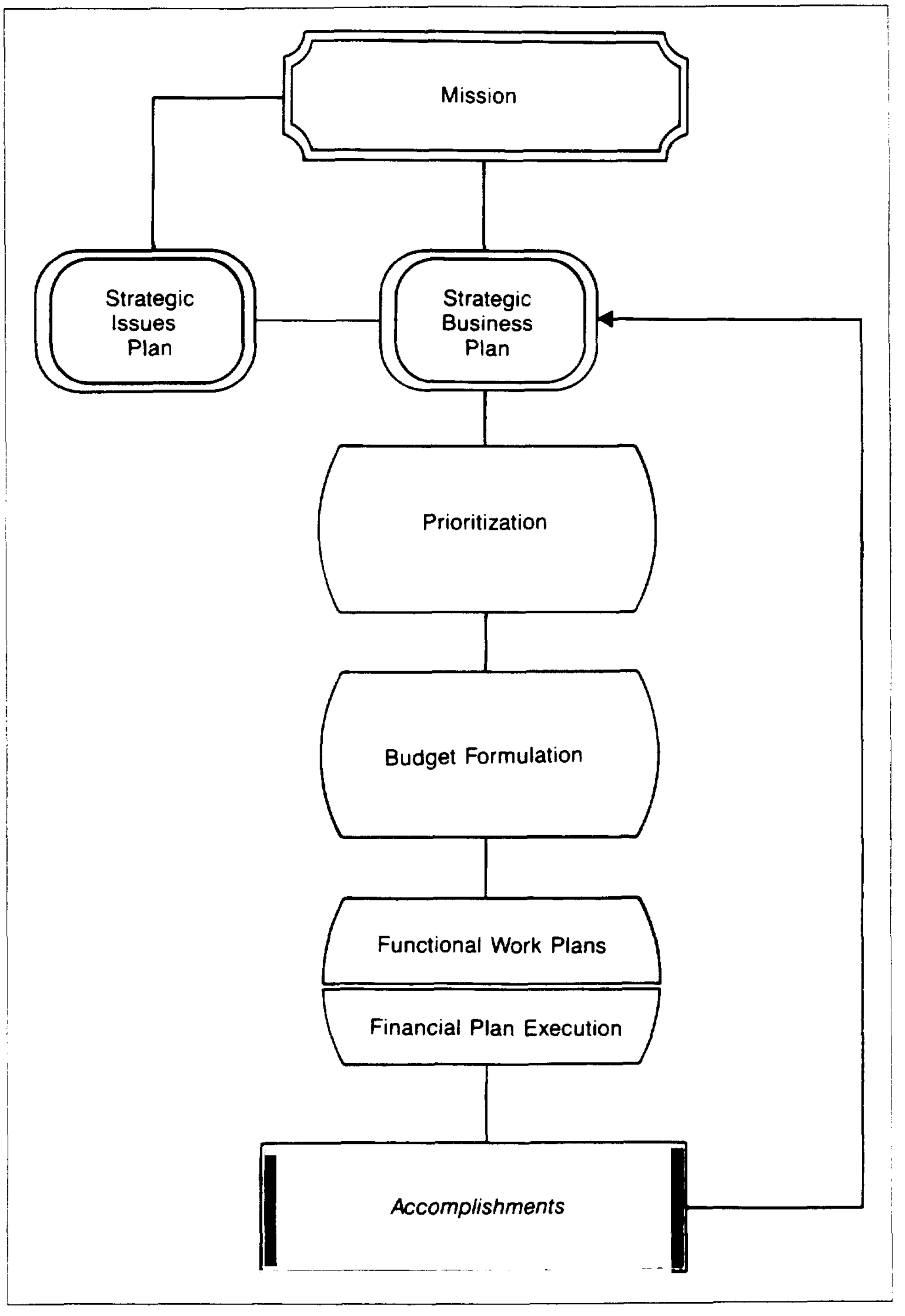
IRS also has recognized the need to keep its organizational structure responsive to the changing technical requirements of the ever-changing tax law. From 1952 to 1987, IRS has made several major changes to its organization that were intended to establish better communication and coordination among headquarters technical divisions and field offices. IRS' most recent reorganization was implemented in August 1987 in an attempt to, among other things, again improve organizational communication and accountability.

Maintaining a responsive field office structure to effectively serve compliance needs has been a continuing IRS concern. Over the past several years IRS service center involvement in compliance activities has continued to grow. These responsibilities have grown significantly and many of the IRS compliance managers we interviewed are concerned that the compliance role of the service centers and of the district offices needs to be clarified to ensure that future compliance needs will be effectively served.

Although IRS has initiated actions in these areas, important management challenges remaining include

- implementing an effective strategic business planning process,
- reassessing IRS' recent reorganization to ensure that reorganization objectives have been accomplished, and

Figure 4.1: IRS Strategic Management Process



- developing a long-term strategy for organizing IRS' compliance activities in the field.

Revised Strategic Business Planning Process Should Be Improved Further

In 1987, IRS refined its Strategic Management System by adding the SBP, primarily to help improve the link between planning and budgeting. The SBP is intended to provide a "comprehensive, servicewide, future-oriented focus" on what IRS should be doing to accomplish its mission. It will be used to: (1) drive and shape decisions on budget priorities, (2) assist in formulating functional plans, and (3) act as a benchmark to evaluate progress toward achieving objectives.

The link between planning and budgeting is most important. The SBP is built around IRS' three major activities: administering the tax system, collecting revenue, and encouraging and enforcing compliance with federal law. Each activity area is translated into a set of objectives. Each objective is supported by a group of strategies—21 in total—that reflect the general means for achieving the objectives. Approved SBP strategies should then dictate individual program actions that drive and shape the formulation of IRS' budget. Currently, IRS is in the process of implementing a set of specific actions aimed at supporting each of these major activities.

When IRS began the process of refining its Strategic Management System, it asked us to provide an independent critique of the effort. As this area had been identified within the GAO/IRS joint study program as an important area for review, we had already gathered information on IRS' strategic and long-range planning efforts through an employee questionnaire, structured interviews with IRS' top managers, and a review of the effectiveness of a sample of specific strategic initiatives.

Using a synthesis of existing strategic planning criteria (see ch. 3, p. 34 for a full description of the criteria), we found that the proposed new strategic planning process needed to

- improve the link between environmental assessments and the SBP;
- establish priorities among strategic initiatives;
- institutionalize the link between the SBP and budget development;
- familiarize other key external organizations (e.g., OMB and Congress) with the SBP; and
- establish an effective feedback process to measure and monitor progress toward achieving SBP objectives.

On the basis of comments received from GAO and various IRS internal operating groups, IRS made several changes to its proposed system. These changes include explicitly linking an expanded array of environmental assessments to specific SBP strategies and initiating a process to establish priorities among competing strategic actions within the SBP. While these revisions represent a good beginning, IRS must build upon these initiatives by implementing an effective feedback process to measure and monitor progress toward achieving SBP objectives and institutionalizing the link between the SBP and budget development.

IRS Should Establish Specific Progress Measures and Monitor Implementation

The SBP is intended to guide budget decisions and to be used as a benchmark to evaluate progress toward achieving IRS' objectives. To accomplish this, IRS management needs a way of measuring progress toward accomplishing plan objectives in order to hold managers accountable for results. However, many of the strategies and objectives currently in the SBP lack clear measures. For example, the SBP contains as objectives general statements that IRS

- promote a "quality first" environment,
- provide improved access to complete taxpayer information,
- improve responsiveness to the public, and
- identify and correct areas of noncompliance.

Translating these broad objectives into clear terms is critical to measuring accomplishments and providing effective direction to the agency. Only about 44 percent of the agency's Senior Executive Service (SES) or managers felt, to a great extent, that past IRS goals and objectives were sufficiently clear to assist them in carrying out their functional area planning responsibilities.

According to IRS' SBP, functional work plans and programs will "define in detail the plan for implementing specific actions to accomplish servicewide objectives and strategies." SBP "accomplishments" are to be the direct result of implementing actions defined in functional plans. IRS believes that the ultimate success of the strategic planning process depends on how well the organization accomplishes its planned objectives. Thus, effective progress measures will be important to the viability of the process.

IRS also will be challenged to institute an effective oversight mechanism within its strategic management process. Feedback on operational performance against plans should be obtained, analyzed, and used to adjust and revise plans where necessary. As it is now structured, the management system contains no oversight or feedback mechanism. Without an oversight process, top IRS management can receive little meaningful information on the status of program performance against the SBP's priorities, objectives, and actions.

Institutionalizing the Planning/Budgeting Link

A key factor in the overall success of the SBP will be the extent to which the plan drives IRS budget decisions. During some periods, IRS' long-range plans have played key roles in driving its budgets. In the late 1950s and early 1960s, when IRS was establishing service centers nationwide, its long-range plan played a key role in successfully communicating the agency's needs to Treasury, OMB, and Congress.

For the SBP to successfully drive the budget, it must also successfully convince Treasury, OMB, and Congress that it represents a clear, well thought-out vision of IRS' future. If the SBP is to be effective, these organizations must be familiar and comfortable with its overall direction.

IRS Needs to Assess the 1987 Reorganization

To enhance IRS' effectiveness, the Commissioner reorganized top level positions in August 1987. This reorganization was designed to provide greater accountability, improve lines of organizational communication, sharpen definitions of responsibilities, and reduce management spans of control. Underlying the 1987 reorganization were IRS managers' perceptions that the last major reorganization, in 1982, did not support efficient tax administration.

The 1982 reorganization created three Associate Commissioner positions. These top level officials reported to the Deputy Commissioner and were to be responsible for the coordination and management oversight of major functional areas (Operations, Policy and Management, and Data Processing). The three Associate Commissioners were intended to be policy managers, with operations, staffing, and decisionmaking remaining at the Assistant Commissioner level. Rather than reporting directly to the Commissioner, Assistant Commissioners were supposed to report to the Commissioner through the Associate Commissioners.

Following the 1982 reorganization, the policy role of the Associate Commissioners was questioned. Essentially, IRS' top managers were uncertain as to how the Associate Commissioners' policy role would interact with the Assistant Commissioners' operational role. For several years following the reorganization, IRS management felt uncomfortable with this arrangement.

The 1982 organizational structure, however, remained essentially unchanged until 1987. A Department of the Treasury study in 1987 highlighted concerns with IRS' decisionmaking process that focused on IRS' organizational structure and its implications for overall management direction and accountability. The report suggested broad changes in organizational structure to (1) increase senior managers' accountability, (2) improve management direction, and (3) permit high level attention to central management functions. Specifically, the report presented a number of options including restructuring the Associate Commissioner position, requiring service center processing activities to report directly to the national office, and creating a new Assistant Commissioner for Taxpayer Service.

While IRS was reviewing the Treasury report, organizational issues also were being studied in detail as a part of this management evaluation. As a result, GAO and IRS staff jointly developed the survey questions and obtained interviews with 62 of the 190 national office and field senior executives to provide an analytical basis for considering organizational issues.

Several key concerns were identified through this process. IRS executives primarily believed that the responsibilities of the Deputy Commissioner were too broad and that creating the Associate Commissioner positions in 1982 negatively affected IRS. The executives perceived that the Associate Commissioner's role was unclear, its impact on the coordination of policy issues was negative, and its decisionmaking influence was limited. The executives also said that IRS should create an Assistant Commissioner for Taxpayer Service to heighten IRS' responsiveness to the public. On the other hand, they believed that the Treasury proposal for having service centers report directly to the national office should not be adopted because it would sever important ties with the regions and districts.

Based in part on the information obtained from executives, IRS restructured the top tier of its organization in August 1987. The primary changes included (1) abolishing the positions of Deputy Commissioner and Associate Commissioner; (2) creating the positions of Senior Deputy Commissioner and two Deputy Commissioners (Operations) and (Planning and Resources); and (3) having Regional Commissioners and all

Assistant Commissioners except the Assistant Commissioner (Inspection) report to the Deputy Commissioners.

As the top career official in IRS, the Senior Deputy Commissioner serves as the Chief Operating Officer. He is responsible for the effective performance of all of the varied IRS operations and for assisting and acting for the Commissioner in planning, directing, coordinating, controlling, and giving executive leadership to all of IRS' policies, programs, and activities. The Senior Deputy Commissioner supervises the Deputy Commissioners and the Assistants to the Commissioner.

As shown in figure 1.1, the two-deputy commissioner structure requires each Deputy to have direct responsibility and accountability for carrying out major segments of the mission. Also, the new structure allows a single official below the Commissioner—Deputy Commissioner (Operations)—to be responsible for both program policy development and execution matters affecting field operations. The Deputy Commissioner (Operations) also supervises the Regional Commissioners and Assistant Commissioners who have responsibilities for enforcement, taxpayer service, employee plans and exempt organizations, and returns processing.

The Deputy Commissioner (Planning and Resources) also has substantial agencywide responsibilities. This official serves as the principal advisor to the Commissioner and Senior Deputy Commissioner on IRS-wide planning and the management of human, financial, and information resources. The Deputy Commissioner (Planning and Resources) also supervises the Assistant Commissioners who are responsible for planning and resources activities.

We believe that the 1987 reorganization was a very positive change, particularly placing the Regional Commissioners under the Deputy Commissioner (Operations). However, as we discuss in chapter 6, IRS also needs to establish a Chief Financial Officer position.

The success of the 1987 organizational changes also will depend substantially on whether the managers involved believe that the new structure has helped communication and decisionmaking. To ensure that the 1987 reorganization continues to have managers' support and confidence, IRS should evaluate its results to ascertain whether it has accomplished its goals. As discussed in chapter 5, we believe that the need for establishing a third Deputy Commissioner position focusing on the information resources management area should be a key issue examined by this reevaluation.

Defining Future Service Center and District Office Compliance Roles

The traditional role of service centers has been changing. Originally, service centers were established to centralize processing for the growing number of tax returns, tax remittances, and other processing-related functions. Since their inception in the 1950s, service centers gradually have assumed responsibility for additional programs primarily related to taxpayer compliance activities. Locating compliance programs in service centers also improved economies-of-scale by centralizing processing and making optimal use of off-peak processing staff.

During the past several years, service center staffing of compliance activities—primarily examination and collection activities—has grown rapidly in relation to IRS' total budget. Service center compliance staff years grew by 93 percent between fiscal years 1982 and 1987, while total IRS staffing grew by 22 percent. With the growth of information returns filings and other compliance activities, IRS expects service center compliance activities to continue to grow.

Service center compliance activities include a wide range of IRS compliance programs, many of which may require direct contact with the public. As shown in the examples listed in table 4.1, service center compliance programs cover important parts of IRS' overall compliance activities.

In total, IRS' compliance activities are shifting toward service center contacts with taxpayers rather than district office contacts. The growth of the Information Returns Program (IRP) illustrates this shift. IRS estimates that for fiscal year 1987, IRP will issue 3.5 million notices to persons who have potentially underreported their income. However, IRS estimates that it will examine 1.23 million returns through the examination program in the district offices.

Table 4.1: Examples of IRS Service Center Compliance Programs

Compliance program	Direct contact with the public
IRP/Underreporter processing—The documents matching program, also known as the Information Returns Program, is a computerized correspondence compliance program by which IRS systematically matches information, such as interest and dividend statements and wage statements (W-2) with the related income tax returns. The process enables IRS to identify income reporting discrepancies and nonfiling of tax returns so it can then contact taxpayers to verify facts and amounts in question before assessing additional tax or refunding excess credits.	yes
Correspondence examination—Examines form 1040 through correspondence and telephone contacts.	yes
Centralized returns classification—Determines which returns and related documents have the highest examination potential.	no
Automated collection system support—Supports IRS' computerized system, which provides collection case management. Service center support provides research assistance, inputs information from other sources, and generates levies and letters to taxpayers.	yes
Questionable refund detection program—Receives information from various sources to attempt to identify individuals and businesses involved, or suspected of involvement, in filing fraudulent returns. It screens questionable refund returns, does research, makes contact with employers, and alerts service centers of newly identified schemes.	yes
Abusive tax shelter detection program—Requests and receives returns, listings, and other information related to questionable tax shelters and analyzes these items for potentially abusive tax shelters.	no

Service center examination activities from fiscal years 1982 to 1987 have grown from about 1.5 million examinations to 3.5 million.

With this rapid growth as an underlying concern, IRS managers have commented that an organizational change could improve service center compliance activities. Approximately 70 percent or 18 of 26 IRS executives responsible for managing compliance activities that we interviewed said that compliance activities should be moved out of service centers to district offices. IRS managers cited several reasons why this shift would be beneficial, as table 4.2 summarizes.

Table 4.2: IRS Compliance Managers' Reasons for Moving Service Center Compliance Activities

Reason for compliance move	Number of responses[a]
Service center has a production—not compliance—focus	10
District offices better serve taxpayers	5
Better span of control and quality control in districts	4
Advanced information technology will allow for the shift	4
Other reasons cited	5

[a]Some managers cited more than one reason.

Other reasons cited included taxpayer complaints with service center compliance activities.

The IRS SBP recognizes the mission-related issues underlying the need to clearly delineate future service center and district office compliance roles. The plan recognizes compliance growth and the need for a commitment to quality service to taxpayers. Toward this end, it suggests (1) providing services at times and places convenient to taxpayers and (2) establishing a one-service concept, with each employee striving to meet all the taxpayer needs. Essential to meeting these needs is organizing services to taxpayers in order to assist them at one location.

Conclusions

IRS' top management must address a set of important long-term management needs to effectively prepare the agency for the future. These needs include planning and implementing a major multiyear conversion to modern information processing technology, effectively applying a wide range of technical job skills to administer the tax laws, and maintaining effective contacts with hundreds of millions of taxpayers.

Historically, IRS has recognized that its long-term needs are not effectively served by the incremental annual budgeting process. These needs are simply too large and too complex. IRS initiated a series of long-range planning processes to establish a clear agenda for the agency's future that will drive future IRS information technology requirements. These efforts met with mixed success. IRS' most recent effort, the SBP, represents a good beginning at clearly setting an agencywide agenda for the future. IRS must build upon this initiative by implementing an effective feedback process to measure and monitor progress toward achieving SBP objectives, and institutionalizing the link between the SBP and budget development.

IRS also has recognized the need to keep its organizational structure responsive to the changing requirements of the tax law. We believe IRS' most recent (1987) reorganization was a positive step toward addressing important organizational concerns. However, additional refinements in the information resources and financial management areas are needed, and IRS should assess the overall impact of this reorganization.

Maintaining a responsive field office structure to effectively serve compliance needs also has been a continuing IRS concern. These responsibilities have grown significantly to where concern now exists among many of the IRS compliance managers we interviewed that the roles of the service centers and the district offices in compliance activities need to be clarified in order to ensure that future compliance needs will be effectively served.

Recommendations

To enhance IRS' effort to effectively prepare for the future, we recommend that the Commissioner:

Key Recommendations

Institutionalize the link between the Strategic Business Plan and budget development. One of the SBP's objectives is to guide and shape budget decisions and operational work plans. In order for this to become reality, however, IRS needs to clearly establish priorities and make a concerted effort during the budget process to make decisions consistent with SBP strategies and priorities. Also, because IRS had not yet used its SBP to formulate a budget, it should formalize its procedures connecting the two. This would enhance understanding, permit greater enforceability, and establish the process as its normal decisionmaking tool.

Assess the 1987 reorganization. An evaluation of the effectiveness of the reorganization is needed to determine whether the reorganization improved accountability, communications, and decisionmaking. This reassessment should be initiated in the fall of 1988, allowing the reorganization to be in place about a year.

Examine the service center-district office compliance roles. IRS' SBP recognizes that improving service to the public and improving taxpayer compliance are long-term agencywide goals. Developing a plan for the location of compliance activities will assure that IRS is appropriately organized to provide the best service to the public. Further, articulating this plan will provide the direction needed to assure that information systems, human resources, and other support systems are structured to support the location of compliance activities.

Supporting Recommendations

To enhance the SBP, we recommend that the Commissioner take the following actions:

Other key organizations should be familiarized with IRS' plans. To facilitate the development and implementation of IRS' action plans, IRS should explain and seek acceptance of its plans from Treasury, OMB, and its congressional oversight committees. Given the multiyear nature of the SBP, the concurrence of these organizations is vital to sustaining the process.

Measures of accomplishment within the planning process should be established. All SBP strategies should be supported by a set of clearly defined measures of accomplishment written in their supporting work plans. Such measures would give management a basis with which it can gauge the strategy's progress. In addition, IRS also should use such measures to hold its executives and managers accountable for program performance.

An effective feedback mechanism should be implemented. IRS should establish an effective mechanism to provide top executives with nationwide evaluative feedback on the implementation of SBP strategies, action plans, and accomplishments.

Improving the Management of Information Resources

Management Challenges

- Plan and manage a major effort to modernize the computer-based tax administration system to meet IRS' mission needs and growing work load.
- Maintain effective central direction for technology management.
- Provide technical expertise in managing and applying state-of-the-art technology at the senior decisionmaking levels.

Key Recommendation

Before major modernization investments are undertaken, assess the new organizational structure for technology management and consider establishing a third Deputy Commissioner whose sole responsibility would be managing information technology.

Supporting Recommendations

- Consolidate accountability and responsibility below the Deputy Commissioner level for managing IRS' telecommunications program.
- Develop and implement a strategy for providing additional technical training and expertise to the senior information technology management team.
- Assess the current technology and information system strategy and initiatives for redesigning the tax processing system to ensure they will support the objectives specified in the Strategic Business Plan and accomplish the results expected.
- Monitor implementation of actions to improve contract administration.

IRS is one of the largest users of computers in the federal government. Over the last few years, IRS has had difficulty managing its information resources effectively,[1] and, as a result, both IRS and the public have suffered. The most visible effect occurred during the 1985 tax filing season when IRS computers contributed to delayed refunds, erroneous notices to taxpayers, heavy backlogs of work, and generally poor taxpayer service. IRS has rebounded from this situation but still faces critical challenges in managing a billion dollar a year information technology budget and planning a major redesign of its tax administration systems.

Recognizing this, IRS recently acted to strengthen the management of its information resources. To provide more central focus for technology management, IRS, in late 1987, consolidated critical technology management functions under a senior executive and designated him the IRS information resources management official. To ensure that mission planning drives information systems planning, IRS initiated a new strategic business planning process to identify the technology needed to support IRS' mission. IRS also elevated the organizational placement of its procurement function and strengthened the function's ability to administer contracts.

These steps should help improve technology management at IRS; however, additional steps are still needed. We believe, for example, that IRS needs to assess its new organizational structure for technology management to assure that it has the most appropriate leadership structure given the sheer size of IRS' technology program, the critical role it plays in IRS' mission, and the complexities of its planned modernization effort. Also, IRS should consolidate the responsibility and accountability for managing telecommunications resources, and provide greater technical expertise in managing and applying state-of-the-art technology.

[1] Information resources include the hardware, software, telecommunications, personnel, manual and automated procedures that provide the information necessary to accomplish agency or organization missions and objectives. Information technology refers to the hardware and software that make up the automated processes and systems, regardless of the technology involved.

IRS Must Effectively Plan and Manage a Difficult Modernization Program

IRS' tax administration function is highly visible and one of the most important in government. IRS' computer systems play a key role in tax administration. The accomplishment of an enormous and growing annual work load—the processing of tax returns, issuing refunds, and sending tax-due notices—is dependent on geographically dispersed information technology resources. IRS' proposed fiscal year 1989 automated data processing (ADP) budget is $992 million, or about 19 percent of its total budget request, including $176 million for telecommunications.

IRS' tax processing system, which is based upon a design developed in the early 1960s, consists of both manual and automated processes. This system is outdated and inefficiently designed, lessening the quality of service to IRS users and the public. The system prohibits ready access by employees to tax account data that are required to more adequately address taxpayer inquiries and meet other program needs. It also limits IRS' ability to deal with its mounting work load and hampers its efforts to be more effective. According to IRS and our own projections, the current system probably will not be capable of meeting IRS' processing needs by the early to mid-1990s. (See ch. 2.)

To correct these problems, IRS is pursuing tax system redesign, an ambitious modernization initiative. This modernization is intended to create a more distributed processing environment that will use technology that is more sophisticated and complex than IRS has now. For example, IRS intends to

- implement systems to capture, store, and transmit electronic images of tax return documents;
- replace the central tape-based master files with on-line data bases; and
- replace the shipment of data tapes with a nationwide telecommunications network that will permit automatic posting and IRS-wide access to taxpayer accounts.

Managing Information Technology at IRS—A Historical Perspective

Because its ability to serve the public depends on the performance of information systems, IRS must adhere to a high standard of performance in managing its technology resources, and in particular, its information systems modernization initiative. Federal regulations require agencies to assess their processing requirements, plan to meet their needs for technology efficiently and economically, and follow prescribed procedures in acquiring technology. Agencies must make comprehensive requirements analyses that define the problems to be solved and assess the costs and benefits of alternative solutions for meeting these requirements. In addition, according to federal guidelines, testing of acquired or developed software should be commensurate with a system's criticality, complexity, and project structure to assure the effectiveness and accuracy of systems.

IRS has encountered problems on different computer technology initiatives it has pursued recently, including a replacement of computer hardware at its service centers, the development of plans for modernizing the entire tax processing system, and the execution of individual procurement actions. IRS has initiated actions to address these problems.

Computer Replacement Disrupts Tax Processing

IRS experienced numerous problems during 1985 that disrupted the processing of tax returns and strained taxpayer relations. Some of IRS' 10 service centers had difficulty processing tax returns in a timely manner, controlling the flow of tax returns and tax data through the processing system, and keeping work load inventories at manageable levels. As a result, IRS' operational costs increased, the government's interest payments to taxpayers increased as refunds were delayed, IRS' image suffered as the public became increasingly frustrated, and IRS employee morale and pride in the organization declined significantly.

Most of these problems were related to newly installed computer hardware and software at the service centers. The new computer system failed to adequately meet the service centers' processing requirements, and IRS had to procure additional computer capacity and rewrite several computer programs.

As we reported,[2] this situation occurred because IRS management did not have sufficient controls in place during critical phases of the project to ensure timely and informed decisionmaking and did not emphasize quality control during the software conversion phase of the project. For example, no steering committee existed to ensure that all affected parties were represented in the decisionmaking process during critical acquisition and implementation phases, and the project office that had overseen development of the project plan was not involved in its implementation. Consequently, issues related to testing system performance, unplanned software enhancements, and software testing did not receive appropriate attention, and important management functions were not

[2]See Tax Administration: Replacement of Service Center Computers Provides Lessons for the Future (GAO/GGD-87-109, Sept. 23, 1987).

carried out. In addition, IRS rewrote computer programs without fully reviewing software design and coding to ensure compliance with its internal standards, and put rewritten programs into production before they were fully tested.

Delays in Recent Modernization Initiatives

Since 1982 IRS has pursued four developmental approaches for the Tax System Redesign initiative, ranging from contractual to in-house design and development of a new system.[3] The first three approaches did not proceed beyond the conceptual phase, partly because leadership changes within IRS and Treasury hampered redesign attempts. Also, the initial redesign strategies were challenged as not being clearly tied to IRS' mission needs. Its estimated time frame for full implementation of the target design has slipped from 1995 to 1998. As a result, IRS will have to contend with the problems in its current system for several years longer than expected.

Weaknesses in IRS' plans also contributed to these delays. For example, in February 1986, Treasury did not approve an IRS request for additional computer equipment for the tax processing system. Treasury believed that approval of such a request would be an expensive equipment acquisition that was not tied to any well thought-out solution to IRS' systems problems. As IRS began to answer Treasury's concerns, the Assistant Commissioner for Tax System Redesign concluded that a viable management plan for the redesign could not be developed until IRS established more effective technology management and planning processes.[4]

In October 1986, IRS began what it describes as an evolutionary approach to the redesign, meaning that improvements would be made incrementally to the current system until redesign objectives have been met. As of March 1988, IRS had approved a basic management plan and preliminary designs for the redesign; Treasury officials now approve the overall direction set forth in this plan.

[3]For detailed information on events related to Tax System Redesign development, see ADP Modernization: IRS' Redesign of Its Tax Administration System (GAO/IMTEC-88-5FS, Nov. 9, 1987), and ADP Modernization: IRS' Tax System Redesign Progress and Plans for the Future (GAO/IMTEC-88-23BR, Apr. 27, 1988).

[4]On August 30, 1987, IRS renamed the Office of Tax System Redesign the Office of Information Systems Development. According to IRS, this change reflected the Office's goal of improving and modernizing the tax administration systems and the greater scope of its responsibilities in planning, data administration, and providing shareable technology resources to various segments of IRS. In this chapter, we use both titles depending on whether the evidence refers to events before or after the change in name.

Problems in Handling Technology Procurements

IRS has encountered problems in justifying its requirements and awarding and administering technology contracts. For example:

- On several occasions, IRS contract specialists made substantial errors in the price evaluation of vendor proposals for major computer procurements.[5] The errors were attributed to inadequate cost evaluation procedures; lack of experience in the evaluation teams; and inadequate training, supervision, and quality review.
- In November 1986, we reported that IRS did not need to undertake a planned $186 million computer acquisition.[6] We pointed out that IRS had not done a comprehensive analysis of its current and future work loads, nor had it assessed the impact these work loads would have on its computer resources.
- IRS reports it exceeded its procurement authority on a $16.5 million ADP contract for multifont optical character recognition equipment by over $4 million. In addition, IRS made nearly $1 million in overpayments on an ADP maintenance contract between January 1985 and September 1986. These problems occurred because contract administration officials did not know the total amount IRS was spending on ADP contracts or the amount of individual payments.

IRS is taking action to improve its contracts administration. According to the Contracts and Acquisition Division Director, new management information software is being developed to provide information the division needs to ensure that IRS does not exceed its procurement authority or overpay for ADP goods and services. IRS plans to have the contract administration portion of this software operational in 1990. In addition, IRS has instituted a training program for contract specialists that is intended to prevent errors in future price evaluations. This training has begun.

[5] Mini/Micro Vendor Selection Process, IRS Internal Audit Division (Jan. 31, 1984) and The Design and Development of the Automated Examination System, IRS Internal Audit Division (Jan. 13, 1987). Decision of the General Services Administration Board of Contract Appeals on procurement protest of contract No. TIR 85-0303 (Jan. 23, 1986). See Board of Contract Appeals cases GSBCA Nos. 8208-P, 8210-P, and 8266-P.

[6] Computer Capacity: IRS Must Better Estimate its Computer Resource Needs (GAO/IMTEC-87-5BR, Nov. 3, 1986).

Federal Guidance and Industry Experience Highlight Key Management Functions

Agencies have considerable latitude in establishing processes to manage information technology. We found general agreement between federal guidance, data processing literature, and industry practice on the importance of several key management functions—strategic planning, telecommunications, data administration, and standards.

Guidance on Information Technology Management

The Paperwork Reduction Act of 1980 and the Office of Management and Budget's (OMB) implementing directive, Circular A-130, require departments to carry out information management in an efficient, economical, and effective manner. Treasury is required to establish a clear and identifiable line of accountability for managing technology throughout the Department. This includes appointing a senior official for information resources management, preparing a 5-year plan for information technology, and ensuring that the Department's information systems do not overlap each other.

OMB and General Services Administration (GSA) planning guidance stress the importance of basing information system plans on clearly articulated and measurable long-range program objectives. Treasury requires its major suborganizations, such as IRS, to establish clear accountability by consolidating technology management functions within a single office reporting to a designated senior official for information resources management. Treasury also requires each suborganization to prepare a 5-year information systems plan for technology management that links ADP plans to its mission, goals, objectives, and strategic plans.[7]

In addition, GSA guidance says that agencies should document their telecommunications management strategy. The strategy should include decisions concerning the organizational placement of telecommunications responsibility within the agency, the integration of voice and data communications staffs, and management policies and service quality criteria.

[7] Planning: For purposes of this chapter, business plans, or long-range plans, are plans to identify, define, and accomplish the missions, goals, and objectives of the business organization. An objective is a measurable result, not an activity, that management has agreed to accomplish within a specific time frame. Technology plans (e.g., an information systems plan) build on agency business plans; they develop the policies and direction for the information technology management program within the agency and specify technology activities and resources necessary to achieve the documented missions and objectives.

Data processing literature supplements the more general federal guidance on information resources management. The literature recognizes that complex distributed processing strategies require vigilant management control and planning. One reason is that the strategies often are implemented under management philosophies in which users (1) have considerable latitude in decisions on how to apply technology to business problems and (2) control individual systems projects. Central management, therefore, should provide a basic framework for ensuring that separate development activities are coordinated and integrated. This framework should include ground rules for managing and using corporate data (data administration), and standards for maintaining compatibility and quality in user-developed systems over time. It is important that the framework and accompanying management processes come from a high organizational level; they must span functional organizational lines, support long-term organizational strategies, and ensure top management involvement in decisionmaking.

Private Sector Managers' Views on Management Success Factors

We met with senior technology managers in six private sector firms to discuss opportunities for improving IRS' management of information resources. In selecting the firms, we took into consideration IRS' intention to move to a massive and complex application of data base and telecommunications technology, and the fact that such technology could fundamentally change the way IRS accomplishes its mission. On the basis of our consultants' judgment and available literature, we selected firms that (1) on balance had technological environments similar to IRS' (large and geographically dispersed operations, widely dispersed customer bases, large investments in computers, high communications activity between geographically separated computers, and high standards of data integrity) and (2) had reputations for the successful and innovative use of technology. The firms and our principal contacts are listed in appendix II.

We recognize that government agencies face additional technology management challenges that private sector firms do not (e.g., special laws and regulations requiring competitive procurements). On the other hand, private sector firms and government agencies face many common challenges. Each must (1) assess available and emerging technology and decide how it should be applied in support of the entity's mission; (2) plan for technology to meet the needs of users with diverse and often competing needs; (3) implement technology efficiently, economically, and effectively; and (4) be responsive to concerns of those with oversight authority. The additional oversight and procedures that government agencies like IRS face do not alter the basic processes needed to manage technology. In fact, they underscore the need to carry out the basic processes effectively.

According to the senior technology managers, three keys to successful technology management include: (1) focused, virtually full-time management by a senior executive with both business and technology knowledge and experience; (2) active, centralized control of key activities (strategic technology planning, data administration, technology standards, and telecommunications); and (3) corporate technology strategies that mirror business strategies, as well as a corporate commitment to the technology program, particularly among top management.

The senior technology managers, commonly referred to as the Chief Information Officers, provide the focus for technology management in their companies. They play an essential role in shaping the technology programs and fostering a shared commitment to company programs and technology goals. Three of the managers report to the Chairman of the Board or Chief Operating Officer and three report to the next lower level. Each, however, had direct access to the company's Chief Executive Officer and other policy-level officials, and considered this a critical factor in their success.

In five of the six companies, the Chief Information Officer devotes virtually full-time attention to information technology policy and management. The other Chief Information Officer has additional duties, but full-time technology management functions are centralized under him. All officers have broad managerial experience and in-depth knowledge of and extensive practical experience in managing major technology projects.

These senior technology managers said it is essential that the company have a strategy for relating information technology to the business environment. Their companies manage technology as a strategic resource and consider this in planning to meet corporate goals and objectives. The managers said they are responsible for maintaining their firm's long-term technology vision and ensuring that long-range technology plans mirror the company's business vision and strategic plans.

Each Chief Information Officer actively participates in technology planning. In three companies, technology managers in subordinate business units develop technology plans in support of the units' strategic business plans. The officer, using a central planning staff or committee of technical managers, compiles and critiques these plans to ensure consistency with the corporate technology vision and standards. In the other three companies, officers use their own staffs to develop a technology plan based upon their review of the corporate business plan and discussions with business executives.

The Chief Information Officers believed it was important to focus top management attention on technology policy and shaping the company's overall technology design and structure. Although each company had different functions to meet their particular organizational needs, there was general agreement that the following functions are key and require central direction:

- Setting standards for development and acquisition of software and hardware.
- Data administration—setting standards for describing, storing, and retrieving corporate data.
- Design and management of telecommunications.

They said that issuing and enforcing standards for systems development and acquisition is a principal means for communicating the company's technology vision and policy.[8] They also said that standards provide an effective tool for ensuring that technology initiatives undertaken by various entities within the company are consistent with that vision and corporate strategy.

The Chief Information Officers believed that centrally managed telecommunications is important because it is a common, shared resource that allows their companies' information systems to obtain and exchange data. Most of the six firms had consolidated the management of voice and data communications in the Office of the Chief Information Officer. The reason, according to one, was that the more substantive strategic decisions in telecommunications are occurring in data management.

[8] Policies: The set of fundamental principles reflecting management's philosophy for applying information and its related resources to meet the organization's mission.

IRS Needs a Strong Focus for Key Management Functions

IRS is moving toward a distributed, user-driven technology, but has not been able to make effective central management decisions. IRS did not have a strong focus for managing information technology at the senior executive level until August 1987. The functions of strategic technology planning, data administration, technology standards, and telecommunications were dispersed across several offices. The Commissioner's designated policy advisor on information technology, as well as several other technology managers, had a strong IRS and management background, but most managers lacked the kind of background in technology that industry managers generally believe is important to successful use of technology. In addition, IRS planned for information technology without the benefit of a strategic business plan. IRS is taking a number of actions to address these problems.

IRS Did Not Have Adequate Technology Management Focus

Until August 1987, IRS did not have a focal point for technology management as found in the practices of our sample of private sector firms. Responsibility and accountability were diffused; technology planning, telecommunications management, and data administration and standards were split between two of IRS' three Associate Commissioners and, below them, across four Assistant Commissioners. While the Associate Commissioner for Data Processing appeared to have line management responsibility for data processing, his role, like that of the other two Associate Commissioners, was essentially that of a policy adviser to the Commissioner (see ch. 4). Line management responsibility and authority resided with the Assistant Commissioners. By preventing coordinated and proactive management of technology, this condition impeded IRS' progress in redesigning its tax processing system and improving its use of technology.

Technology Planning

IRS' information technology planning was not sufficiently focused to form a vision and integrated plan for future use of technology.[9] Although responsibility for planning resided with the Assistant Commissioner for Planning, Finance, and Research, that office generally prepared the information systems plan by (1) compiling initiatives and strategies planned by other Assistant Commissioners and (2) developing statements of overall strategies. At the same time, the major technology resource managers—the Assistant Commissioners for Human Resources

[9] By vision for future use of technology, or vision, we mean a general description of an agency's technical philosophy—its future architecture, policies, strategies, and standards. Architecture refers to the components of an automated information system, including the hardware, software, and telecommunications.

Management and Support, and for Computer Services—planned to support the individual initiatives at the project level, while the Assistant Commissioner for Tax System Redesign planned IRS' future tax administration system. The information systems planning process, while permitting a limited synthesis of these various efforts on an annual basis, did not permit detailed review and analysis to detect and resolve overlapping and duplicative systems initiatives.

The true oversight of technology planning came from the Automation Policy Board. The Board's responsibility was to approve or disapprove the overall information systems plan as well as individual initiatives. Based on members' biographies, discussions with officials who worked with the Board, and review of the Board's operating practices, however, we believe the Board did not have the expertise or staff resources to evaluate and shape IRS' direction in information technology. It received its primary support from small, nontechnical staffs in the Executive Secretariat and the Office of Planning, Finance, and Research and did not receive dedicated technical staff support from either Computer Services or Tax System Redesign.

Because it lacked the analytical support of a dedicated staff, the Board could not actively assess the combined effect of IRS' numerous initiatives and resolve IRS-wide technology planning issues. Instead, it depended on lower organizational levels, where planning was diffused, or on automation implementation control groups, which were intended to concentrate on issues relating to single projects.

Further, the Board's review of the information systems plans was limited. Between January 1985 and March 1987, only 3 of the Board's 19 meetings were devoted to information systems plans. The Board did not review the fiscal year 1989 plan. According to the former Associate Commissioner for Data Processing, the Board generally did not use the information systems plan as a decision tool in its deliberations, since most members did not have detailed familiarity with the plan because of its large size.

Telecommunications Management

IRS' management of telecommunications is divided between two Assistant Commissioners. This is not consistent with federal telecommunications management guidance, private sector management trends, and IRS' desire to provide integrated data communications for the redesigned tax administration system. The Assistant Commissioner for Human Resources Management and Support is IRS' overall telecommunications manager. He designs and acquires communications capability and handles all aspects of voice and general communications management including planning, budgeting, and preparing the telecommunications portion of the information systems plan. The Assistant Commissioner for Computer Services is responsible for determining user requirements for data communications.

According to assessments by IRS telecommunications managers in early 1987, the division of telecommunications responsibility extended the time required for IRS to acquire data communications. Requirements are evaluated in Computer Services and communicated to Human Resources where they are translated into procurement actions. Since Human Resources controls the final specifications, a period of negotiation may be required. Also, portions of the evaluation work may be redone. This process has at times been lengthy because the two offices did not share the same technical philosophy on some issues. Although there was no consensus between the managers concerning the extent of the acquisition problems, they agreed that they had overcome them during 1987 with additional coordination.

Electronic Data Systems Corporation, a data processing and telecommunications consulting firm, reported in 1985 and 1986 on IRS' data communications operations. The firm found that IRS lacked a strategy and overall direction for telecommunications. It also found that telecommunications management was diffused in the service centers and telecommunications planning was being done on a system-by-system basis. As of May 1988, IRS did not have an overall telecommunications plan.

In two organizational studies IRS did in 1986, it concluded that the telecommunications functions should be consolidated. IRS postponed action, however, when officials, while agreeing on the need for consolidation, were unable to agree on how to consolidate.

Data Administration and Standards

Strong data administration and standards ensure compatibility among separate development efforts and provide a foundation of essential management control for user development of information systems. According to IRS' March 1988 Information Systems Development Management Plan, users cannot readily access data because IRS' separate systems are incompatible, use different control or program languages, and contain data in different descriptions and formats. In addition, IRS believes the data in the separate systems have become redundant and inconsistent. IRS recognizes that it needs to strengthen its standards program and has taken steps to do so.

Management Perception

During our review, we surveyed IRS' senior executives in mid-1987 and found that most did not believe that IRS had an official or an organizational component with clear responsibility for information technology management. As shown in table 5.1, 54 of 62, or almost 90 percent, of the executives believed that IRS did not have a clear organizational focal point responsible for the overall management of information resources. Moreover, in responding to another question, 48 of the 62 executives believed that such a focus was needed. Since these executives have a major responsibility in successfully implementing technology for IRS' day-to-day operations, the findings indicated a lack of confidence in IRS' approach to technology management. These perceptions, we believe, added to IRS' problems in managing its information resources.

Table 5.1: IRS Executives' Perceptions of Whether Organizational Responsibility for the Overall Management of IRS' Information Resources is Clearly Defined

Response	Number	Percent
No	54	87
Yes	7	11
No opinion	1	2
Total	**62**	**100**

Source: GAO survey of senior IRS executives, 1987

Business Goals and Objectives Should Guide IRS Technology Plans

Over the past few years, several functional groups did planning for information systems and plans were prepared without the benefit of a clear statement of IRS' long-range business goals and objectives for meeting its mission. As a result, IRS was unable to clearly define its redesign objectives or their relation to IRS goals and objectives, and the initiative was delayed. More recently, IRS has begun taking action to correct this problem.

During 1983 and 1984, IRS shifted the responsibility for developing the overall information systems plan. Before 1984, the Assistant Commissioner for Computer Services was responsible for developing these plans. Beginning in 1984, with the development of the information systems plan for fiscal year 1986, the Assistant Commissioners for each functional area (e.g., Collection, Examination, and Returns and Information Processing) became more a part of the process and were given responsibility for developing their own plans. The Assistant Commissioner for Planning, Finance, and Research then merged these individual plans to form an IRS-wide information systems plan.

In reviewing information systems plans after fiscal year 1986, Treasury began requesting that IRS better tie its long-term plans for information systems to the organization's overall mission goals and objectives. In April 1985, Treasury informed IRS that its fiscal year 1987 Information System Plan did not adequately specify how its use of information technology would support its overall mission goals and objectives.

In May 1986, IRS issued an agencywide long-range plan, which was a forerunner to a strategic business plan. The long-range plan generally elaborated on the mission goals and objectives and the information system strategy described in the fiscal year 1988 Information Systems Plan. It also included nontechnology initiatives for meeting mission goals and objectives. Treasury, however, expressed concern about fragmentation within the fiscal year 1988 plan and lack of coordination between some functional areas. Treasury said that the plan must represent the direction to be followed by all IRS management.

As discussed earlier, these planning problems slowed IRS' modernization program. IRS' planning problems also were reflected in the lack of a broad base of support for the information systems plan among its senior executives. In our survey of all senior IRS executives, we found a great deal of uncertainty about the adequacy of the information systems plan and its support of IRS' mission.[10] As shown in table 5.2, 33 percent believed the plan was inadequate, while 29 percent believed the plan was adequate.

Table 5.2: IRS Executives' Opinions on the Adequacy of the Information Systems Plan

Response	Percent
Inadequate or very inadequate	33
Neither	26
Adequate or more than adequate	29
No basis to express an opinion	13
Total	**100[a]**

[a]Does not add to 100 percent due to rounding

Source: GAO survey of IRS employees, 1987.

[10]Given when the questionnaire was answered, executives' impressions would have reflected their knowledge of plans up to and including the Fiscal Year 1988 Information Systems Plan, April 11, 1986.

In developing its fiscal year 1989 Information Systems Plan (issued Feb. 1987), IRS used the long-range plan for internal business planning guidance. Treasury commended IRS for an improved plan, noting in particular that its new information systems initiatives were tied to mission need statements. Treasury did suggest, however, that the mission need statements could be improved by including measurable and quantifiable statements of the problems to be solved.

IRS Takes Action to Strengthen Technology Management

Recognizing the importance of improving its technology management, IRS made several changes during 1987. In a major reorganization on August 30, 1987, IRS consolidated all major technology management functions and responsibilities under a single senior executive. The official occupying this new position—the Deputy Commissioner for Planning and Resources—reports directly to the Commissioner and the Senior Deputy Commissioner (see ch. 1). IRS designated the new Deputy Commissioner as its senior information resources management official, akin to a chief information officer in private industry, and appointed him Chairman of the Information Systems Policy Board (ISPB), previously the Automation Policy Board.

In addition, IRS increased the responsibilities of the Assistant Commissioner for Information Systems Development (previously Tax System Redesign). In early 1987, the Assistant Commissioner was given responsibility for overseeing tax systems development and implementation planning within IRS and was granted membership on the new ISPB. In June 1987, IRS moved standards and data administration under the Assistant Commissioner, elevated the function to the division level, and gave it the added responsibility of issuing IRS-wide data communications standards.

The Assistant Commissioner is responsible for formulating IRS' technology vision and preparing and publishing a management plan to (1) depict the total concept for the redesign of the tax administration system and (2) provide guidance to those managing information system initiatives to meet the particular needs of specific departments or users in the agency. In March 1988, the Assistant Commissioner issued an approved management plan for information systems development, which included milestones, planning guidelines, preliminary design concepts, and an interim and target architecture for the redesign.

To carry out his responsibilities, the Assistant Commissioner participates as a partner with Assistant Commissioners of functional areas in development and implementation planning for the tax administration system and the associated tax information systems. He ensures that planning for all tax-related information systems initiatives is fully coordinated and assesses information systems initiatives for consistency with tax system redesign planning and potential duplication of effort before their consideration by ISPB. As a result of these changes, the Assistant Commissioner has many of the functions that are important to establishing clear responsibility for directing technology.

Additionally, in 1987, IRS initiated an annual two-phased strategic business planning process under the direction of the Assistant Commissioner for Planning, Finance, and Research. The process is designed to improve program planning and integrate information systems planning with it. One phase, completed in September 1987, established draft program objectives and strategies, including those for information systems. The second phase incorporated Assistant Commissioners' supporting action plans, which included the technology initiatives that formerly comprised the information systems plan. In March 1988, to meet Treasury's requirement for a fiscal year 1990 information systems plan, IRS submitted the initiatives to Treasury.

Planning responsibilities for the Assistant Commissioner for Planning, Finance, and Research include accountability for the information systems plan (now the technology subset of the SBP), and responsibility for ensuring the consistency of any new information systems initiatives with SBP objectives and strategies. The Assistant Commissioner participates as a member of ISPB when information systems planning or budgeting issues are discussed.

More Steps Needed for Effective Management of Information Technology

Changes IRS made recently should improve the management of its technology program; however, the program could be strengthened if IRS were to

- assess its recent organizational change and consider establishing a third Deputy Commissioner whose sole responsibility would be managing information system technology;
- provide greater technical expertise at the senior decisionmaking level; and
- consolidate accountability and responsibility for technology planning and telecommunications management below the Deputy Commissioner.

Full-Time Attention

The Deputy Commissioner for Planning and Resources has a range of responsibilities. As IRS' senior official for information technology management, he has the sizable task of creating IRS' technology vision and developing and monitoring strategies for introducing that technology into the agency to improve its ability to carry out its mission. Like chief information officers in the private sector, the Deputy now has the authority necessary for developing the vision and implementing the strategy—central control over technology planning, telecommunications management, and standards. However, unlike his private sector counterparts, the Deputy Commissioner also has other substantial and equally important duties. For example, his other responsibilities include

- strategic management programs for the entire agency;
- financial management and budget development and control for the entire agency;
- human resource management programs for all of IRS' 102,000 employees;
- facilities management and maintenance for the entire agency; and
- research of new techniques and methods for improving agency operations and administering the Nation's tax laws.

These additional duties will place large demands on the Deputy's time and will detract from the amount of attention he will be able to commit to IRS' technology management program, which also will place large demands on his time. As tax system redesign progresses through implementation, the Deputy also will be faced with dramatic changes within the technology management area and will have a key leadership role in managing these changes in the application of technology in other areas as well.

Technical Expertise

Senior managers face significant technical challenges over the next decade to maintain IRS' current antiquated systems and move to redesign the tax administration system with current state-of-the-art technology. These challenges extend to all senior managers because virtually all tax administration functions are highly dependent on this technology now and will be in the future. Operating the current systems will cost about a billion dollars in 1989, and the modernization effort will be even greater.

IRS senior level management has extensive managerial experience and the technical expertise necessary to keep IRS' current systems operational. However, the Deputy Commissioner for Planning and Resources and his frontline managers have far less experience in managing and introducing state-of-the-art technology into a major organization like IRS.

Additionally, the Deputy Commissioner for Operations and his senior managers need to raise their level of knowledge and experience in state-of-the-art technology because they also have key decisionmaking roles in the redesign program by approving and managing major ADP projects for their respective functional areas.

Technology Planning

Below the Deputy Commissioner, accountability and responsibility for technology planning remains diffused among subordinate Assistant Commissioners. The Assistant Commissioner for Information Systems Development is responsible for planning and integrating initiatives to redesign the current computer-based tax administration system and the associated tax information systems. This includes responsibility for ensuring that planning for all tax-related information systems initiatives is fully coordinated, and that the various information systems can be connected or exchange data and do not unnecessarily duplicate one another in whole or in part. Concurrently, the Assistant Commissioner for Planning, Finance, and Research is responsible for preparing the information systems subset of the SBP, and coordinating the information system planning process with the overall IRS strategic planning process. He is accountable for the information systems subset, as well as ensuring that new information systems initiatives are consistent with the SBP. According to IRS, the two Assistant Commissioners must work together to develop and package a viable, technically sound plan.

As a result, no single executive below the Deputy is both responsible and accountable for the planning of IRS' technology program as a whole. The Assistant Commissioner for Information Systems Development is responsible for formulating the agency's technology vision, ensuring that information systems initiatives are consistent with it, and planning for their development and implementation. He is not, however, accountable for the information systems plan, which essentially lays out IRS' strategies and implementation plans for achieving that vision. This accountability is placed with the Assistant Commissioner for Planning, Finance, and Research.

Telecommunications

Below the Deputy Commissioner, telecommunications management responsibilities are also diffused. The Assistant Commissioner for Human Resources Management and Support is IRS' overall telecommunications manager. He is accountable for designing and acquiring all communications systems and preparing the telecommunications portion of the information systems plan. The Assistant Commissioner for Computer Services is accountable for determining requirements for data communications and is the principal customer for data communications.

Technology trends, private sector practice, and federal guidance suggest that the management of voice and data communications should be merged. This guidance also suggests that central management properly resides in an information technology function unless specific agency circumstances warrant otherwise. While IRS has used telecommunications primarily for voice transmission, decisions on data transmission will become increasingly important in the future as IRS makes extensive use of data communications in its redesign of the tax processing system.

IRS is taking action to further study the telecommunications issues. In early 1988, IRS formed a Telecommunications Strategy Task Force, under the direction of the Assistant Commissioner for Information Systems Development, to complete the formulation of the long-range planning for telecommunications systems and the direction of telecommunications management in IRS. According to IRS, the task force will have completed the IRS long-range telecommunications strategy in late 1988.

Conclusions

Successfully introducing new technology and smoothly making the transition at IRS without degrading the quality of its service to the public will require strong leadership and direction, extensive technical expertise, and proper management tools for informed decisionmaking. Meeting these requirements presents a major challenge for IRS.

Large private sector firms that met similar challenges provided leadership and effective decisionmaking by designating a Chief Information Officer with direct access to the Chief Executive Officer and other top executives. Their successful management of the technology programs was largely dependent upon (1) focused, virtually full-time management by a Chief Information Officer with business and technology knowledge and experience; (2) active, centralized control of key activities (strategic technology planning, data administration, technology standards, and telecommunications); and (3) corporate technology strategies that mirror business strategies as well as a corporate commitment to the technology program.

Recently, IRS made a number of changes that are consistent with these success factors. Among them was the designation of a Deputy Commissioner for Planning and Resources, with responsibilities similar to those of a Chief Information Officer. To carry out his responsibilities, he relies upon four senior executives. Primary among them is the Assistant Commissioner for Information Systems Development, whom the Deputy holds accountable for formulating the agency's technology vision for tax administration systems.

We believe these organizational changes should help IRS to manage its information technology program more effectively. However, we also believe that IRS could better ensure the success of this program if it provided more technical expertise to the Deputy Commissioners and their senior management teams. Extensive experience in managing state-of-the-art technology projects is vital in senior managers' role of formulating the agency's technology objectives and principles and deciding on the economic and technical feasibility of various strategies for acquiring that technology. Each of these two steps often requires that senior managers weigh technical advice in balancing the technical merits, risks, costs, and benefits of alternative solutions. Strengthening the technical expertise of IRS' senior executives will enhance their ability to make modernization decisions quickly and effectively.

We also believe that IRS would have a more successful technology management program if it consolidated responsibility and accountability for telecommunications below the Deputy Commissioner level. Focused accountability for telecommunications management will avoid confusion and possible delays in carrying out this critical element of IRS' technology management program.

Other organizational changes could enhance IRS' technology management program. The Deputy Commissioner for Planning and Resources is positioned to be a strong technology manager but has other substantial and equally important duties that will detract from the amount of time that can be committed to the technology program. We believe that IRS should consider establishing a third Deputy Commissioner whose sole responsibility is the management of technology to permit concerted attention to technology at the senior decisionmaking level. Further, this Deputy Commissioner should have extensive experience in managing and introducing state-of-the-art technology into an organization like IRS. In addition to establishing a third deputy, the consolidation of responsibility and accountability for technology planning below the Deputy Commissioner level would facilitate the formulation of a technology vision and ensure that information systems plans will achieve that vision.

We recognize that the establishment of a third deputy and consolidating technology planning is a major departure from IRS' newly established organizational structure whose effectiveness has yet to be determined. As we recommend in chapter 4, IRS plans to assess its new organizational structure shortly. In our view this evaluation should thoroughly explore the option of establishing a third deputy for technology and consolidating technology planning.

Beyond these organizational issues, clearly stated information systems plans and initiatives are critical to the success of IRS' efforts to redesign its tax processing system. They are essential to obtaining the continued support of all IRS executives for the redesign effort. Without across-the-board support, the redesign effort will suffer. Such support and a long-term commitment from current and future key decisionmakers will depend, in part, on whether IRS' information system strategies and initiatives clearly support its recently developed SBP. The requirements and perspective of the new business plan, however, may not be clearly reflected in the information system strategy and initiatives because (1) they were developed before or concurrent with the SBP and (2) neither IRS' mission need statements for information systems nor the SBP, as discussed in chapter 4, contain measurable and quantifiable statements of the problems to be solved.

Contract administration will be critical to the success of the redesign effort, which will include several major procurements. Without accurate evaluation of contract proposals and tracking of contract expenditures, IRS cannot make informed acquisition decisions or adequately plan the implementation of its technology program. Top management has supported recent efforts to upgrade contracts administration, but several of them have not been completed and some will require continued effort for 2 or more years. Continued top management support will be important to their ultimate success.

Recommendations

A series of actions are needed to provide agencywide leadership and effective decisionmaking in IRS' technology program. We recommend that the Commissioner

Key Recommendation

Assess the new organizational structure for technology management and consider establishing a third Deputy Commissioner whose sole responsibility is managing information technology before major modernization investments are undertaken.

Supporting Recommendations

- Consolidate below the Deputy Commissioner the responsibility and accountability for managing IRS' telecommunications program.
- Develop and implement, as a high priority initiative, a strategy for providing additional technical training and expertise to the Deputy Commissioners and their senior management teams. This strategy could include a combination of hiring additional senior level technical advisors and/or managers, establishing a panel of experts with extensive experience in introducing state-of-the-art technology into large organizations, and providing training in computer technology to senior managers. In addition, the succession planning system discussed in chapter 8 should establish a career path to create a pool of technically qualified executives to meet future needs in critical senior level technical positions.
- Assess the current technology vision and information system strategy and initiatives for redesigning the tax processing system to ensure that they adequately support, as discussed in chapter 4, the objectives specified in the SBP and accomplish the expected results.
- Monitor implementation of actions to build and maintain the competence of contract administration staff in price evaluation and to develop new management information software.

Strengthening Financial Management and Accountability

Management Challenges

Correct IRS' accounting and financial systems problems and provide a sound basis for guiding its systems development efforts.

Key Recommendations

- Designate and support a Chief Financial Officer position.
- Develop an overall financial management improvement plan as part of the Strategic Business Plan, to assist in setting priorities, fixing accountability and responsibility, and monitoring financial system operations and improvements.

Supporting Recommendations

- Arrange for IRS' financial statements, prepared in accordance with GAO requirements, to be independently audited.
- Monitor closely the Automated Accounting and Budget Execution System to ensure that its internal controls and accounting processes protect the government's interests.
- Designate a project manager to direct and oversee day-to-day efforts to develop the Automated Financial System and ensure that sufficient staff resources are applied to the project.
- Identify present and future staffing needs for accounting operations as a part of the overall financial management improvement plan and look into alternatives for filling staffing requirements in this area, such as expanding career paths for employees doing accounting work.
- Require, in the long term, that a comprehensive cost accounting system be developed to account for all of IRS' costs and to identify them with the appropriate organizational components and functions.
- Include in IRS' Federal Manager's Financial Integrity Act report its serious accounting problems in accounts receivable.

As the government's tax collector, IRS has unparalleled responsibility to maintain revenue accounting and administrative financial systems that are second to none. IRS accounts for 90 percent of the federal government's revenue and 60 percent of its delinquent receivables. Its visibility and contact with the public is equaled by very few federal agencies, and success in achieving its primary mission is highly dependent on voluntary compliance by the public. In this regard, taxpayers rightfully expect fair treatment by having their records of their tax deposits, returns, and refunds accurately processed and maintained.

IRS' ability to satisfy its financial responsibilities and meet taxpayer expectations has been undermined by accounting processes with weak internal controls and old systems that produce inaccurate and untimely information. IRS' financial structure is not modern and supports systems that are not compatible and involve labor-intensive operations.

The biggest challenge facing IRS in the financial management area, therefore, is developing systems that will fill its needs and operate effectively through the year 2000 and beyond. IRS has fully recognized the problems with its financial systems. However, it has had difficulty in successfully solving these problems. IRS is, nonetheless, making strides through projects aimed at significantly enhancing or replacing its present financial systems.

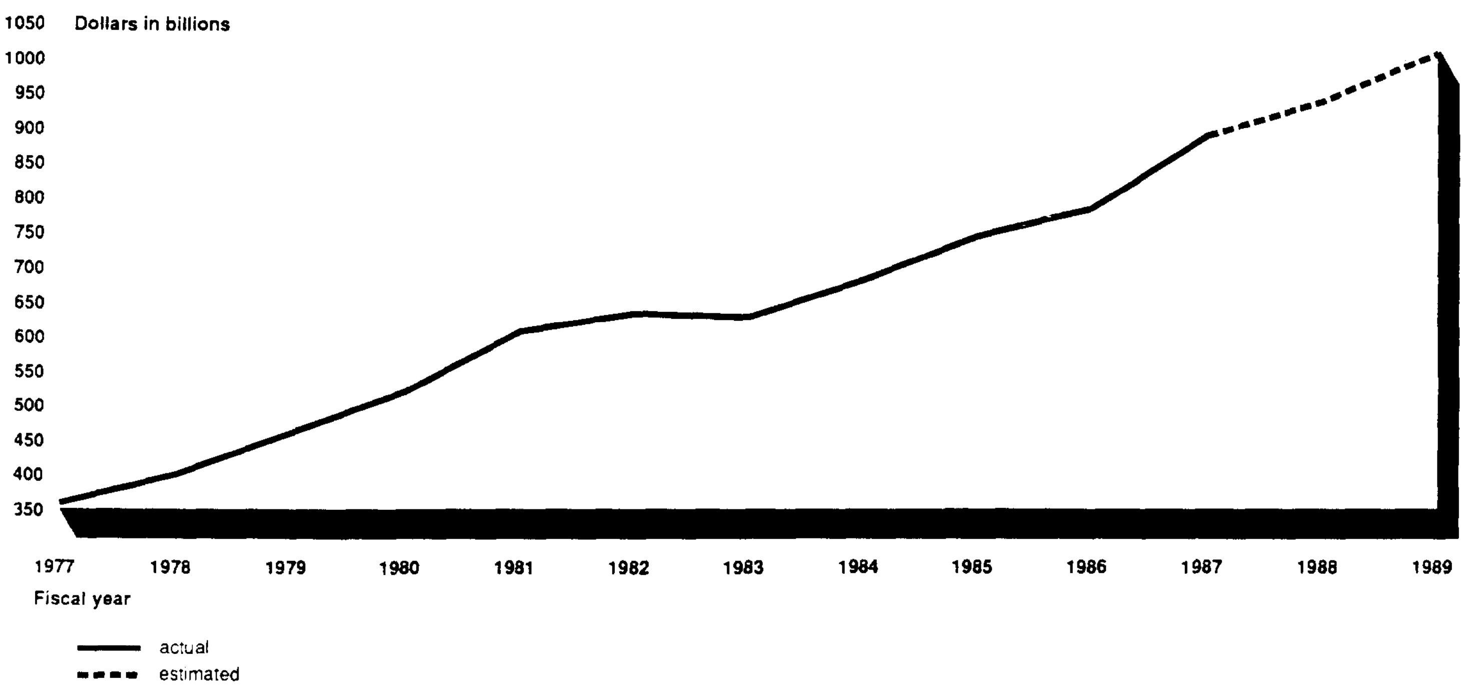
Even though many of these efforts are well underway, the direction of IRS' financial management systems and operations should be guided by an overall plan and led by a Chief Financial Officer. While guidance and leadership are essential in keeping developmental efforts on target, they also are needed in seeing that present financial and accounting services are maintained at an adequate level. IRS also needs to maintain an emphasis on providing better taxpayer accounts receivable records, producing comprehensive information on its costs, and preparing a complete set of annual financial statements that are independently audited. IRS also has recently put substantial effort and resources into resolving its serious and long-standing revenue and administrative accounting systems problems.

Operating Environment and Financial Management Structure

Accounting for billions of dollars and maintaining records for millions of taxpayers is an extraordinary task. IRS is attempting to meet this challenge through a series of highly automated and interrelated systems and subsystems.

The amount of taxes collected annually has more than doubled since 1977 and is steadily approaching $1 trillion. (See fig. 6.1.) Population growth, legislative changes, and enforcement efforts are expected to increase the already large work load created in processing the massive paperwork involved.

Figure 6.1: Growth in IRS Revenue Collections



In 1987, $886 billion in taxes was collected and more than $96 billion was refunded to about 78 million taxpayers. Further, by 1989, IRS expects to receive 190 million tax returns, 12 million supplemental documents, and 83 million federal tax deposits. IRS also is responsible for the

Federal Tax Lien Revolving Fund, amounting to $9.9 million. This fund finances the redemption of real property seized by IRS.

IRS' operating costs, which are primarily related to employee salaries and benefits, also have grown substantially to meet the increased volume of transactions. (See fig. 6.3, p. 92) These costs, funded by four appropriations, exceeded $4.4 billion in 1987.

To provide accounting support for this tremendous level of financial activity, IRS' financial structure is made up of two primary systems: the Revenue Accounting System and the Administrative Accounting System. Together, these systems, along with their subsystems, record, control, and report on all IRS operations.

The Revenue Accounting System records taxpayer transactions, maintains taxpayer accounts, and produces reports on tax assessments and collections. This system provides detailed and summary financial statement reports on taxes collected, assessed, and owed, as well as on overpayments refunded to taxpayers.

Seven subsystems support this operation. Included among these are separate systems designed specifically to handle recordkeeping for accounts receivable from taxpayers, a general ledger system to account for and control revenue-related transactions, and a system to handle revenue remittances received at the service centers. In addition, the Federal Tax Deposit System processes tax deposits received from businesses, posts them to taxpayer accounts, and reports collections to Treasury.

The Administrative Accounting System records, controls, and reports on appropriated funds transactions. It consists of four separate subsystems used to develop IRS' budget, control its property, and maintain its payroll. In addition, the Automated Accounting and Budget Execution System maintains the annual financial plan, accounts for and controls appropriated funds through its subsidiary ledgers and general ledger, supports cash transactions (collections and disbursements), and does a full range of accounting transactions.

Accounting operations for IRS are geographically disbursed over 7 regional offices and the 10 service centers. Also involved in IRS' accounting are the national office, the National Computer Center, and the Detroit Data Center.

Systems Problems Are Serious and Long-Standing

IRS has a history of problems in its accounting operations that have been exacerbated by the rapid growth of the agency in recent years. These issues are of such proportion that replacing some systems is the only feasible solution. In many cases, the volume of transactions required to be processed on the present systems is greater than the systems were designed to handle. Equipment on which some of the systems are being run is no longer manufactured, thereby making maintenance and improvement difficult at best.

Further, systems in the IRS financial structure are not compatible, requiring duplicate functions in processing data. A great number of staff is required to maintain accounting-related operations that might otherwise be done more efficiently through automation. In addition, internal control weaknesses are evident in both the Revenue Accounting System and the Administrative Accounting System. Because of this, financial information they process is error-prone and reports they produce are not always accurate. Finally, important financial information needed to manage IRS is either not available or is not timely. These problems are discussed more fully in the following sections.

Systems Are Outdated, Incompatible, and Labor-Intensive

Agency accounting systems are dynamic. They are subject to ever-changing technological advances, program requirements, and funding and personnel levels. Systems that cannot accommodate these changes eventually become obsolete, require progressively greater amounts of manual resources, and if they are not compatible with companion systems, cannot be operated efficiently.

IRS' Revenue Accounting System was developed in the 1950s and 1960s. Although the automated data processing (ADP) equipment on which it is operated was replaced and upgraded in 1984, the system design has not changed since the 1960s. It requires extensive manual transfer of information from tax returns to the automated system. This situation is compounded during peak work load periods when additional staff is temporarily hired to do processing tasks that could be done automatically with modern systems. Further, the Revenue Accounting System's subsystems are not fully integrated, which requires data exchanges to be done manually or by magnetic tape processing.

The Remittance Processing System further illustrates this situation. This system, which processed $124 billion in transactions in 1986, was implemented 10 years ago using equipment first marketed in 1970 and which is no longer manufactured. The system is not capable of processing all types of tax returns. It cannot, for example, process those with partial payments or multiple tax returns paid by one check. Therefore, 12.7 million remittance transactions, or about 15 percent, had to be processed manually in 1986. In addition, the Remittance Processing System involves frequent rehandling of documents and duplicate key entry of data. It also causes loss of revenues from deposit discrepancies and has severe maintenance problems.

The Automated Accounting and Budget Execution System, as characterized by the Director of IRS' Finance Division, is similarly antiquated and inadequate. This system also was developed in the early 1970s. While some significant improvements have been made, they have not been sufficient to keep up with expanding work loads and changing needs. Also, a lack of standard procedures for this system has resulted in different ways of doing similar jobs at each location where it is operated. Finally, the system is unable to accept major enhancements and has almost reached its available computer capacity.

Internal Control Weaknesses Exist in Key Systems

The need for good internal controls encompasses all IRS financial activities—from ensuring that information in its multitude of taxpayer records is correct to providing the least possible risk of loss in handling its enormous amount of collections. Agencies are required by law[1] to establish and maintain an effective system of internal controls. Weak internal controls, however, have long interfered with IRS attaining this objective, and the situation has been further compounded by cuts in IRS' administrative staff.

Historically, internal controls related to the Revenue Accounting System's Federal Tax Deposit System did not ensure adequate processing of data. For example, IRS provides tax deposit "coupons," which are check-size pieces of paper containing preprinted information such as taxpayer name, address, and identification number to business taxpayers. However, despite the critical nature of this information, IRS did not verify the accuracy of the preprinted data before the coupons were sent to businesses. These coupons are subsequently processed by the tax deposit system after being submitted by businesses to banks along with tax deposits. Errors in the preprinted data caused the system to be unable to accurately process deposits. This resulted in the system being error-prone. In addition, the system had not been able to handle the volume of

[1] The Accounting and Auditing Act of 1950 (31 U.S.C. 3512) and the Federal Managers' Financial Integrity Act of 1982 (31 U.S.C. 3512(b) and (c)).

data it had to process. Finally, several important controls over processing federal tax deposits were eliminated, resulting in less time being available to managers and supervisors to review staff work and to train employees.

To illustrate one effect of this situation, tax deposits reported by taxpayers for 1985 related to the Federal Unemployment Tax Act were significantly overstated. A $798 million adjustment to IRS records resulted. Further, a 1986 internal audit of the system estimated that about 721,000 tax deposits amounting to $6.5 billion in 1986 would result in erroneous bills, penalties, and refunds to businesses because IRS control systems were unable to promptly identify and resolve employee and taxpayer errors. The audit recommended strengthening controls for the system. Recently, IRS initiated a quality improvement project to evaluate the overall process related to federal tax deposits, which resulted in systems enhancements being initiated. A description of the Federal Tax Deposit System Redesign quality improvement project is on page 104. IRS reports that as a result of these efforts critical controls have now been restored. Since 1985, IRS has reported the need to provide better controls over its federal tax deposit processing operation and the status of efforts to correct the situation in its Federal Managers' Financial Integrity Act statements.

Internal controls over the Administrative Accounting System are inadequate to ensure that transactions are accurately recorded or that disbursements are proper. IRS has identified an example of a breach in internal controls involving separation of duties, where one employee at an IRS accounting section was found to be responsible for the obligation, audit, and certification of vendor payments. A May 1986 IRS study of the system's operation indicated that internal control problems in the administrative accounting operation were aggravated by a lack of standardization among accounting sections, staff cuts, and increased work loads. According to the study, the system's operation had seriously deteriorated and the potential for fraud had increased.

A serious incident of embezzlement, involving about $133,000 paid through this system over a 4-year period, has since been discovered. An investigation of this matter identified weaknesses in internal controls, including: (1) payments to unapproved vendors were not prevented, (2) separation of duties and supervisory review were inadequate, and (3) payments were routinely based on verbal approvals. IRS has taken steps to correct these problems.

Accurate and Timely Financial Information Is Not Available

Financial information resulting from an accounting system must contain correct data that is available when needed. Such data are vital to agency managers in accomplishing their stewardship. It helps, for example, in determining whether operations are running as intended or whether fewer or more staff members are needed. Accurate and timely financial information is not available from IRS' major accounting systems. When financial reports cannot offer this data, managers often establish alternative sources for financial information.

IRS' Revenue Accounting System was not designed to provide financial information to service center managers for their use in scheduling staff and measuring work loads and in planning and controlling other resources. This information would be especially important for purposes such as shifting personnel between various operations throughout the processing cycle in order to provide maximum staff coverage at minimal cost. To remedy this situation, the service centers maintain other systems and manual records to provide financial information.

Likewise, the Administrative Accounting System is unable to provide timely information about the financial status of operations. Among other purposes, such information is indispensable in controlling IRS' appropriated funds and its payments to vendors.

IRS' outdated system makes it virtually impossible to provide accounting information in the time frames most managers perceive to be necessary. As a result of these delays in providing meaningful, timely, and accurate accounting data, managers maintain their own informal records of funds spent. As a further consequence of these delays, less time is available to determine the accuracy of the accounting system's information.

For example, purchase orders and receiving reports in IRS' multimillion dollar procurement operation often are not provided promptly. As a result, seven out of eight IRS accounting offices have expressed growing concerns that payments may not be accurate and proper—a serious problem that could cost the government substantial amounts in additional interest caused by not paying bills on time, as required by law,[2] and duplicate payments.

[2] The Prompt Payment Act (31 U.S.C. 3902).

Systems Modernization Is Underway

IRS has done a good job of identifying its financial systems' weaknesses and improvement needs. Solutions, however, have been elusive and present the greatest challenge facing IRS in the financial management area. In the past, systems improvement efforts have not always gone as well as IRS had anticipated. A multimillion dollar systems modernization program is, however, currently ongoing. IRS hopes that this will resolve its serious and long-standing financial system problems.

Examples of projects developed in attempts to correct the financial system problems facing IRS follow.

- The Realtime Input System. This major computer system initiative began in 1983 to upgrade processing tax returns at the service centers. By August 1985, the system design had not been completed, its cost effectiveness had not been demonstrated, and its computer programs had not been developed. An IRS internal audit concluded that plans for the system's development were not adequately coordinated and the system's intended users were not effectively involved in the project. The auditors determined that lack of upper level management involvement in overseeing the design and development of this system caused these problems. When the project was canceled in March 1986, its implementation schedule had slipped 18 months and its cost estimate was $120.5 million, or more than 14 times the original $8.5 million estimate. IRS could not provide us with the actual amount spent on the project before its cancellation because IRS does not have a system to track the cost of such projects.
- The Capitalized Assets Management System. IRS started this project in 1979 to provide reliable accounting control, through one system, over its capitalized property, which exceeds $307 million. In September 1987, after more than 7 years, IRS implemented a version of the system that will not account for or control capitalized computer hardware and software. IRS estimated development costs at $2.7 million. As a result, IRS will maintain two property accounting systems. Project managers responsible for the design and implementation of this system attributed the lack of upper level management involvement and the low priority given to financial management matters to the delay and deviation from the intended concept.

In addition, IRS has attempted to address the broader concern of providing top management with timely and accurate financial management information to enhance critical decisionmaking and resource allocation. The following is an example of a comprehensive approach to improve timeliness and availability of financial management information.

- The Decision Enhancing Management Information System. This effort, which started in 1982, was initiated to provide performance, productivity, scheduling, and resource allocation information on IRS programs—a need that had been recognized as early as 1976. Work on this project was terminated 4 years later, in 1986, because it required excessive resources to implement. In addition, IRS determined that its ADP equipment could not meet the proposed system's needs, and upgrading the equipment was too expensive to be feasible. IRS was unable to provide us with the total cost of this project.

IRS is presently spending millions of dollars on a number of significant system design efforts to solve problems in its financial management and accounting systems. These improvement efforts involve both short- and long-range system enhancements that extend throughout the agency. Table 6.1 identifies major examples of these efforts and provides information on their cost, implementation status, and importance to IRS' mission.

Table 6.1: Information on Selected IRS Financial Management System Improvement Projects

(Dollars in millions)

System	Estimated development cost	Status	Importance to mission
Automated Financial System (AFS)	$14.1	AFS is behind its initial implementation date of September 1988 by about 1 year. Currently, software is being developed and the system is expected to be operational in September 1989.	To improve the quality and timeliness of financial information to manage IRS' $4 billion appropriated budget.
Check Handling Enhancements and Expert Systems (CHEXS)	130.5	The Delegated Procurement Authority was received from GSA during December 1987. The request for proposals was being prepared for issuance in mid-1988.	In 1986, the existing systems processed only 85 percent of the total volume of payment transactions. Approximately 85 million payment transactions amounting to over $124 billion were received. CHEXS is intended to improve the timely processing of payment transactions.
Federal Tax Deposit (FTD) System Redesign	4.1 to 16.6	A conceptual design has received Treasury approval.	To improve the efficiency of collecting and accounting for over $680 billion in tax revenue.
Integrated Management System (IMS)	20.5	Functional requirements and specifications are currently being developed.	To provide management with timely information for planning, scheduling, measuring, and controlling work load and costs; and appraising employee performance and evaluating individual and product quality.

The Automated Financial System (AFS) project will represent a far-reaching advancement for IRS' administrative accounting. Other system improvement projects in the administrative accounting area include upgrading the IRS payroll system and the property accounting system. Three of the projects shown in table 6.1 are tax administration systems that come under the guidance and standards provided by the information systems development management plan discussed in chapter 5.

Solving Problems Through Stronger Direction and Leadership

IRS' program to update its accounting and financial systems is aggressive and ambitious. However, additional opportunities exist to help bolster IRS' efforts to ensure successful correction of persistent problems facing its financial and accounting systems and to maximize its systems development work. These actions involve a plan focusing on maintaining and improving financial and accounting operations throughout IRS and designating a Chief Financial Officer to provide standards and direction in accounting and financial management. Solving problems in certain specific areas would especially benefit from strengthened oversight.

Directing Accounting Operations and Improvements Through a Financial Management Plan

A structured approach to managing financial operations and developing new systems requires a plan under which systems are maintained and designed or revised from an agencywide perspective. This approach to initiating and controlling these activities is critical to ensuring that existing systems problems are corrected. It also aids in eliminating duplicative and fragmented design efforts by tying interrelated efforts together.

We have identified a number of major factors that are critical to the success of system development projects.[3] Predominant among these factors is the need for such efforts to be carried out with an overall systems plan in mind.

While IRS has submitted information through Treasury to OMB on its planned and ongoing systems initiatives, as required by Circular A-127, it has not established an overall plan for accomplishing improved accounting and financial management systems throughout the agency. Rather, many different organizational components are independently accountable for individual system development efforts, as discussed previously.

[3] U.S. General Accounting Office, Critical Factors in Developing Automated Accounting and Financial Management Systems (Jan. 1987).

We believe that IRS should establish a long-term financial management plan to guide its components in their efforts to operate and improve financial and accounting systems. While ongoing systems improvement initiatives are encouraging, we believe that success is more likely if the initiatives are guided by an overall financial management plan, which should be developed as an integral part of IRS' SBP. Such a plan would identify the magnitude of current financial and accounting system problems and establish goals for attaining improved systems. Over time, the plan would provide more continuity in systems development projects and help sustain the various initiatives.

A systems improvement plan also would set priorities for correcting these problems and meeting IRS' future financial systems needs. In addition, it could assist in fixing accountability and assigning responsibilities for implementing the plan at various levels within the organization. It could likewise be useful in monitoring systems development projects to ensure they are accomplished on schedule. Further, managing under a realistic and achievable plan would ensure that development efforts result in an overall financial management structure for IRS whereby its systems are fully compatible and its staffing needs and costs are considered.

Specific difficulties in maintaining present systems, developing new systems, and solving critical accounting and staffing problems that should be addressed through the overall financial management plan are outlined in the following sections.

Current Administrative Accounting Operations Are Deteriorating

IRS has decided to replace the current administrative accounting system with AFS as soon as reasonably possible. To do this, experienced staff members are being moved from the Automated Accounting and Budget Execution System to the AFS project.

IRS officials have expressed concern that, as a result, insufficient attention is being given to the operation of the Automated Accounting and Budget Execution System. An internal IRS study recommended that sufficient staffing is the only solution to stabilizing the Automated Accounting and Budget Execution System in the short term.

We also are concerned that operation of the existing system and its internal controls are deteriorating. While we agree that a new system is the solution to correcting problems associated with administrative accounting, the present system must be maintained at an adequate level for several more years until it is replaced. IRS, therefore, should ensure the availability of sufficient staff to cope with its administrative accounting burden through the Automated Accounting and Budget Execution System throughout this period.

Development of the Automated Financial System Can Be Enhanced

Assigning a strong project manager to carry out system development projects is another critical factor to the success of such efforts. (See fn. 3 on p. 86.) Systems development projects require day-to-day leadership and direction, as well as sufficient resources for successful completion. Implementation of the AFS is expected to alleviate shortcomings in IRS' $4 billion administrative accounting operation. Completing this massive project reasonably close to schedule and without undue increases in costs is a key challenge for IRS in this area.

Two project managers are assigned to the AFS developmental project, which was initiated in 1981. One of these managers, who is responsible for the detailed accounting requirements, is assigned part-time from the Finance Division. The other, from the Data Center, works full-time on the project and is responsible for the ADP system conversion. IRS is operating this project on a contractor/client basis, with the Data Center serving as the contractor and the Finance Division acting as the client. However, the effort does not have an overall project manager dedicated to planning, directing, and controlling the work of these two project managers and providing overall leadership.

In addition, IRS does not have enough experienced and knowledgeable staff available to carry out this major undertaking. In this regard, 26 accounting personnel from the Finance Division and the regions are assigned to develop the detailed accounting requirements for the AFS. Of these, three are full-time. IRS financial management officials expressed concern that experienced and knowledgeable staff members are not available to carry out this major undertaking.

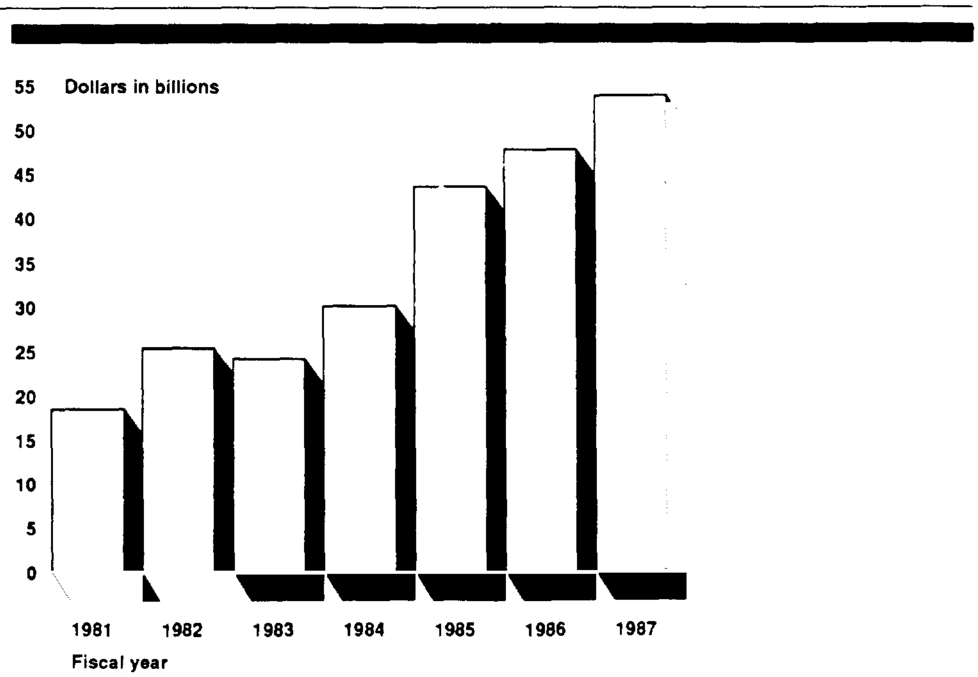
Situations such as this often contribute to slippages in implementing systems and to increases in planned costs. In this regard, IRS could not provide us with complete historical information on this project's cost. IRS has stated that $5.68 million has been spent on the project as of March 31, 1988. However, this figure does not include certain staffing and travel costs. The project's current budget is $14.1 million and it has been underway for 7 years. In order to ensure that this costly and lengthy project avoids seriously missing project milestones, we believe that the

AFS development project should be provided (1) a full-time project director to oversee all aspects of the job and (2) experienced staff to ensure completion of the work.

Accounts Receivable Problems Affect Taxpayer Accounts

One of the primary functions of the Revenue Accounting System is to maintain accounts receivable records. These records consist of taxes, interest, and penalties owed to the federal government by individuals, businesses, and other taxpayers. These accounts have grown substantially during the past few years—increasing from $18 billion in 1981 to $53.7 billion as of September 30, 1987. (See fig. 6.2.) As we have for the past several years, in April 1987 we testified[4] at budget hearings on IRS' growing receivables and related control problems.

Figure 6.2: Growth in IRS Accounts Receivable Between Fiscal Years 1981 and 1987



According to IRS officials, the agency's reports to Treasury contain inaccurate accounts receivable information, specifically with regard to interest and penalties on taxpayer receivables. The Revenue Accounting

[4]Testimony before the Subcommittee on Oversight, Committee on Ways and Means, House of Representatives, IRS' Fiscal Year 1988 Budget Request (GAO/T-GGD-87-9, Apr. 23, 1987).

System does not provide an aging analysis for accounts receivable and does not include accrued interest. In addition, IRS cannot reconcile taxpayer accounts receivable with its general ledger—a critical internal control feature. As a result, IRS information on amounts owed by taxpayers is not always reliable.

With regard to the growth in receivables, IRS set up an executive task force and a quality improvement project to determine the validity and collectibility of tax accounts receivable, to review the systems and procedures in operation, and to recommend improvements. As part of this work, a consultant also analyzed accounts receivable reporting and reviewed the accounts receivable subsystems of the Revenue Accounting System. When completed, this analysis should provide IRS with information on (1) the content of and reasons for the growth in accounts receivable and (2) operational changes needed to better ensure that receivables are more accurately reported in the future.

We believe that accurate and reliable information on amounts owed by taxpayers is essential to IRS accomplishing its tax collection mission. Without adequate records on these accounts, potentially billions of dollars owed to the government could go uncollected for extended periods of time. In addition, adequate internal controls and accounting for receivables could help stem the unprecedented growth in amounts recorded as being due IRS from the public.

Because of the IRS task force's ongoing efforts, we are not making any recommendations specifically directed toward improved accounting for receivables. We do note, however, that IRS has not included all its problems in this area in its statements to the Secretary of the Treasury under the Federal Managers' Financial Integrity Act.[5] This should be done pending implementation of the task force's recommendations. The Secretary's annual report to the President and Congress under the act would, as a result, fully disclose IRS' serious difficulty in accounting for amounts due.

Accounting for Costs Can Be Improved

Knowing how much it costs IRS to carry out its programs and activities is vital to their efficient and effective operation. Having an accurate picture of the amount IRS spends on such things as the salaries of its

[5]The Federal Managers' Financial Integrity Act requires federal department and agency managers to evaluate whether internal control and accounting systems have weaknesses that can lead to fraud, waste, and abuse in government operations. The act requires federal managers to report annually to the President and Congress on their systems and plans to correct identified weaknesses.

employees, the purchase of its equipment, and the maintenance of its facilities is indispensable for planning and decisionmaking. Such information is needed to compare what it costs to run IRS at various times and at locations doing similar work, such as processing tax returns or deposits. This information represents a basic management tool for analyzing how well resources are utilized and for keeping spending within limits established by law, regulation, or agency management policies. Data of this nature also should be available to agency management officials and others in devising and approving realistic budgets and defending them before Congress.

In addition, OMB Circular A-121 requires agencies to account for ADP costs. This is particularly important to IRS because it is a highly automated operation. Its budget in this area for fiscal year 1988 is $847 million, with the prospect of millions potentially being applied to future automation in areas like electronic filing of returns by taxpayers.

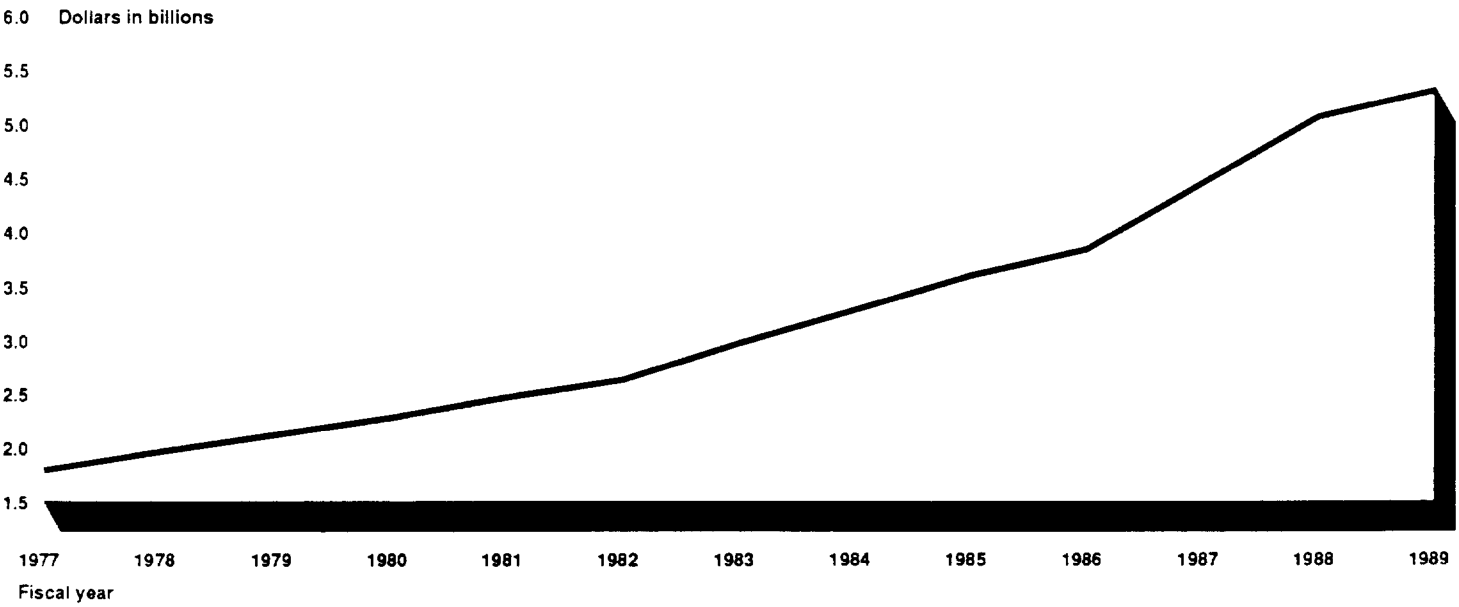
The amount spent to operate IRS and provide services to taxpayers increased significantly during the past 10 years—rising 149 percent, or about 10 percent compounded annually, from $1.79 billion in fiscal year 1977 to $4.45 billion in fiscal year 1987. These costs are expected to reach almost $6 billion within the next 2 years. (See fig. 6.3.)

In 1979, we recommended that IRS develop and implement a cost accounting system to measure use of resources.[6] IRS has recognized the need for a comprehensive cost accounting system since at least 1980 but has been unable to develop a system to meet its needs for cost data. A March 1983 IRS memo states that a comprehensive cost accounting system could not be pursued until the results were known of five major system improvement initiatives, then underway, which included cost accounting elements. Currently, three of these projects continue to be under development, one has been canceled, and the other has been completed.

In late 1984, IRS contracted for a feasibility study of an integrated management information and cost accounting system for the service centers. The study has resulted in the Integrated Management System initiative. (See table 6.1.) This system is to provide management with information for planning, measuring, and controlling work load and staffing; appraising performance; determining product quality; and highlighting

[6]IRS Can Better Plan for and Control Its ADP Resources (GAO/GGD-79-48, June 18, 1979).

Figure 6.3: Growth in IRS Operating Costs



Note: The 1988 $5.06 billion figure is appropriated funds. The 1989 $5.30 billion figure is the President's budget request.

differences between actual and planned production. IRS believes this system will greatly enhance information available to IRS service center managers for carrying out their operations. However, the system will not be available for several years.

Development of an IRS-wide comprehensive cost accounting system. which would account for all of IRS' costs and identify them with the corresponding organizational component and function, should be a long-term goal. (The need for one type of cost data—investment costs related to system development projects—has been demonstrated throughout this chapter.) This is particularly important as IRS costs continue to grow.

Shortage of Accounting Personnel Hinders Operations

In order for an accounting system to maintain adequate internal controls and operate as intended, ample staff resources must be provided. Accounting personnel have critical balancing, reconciliation, reporting, and analytical duties, and in the case of IRS, help ensure the integrity of its financial systems and processing of taxpayer information.

IRS has recognized in its SBP that it must improve its ability to attract and retain a high quality financial management and accounting workforce. In both the revenue and administrative accounting functions, IRS is experiencing difficulty in attracting and retaining personnel with knowledge and skill in accounting. Several factors hinder attempts to solve this situation.

According to the Director of IRS' Returns Processing and Accounting Division, it is difficult to qualify for accounting technician jobs because the position requires accounting knowledge and experience—skills that a large number of people do not have in some communities where IRS service centers are located. In those locations where this is not a problem, IRS has found it is often at a disadvantage because of higher paying jobs in the private sector. Further, when accounting technicians reach the journeyman level, the prospects for continued progress within the accounting section are extremely limited.

The Assistant Commissioner for Planning, Finance, and Research has said that none of the accounting sections can afford further reductions until sufficient systems changes are made. He indicated also that most sections require added staffing to avoid being vulnerable to losses from overpayments to taxpayers and payments for which no goods or services are received. In his view, present practices do not provide assurances that transactions are accurately recorded or that disbursements are proper, and the potential for undetected fraud is a very real concern.

To determine the magnitude of this situation, we asked the Finance Division to furnish statistics on authorized accounting section staffing in the regions. This information showed turnover rates in excess of 25 percent for the last 3 fiscal years. According to the Chief of the Accounting Branch, administrative accounting staffing levels in the regional offices have been returned to the 1985 authorized level and additional staffing positions have not been budgeted. The effect of this is illustrated by a May 1986 study of administrative accounting activities done by the Finance Division that raised concerns that recent staff cuts, combined with increasing work load, have resulted in lowered quality. The study says that a significant number of responsibilities are currently being completed without sufficient resource levels.

We recognize that IRS will continue to be faced with severe shortages of permanent staff in the future—positions that cannot be temporarily filled to meet work load fluctuations. IRS needs a framework for monitoring and analyzing the effect of a reduced cadre of qualified staff on maintaining financial operations. This could be accomplished through the overall financial management plan that we are calling for, whereby objectives for attaining a constant and adequate supply of staff resources could be set.

Coupled with this, IRS should identify present and future staffing requirements for its accounting operations and begin to adopt strategies for overcoming the scarcity of accounting personnel it is presently experiencing. Alternative strategies include working with the Office of Personnel Management (OPM) to authorize increased pay rates for its accountants, studying the feasibility of supplementing its accounting staff with contractor support, and enhancing a career path for employees doing accounting work.

Audited Financial Statements Could Benefit IRS

Given the magnitude of the dollars IRS controls and considering the problems it faces, we believe IRS needs to include in its comprehensive financial management plan the means for assuring that the information its systems produce is reported in a consistent, meaningful way and is audited. In testimony before the Senate Committee on Governmental Affairs,[7] we have emphasized that the concept of preparing and auditing financial statements is an integral part of improving agency financial management by promoting discipline and accountability. Financial statement audits ensure there is a proper link among accounting transactions, accounting systems, and financial statements.

Although IRS has prepared a complete set of financial statements, as required by and prescribed in Title 2 of the GAO Policy and Procedures Manual for Guidance of Federal Agencies,[8] they are not yet audited and issued. As part of these audited financial statements, IRS would present

[7] Testimony on The Federal Management Reorganization and Cost Control Act of 1986 (May 13, 1986); Improving Government and Accountability (GAO/T-AFMD-87-1, Feb. 18, 1987); and The Federal Financial Management Reform Act of 1987 (GAO/T-AFMD-87-18, July 23, 1987).

[8] The GAO Policy and Procedures Manual for Guidance of Federal Agencies, Title 2, contains the accounting principles, standards, and related requirements to be observed by federal agencies.

a balance sheet that clearly discloses its financial position, and a statement of operations that reports items such as its expenses and revenues. The preparation, audit, and issuance of such statements would, therefore, provide comprehensive financial information on the status and integrity of IRS' financial condition.

Financial reports on revenues collected and appropriations spent that are now prepared by IRS are based primarily on unaudited data generated by the revenue and administrative accounting systems. As discussed in this chapter, these systems do not produce reliable information because of their design and internal control problems. As a result, information reported by IRS on the amount of taxes owed to the government cannot, for example, be relied on to present a clear picture of things such as whether uncollected taxes are growing inordinately and whether efforts to collect taxes owed need to be increased.

The concept of preparing and auditing financial statements is not new. It is a common practice in the private sector and required by law[9] for government corporations. Issuing financial statements would help ensure (1) the integrity of information generated from both the revenue and administrative accounting systems and (2) that this information is disclosed in accordance with the accounting principles and standards to be observed by federal agencies. (See fn. 8 on p. 94.) Highlighting significant financial events in this manner would heighten congressional and public awareness of IRS' stewardship and administration of the government's tax laws.

Further, periodic audits of annual financial statements done in accordance with generally accepted government auditing standards would determine whether adequate safeguards are in place to protect resources entrusted to IRS and whether it accurately discloses the financial aspects of its operation. Specifically, audited financial statements would help enhance the reliability of the financial data by identifying internal control weaknesses and other system deficiencies and by providing another opportunity to improve the system on a continuing basis. In addition, financial statement audits would help improve financial information needed to manage IRS operations and organizational discipline needed to develop and maintain accurate and timely systems of internal control and accounting.

[9]The Government Corporation Control Act (31 U.S.C. 9105).

Leading Financial Operations and Improvements Through a Chief Financial Officer

Another key element in reforming IRS' financial management systems is leadership. Presently, IRS does not have one specific individual who is responsible for ensuring the integrity and efficiency of financial management and accounting systems agencywide. As we testified before the Senate Governmental Affairs Committee, agencies must have consistent, continuous, and strong financial management leadership to solve the serious and long-standing accountability problems they face. (See fn. 7 on p. 94.) This would provide the continuity needed for improved agency financial management, support for central agency financial initiatives, and a conduit for accounting policy and guidance.

OMB has recognized the need for financial leadership throughout the federal government and in November 1987 required the head of each executive department and agency to designate a Chief Financial Officer. While the Department of the Treasury has a Comptroller, OMB's action sets the stage for IRS to follow this lead. By doing so, IRS would take a major step toward bringing about lasting improvement to its financial management and accounting systems.

Leadership for IRS' financial management and accounting systems is now divided among various senior officials. Currently, both Deputy Commissioners have financial management responsibilities related to their respective operations. The Deputy Commissioner for Operations has overall responsibility for the Revenue Accounting System. Responsibility for the Administrative Accounting System lies with the Deputy Commissioner for Planning and Resources.

Development and operation of various systems and subsystems is further delegated to, and divided among, four Assistant Commissioners. The Assistant Commissioner for Taxpayer Services and Returns Processing is responsible for the revenue accounting operation. For administrative accounting operations, responsibility is separated. The Assistant Commissioner for Planning, Finance, and Research is responsible for the Automated Accounting and Budget Execution System and the Budget Formulation System, while the Assistant Commissioner for Human Resources Management and Support has the payroll system and the capitalized asset management system. In addition, the Assistant Commissioner for Computer Services is responsible for ADP hardware and software to support these systems.

As discussed previously, IRS has systems improvement initiatives planned and underway in virtually every major aspect of its financial management and accounting systems. Responsibility for developing and completing these initiatives is, therefore, spread among various officials.

While it may be possible to adequately maintain revenue accounting and administrative financial management systems authority and responsibility at various levels within IRS, we believe that, given the pervasive and complex problems and the historical difficulty in improving its systems, IRS would benefit from a single individual leader from within its existing management structure who has overall authority and responsibility for the following:

- Developing an overall financial management plan.
- Establishing a finance and accounting policy that conforms to the accounting principles and standards to be observed by federal agencies.
- Devising a financial reporting plan that includes a complete set of financial statements.
- Providing for financial statements to be audited.
- Monitoring accounting and financial systems development and operations.
- Overseeing the Federal Managers' Financial Integrity Act evaluations and reporting.
- Developing cash and credit management programs.
- Identifying staffing and training needs to support accounting and financial management.

Conclusions

IRS has serious financial and accounting systems problems. These problems hamper IRS' ability to manage its operations and provide full accountability for much of the government's revenue. Generally, IRS has done well in identifying its major financial management challenges. Many of its long-standing weaknesses in this area, however, center around systems that are 20 to 25 years old and need to be replaced by modern systems.

Until recently, IRS has put neither substantial effort nor dollars into rectifying the poor state of its accounting operations; it has been unable to resolve its problems in this area. Past programs to bring about improvements experienced delays, cancelations, and cost increases.

Two things are paramount in bringing about lasting improvements to IRS' financial and accounting environment for the next decade and beyond. The first involves developing an overall financial management improvement plan to provide a strong framework for the direction of

IRS' financial operations. The second effort involves designating and supporting a Chief Financial Officer within IRS' top management ranks to serve as a focal point for establishing standards and guidance. These two steps help make the comprehensive plan a reality. Together, these actions would markedly raise the probability that financial management issues currently facing IRS, and those that it may encounter in the future, will be given a high priority.

If the plan and the Chief Financial Officer focus on particular issues—most notably for both receivables and cost accounting—it would promote a financial management structure for the organization that is more responsive to the expectations of taxpayers and the needs of IRS managers. Finally, because of the discipline that it can instill throughout IRS' financial organization, preparing and having audited a complete set of annual financial statements should be a primary feature of the financial management plan.

Recommendations

In order to help correct IRS' accounting and financial systems problems and provide a sound basis for guiding its systems development efforts, the Commissioner of IRS should take the following actions:

Key Recommendations

- Designate and support a Chief Financial Officer.
- Develop an overall financial management improvement plan as part of the Strategic Business Plan, to assist in setting priorities, fixing accountability and responsibility, monitoring financial systems operations and improvements, and providing a strategy for attracting and retaining accounting staff.

Supporting Recommendations

- Arrange for IRS' financial statements, prepared in accordance with Title 2 requirements, to be independently audited.
- Monitor the Automated Accounting and Budget Execution System to determine that its internal controls and accounting processes protect the government's interests.
- Designate a project director to manage day-to-day efforts to develop the Automated Financial System and ensure that sufficient staff resources are devoted to the project.
- Identify present and future staffing needs for accounting operations and look into alternatives for filling staffing requirements in this area, such as seeking increased salary levels for accountants, complementing their

ranks with contractor staff, and expanding a career path for employees doing accounting work.

- Require, in the long-term, that a comprehensive cost accounting system be developed to account for all IRS costs and identify them with the organizational components and functions to which they relate.
- Include in IRS' Federal Managers' Financial Integrity Act report its serious problems in accounting for and controlling accounts receivable.

Ingraining Quality Service to the Public—An Agencywide Challenge

Management Challenges

- Continually reinforce the importance of product/service quality to managers and employees.
- Monitor and periodically assess IRS' progress toward improving service quality.

Key Recommendation

Build quality into IRS' services through preventive approaches.

Supporting Recommendations

- Develop an effective agencywide performance measurement system with agreed-upon measures of quality, efficiency, and timeliness.
- Use the new measurement system to hold managers accountable for their performance.
- Develop a rewards and recognition system for quality improvement for both managers and employees.
- Strengthen the Productivity Through Quality Innovation Enhancement Program.
- Coordinate the productivity management program with the quality management process.

IRS' mission translates into a large and growing annual service work load. Few, if any, federal agencies have more customers to serve. During 1987, IRS

- processed over 800 million transactions involving taxpayer information—roughly 1,500 transactions every minute;
- collected about $900 billion;
- answered over 50 million taxpayer inquiries; and
- maintained over 140 million individual taxpayer and 28 million business taxpayer accounts.

Providing these services to the public in a quality manner plays a very important role in shaping our citizenry's views on how well the federal government functions. Our review of IRS' history shows that from 1952—when the modern IRS was formed—up to the early 1980s, IRS established a reputation as a well run agency, one that emphasized cost savings, efficiency, and quality in dealing with tremendous work loads. However, the 1985 filing season damaged IRS' reputation and caused management to give additional attention to improving the quality of services to the public. IRS' efforts in this area will be a key to its future success.

To support this effort, IRS has initiated a major agencywide quality improvement effort, including providing training for all executives and managers and encouraging a cooperative effort with the National Treasury Employees Union (NTEU). IRS also initiated a set of five new quality-oriented strategic initiatives, which include establishing program effectiveness measures, developing a greater concern for customers, identifying and reviewing barriers to quality, and developing a management information system to track progress in achieving quality goals and objectives. Such efforts represent a solid beginning. The long-term success of this process, however, rests on ingraining quality into day-to-day operations. Important management issues related to this long-term effort include the following:

- A proactive approach toward quality improvement has to be maintained. IRS must balance its quality control efforts with quality planning (i.e., building quality in up front). Doing the right job right the first time must become the predominant objective.
- IRS must improve management information systems by developing and implementing an effective agencywide performance measurement system to have an adequate basis for knowing whether or not IRS is making progress in improving quality. This system should include agreed-upon

measures of quality, efficiency, and timeliness, with particular attention being paid to systematically assessing internal and external customer satisfaction with service quality.

- Employee and managerial commitment must be sustained. IRS must continue to train and educate its executives, managers, and employees on the principles of the quality process as well as provide positive incentives—rewards and recognition—to reinforce the importance of a quality-first mindset among the workforce.
- The current productivity effort must be improved and effectively coordinated with the quality improvement process.

Each of these issues is detailed in the following sections.

Growing Recognition of the Importance of Quality

A long tradition of solid IRS performance was shaken during the 1985 filing season, when the agency paid out $15.5 million in additional interest payments for late refunds and incurred additional costs of over $64 million. Public confidence was greatly reduced due to late refunds, improper posting of federal tax deposits, erroneous taxpayer notices, and numerous newspaper articles detailing problems at service centers. Employee pride in the organization's ability to carry out its mission declined.

During the early 1980s, IRS management became aware of a growing movement within private industry to emphasize a more structured approach to quality management. Many companies such as IBM, Ford, Hewlett Packard, 3M, and Polaroid were finding that poor quality cost them significant dollars and customers. They achieved positive results in reversing these trends by aggressively reemphasizing quality improvement as an integral part of the company's operating process. Such efforts generally embodied several key elements of quality management, which are shown in table 7.1.

IRS managers' interest in improving the quality of its services spawned several efforts. For example, IRS began a major strategic initiative in 1984 to attempt to assess overall quality problems in the agency. The final report challenged the agency to make quality an overriding concern and its recommendations led to the formation of a National Quality Council, the development of a new area of concern in the Strategic Issues Plan, and the design for the IRS-wide quality improvement process.

Comments From the Internal Revenue Service

DEPARTMENT OF THE TREASURY
INTERNAL REVENUE SERVICE
WASHINGTON, D.C. 20224

COMMISSIONER

SEP 7 1988

Mr. Richard L. Fogel
Assistant Comptroller General
United States General Accounting Office
Washington, D.C. 20548

Dear Mr. Fogel:

Thank you for the opportunity to comment on the draft report of the joint IRS/GAO management review entitled Managing IRS: Actions Needed to Assure Quality Service in the Future. I am impressed with the cooperative attitude reflected in the draft report and appreciate the efforts of your staff, working with IRS management, in addressing issues that will benefit the Service's internal operations as well as its service to the American public.

We share a common goal of assuring that the Internal Revenue Service provides quality service and, to that end, I fully support the recommendations contained in the report. As you know, several of the recommendations have already been implemented and we are planning for the implementation of the others.

One of the most important recommendations is to reassess the 1987 reorganization. We are planning to begin the reassessment this fall and I invite you to participate with us in this undertaking. GAO's involvement will lend a perspective and objectivity that will be critical to the success of that effort.

Please extend my appreciation to Gene Dodaro, John Stahl and the rest of the project team for the fine job they did. I look forward to working with you again in the future.

With best regards,

Sincerely,

Larry Gibbs

Companies Contacted in the Private Sector Information Resources Management Survey

Company names	Principal contact
Aetna Life & Casualty Company, Hartford, Connecticut	Vice President—Corporate Administration
American Airlines, Dallas, Texas	Senior Vice President—Information Systems
American Express Company Travel Related Services, New York, New York	Vice President—Planning and Data Processing Acquisitions
Citicorp, New York, New York	Senior Vice President—Corporate Technology
Mellon Bank, Pittsburgh, Pennsylvania	Executive Vice President—Information Management and Research Development
Sears Merchandise Group, Chicago, Illinois	Vice President—Information Systems and Data Processing

Table I.3: Sample Plan and Weights

Strata	Strata size	Sample size	Returned	Response rate[a]	Weight	Sample error
1) National Office	5,078	371	320	86%	13.7	3.4%
2) Southeast Region	8,473	382	327	86	22.2	3.4
3) Midwest Region	6,065	375	332	89	16.2	3.1
4) Central Region	5,392	372	321	86	14.5	3.4
5) Southwest Region	10,067	385	326	85	26.1	3.5
6) N. Atlantic Region	7,860	381	329	86	20.6	3.4
7) Mid-Altantic Region	6,117	375	322	86	16.3	3.4
8) Western Region	9,830	384	314	82	25.6	3.7
Total	**58,882**	**3,025**	**2,591**	**85%**	**n/a**	**1.3%[b]**

[a]Response rate is calculated by dividing the number returned by the number sampled.

[b]Sample error is for the entire sample, which differs from the error rate for each specific stratum.

Table I.1: Non-SES Respondents Survey Sampling Errors for Selected Questions

		Sample Error
Q40	To what extent does IRS hold GS-15s and SES members accountable for the performance of the functional area(s) under them?	2.0%
Q21	Which of the following is the principal way that computer systems affect your job?	1.9%
Q42	To what extent are the following conditions adversely affecting your ability to accomplish your goals?	
	5. Poor coordination among organizational units	1.9%
	6. Conflicting priorities among functional areas	1.9%
	7. Poor communication among organizational units	1.9%
Q15	To what extent is IRS management concerned about	
	2. Management-staff relations	1.9%
	3. Working environment	1.9%
Q10	How effective has the productivity enhancement fund been?	1.9%
Q13	Does your functional area currently have too many, too few, or about the right number of staff?	2.0%
Q12	How adequate is the amount of training in the tax law changes?	1.9%

We will issue a separate technical appendix containing all of our questionnaire and structured interview results.

Analysis of the RORP Reports

We reviewed 61 of approximately 500 of the 1986 Regional Office Review Program (RORP) reports that covered the Examination, Collection, Returns Processing, and Taxpayer Service functions at 23 locations. The reports were selected by us on the basis of a cluster sampling plan previously used by IRS. We have reported the findings based on those 61 reports and have not generalized to all the reports for 1986.

Table I.2: Number of RORP Reports Reviewed by Function

Functions	Number of reports reviewed
Examination	20
Collection	20
Returns Processing	9
Taxpayer Services	12

Sample Survey Methodology

Sample surveys allow us to draw conclusions about the total population being studied on the basis of the information from a randomly selected sample. The responses of the sample are estimates of how the total population would have responded if all had been sent the questionnaire. The key to accurate estimates rests on randomness. Under mathematical sampling theory, every member of the population must have an equal chance of being included in the sample. However, there is likely to be some error because only a portion of the universe has been selected for analysis. The sampling error is presented here so that the reader can estimate the range of possible results for each question if different taxpayers had been selected in the sample. We selected a sample size to ensure that we would be 95-percent certain the sample error rate would not be greater than 5 percent.

Survey of IRS Employees

A questionnaire was sent to 3,025 randomly selected permanent full-time employees at the GS-5 through GS/GM-15 levels. The sample was stratified by the seven regions and the national office. Our response rate was 85 percent, with 2,591 employees returning the questionnaire. In addition, we sent the same questionnaire to all 190 SES members not in the Office of General Counsel. Our response rate was 91 percent, with 173 questionnaires being returned.

Sample Errors for Questions Used in the Report

The sample errors for all of the non-SES respondents are 2 percent or less for the questions used in the body of the report. This means that we are 95-percent certain that if a different group of non-SES employees from IRS had been randomly selected, their responses would have been within a range of +1 to -2 percent of the responses given by this group.

Table I.1 contains the sampling errors for selected questions for the non-SES respondents.

center operations. To ensure that both the Regional Commissioners, the primary RORP customers, and IRS senior management receive sufficient information on field performance, the RORP process should be changed as follows:

(1) Employ NORP measures and consistent IRS-wide methodology—IRS must closely coordinate the RORP process with NORP to ensure sufficient oversight of field activities. This will require (1) using the same performance measures and evaluation standards applied in NORP, (2) maintaining RORP with an appropriate level of independence, and (3) developing a coordinated NORP/RORP evaluation plan nationwide.

(2) Balance IRS-wide/local needs—In scheduling RORP activities, IRS should attempt to balance local evaluation needs with the need for a more structured RORP process to feed into NORP evaluations.

- Improve independent evaluation coverage.

To improve the usefulness of IRS' IA activities, the Commissioner should

(1) independently evaluate strategic management and NORP efforts—IA should provide IRS top management with periodic, independent evaluations of the implementation of the Strategic Management System and NORP. This should include reviewing the effectiveness of business plan strategies and their supporting action plans, the implementation of strategic initiatives, and the extent to which the SBP is driving IRS budget decisions.

(2) Provide staff and funds for broader IA coverage—IA's staff and funds should be sufficient to provide audit coverage that extends to all critical field and national office activities. The Commissioner may have to seek additional funds from Treasury, OMB, or Congress.

timely feedback to IRS senior management on how well the SBP strategies are accomplishing intended objectives.

(2) Develop evaluation guidelines—Detailed, standard NORP guidelines should be developed outlining minimum evaluation scope and methodology (e.g., the extent to which case file reviews are to be made) and addressing functional as well as cross-functional issues. These guidelines will help ensure nationwide consistency and facilitate the reporting of IRS-wide results.

(3) Use agreed-upon measures—IRS should use performance measures agreed upon throughout the organization for NORP. Agreed-upon measures are needed to facilitate the assembling and reporting of IRS-wide evaluation results.

(4) Provide full-time leadership—In order to effectively provide annual IRS-wide coverage of IRS' regional and national office activities, a full-time management function is needed to assure consistent evaluation, appropriate independence, and sustained leadership. This evaluation function should also synthesize NORP and RORP results to identify programmatic and cross-functional issues of nationwide importance. It could also undertake analysis of the national office and special evaluations to assist the Commissioner's office.

IRS agrees that sufficient resources need to be dedicated to make the revised NORP process successful but wishes to reserve judgement as to whether a full-time leader is necessary until the process is providing annual IRS-wide coverage.

(5) Assure relative independence—To enhance the credibility of NORP results to outside groups and to avoid duplication with other management analyses functions, the NORP function should be established and maintained separately from the programs under evaluation. One option would be to have it report directly to the Commissioner's office.

(6) Follow up - Rigorous follow-up procedures should be employed to ensure prompt and sufficient implementation of NORP recommendations.

- The regional office review process should be improved.

IRS senior management relies on NORP for feedback on field activities. The NORP process focuses on regional activities and relies on RORP for detailed oversight information concerning district office and service

Commissioner, the SBP represents IRS top management's most important tool in providing program direction to the agency and in achieving mission objectives. NORP represents IRS' highest level of management review. However, IA currently has no plans to review these processes.

Conclusions

To effectively supervise IRS' decentralized tax administration system, the Commissioner must maintain a series of checks and balances within the organization to ensure that IRS remains responsive to local taxpayer needs and also administers the law fairly and uniformly throughout the country. To carry out these nationwide responsibilities, the Commissioner needs effective, nationwide evaluation processes that will help provide assurances that the tax law is being administered properly.

IRS has long recognized the need for these types of evaluation systems and relies on its IA, NORP, and RORP processes to provide these services. However, in recent years, IA's funding has decreased while the agency's operations have been expanding. In addition, the NORP process was suspended from 1985 to 1987.

IRS has taken several recent actions to improve its evaluation process, but significant challenges remain. In particular, IRS needs to improve its reinstituted NORP process and to support full internal audit coverage of all significant IRS activities.

Recommendations

To strengthen the effectiveness of IRS' major evaluation processes, the Commissioner of IRS should act on the following recommendations.

Key Recommendation

The IRS annual, nationwide assessments of its field operations should be improved.

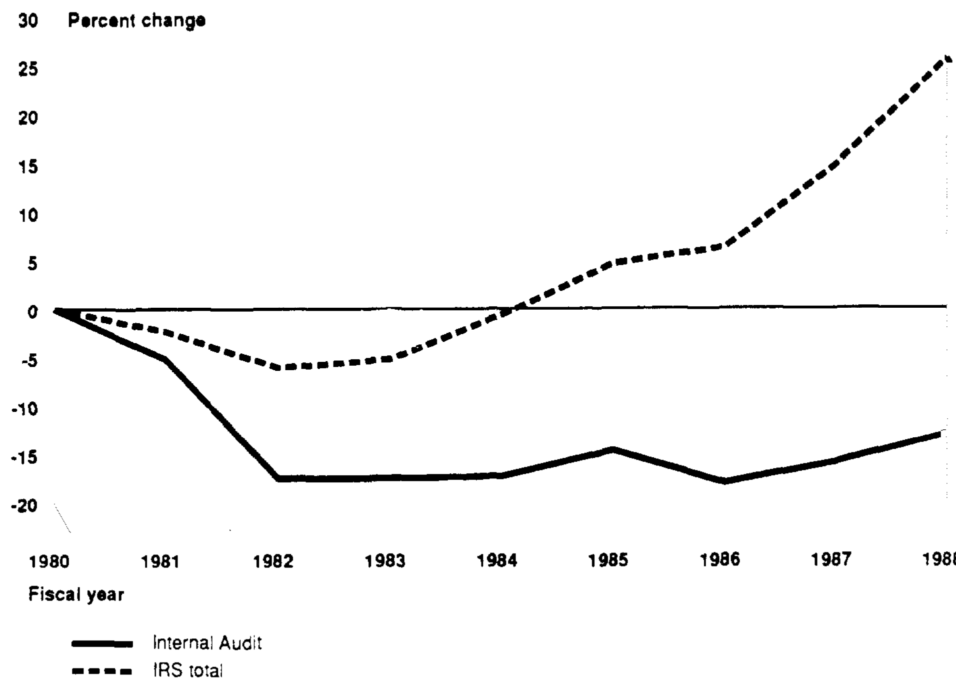
Supporting Recommendations

- The national office review process should be improved.

To make the NORP process more useful to IRS top management, the Commissioner should

(1) Provide annual IRS-wide coverage—IRS should implement an annual IRS-wide NORP assessment schedule as soon as possible. This schedule should provide top executives with IRS-wide assessments to be used in annual budget proceedings. In addition, NORP results should also provide

Figure 9.1: Internal Audit Staffing vs. IRS Staffing Percent Change Since 1980



requested 13 additional staff years for information systems development work for 1989.

In fiscal year 1987 in the program review area, IA devoted about 25 percent of its staff to reviews of program effectiveness. These reviews assess IRS programs to determine the extent to which desired program results are achieved. Although IA has received positive feedback on specific efforts, IRS executives still perceive it as more effective in carrying out procedural compliance reviews than program effectiveness reviews. Of the 62 executives we interviewed, 82.2 percent believed IA audits of procedural compliance were effective, while only 35.5 percent believed IA was conducting effective reviews of program effectiveness. In expanding upon their responses, about half of these executives noted a perceived lack of internal audit presence in the program effectiveness review area.

The implementation of the new SBP and the new NORP processes represents a significant opportunity for IA to substantially increase its presence in the program effectiveness review area. According to the

A fairly typical Examination Division's RORP report, for example, addresses field examinations, office examinations, tax shelters, and classification (one of several means to screen returns for examination). Discussion of each program focuses on statistical measures such as yield per hour, time per return, or number of tax shelters closed. Reasons given for program success or failure usually entail a comparison with a region or national average, not a program goal. The resource usage section compares the staff years utilized with the staff years budgeted and provides an explanation for discrepancies. The executive impact statement generally describes how proactive an Assistant Regional Commissioner or Service Center Director has been, as well as staff development efforts and programs receiving substantial management attention.

The lack of uniformity in these RORP evaluations limits their usefulness in contributing to an IRS-wide perspective. We reviewed a sample of 61 RORP reports for the Examination, Collection, Returns Processing, and Taxpayer Service reports in 12 district offices and 9 service centers. IRS identified the sample as representative of agency operations nationwide. In 23 of 61, or 38 percent, of the RORP reports we reviewed, evaluation scopes varied significantly. The remainder of the reports relied on a variety of evaluation approaches, such as assessing compliance with annual program letters outlining general goals and objectives for each function. Relying on analyst discretion to determine the scope of evaluations may meet regional needs but will not produce results that will be comparable for NORP purposes. As a result, limitations in the RORP process will constrain NORP's effectiveness.

Internal Audit Staffing Decreases Despite Agencywide Growth

Between 1980 and 1988, the IRS Internal Audit Division experienced a 13-percent decrease in staff years from 561 to 488. Meanwhile, IRS staff year allocation has increased by almost 26 percent from 88,184 to 110,681. (See fig. 9.1.) According to IA, this staffing reduction has limited its ability to provide sufficient audit coverage. IA officials attribute agencywide cuts in overhead as the cause for the decline in staff.

According to IA, these staffing reductions also reduced IA's ability to effectively cover IRS' increasingly complex systems development and growing programmatic activities. For example, in 1987, IRS had 48 major information technology projects that included over $1 billion worth of acquisitions between 1987 and 1992, while IA had 20 staff years devoted to information systems development work. IA believes this was not enough staff to effectively cover this area and has increased its staffing. In 1988, 37 staff years were budgeted for systems work and IRS covered 14 program areas and made 21 recommendations, including a recommendation that the region should analyze recruitment problems in the accounting area. The report concluded that the "Western Region is among the leaders in program delivery, program management, and innovation and creativity." It also noted that "the objectives of the new NORP philosophy have been accomplished—both regional and national officials agree with listed areas of concern."

Consistent with NORP procedures, participating national and regional office officials critiqued the pilot effort. Most of the officials said the pilot was a good beginning and made a number of suggestions aimed at making NORP more effective. These suggestions included developing functional performance indicators to facilitate the review, making the NORP executive responsible for following up on regional post-NORP action plans, and establishing greater precision in NORP review guidelines. A second NORP of IRS' Mid-Atlantic Region is now underway. IRS currently is considering making revisions to the NORP process based on its experiences to date.

RORP Procedures Should Be Improved

While NORP is designed to provide the Commissioner's office with feedback concerning regional office performance, RORP provides feedback to Regional Commissioners on district office and service center performance. From a regional or district perspective, IRS executives find RORP information useful.

Current RORP results, however, will not be very useful in supporting an effective nationwide NORP process since their timing, scope, and evaluation measures will differ from those used by NORP. This NORP/RORP link is important, as current NORP procedures rely, in large part, on regional information and assessments that are generated as a result of RORP activities. To help NORP provide an accurate and thorough assessment of critical agency operations, the RORP reviews must be designed to provide information that is compatible with NORP objectives. This can be accomplished while still addressing issues of local concern.

Although IRS has revised the NORP process over time, the RORP process has remained relatively unchanged. Similar to NORP in some respects, RORP lacks detailed evaluation guidelines; provides management information available from other sources throughout the year; and lacks agreed-upon performance measures. IRS needs to have an effective, routine monitoring program of both district offices and service centers.

administering tax laws, supporting agency policies, and executing programs. An agreed-upon, joint assessment is then provided to the Senior Deputy Commissioner. Ultimately, NORP assessments are to be made of each region on an annual basis.

When IRS began the process of drafting new NORP procedures, it asked us to provide a critique of the effort. Since this area had already been identified within our joint study program as an important area for review, we were able to provide IRS a comprehensive, independent critique of NORP.

Using existing evaluation criteria (see ch. 3, p. 35 for a full description of the criteria), we found that the proposed new program needed

- agreed-upon performance measures in order to provide timely and consistent evaluations nationwide;
- full-time leadership in order to provide sustained guidance to the process;
- detailed evaluation guidelines to facilitate a timely, consistent scope of evaluation among regions and among functions;
- rigorous recommendation follow-up procedures;
- an independent evaluative perspective in order to avoid direct duplication with other existing management analysis functions; and
- annual, nationwide coverage as soon as possible.

On the basis of our comments and other comments received from internal operating groups, IRS made several changes to its proposed program and decided to initiate a pilot of the process in IRS' Western Region.

IRS assigned overall responsibility for the pilot to the Deputy Assistant Commissioner for Planning, Finance, and Research. This executive facilitated and coordinated the review in addition to his other responsibilities and was aided by staff from the planning division. Consistent with the NORP guidelines, neither the executive nor his staff participated in any evaluation activities during the review. In addition, the executive provided no specific evaluation guidelines for the review and established no agreed-upon performance measures to use in assessing regions' accomplishments.

The pilot covered all major program areas—Collection, Examination, Criminal Investigation, and Returns Processing—and relied on regional self-assessment and headquarters' functional area assessments of their own programs to reach its conclusions and recommendations. The report

In recent years, however, both the NORP and the IA programs experienced problems that have significantly limited their oversight contributions to top management. From 1985 to 1987, IRS had no NORP program, since it had been suspended by a previous Commissioner because of his dissatisfaction with the lack of results produced by the process. Between 1980 and 1988, IA also experienced a 13-percent decrease in staff years while IRS' overall staff allocation increased by nearly 26 percent. This situation hindered IA's ability to provide sufficient audit coverage of important agency decisionmaking processes.

IRS has initiated several actions to address these concerns. A new NORP process recently has been started. In addition, IRS moved to request additional IA staff years to help maintain an effective agencywide oversight presence. IRS' new SBP also notes a need to increase internal auditing activities, program reviews, and investigations.

While these actions represent important steps, significant management challenges remain. In particular, IRS must

- improve its newly reinstituted NORP process to ensure that it provides an annual nationwide assessment of IRS operations for use by IRS top management;
- improve its regional office review process to ensure that a consistent IRS-wide evaluation methodology is employed and that the process provides effective input into NORP; and
- maintain a strong internal audit function capable of providing full audit coverage of all of IRS' important activities.

Revised NORP Process Should Be Improved

In May 1987, a revised NORP process was reinitiated. Currently, IRS considers NORP its highest level of management review. Internal Revenue Manual guidance depicts the focus of the revised NORP as one of ensuring consistent goals and a uniform management approach throughout IRS.

NORP is a joint assessment by regional and national officials of "the effectiveness with which a region has carried out the mission of the Service by managing resources, administering tax laws, supporting Service policies, and executing programs." The Assistant Regional Commissioners in each functional area, such as Examination, Collection, Returns Processing, and Taxpayer Services, work with their counterparts and others in the national office to prepare a joint assessment of regional effectiveness in carrying out IRS mission by managing resources.

tax processing and enforcement programs, utilizing resources, and managing operations and staff relations. The NORP evaluation reports contained a synthesis of information obtained as a result of field visits, the monitoring of statistical reports and correspondence, and the review of results from Regional Office Review Programs (RORP). RORP's are regional reviews of field operations, including district office and service center operations. NORP reports were drafted by national office staff who were assigned to specific programs. In addition to preparing NORP reports, they developed new programs, monitored program execution, and completed quality assurance reviews.

Key sources of NORP information are the analyses produced by regional office RORP processes. Each regional office has a policy outlining its specific RORP. Senior regional office staff including Assistant Regional Commissioners (ARC) are responsible for the RORP process. Regional analysts assigned to each function are responsible for drafting the evaluations as well as assisting with program development and execution. Generally, RORP reports are prepared at least once a year for each district office and service center with interim assessments prepared at the request of regional management. These reports are based on a wide range of information, including the results of field visits; quality assurance reviews; monitoring of statistical reports; and a general assessment of an installation's accomplishments, deficiencies, and resource utilization.

Unlike NORP and RORP, whose reviews are implemented by management, IA reports directly to the Commissioner and provides the only independent appraisal of IRS functions. As part of a major reorganization in 1952, IRS established an Inspection Service comprised of the IA and Internal Security Divisions. Inspection was created in response to heightened congressional concerns with corrupt collection activities during the 1940s and 1950s. IA's mission and activities have remained virtually the same since its inception. Its reviews are intended to provide an assessment of the condition of all functional activities at the national, regional, and district levels, and a basis for constructive management action. The division also is responsible for systematically reviewing financial transactions and internal controls at all levels.

These kinds of oversight activities are particularly important, given the nature of IRS' mission. IRS personnel deal with millions of taxpayers annually and the potential for inconsistent treatment is always there. Thus, it is important to maintain a rigorous, nationwide oversight mechanism for IRS activities.

To effectively implement IRS' nationwide mission, the Commissioner must assure that the nation's tax administration process

- provides fair and equitable treatment to millions of taxpayers located in all sections of the country,
- uses its annual multibillion dollar operating budget efficiently and effectively, and
- effectively brings to bear technical expertise from different functional areas in handling thousands of individual tax cases.

The Commissioner is held accountable for all of these nationwide operations by the Administration, Congress, and the public. However, the Commissioner must delegate a great deal of authority to field officials located throughout IRS' dispersed and decentralized organization if these operations are to be responsive to taxpayers' needs.

To effectively supervise this decentralized tax administration process, the Commissioner must have substantial control over his seven Regional Commissioners, and through them, over all activities in the field. (See ch. 1, p. 15 for a description of regional office responsibilities.) This control, however, must not be exercised in such a manner as to excessively disrupt day-to-day operations, thereby potentially lowering IRS' level of responsiveness to individual taxpayers. Balancing these sometimes conflicting needs is an important management challenge inherent in supervising our nationwide tax administration system.

Since the 1950s, IRS has recognized the need for the Commissioner to have access to timely and relatively independent assessments that address IRS' efforts to provide equitable, efficient, and competent service to all taxpayers. These assessments can potentially provide the Commissioner with an important check of the operating results being reported to him through existing functionally based management information systems. In addition, they also can provide feedback on operational performance that can be used to help formulate new plans.

IRS' Internal Audit (IA) Division and National Office Review Program (NORP) historically have been two important sources of feedback for the Commissioner and other top officials on operational performance. NORP is a management review program while IA provides independent evaluations of IRS activities to the Commissioner.

For many years, IRS has relied on NORP as its primary means of evaluating regional office performance in administering the tax laws, executing

Maintaining Effective Oversight of a Decentralized Tax Administration Process

Management Challenge

- Maintain strong IRS oversight processes to help the Commissioner
  - assure the Administration and Congress that taxpayers receive fair and equitable treatment nationwide,
  - ensure that funds are spent effectively nationwide,
  - effectively coordinate various specialized skills needed to administer the tax laws nationwide.

Key Recommendation

Improve IRS' nationwide assessment of its field operations.

Supporting Recommendations

- Improve IRS' national office review process for evaluating regional office operations by
  - developing evaluation guidelines to assure nationwide consistency,
  - using agreed-upon performance measures,
  - requiring nationwide coverage on an annual basis as soon as possible,
  - providing full-time leadership in order to achieve a scope that provides nationwide results on an annual basis, and
  - ensuring rigorous follow-up of review recommendations.
- Improve regional office review process for evaluating district and service center operations and providing input into the national office review process by
  - establishing an IRS-wide evaluation methodology, and
  - balancing IRS-wide versus local evaluation needs.
- Increase internal audit staffing.
- Use IRS internal audit to evaluate IRS' new strategic business planning process and the new national office review process.

impact on the entire system—are subsequently integrated into the new planning system. This will be particularly important in areas requiring a high degree of technical specialization, such as the Information Systems area, as these attributes may be unique and thus require the establishment of new career paths for these specialized positions.

Recommendations

The Commissioner of IRS should implement the following recommendations:

Key Recommendation

IRS should better coordinate human resource planning efforts through establishing an agencywide human resources plan. This plan should be an integral part of the SBP. A human resources plan would organize various IRS activities into a long-term agencywide human resource agenda. It should coordinate the various human resource management initiatives that have been started throughout IRS.

Supporting Recommendations

- IRS should establish an agencywide strategy to develop, accumulate, and use information on employee quality throughout IRS' human resource management processes. An agencywide strategy is essential to identifying the scope and nature of the quality challenge and implementing an agencywide approach to its resolution.
- IRS should establish clear accountability for the development and maintenance of an agencywide human resources plan.
- IRS should reformulate the current human resource management evaluation strategy to explicitly link it to the new agencywide human resources plan. The evaluation strategy should provide effective feedback to management on the status of planned actions.
- IRS should strengthen the information systems project approval process by requiring the identification of human resource requirements and issues when the project receives conceptual approval. These requirements should be specified in the prospectus for all projects. Detailed studies would not be required but rough estimates should be stated. This analysis would include the number and skills of employees who will be displaced, the number of new positions and skills needed, and the training required. Detailed analysis of these issues in the prospectus should be addressed in the requirements analysis package.
- IRS should require the Assistant Commissioner for HRMS to comment on the human resource section of the information systems project prospecti. The Assistant Commissioner should make any recommendations believed to be appropriate regarding the human resource issues involved, including the need for an HRMS liaison. These recommendations should be submitted to the project initiator and to the official responsible for project approval before conceptual approval.
- IRS should integrate results of the executive attribute study into executive succession planning system design. Because succession planning will be initiated before executive attributes have been fully defined, IRS must ensure that the results of this research—which could have an

In addition to addressing internal concerns about executive selection, IRS also revised procedures for selecting outside applicants to the ES&D program in response to a Treasury recommendation. In particular, Treasury was concerned about the implicit bias toward IRS candidates that a totally IRS-staffed process may produce.

Outside applications for the 1988 ES&D class were sent directly to the national office rather than being screened by regional offices as they had been in the past. After ensuring that applicants met the basic requirements, the IRS Office of Executive Support forwarded 63 of the 290 applications received to a ranking panel. The panel consisted of two IRS Regional Commissioners and an Assistant Commissioner, a Deputy Director from the General Accounting Office, and the President of Cigna Insurance. In the past, outside applications were reviewed solely by IRS officials. The panel referred six outside applicants to the National Selection Panel. One applicant subsequently withdrew. Three of the remaining five applicants were selected into the 1988 ES&D program. This compares to the 15 selections from the 30 internal applicants.

Conclusions

IRS has become increasingly concerned over its future ability to attract and retain quality employees, managers, and executives. Like all other federal agencies, IRS must attempt to attract and retain quality employees while operating within the limitations of a noncompetitive federal pay structure. Nevertheless, IRS has initiated a number of important efforts aimed at strengthening its human resource management capabilities to address these issues. Many of these initiatives, however, are long-term in nature and will require a well-organized commitment on the part of IRS leadership.

In order to ensure that these efforts will be effectively maintained, IRS needs to establish a long-term agencywide human resources plan and a strategy to address its concern over its future ability to attract and retain quality employees. It also needs to improve its consideration of human resource issues within the information systems planning process and to ensure that its new executive succession planning system is effectively designed and implemented.

development of a new succession planning system for IRS executives. The specific purposes of IRS' succession planning system will be to

- expedite the process of filling vacant executive positions;
- provide for regular discussions of executive career plans, development needs, and organizational objectives;
- forecast positions in which shortages or surpluses of qualified candidates exist; and
- create a cadre of highly developed executive candidates from which successful selections can be made.

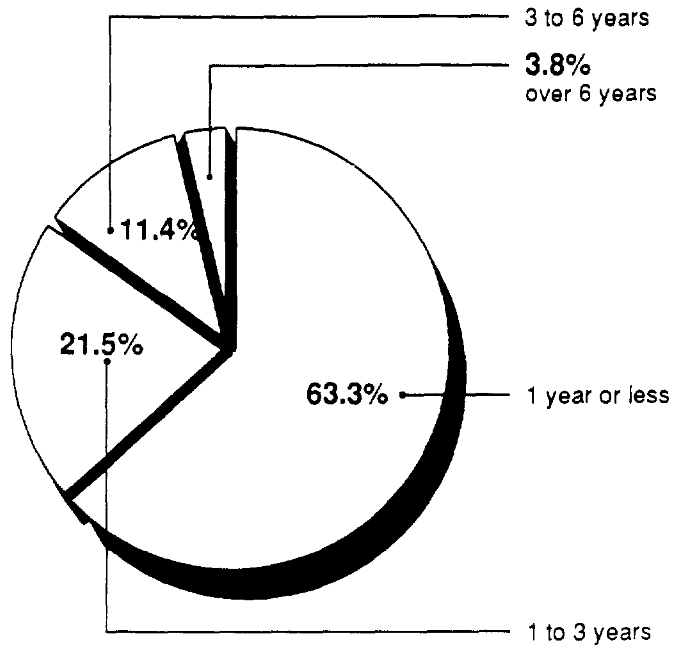
IRS' succession planning system has two phases, a planning phase and a selection phase. During the planning phase, the Executive Resources Board reviews data on potential executives and discusses their relative strengths with Assistant Commissioners and Regional Commissioners knowledgeable about the individual's performance. After this analysis, the Executive Resources Board lists potential candidates for future vacancies and approves placement and individual development plans for executives.

In the selection phase, using the data that identify potential replacements, the appropriate Assistant Commissioner or Regional Commissioner (depending on the location of the vacancy) may propose the selection of an individual from the listing created by the Executive Resources Board. If the Executive Resources Board concurs, the individual's name would be forwarded to the Commissioner for final approval.

The effective implementation of a succession planning system requires identifying and using effective selection criteria throughout the process. These criteria must be based on the competencies needed for effective executive performance. IRS has initiated efforts to identify these competencies by developing a model for executive and managerial performance.

Although the executive competencies identified by IRS so far have been general in nature (e.g., expressive communication skill, IRS knowledge, etc.), IRS intends to develop executive competencies for types of executive positions later this year. To improve its timeliness in filling executive vacancies, IRS will implement succession planning before the individual attributes have been completely identified. However, IRS will integrate newly identified attributes, especially those for types of executive positions requiring technical skills, into subsequent selection criteria used for succession planning.

Figure 8.3: Years Executives Say They Will Remain After Retirement Eligibility



was to develop and implement a plan to improve the effectiveness of IRS' executives and managers.

The staff working on the initiative produced two reports containing over 90 recommendations. As a result of work on this strategic initiative, IRS identified the need to revise or improve several aspects of its managerial and executive selection and development programs. The staff suggested developing a succession planning model for executives and establishing an effective selection process for executive development candidates.

In addition to the internal concerns over executive selection, a May 22, 1987, Treasury report concluded that most of IRS' executives were selected from within and recommended that IRS improve its outside recruitment. The report said that the IRS selection process was so internally focused that it limited the organization's exposure to the ideas and strategies used in other public and private sector organizations.

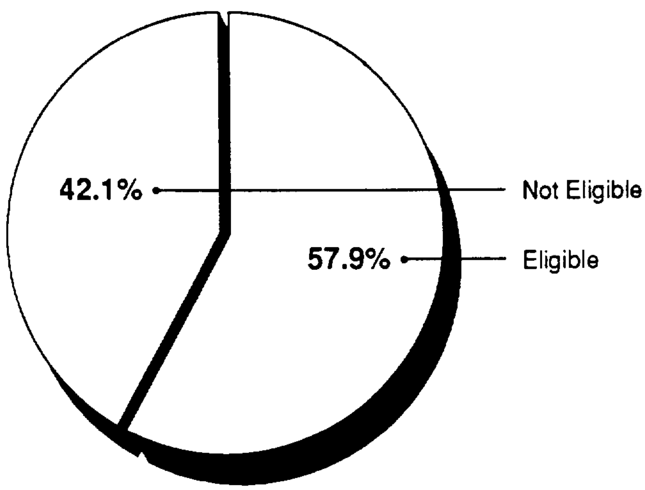
IRS has already initiated actions to address these recommendations. One of the first actions was the Executive Resources Board's approval of the

Maintaining Quality Executive Leadership—a Critical Future Challenge

Effectively selecting and training executives is very important to IRS. These executives, the majority of whom are located in field offices, provide a key link between policy formulation and execution. In addition, these executives have provided operational continuity—84 percent of the executives who responded to our survey have been with IRS for 20 years or more.

As illustrated in figures 8.2 and 8.3, 57.9 percent of the 164 senior executives who answered our question on retirement eligibility said they would be eligible between 1987 and 1992. Of the 79 executives who estimated when they would retire, 63.3 percent said they would leave in less than a year after reaching retirement eligibility.

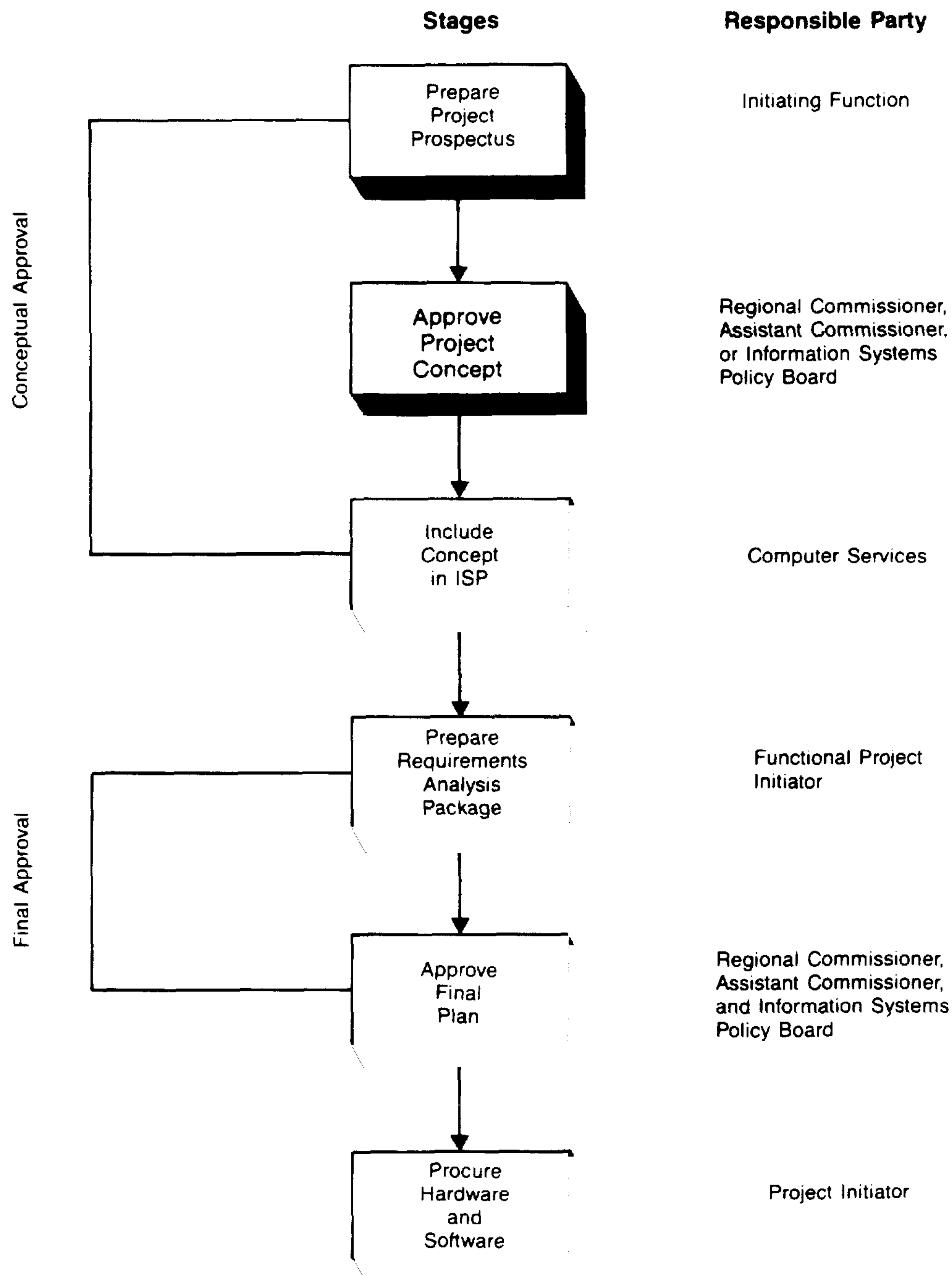
Figure 8.2: Executive Retirement From 1987 to 1992



Historically, the source of IRS senior executive leadership has been the Executive Selection and Development (ES&D) program. The purpose of the ES&D program is to identify outstanding persons with executive potential and prepare them for executive positions in the agency.

In the last few years, concerns have arisen regarding the executive selection process. Within IRS, management became concerned that many qualified employees were no longer willing to take managerial positions. As a result, IRS established a strategic initiative on the treatment of executives and managers in May 1984. The objective of the initiative

Figure 8.1: Information Systems Project Planning Process



draft requirements provide more specific guidance than currently exists on which human resource activities should be done at the various stages of system development.

In addition to developing these initiatives. beginning in 1985, HRMS staff members were assigned as liaisons to functional area automation projects. Liaisons inform the project managers of human resource issues associated with the project but do not have authority to act on them. Rather, their role is to direct project managers to relevant HRMS offices to resolve issues. Liaisons may be assigned during any project development stage at the request of the project managers or by HRMS direction.

As shown in figure 8.1, the automation project approval process is currently divided into two general stages—conceptual and final approval.

Initially, the project originator develops a prospectus that includes a brief description of the overall system concept and basic requirements and a preliminary cost-benefit analysis. Human resource issues are not discussed. The approving official for the prospectus varies according to project cost. If the prospectus is approved, the initiator must then develop certain support documents and coordinate with other IRS units, including HRMS.

One of the support documents required is a "requirements analysis package," which includes discussions of some of the human resource issues associated with the project. For example, the analysis must discuss the training and personnel requirements associated with the proposed system. The supporting documents are submitted to the appropriate official for final project review and approval.

Human resource issues must be considered early in the process. Not addressing human resource issues early in the planning process can result in project implementation delays or wasted resources. HRMS officials and liaisons agreed that early HRMS involvement and consideration of HRMS issues in the automation development process, before project planning is completed, is central to the success of a project.

Human Resources Planning for Automation Projects: Steps in the Right Direction but Earlier HRMS Involvement Needed

Both internal and external studies of IRS identify the impact of an increasingly automated environment as a fundamental, long-term human resource management issue. A 1982 IRS redeployment study estimated that about 8,700 employees could be affected by automation through fiscal year 1987. Difficulties encountered in implementing the Automated Collection System (ACS) in 1983 highlight the need to anticipate human resource issues before implementing automation projects.

ACS was designed to eliminate the extensive paperwork of the Collection Office function. Before implementing ACS, delinquent taxpayer collection cases were batched in groups of up to 500 cases and were manually reviewed every 36 work days to determine the next action. Up to three employees were involved with each review—a reviewer who analyzed the case and decided the next action; a clerk who prepared letters and forms; and a third employee who initiated the contacts with the taxpayers. Under ACS, Collection personnel were to have a paperless work process, automated telephone dialing, and computerized techniques for locating delinquent cases.

Concerned that ACS was not accomplishing its objectives, IRS established a 1982 task force to evaluate its implementation. The task force identified four major areas for review, one of which was human resources. In particular, automated installations had become high turnover operations, with low salary levels, high job stress, and the repetitious nature of the activity contributing to job burnout. The task force recommendations included

- additional training in job stress and basic enforcement skills;
- adequate office space and sufficient equipment;
- additional training for ACS managers in techniques for motivating and managing in an automated environment;
- development of better employee selection criteria; and
- reevaluation of decisions on the appropriate staffing mix—permanent, part-time, and intermittent employees.

As part of IRS' attempts to deal with technological changes, it developed a strategic initiative that focused on revising the existing automation project planning process to address human resource concerns more explicitly. From this strategic initiative, IRS developed a systems development methodology to help integrate human resource planning into the development of automation project milestones. Although the specifics are still in draft, the initiatives lay out the human resource issues and activities associated with the various stages of project development. The

- gaining support for such activities from the functional areas,
- obtaining access to needed human resource information contained in functional management systems, and
- modifying existing information systems to achieve IRS-wide compatibility.

IRS also has recognized the need to effectively evaluate human resource actions and the need to have a close link between evaluation and planning. IRS' Human Resources Division (HRD) is responsible for providing evaluation techniques and criteria. Historically, HRD has relied on the National Office Review Program (NORP) for oversight of field human resource management activities. However, as discussed in chapter 9, NORP had not been used for 2 years and has only recently been reactivated under new procedures. We believe the recently revised NORP procedures do not provide for independent assessments of the current effectiveness or efficiency of agencywide operations. In addition, in our survey of 21 IRS senior executives, which asked them whether HRD provides the techniques and criteria to help managers effectively evaluate their human resource management programs, 1 responded to a very great extent, 11 responded to a moderate or some extent, and 9 responded to little or no extent.

HRMS plans to improve its human resource management evaluation activities but acknowledges that it faces several significant challenges. As in the planning area, an internal HRMS report notes that implementing an effective evaluation process will face difficulties that include gaining support for such activities from the functional areas.

In summary, the formulation of the new SBP provides an opportunity for IRS to overcome the historical functional difficulties that have inhibited a more proactive, agencywide approach to human resource planning. A supporting mechanism, such as an agencywide human resources management plan serving as an integral part of SBP, would provide a vehicle to directly link planning and evaluating activities to strategic goals.

The need for this linkage has already been acknowledged within a recent internal HRMS taskforce report, which notes:

> "The opportunity exists to change the culture of the Service through the use of a planning and evaluation process by tying these activities to IRS strategic management goals and by instituting a reward system to reinforce the desired behaviors."

occupations. However, this long-term effort will require a sustained commitment from top management.

IRS Needs an Agencywide Human Resource Plan to Support the Strategic Business Planning Process

As discussed in chapter 4, IRS has initiated a new strategic business planning process to provide agencywide direction to management. IRS-wide and functional human resource management issues and challenges are present throughout the plan. For example, strategic business planning challenges include recruiting the number and type of employees needed for effectively processing tax returns and recruiting and retaining high quality enforcement personnel. Effectively addressing these issues requires a proactive agencywide focus for human resource planning. An agencywide human resource plan, derived from strategic business planning, could provide this framework within IRS.

Both at the agencywide and at the functional organizational level, IRS senior management has recognized the value of human resource planning. A major component of the initial IRS strategic plan focused on the human resource area. The component contained 15 initiatives aimed at improving the recruitment and retention of IRS employees, including specific initiatives on improving recruitment planning and procedures. Several of these initiatives recommended using a more agencywide approach to human resource planning. Recommendations included formulating and implementing an IRS-wide college recruitment strategy and developing a national electronic referral system for job applicants. To date, progress on the implementation of these recommendations has been slow; however, an action plan has been drafted to implement these initiatives.

At the functional level, various individual organizational components within IRS also have recognized the need for human resource planning. For example, in September 1986, the Assistant Commissioner, Human Resource Management and Support established a planning approach for his organization that identified strategic issues and objectives for the 1990s and related all major work projects and senior executive performance objectives to these strategic objectives. The approach also provided a strategy for how HRMS can interact with the functions to carry out human resource activities.

While the HRMS study contains many good ideas, it also illustrates the problems inherent in attempting to achieve agencywide results through a functional process. As HRMS noted in its study, to implement an effective planning approach, it will face a number of difficulties, including

Table 8.2: Results of Comparison of Revenue Agent New Hires Orientation Test Scores Against Various Norm Groups (1984 Through 1987)

	Percentiles[a]	
Year	Entry level accountants[b]	Students with more than 1 year of accounting[c]
1984	25	85
1985	22	84
1986	19	83
1987	19	83

[a]Percentiles are relative rankings compared to a norm group, i.e., scoring in the 20th percentile means that 80 percent of the norm group scored higher than IRS revenue agent new highers.

[b]Entry level percentile norms based on 329 entry level accountants tested from 1983 to 1984.

[c]Student percentile norms based on 411 students tested from 1983 to 1984.

Combining this data with other information, IRS will establish a data base from which future correlations between test results, education, experience, and job performance could be attempted. This is critical to ensuring that the evaluation criteria employed are predictive of successful job performance. For example, IRS will test the relationship between scores on the achievement and orientation tests and job performance to see if these tests could be used in the future to examine job applicants.

Recruiting and retaining quality employees also has been a major concern in the tax processing area, particularly since the 1985 filing season problems. Three major tax processing positions—tax examiners, data transcribers, and clerks—all deal with a wide seasonal fluctuation in work load, which IRS has traditionally managed by using both permanent and seasonal employees. Moreover, IRS has issued national guidelines for establishing the permanent and seasonal staff mix.

Information on the quality of these employees is important to identifying the best mix of employees, particularly if performance differences between permanent and seasonal employees are significant. Although error rate data are available, they are not accumulated or used in a manner that supports this national guidance. Presently, IRS senior managers do not have current information identifying the relative regional or nationwide quality of either permanent or seasonal processing employees.

IRS has initiated an effort to begin systematically developing and using workforce quality data within an agencywide approach for maintaining effective selection and examination procedures in several important IRS type of interview, only 8 of the 63 reported that they gather and analyze data on the reasons for employee attrition. This type of analysis could be useful in making adjustments to recruitment and retention policies and procedures.

Various IRS functional areas also have initiated efforts to obtain data on the quality of their workforce. For example, in the revenue agent area, IRS' Examination function is attempting to collect data to determine what makes successful revenue agents, and where these successful agents come from. Such concerns were precipitated, in part, by the 1981 revenue agent attrition study that concluded that IRS was having a problem retaining quality agents. That study made a number of recommendations, including gathering more data on the nature of revenue agent attrition. This is particularly important because revenue agents comprise a large job classification within IRS' enforcement area.

One of Examination's efforts in this area is the testing of new revenue agent hires to try to gain insight into recruitment quality. IRS has administered the AICPA Achievement and Orientation tests to new hires to measure achievements in financial accounting, cost and managerial accounting, auditing, taxation, and information systems. The orientation test measures learning ability as applied to business situations. IRS new hires in fiscal years 1984 through 1987 were measured against several different norm groups that included entry level accountants, all employed accountants, and two student groups as shown in tables 8.1 and 8.2.

Table 8.1: Results of Comparison of Revenue Agent New Hires Achievement Test Scores Against Various Norm Groups (1984 Through 1987)

	Percentiles[a]		
Year	Entry level[b] accountants	All employed[c] accountants	Students with over[d] 2 years accounting
1984	20	23	51
1985	18	22	48
1986	21	[e]	49
1987	20	[e]	47

[a]Percentiles are relative rankings compared to a norm group, i.e., scoring in the 20th percentile means that 80 percent of the norm group scored higher than IRS revenue agent new hires

[b]Entry level percentile norms based on 268 entry level accountants tested from 1981 to 1984

[c]All employed percentile norms based on 334 accountants tested from 1981 to 1984

[d]Students with over 2 years accounting percentile norms based on 1,514 students tested from 1981 to 1984

[e]No comparison made

- IRS has established a strategic planning council in the collection area to help formulate a long-term approach to effectively address the changing nature of the work, including the expanding role of automation in collection.
- IRS has initiated an executive succession planning effort aimed at ensuring that it has a highly qualified pool of candidates to choose from in filling vacancies. A key element in the initial selection of future executives will be the identification of the attributes needed to succeed in these positions.
- IRS has initiated changes to improve the process for considering outside applicants for its executive development program.
- IRS has implemented three strategic initiatives—dealing with child care, health improvement, and counseling services—designed to help make it an attractive employer to enhance the recruitment and retention of high quality employees.

Efforts to Develop and Use Information on Workforce Quality

Timely, accessible, and relevant data on workforce quality—e.g., appraisals, performance indicators, employee surveys, exit interviews—are an important part of the mosaic of information needed to establish the selection and examination procedures necessary to recruit the right people for the right jobs at the right time.

IRS has long recognized the importance of attempting to collect and use data on workforce quality. For example, in 1956, it established a Blue Ribbon Career Service Program to develop data and strategies for attracting and retaining high caliber employees. In 1964, IRS sent questionnaires to more than 1,500 high quality applicants to determine why they had dropped out of competition for appointments. In 1965, it began to collect background data on all appointees in seven major enforcement positions and recorded follow-up data to determine success in job performance and training.

Currently, specific IRS functional areas or organizational units are engaged in various efforts to develop better workforce quality information. For example, at the organizational unit level, a 1986 Revenue Agent Recruitment Study done by IRS' Southwest Region recommended that field offices conduct substantive exit interviews with departing revenue agents to better understand why quality agents were leaving.

However, information obtained from IRS district offices shows a wide range of current exit interview practices. While all districts do some

A third long-term management concern is maintaining an effective group of quality senior executives to lead IRS in the future. Specific concerns include the following:

- IRS senior executive responses to our questionnaire revealed that over half will be eligible for retirement between 1987 and 1992. Over 60 percent of those eligible for retirement indicated that they would leave within a year after achieving eligibility.
- A 1987 Treasury study recommended that IRS pay particular attention to recruiting high quality executives from outside of IRS to fill leadership roles in areas that require extensive technical skills, such as ADP.
- IRS has reported that qualified employees appear to be increasingly unwilling to take managerial positions.

Early Actions Taken by IRS Management

IRS management has been taking a number of initial actions to begin to address their human resources concerns. For example:

- IRS has established three strategic initiatives to strengthen recruitment and retention of quality employees. A recruitment planning initiative will develop the means for staffing IRS' technical and professional positions with high quality employees. A reporting system on the job performance of new hires will be developed as a part of this initiative. College relations and recruitment procedures initiatives are intended to strengthen IRS' relationships with colleges.
- IRS has tested IRS revenue agent new hires using the American Institute of Certified Public Accountant Achievement (AICPA) and Orientation tests. New revenue agent achievement test results compared unfavorably to entry level accountants at predominantly "Big 8" firms. IRS will correlate these results with job performance information to see if the test results are a valid performance indicator.
- IRS has implemented two new strategic initiatives that could improve its automation project planning by requiring the identification and resolution of staffing and training needs during the approval process for major automation projects.
- IRS has undertaken several initiatives to make employment as a revenue agent at IRS more attractive, including promoting the positive features of federal employment and using direct hiring authority.
- IRS has drafted a strategic plan to provide long-term direction for the Human Resources Management and Support (HRMS) group, which is responsible for providing human resources leadership and guidance to the agency's officials and personnel.

salary of $25,375, which is 35 percent more than IRS' predominant starting salary of $18,726 at the GS-7, step 1 level.

In the 1988-89 edition of its Occupational Outlook Handbook, the Bureau of Labor Statistics (BLS) projected that the employment of accountants will grow much faster than the average for all occupations through the year 2000. BLS projected a moderate growth increase for accountant positions of 34.8 percent for the period 1984 through 1995. BLS data also showed that the growth in the number of accounting degrees granted annually has moderated since the late 1970s. IRS believes that a heavy demand on the supply pool and a sizable salary difference will have a detrimental impact on its future ability to recruit revenue agents.

A second long-term management concern is the need to effectively address the human resource impact of an increasingly automated work environment. IRS estimates information systems costs will increase from approximately $369 million in fiscal year 1985 to $992 million in fiscal year 1989. Over the next several years, IRS will be implementing over 100 automation projects. These automation efforts should have a significant impact on future skills, employee qualifications, training programs, and staffing mix decisions (i.e., permanent, part-time, seasonal). Examples of this potential impact follow.

- Electronic filing, machine readable forms, and other technological advances should make it possible to check return accuracy more efficiently and with fewer errors but will require new skills, intensive training, and key decisions on the number and types of employees needed.
- Telecommunications technology advances should allow managers to supervise more employees over a wider geographical area.
- Expanded automation-assisted completion of lower-level work and increasing taxpayer use of computers for recordkeeping will require new job skills for technical employees, and jobs will be classified at higher grades.
- The introduction of new automated systems could significantly change the nature, complexity, and size of the revenue officer's work load.

rehire about 70 percent of the revenue agents who left the organization between July 1979 and June 1980. Subsequently, low scores on accounting tests that were administered to new hires in fiscal year 1984 through 1987 have reinforced quality concerns. For example, when 1985 new hire achievement test scores were compared to a norm group consisting primarily of entry level accountants in large accounting firms, over 80 percent of the norm group scored higher than the revenue agents. (See p. 122 for more details.)

- IRS has found recruiting the number and types of employees needed in the tax processing area more and more difficult. At some service center locations, entry level salaries are lower than those offered by local fast food restaurants.
- IRS is becoming increasingly concerned about the ability of its taxpayer service employees to effectively communicate an increasingly complex tax law to the public. IRS asserts higher skill levels, better recruitment, and improved training are needed. Our 1987 survey of IRS employees showed that over 54 percent believed their training on the tax law changes was either inadequate or very inadequate. Since that time, IRS has planned training on the changes ushered in by the 1986 Tax Reform Act.
- A 1985 study prepared for IRS showed that 74 percent of IRS managers believed their salaries do not match their level of responsibility.

Various surveys show a continuing erosion in IRS' ability to successfully compete with private sector salaries offered for college graduates. For example, a recent comparison showed that the 1986 revenue agent (GS-7) starting salary of $17,824 was about 19 percent less than the average starting salary for accounting graduates, as reported in the College Placement Counsel Survey and the Endicott Report (Northwestern University).

The College Placement Council Survey for July 1988 showed the results of 4,349 salary offers extended to students graduating between September 1, 1987, and August 31, 1988. The average starting salary offer for accounting graduates in the private sector was $24,120, whereas the average starting offer for the federal government for this period was $19,008—a difference of 26 percent. Furthermore, more than 90 percent of the offers made by private firms were above the federal government's average offer.

We found a similar variance in starting salaries between the private sector and the federal government. Data collected from four "Big 8" accounting firms showed that they paid accountants an average starting

Annually, thousands of IRS employees deal with millions of citizens, businesses, or their tax representatives on sensitive tax matters. For example, in 1987,

- 18,046 revenue agents and tax auditors examined 2.0 million tax returns;
- 7,229 revenue officers worked to complete actions on 2.6 million unpaid tax accounts and secure 4.1 million delinquent tax returns; and
- 2,715 special agents initiated 5,511 tax fraud investigations.

For many citizens, these activities may be their most significant annual business with the federal government. For IRS to be effective, these activities must be carried out by quality employees possessing a variety of job skills in such areas as accounting and tax law.

IRS has become increasingly concerned over its future ability to attract and retain quality employees and managers. One important factor in attracting and retaining quality employees is competitive pay. Because of years of federal salary adjustments at lesser amounts than granted for comparable jobs in the private sector, we believe federal pay is not competitive with the private sector. IRS, like other federal agencies, cannot offer competitive salaries in some critical occupational series to attract quality talent. IRS believes this situation will make attracting quality employees even more difficult in the future.

While IRS cannot unilaterally resolve the pay issue, it has initiated a number of other human resource management initiatives, such as using direct hire authority where possible, and promoting the positive features of federal employment.

Attracting and Retaining Quality Employees—A Major Long-Term Concern

One major concern of IRS' top management is that the disincentives to considering a career in the federal service may increase, making the future recruitment and retention of quality employees even more difficult. IRS believes that those aspects of federal employment that historically have helped IRS attract and keep top employees—relatively competitive pay and positive values associated with public service—have eroded to the point where they no longer provide powerful incentives. The following examples illustrate why IRS managers are concerned about their ability to secure top talent.

- Since the early 1980s, IRS managers have been concerned about revenue agent quality. A 1981 study reported that IRS management would not

Improved Human Resources Management Needed to Prepare IRS for the Future

Management Challenges

- Attract and retain quality employees in an employment environment where disincentives to considering a career in the federal service appear to be increasing.
- Maintain an efficient and effective workforce in an increasingly automated working environment.
- Maintain an effective group of quality senior executives as retirements increase.

Key Recommendation

Establish an agencywide human resource management plan as a derivative of IRS' Strategic Business Plan.

Supporting Recommendations

- Establish an agencywide strategy to effectively define the nature and extent of IRS' human resource quality problems.
- Establish clear accountability for the development and maintenance of the human resource management plan.
- Link IRS' human resource evaluation strategy to the new human resource management plan.
- Improve consideration of human resource issues in the information systems project approval process.
- Integrate research results identifying the attributes of successful IRS executives into the new succession planning system.

- Reward and recognition systems are needed for quality management—IRS must develop better systems for managers and employees at all levels of the agency that directly support the quality management process. These systems would encourage the involvement of all employees in the quality improvement process.
- The Productivity Through Quality Innovation Enhancement Program effort should be strengthened—IRS can improve this program by sustaining recent initiatives to increase the overall awareness of the effort, and by improving the documentation of individual projects as well as improving the dissemination process.
- The Productivity Management Program should be closely coordinated with the Quality Improvement Process—The current effort should be closely coordinated with the quality improvement process, with quality being the primary concern.

reduced because of late refunds, erroneous taxpayer notices, and numerous newspaper articles detailing problems at service centers.

These problems caused IRS management to give additional attention to finding ways to improve the quality of its services to the public. IRS management has undertaken a series of initiatives aimed at improving the quality of services throughout the agency. These efforts represent a solid beginning.

The long-term success of these quality initiatives, however, rests on ingraining quality into IRS' day-to-day operations. In order to achieve this objective IRS management must build quality into critical IRS service processes, develop an effective performance measurement system, develop reward and recognition systems to reinforce the quality improvement process, and improve important aspects of its productivity improvement program.

Recommendations

IRS has made an important start in reemphasizing quality throughout the agency. This initial momentum must be sustained through the continued leadership of IRS management and employee involvement. To assure that the quality improvement process is maintained and adopted as a means of doing business, the Commissioner of IRS should implement the following recommendations.

Key Recommendation

Building quality into IRS' services using preventive, quality assurance approaches—IRS needs to maintain a proactive approach toward quality improvement. IRS must balance its quality control efforts with quality planning, building quality into its services, and focusing more on prevention and less on inspection and correction. This change will require a strong effort over a number of years and a long-term focus on customer satisfaction and service delivery strategies.

Supporting Recommendations

- An effective performance measurement system should be developed—IRS should develop an agencywide performance measurement system containing measures of quality, timeliness, and efficiency that are consistently used throughout the organization. In the quality area, a measurement system is critical to assessing progress made under the quality initiative and demonstrating results. This agencywide performance measurement system should be used to hold managers accountable for their performance.

Documentation

- Six of the nine completed projects contained a final report to document the project's results, but only two of these had any type of cost-benefit analysis. Documentation of each completed project, especially with some type of final evaluation like a cost-benefit analysis, is crucial to determining whether the project should be disseminated IRS-wide.

Awareness/Dissemination

- Although it has been in existence for 7 years, over 60 percent of all IRS employees were not aware of the PEF. Specifically, 72 percent of the IRS nonsupervisory staff and 36 percent of the supervisory staff were unaware of PEF. IRS-wide knowledge of successful and unsuccessful projects is a key to avoiding future duplication of effort and to ensuring that the maximum application of successful results will be attained throughout IRS. After the survey, IRS initiated an effort to better publicize the program.

IRS is at important crossroads in its productivity through quality innovation effort. The agency initiated a quality management process that is similar to the productivity improvement process. For example, IRS' productivity management program contains many of the same elements as their quality management initiative, such as established focal points. It also has some of the same weaknesses, such as the lack of a measurement system.

Coordination between the quality improvement and productivity improvement efforts is important since management needs a complete profile of performance to operate effectively. Both can help management identify service problem areas and implement effective solutions. Our quality management consultant noted in relation to IRS that

> "Most forward thinking private corporations (including Westinghouse) have learned hard lessons about the negative results that come from considering productivity as a separate issue from quality. Quality involves doing the right things right the first time. Productivity will address the efficiency of operations, but it does not address whether these are the right operations or whether the services or products are the best for the customer. A highly efficient organization is not necessarily a high performing or quality operation."

Conclusions

Providing IRS services to the public in a quality manner plays an important role in shaping taxpayer views on how well the federal government functions. A long tradition of solid IRS performance was shaken during the 1985 filing season when public confidence in the agency was managers and executives indicated that the agency's management style provides "very little recognition for good performance." A 1987 report resulting from a strategic initiative dealing with employee pride, involvement, and productivity concludes that IRS lacks effective recognition and incentive systems. This initiative was developed in an effort to better recognize the IRS' investment in its workforce and the employee's role in the organization's accomplishments.

More recently, the Juran Institute's February 1988 assessment of IRS' quality improvement process recommended that IRS designate a project team to find ways to more closely tie the accomplishment of quality improvement objectives into manager performance evaluations. Within one of IRS' quality initiatives, a separate effort will track and link the results of the quality improvement process to determine what steps can be taken to reward quality improvement.

Productivity Management Should Be Coordinated With the Quality Process

Over the past 20 years, IRS has been considered a government leader in the application of tools and techniques to improve productivity. The Productivity Enhancement Fund (PEF) is an important part of IRS' efforts.[7]

PEF was created during fiscal year 1981 to provide funding for testing unique ideas that have the potential for improving productivity and would not normally be budgeted. In fiscal year 1987, the funding for PEF was significantly increased to $2 million from $600,000, and some control for selecting projects moved from headquarters to the field. For example, one regionally funded project established an in-house management consultant group to apply industrial/management engineering skills, techniques, and technology to Austin Service Center operations. Although the effort experienced initial staffing delays, the results of this project could have an important impact on service center operations in the areas of workstation design, document control, and file storage.

To assess the effectiveness of PEF, we reviewed a sample of nine completed and eight ongoing projects that were initiated between 1984 and 1986 using OMB productivity program criteria. These efforts accounted for over 70 percent of the total funds expended during the 3-year period. Two major areas of PEF activities can be improved.

[7] Renamed Productivity Through Quality Innovation Program in 1986. The program now consists of three parts: Service-wide Productivity Enhancement Fund, Regional PEF, and Productivity Award Fund (IRS-wide).

IRS faces a continuing challenge to sustain its workforce commitment to the quality improvement process. The involvement of all of IRS' employees is critical to the long-term success of the quality improvement process. Research strongly supports the concept that employees know the systems and are, therefore, in the best position to identify and help solve systemic quality problems. IRS made a conscious decision not to involve employees in the initial quality improvement project teams until all management levels received training in and understood the overall Juran approach, and quality improvement in particular.

From January 1986 to May 1987, informal discussions were held with NTEU and formal meetings began in June 1987. On October 27, 1987, the Commissioner and the NTEU National President signed a historic cooperative agreement establishing the new IRS/NTEU Joint Quality Improvement Process, thereby making NTEU an equal partner in the effort. Recently, NTEU officials told us that they were encouraged by the agreement and its chances for success. NTEU has also assigned about 100 of its field officials to monitor the regional, district, and service center quality activities.

A good working relationship with NTEU is very important, given current employee concerns about the working environment. Only 12 percent of IRS employees believe management is concerned, to a great extent, about management-staff relations; and only 10 percent believe management is concerned, to a great extent, about IRS' general working environment. The new cooperative agreement has the potential to address these types of concerns.

An effective formal and informal reward and recognition system also is important. Such a system should (1) directly support the quality improvement effort and (2) provide incentives. According to our consultant, without an effective and pervasive reward system, an organization cannot hope to see substantive behavioral/cultural changes on the part of either employees or managers. In a February 1988 assessment of IRS' quality improvement process, the Juran Institute also noted that the promotion of the quality improvement process requires rewards for individual executives and managers.

Although IRS has used rewards and recognition as a motivational tool, several IRS studies have concluded that improvements need to be made. A 1985 task force report recommended that quality performance must be better recognized and that a better reward system must be established. In addition, a completed strategic initiative on the treatment of such measures to assess their performance. Recognizing this need, IRS has incorporated this area into a strategic initiative.

IRS has long recognized the need for performance measurement systems. Over the past 12 years, it has been involved in three major attempts to develop such systems. The first of these attempts was labeled the Decision Enhancing Management Information System (DEMIS). DEMIS' development resulted from a 3-year (1976 to 1979) internal task force study, which recommended that an agencywide system be established to provide managers with cost and accomplishment information.

Initiated in 1980, DEMIS was to be an on-line performance measurement system that would include measures of all IRS products, services, and programs. It was to be a capstone system building upon existing functional measurement systems. The system was to be developed over 10 years at an estimated initial cost of $13.2 million. Development was discontinued because of hardware incompatibilities and because the system's initial cost estimate far exceeded expectations.

In 1984, IRS initiated a second effort to develop a performance measurement system. A strategic initiative was established to identify and measure effectiveness goals for all functional and program areas. New information systems also were to be developed to track these measures. According to IRS management, this initiative was discontinued and folded into the newly developed quality strategic initiatives in 1986. These new quality initiatives will include program effectiveness measures and adapt or develop management information systems as needed. IRS reports that the system is scheduled for completion during 1989.

With no full-time staff or resources currently dedicated to the effort, IRS' latest measurement system initiative faces a major challenge. Given the history of past efforts of this type, we believe full-time, sustained support will be necessary to ensure that this time an operational system will emerge.

Need for Reinforcement Through Reward System

A successful quality program includes (1) sustained commitment of managers at all levels of the organization, (2) strong employee involvement and participation, and (3) a rewards and recognition system that reinforces the importance of product/service quality to managers and employees. Total dedication and active participation of all levels is required if organizational attitudes toward quality are to be changed.

reports on tip income recommended designing an overview and evaluation process to monitor the progress of tip enforcement activities, identify potential problem areas, and devise actions needed to deal with them.[6]

Without a comprehensive measurement system, incomplete and potentially inaccurate performance information may result. With no agreed-upon performance measures, IRS management can now employ different quality measures in each of its seven regions. For example, seven different combinations of quality measures were identified for the returns processing area, such as the number of returns which could not be posted to the taxpayers account because of errors, the number of reject receipts, and processing timeliness. A potentially significant effect of this variability is that IRS may be providing different levels of taxpayer service because each regional management may be stressing different quality measures.

An agreed-upon measurement system also will be important in monitoring the implementation of tax reform. A 1987 Booz, Allen and Hamilton study for IRS on potential planning issues that could jeopardize IRS' implementation of the 1986 Tax Reform Act complimented IRS for the thorough nature of its planning and recommended that the agency strengthen its monitoring efforts. It said that IRS should consider initiating an ongoing central review of key indicators to enhance the organization's ability to identify any problems at an early stage that cut across functional or regional boundaries. If the agency had an established, agreed-upon performance measurement system, such monitoring could be done with existing information. One of the current IRS strategic planning initiatives seeks to develop this kind of information.

Without effective performance measurement systems, IRS also cannot hold its managers accountable for their overall performance. Private companies indicated that such management accountability is crucial to the long-term success of a quality improvement effort. We assessed Senior Executive Service (SES) contracts for 1986 and 1987 to determine how IRS managers were being held accountable for their performance. Of the 157 expectation plans for headquarters and field top managers in 1986 and 1987, fewer than 20 percent were being held accountable for their work using measurable performance indicators. Similarly, fewer than 45 percent of the 157 SES accomplishments reviewed for 1986 used

[6]Tax Administration: Tip Income Reporting Can Be Increased (GAO/GGD-86-119, Sept. 30, 1986).

focus group interviews and additional taxpayer service training to improve customer service.

In order to reduce the high costs of quality in all functions, IRS must sustain its commitment to a quality management approach stressing prevention, not correction, and a high customer satisfaction orientation. An important prerequisite for doing this, however, is an effective performance measurement system—a critical management tool that IRS has been unable to successfully develop for over a decade.

Improving IRS Management Information by Establishing Effective Performance Measurement Systems

An important area of concern among IRS managers is receiving useful information on program performance. Only 31 percent of IRS senior managers believe, to a great extent, that they receive useful feedback on the performance of their functional area or program. To effectively provide this feedback, IRS must establish a comprehensive performance measurement system with agreed-upon measures of quality, timeliness, and efficiency. Without such a system, the agency will not be able to assess its progress toward improving quality or to hold its managers accountable for their performance. According to our quality consultant, a critical element of most successful private sector quality efforts is an effective measurement system.

Our reports over the last several years have shown that important IRS management information systems do not collect the data necessary to effectively monitor program performance. One reason for this, we found, is that IRS has not developed measurement systems with agreed-upon performance measures. We found problems with the lack of available performance data in the collection area in 1981,[3] in returns processing in 1982,[4] and in taxpayer service in 1983.[5] More recently, one of our

[3]What IRS Can Do to Collect More Delinquent Taxes (GAO GGD-82-4, Nov. 5, 1981).

[4]IRS Can Do More to Identify Tax Return Processing Problems and Reduce Processing Costs (GAO GGD-83-8, Oct. 14, 1982).

[5]IRS' Administration of Penalties Imposed on Tax Return Preparers (GAO GGD-83-6, Jan. 6, 1983).

We and IRS are concerned with the high costs of quality in the returns processing "pipeline." IRS, we believe, needs to better document and monitor these costs and identify approaches to prevent errors before they occur. IRS conceptually agrees with us and is now developing a system to better estimate and monitor the cost of quality, and will use the data to identify those functions and organizations with high quality costs.

IRS also has begun to emphasize a more preventive approach in its recent quality training efforts. A new quality training program for all managers provides information on the theoretical applications of quality principles. In addition, a number of pilot quality approaches in Collection and Examination are aimed at providing on-line feedback to the employee when work does not meet acceptable standards.

Two of these pilot approaches are the Service Center Collection Branch (SCCB) quality initiative and Line Management Quality Assurance System (LMQAS). The SCCB initiative has taken the review process away from the independent quality assurance management systems group and put it in the hands of the first-line supervisor. This supervisor reviews the work against a series of performance standards, identifying causes of errors and dealing directly with employees to effectively formulate and implement any changes needed to policies or procedures. We reviewed this approach in two locations and received positive feedback from both employees and supervisors. The second effort, LMQAS, is similar in that the examination staff's work is compared to a set of core performance standards. In addition, control charts are prepared for every group to track overall quality and "red flag" problems. Both pilot approaches represent significant advances compared to the current standard inspection approaches.

IRS also is applying prevention techniques in several areas to improve the quality of returns filed and the accuracy of taxpayer assistance. The agency assigned compliance teams at all service centers to review a sample of the first returns filed in 1988. These teams attempted to identify recurring problems early so that IRS could alert other taxpayers to avoid them. During the 1988 filing season, the agency also increased its testing of assistance accuracy, courtesy, and thoroughness in the taxpayer service area. For example, IRS reports that results based on 12,003 test calls to taxpayer service facilities through April 23, 1988, show that 72.4 percent were answered correctly. Of our sample of 1,733 test calls, we found that about 64 percent were answered correctly. IRS also is using good beginning and recommended establishing specific quality improvement goals, strengthening quality training, increasing manager accountability for quality improvement, appointing a full-time senior manager to support the National Quality Council, and ensuring that all quality projects are addressing important issues and are taking less than 6 months to complete.

In summary, IRS has made a good start, which now must be effectively reinforced. If quality is to become ingrained into normal operations, an approach toward quality emphasizing correcting problems before they reach the customer must become a part of the agency's organizational culture.

Building Quality Into Management Processes

An important concern among IRS' top managers is the effective identification and correction of errors before they adversely affect the public. Given the nature of IRS' mission and its large work load, even a small percentage rate of errors has the potential to affect millions of taxpayers.

IRS' quality improvement process faces an important, long-term challenge—moving from a heavy reliance on inspection to one of prevention. IRS' quality process has relied upon a "post-review" error detection approach, which uses independent groups to identify, measure, and correct problems. However, this type of inspection approach often is too late to effectively address quality issues before errors begin to reach the public, and the process does little to help employees prevent the error the next time. In addition, private industry experience suggests that the inspection approach to quality may be more expensive than a preventive approach.

On the basis of the combined GAO/IRS analysis of staff hour information, we believe the cost of IRS using the inspection approach is high, especially in Returns Processing. For the major functions of "pipeline" processing,[2] staff hours expended in correction (unpostables, error resolution, tax account activities) and quality assurance ranged from 14 to 21 percent of total staff hours. This estimate is based on a methodology we developed since, at the time of our review, IRS had no information system that accumulated the cost of quality for IRS managers.

[2]The service center pipeline's major functions include receipt and control of tax returns, code and edit, data entry, and the correction and quality assurance functions.

- IRS has applied the Juran quality improvement process. Dr. Joseph Juran has been widely acclaimed for his work[1] in quality management and is recognized as one of its leading experts. Juran's approach emphasizes the initiation of quality improvement projects throughout the organization.
- IRS has provided quality training for management. Initially, the Juran Quality Improvement Training was given to IRS' senior executives. IRS then provided a 3-day quality leadership course for over 10,000 middle managers and first-line supervisors. The course was aimed at introducing these managers to three key quality processes: quality planning, quality control, and quality improvement. Quality planning requires managers to focus on identifying customer needs and setting goals to meet these needs. Quality control emphasizes that output or services must meet acceptable standards. Quality improvement focuses on building project teams to address specific quality-related problems. In addition, IRS sent regional and national office employees to the Florida Power and Light Company to be trained as team leaders and facilitators.

  On the basis of these training efforts, over 500 quality improvement project teams were developed throughout the agency. For example, at the national level, IRS initiated a study of the Federal Tax Deposit System to identify and correct processing problems, such as mismatches between the name and identification number on the FTD coupons. Study recommendations included restricting the availability of blank FTD coupons and increasing the adherence to the existing time limits for correcting FTD-related processing problems. Minor changes to this huge system (5.5 million business taxpayers now make 72 million deposits annually) may have a significant positive impact on the public. IRS believes that the changes identified and implemented through this quality improvement effort have significantly reduced FTD processing problems.

- IRS has established the IRS/NTEU Joint Quality Improvement Process. This landmark agreement provides for (1) union membership on all quality councils, including two members on the National Quality Council; (2) employee involvement on quality improvement project teams; and (3) provisions to maintain the Joint Improvement Process.

  At the request of IRS' National Quality Council, the Juran Institute completed an assessment in February 1988 of the status of IRS' quality improvement activities. This assessment concluded that IRS has made a

[1]Juran, J.M., Quality Control Handbook, New York, McGraw-Hill, 1979.

Table 7.1: Elements of a Successful Quality Effort

Element[a]	Description
Establish effective direction	A top level management group, such as a steering committee, should formulate an overall strategy and provide policy guidance.
Develop and sustain commitment	Proactive participation and training at all levels of the organization is crucial.
Ingrain a preventive approach to quality	Identify and correct problems before they reach the customer.
Develop a quality measurement system	An effective measurement system allows the organization to assess the impact of its improvement efforts and hold managers accountable.
Establish management accountability for service quality	A systematic approach for holding managers accountable is a primary factor in the institutionalization of the effort.
Maintain a rewards/recognition system	Reinforcing quality performance is an important component of an effective quality system.

[a]These elements are drawn from private sector programs and from our consultant.

Individual IRS field offices also initiated quality improvement efforts. In 1984, the Ogden Service Center became the first IRS component to adopt an aggressive quality improvement approach and devote full-time resources for improvement projects. These projects included an effort aimed at reducing erroneous notices and refunds to taxpayers. Ogden's early efforts received IRS-wide publicity and led to the expansion of quality improvement efforts.

Early Quality Improvement Efforts at IRS

Since fiscal year 1985, IRS has made good progress in developing a quality process. Recently, the Office of Management and Budget (OMB) designated IRS a Quality Improvement Prototype for its extraordinary commitment to quality improvement. For example:

- IRS has established a National Quality Council to provide leadership. The Council is headed by the Deputy Commissioner (Operations) and includes the Assistant Commissioners (Human Resources Management and Support), (Examination), and (Taxpayer Service and Returns Processing), along with two regional Commissioners and the National President and Vice President of NTEU. The Council's major actions have included (1) determining the quality principles to be applied agencywide, (2) directing quality improvement training, (3) working with NTEU to develop a cooperative agreement making the union a partner in the effort, and (4) initiating five new strategic initiatives related to quality management.

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