United States General Accounting Office
Washington, DC 20548

March 16, 2001

The Honorable Ben Nighthorse Campbell
Chairman
The Honorable Byron L. Dorgan
Ranking Member
Subcommittee on Treasury and General Government
Committee on Appropriations
United States Senate

The Honorable Ernest J. Istook, Jr.
Chairman
Subcommittee on Treasury,
Postal Service and General Government
Committee on Appropriations
House of Representatives

Subject: Business Systems Modernization: IRS Has Satisfied Congressional Direction on the Custodial Accounting Project

As part of its business systems modernization program,[1] IRS is acquiring a system known as the Custodial Accounting Project (CAP). It is intended to provide IRS with a single, corporate data repository of taxpayer accounts and related tax revenue accounting and reporting capabilities.

In September 28, 2000, correspondence to IRS, you directed the agency to limit further spending on CAP until IRS (1) provided a compelling business case for investing in this project and (2) started managing CAP as an integrated part of the business systems modernization program. You subsequently requested that we assess IRS' actions to satisfy your direction. As agreed with your offices, our objectives were to determine whether (1) the CAP business case that IRS submitted to your offices on November 14, 2000, adequately justifies IRS' plans for investing in the system and (2) IRS has implemented management controls for integrating CAP into its business systems modernization program.

In sum, IRS has satisfied both of your directives. IRS can, however, improve its business case guidance in light of its experience in justifying its investment in CAP, and we are making recommendations to the Commissioner of Internal Revenue for doing so. (See the enclosure for details on our scope and methodology.) In its oral

[1] Formerly called tax systems modernization.

comments on a draft of this letter, which are discussed in the "Agency Comments" section, IRS agreed with our conclusions and recommendations.

Background

IRS' business systems modernization program includes three major categories of projects--(1) tax administration systems (i.e., systems that are to support IRS' prefiling, filing, and postfiling taxpayer service core business areas), (2) administrative/internal management systems (i.e., systems that are to support IRS functions such as financial management and human capital management), and (3) infrastructure systems (i.e., operating platforms, system software, network management, and security).

IRS is in the process of reengineering its administrative/internal management processes, such as how it manages (1) taxpayer accounts and tax payments (including reconciling taxpayer account files with tax payment files), (2) internal IRS assets (e.g., property and facilities), and (3) human capital. Of these three efforts, IRS is further along with the first, which includes the processes that CAP is to automate and support. The definition of the full complement of reengineered administrative/internal management functions is to be completed in April 2001.

CAP is expected to provide a single data repository of taxpayer accounts and tax payments. IRS also plans for CAP to, among other things, automatically reconcile accounts and payments, post updates to IRS' general ledger, and produce revenue accounting reports. To do so, CAP is being designed to receive taxpayer account and payment information from either IRS legacy or modernized tax administration database systems as well as from four systems operated by federal agencies, such as Treasury's Financial Management Service, that collect tax payments on IRS' behalf. This information will form IRS' taxpayer account subledger and its collections (taxpayer payments) subledger and, once processed by CAP, will be posted to IRS' general ledger. (See figure 1 for a simplified diagram of CAP functions.)

Currently, CAP is in the detailed system design and development phase and is to be deployed starting in spring 2003. According to IRS, the cost of acquiring CAP and operating and maintaining the system over its expected 10-year life is estimated to be $150 million. As of December 31, 2000, IRS reports it has spent almost $9 million on CAP.[2] When other IRS projects that have evolved into CAP are included, however, the total is about $24 million.[3]

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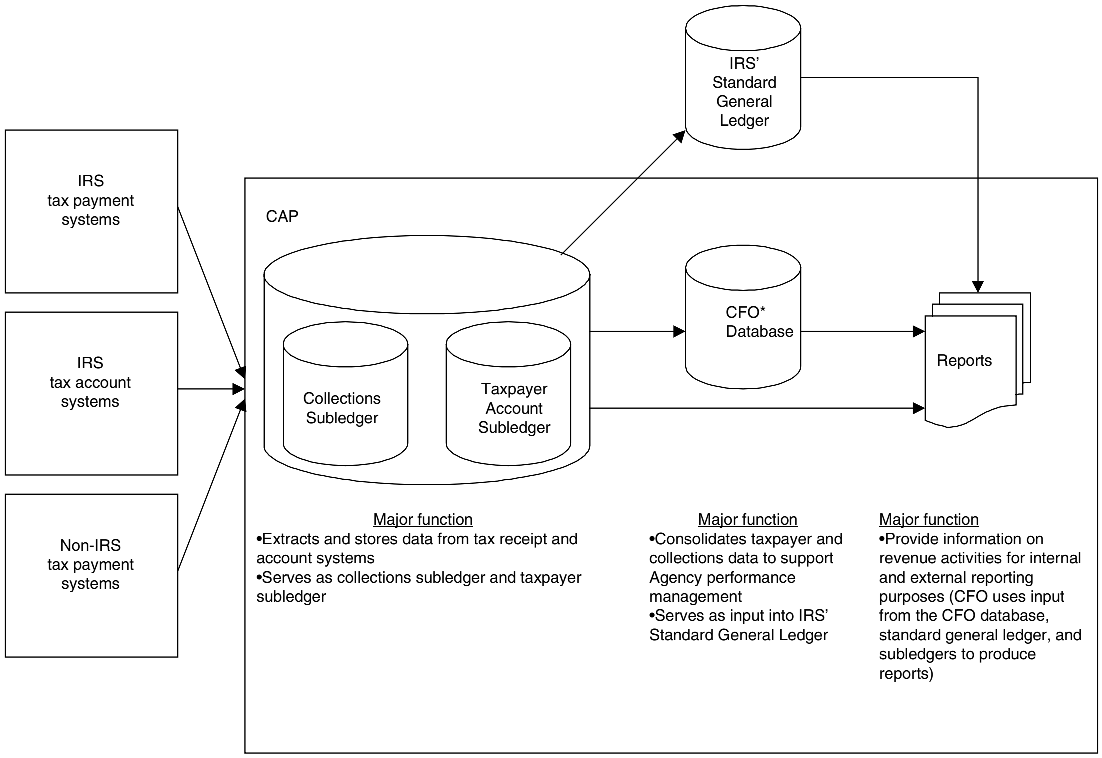
[2]Per IRS, the source of CAP funding is the Information Technology Investments Account.

[3]The other projects are the Financial Reporting Release project and the Payment Information Database project. IRS reported that during fiscal years 1998, 1999, and 2000, it spent approximately $14.8 million from its information systems budget on these projects.

Figure 1: Simplified Diagram of CAP



*CFO = Chief Financial Officer

In September 22, 2000, briefings and a subsequent report,[4] we provided your offices with the results of our review of IRS' August 2000 interim modernization spending plan. This interim plan requested about $33 million from IRS' Information Technology Investments Account[5] as a "stopgap" measure until IRS could submit its third expenditure plan.[6] Of the $33 million requested, about $4 million was for CAP.

[4] *Tax Systems Modernization: Results of Review of IRS' August 2000 Interim Spending Plan* (GAO-01-91, November 8, 2000).

[5] The Information Technology Investments Account is a multiyear capital account--established by the Congress via the Department of the Treasury's fiscal year 1998 and 1999 appropriations acts (Public Laws 105-61 and 105-277, respectively)--to fund the replacement of IRS' inefficient and antiquated information technology systems and ultimately improve service to taxpayers. The obligation of account funds is limited by the acts until IRS and Treasury submit to the Congress for approval a proposal for expenditures that, among other things, (1) implements IRS' enterprise architecture, (2) meets system investment requirements, (3) is reviewed and approved by IRS' Management Board and the Office of Management and Budget, and (4) is reviewed by us.

[6] In October 2000, IRS submitted the third plan requesting approximately $200 million of which $44 million was for CAP. We reviewed the plan and on November 9, 2000, briefed IRS' Senate and House appropriations subcommittees on our results and issued a subsequent report in January 2001 (see *Tax Systems Modernization: Results of Review of IRS' Third Expenditure Plan* (GAO-01-227, January 22, 2001)).

As part of our briefings and report on this interim plan, we concluded, among other things, that IRS (1) had prematurely begun to acquire CAP (i.e., begun detailed design and development) before it had developed a compelling business case for doing so and (2) had not effectively integrated CAP with other modernization projects. Accordingly, we recommended that the Commissioner of Internal Revenue limit further investment in CAP until IRS (1) demonstrated sufficient business value for investing in CAP and (2) reported to its Senate and House appropriations subcommittees on how the risks associated with CAP not being managed as an integrated part of the modernization were being mitigated. IRS agreed with these recommendations.

In September 28, 2000, correspondence to IRS, you subsequently restricted CAP funding until IRS' Chief Financial Officer and Chief Information Officer (1) certified to you that sufficient business value existed for pursuing CAP and (2) reported to you on how the lack of CAP integration was being mitigated. In response, IRS' business systems modernization executive directed that the CAP project halt further detailed design and development work, and on November 14, 2000, IRS' Chief Financial Officer and Chief Information Officer provided the subcommittees with the certification and associated business case and reported on steps taken to integrate CAP into the modernization program.

Business Case Provides Sufficient Basis for Planned CAP Investment

Business cases are an essential tool for disciplined investment management, providing the quantitative and qualitative analytical basis for making informed investment selection and control decisions and for evaluating whether investments actually deliver promised business value. Accordingly, both the Clinger-Cohen Act of 1996[7] and the Office of Management and Budget[8] (OMB) require business cases for information technology investments. Moreover, IRS' Enterprise Life Cycle[9] management program also requires business case justifications at certain project milestones and includes guidance on their preparation and use. This guidance, developed and managed by the office of the Chief Financial Officer, specifies that business cases are to define the benefits and costs of each investment so decisionmakers can discern which ones deliver benefits that exceed costs. IRS' business system modernization executive had staff members involved in acquiring modernized systems trained in the guidance as part of their training on how to use the Enterprise Life Cycle.

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[7]Public Law 104-106, February 10, 1996.

[8]OMB Circular A-94, *Guidelines and Discount Rates for Benefit–Cost Analysis of Federal Programs* (October 29, 1992) and OMB Circular A-130, *Management of Federal Information Resources* (revised November 30, 2000).

[9]The Enterprise Life Cycle is IRS' system life cycle management program that includes the policies, processes, and products for managing information technology investments from conception, development, and deployment through maintenance and support.

In August 2000, IRS decided to proceed with its CAP acquisition and in doing so relied on the CAP business case developed at that time. However, as we briefed your offices in September 2000 and subsequently reported,[10] this business case did not provide a compelling justification for investing in CAP. In particular, the business case reported that the proposed CAP solution provided a negative net present value. Under IRS' definition, this meant that the estimated budgetary costs of this system over its expected 10-year life (i.e., costs to acquire, deploy, operate, and maintain) exceeded the budgetary benefits over the same period by about $110 million (in present-value terms).[11] In addition, the business case did not provide an adequate explanation of how CAP was to support IRS operations.

To assist IRS in responding to your direction, we met with IRS modernization and CAP officials on October 25, 2000, and discussed the CAP business case. At that time, we stated that IRS' approach of economically justifying CAP with a business case that was based on a cost/benefit analysis was not the most appropriate approach. Specifically, OMB has defined two approaches to developing cost/benefit business cases--one based on analyzing the costs and benefits of a proposed solution and the other based on analyzing the relative cost-effectiveness of alternative solutions. According to OMB, cost-effectiveness analyses are to be used when a policy decision has been made to perform a given business function or deliver a given service. This is precisely the impetus for CAP--namely, to comply with federal financial management mandates and other requirements. In the case of CAP, IRS' original business case did not employ a cost-effectiveness approach because IRS wanted to justify all projects using the cost/benefit approach, and its guidance did not explicitly define when and how to use the cost-effectiveness approach.

Subsequently, IRS revised the CAP business case and transmitted it to you on November 14, 2000. We reviewed this revised business case and found that it complied with OMB cost-effectiveness analysis requirements. For example, OMB requires that cost-effectiveness analyses specify (1) a clear investment rationale, (2) alternative investment options for addressing the problem, (3) life cycle costs for each alternative, and (4) process and decision criteria for selecting among the competing investment options. The revised CAP business case met all these criteria. In short, IRS described the necessity to address long-standing financial management weaknesses and showed how CAP was both an incremental means to this long-term goal and an essential near-term tool for producing auditable end-of-year custodial financial statements. IRS also comparatively analyzed CAP against three alternative system solutions and demonstrated, using such criteria as life cycle cost, technical risk, and scalability, that no compelling reason existed to select one of the alternative system solutions.

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[10]GAO-01-91, November 8, 2000.

[11]IRS' computation of net present value takes into account only those benefits and costs that affect IRS' budget. The most significant benefits of CAP are nonbudgetary and, therefore, not counted in the net present value.

IRS Is Now Applying Systems Modernization
Management Controls to CAP

IRS' business systems modernization is a program to acquire a system of multiple interrelated and interdependent systems. Thus, for the modernization to be successful, acquisition of these systems must be managed in an integrated manner.

As we reported in November 2000,[12] CAP was being managed separately from other modernization projects. For example, CAP was not incorporated into the modernization's integrated master schedule, which specifies the projects' acquisition schedules and other dependencies and serves as a control for ensuring that related systems interoperate effectively and efficiently and are delivered in the proper sequence to satisfy system interdependencies. In addition, CAP was not included in monthly program management review meetings, which are designed to inform management of, among other things, how each project is progressing, including how it is managing its dependencies with other projects.

IRS has since taken steps to align CAP with other modernization projects and to manage it as an integrated part of the modernization program. For example, IRS

- is in the process of incorporating CAP in the modernization's integrated master schedule,
- is planning to include CAP in monthly program management review meetings starting in March 2001, and
- has conducted meetings between CAP staff and those of related modernization projects to plan for integration among these systems.

Conclusions

IRS has satisfied November 2000 congressional direction on the CAP project. However, its business case guidance does not explicitly specify cost-effectiveness analyses as a means for economically justifying proposed investments and define when and how these analyses should be prepared. As a result, IRS runs the risk of spending time and money developing future business cases for proposed system solutions that, like CAP, cannot be adequately justified on the basis of costs and benefits alone.

Recommendations

We recommend that the Commissioner of Internal Revenue direct the Chief Financial Officer to revise, consistent with OMB requirements, IRS' business case guidance to explicitly specify cost-effectiveness analyses as a method of justifying system investments that meet prescribed criteria.

[12]GAO-01-91, November 8, 2000.

Further, to ensure that the revised guidance is applied appropriately, we recommend that the Commissioner direct the Business Systems Modernization Executive to train modernization staff in its use.

Agency Comments

In oral comments on a draft of this report, the Business Systems Modernization Deputy Associate Commissioner for Program Planning and Control stated that IRS concurred with our conclusions and recommendations. This official also said that IRS plans to revise its business case guidance to explicitly define when and how to use the cost-effectiveness approach.

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We are sending copies of this report to Senator Max Baucus, Senator Robert C. Byrd, Senator Kent Conrad, Senator Charles E. Grassley, Senator Joseph I. Lieberman, Senator Don Nickles, Senator Ted Stevens, and Senator Fred Thompson, and to Representative Dan Burton, Representative William J. Coyne, Representative Amo Houghton, Representative David R. Obey, Representative Charles B. Rangel, Representative William M. Thomas, Representative Henry A. Waxman, and Representative C.W. Bill Young, in their capacities as Chairmen, Ranking Members, or Ranking Minority Members of Senate and House Committees and Subcommittees. We are also sending copies to the Honorable Charles O. Rossotti, Commissioner of Internal Revenue; the Honorable Paul H. O'Neill, Secretary of the Treasury; the Honorable Larry R. Levitan, Chairman of the IRS Oversight Board; and the Honorable Mitchell E. Daniels Jr., Director of the Office of Management and Budget. The letter will also be available on GAO's home page at *www.gao.gov*.

Should you or your staff have questions on matters discussed in this report, please contact us at (202) 512-3439 or (202) 512-9110, respectively, or by e-mail at *hiter@gao.gov* or *whitej@gao.gov*. Major contributors to this report included Harold Brumm, Gary Mountjoy, Madhav Panwar, Sabine Paul, Steve Sebastian, Aaron Thorne, Tuyet Quan Thai, and James Wozny.

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Enclosure

Scope and Methodology

To assess whether IRS' November 9, 2000, business case provided adequate basis for investing in CAP, we reviewed applicable OMB criteria—specifically OMB Circular A-94*, Guidelines and Discount Rates for Benefit–Cost Analysis of Federal Programs,* which defines key elements of cost-effectiveness analyses, and OMB Circular A-130*, Management of Federal Information Resources*, which specifies guidelines for effectively managing information technology investments.[1] We then analyzed the subject CAP business case against IRS' business case guidance and OMB requirements to identify any significant variances. To augment this analysis, we interviewed senior IRS officials, including the Director of IRS' Business Systems Modernization Office and the CAP project manager, to determine rationale and justification behind certain decisions central to the business case, such as the identification of alternative system solutions. We did not independently validate the cost data cited in the business case.

To assess IRS efforts to implement management controls for integrating CAP with business system modernization, we focused on the following systems modernization management controls: IRS' integrated master schedule, program management review meetings, and the use of Enterprise Life Cycle requirements for CAP. Specifically, we reviewed an updated integrated master schedule, attended program management review meetings to witness the integration of CAP into modernization program decisionmaking, and reviewed CAP life cycle documentation and compared it to Enterprise Life Cycle requirements.

We performed our work in Washington, D.C., from November 2000 through February 2001, in accordance with generally accepted government auditing standards.

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[1]OMB Circular A-94, *Guidelines and Discount Rates for Benefit–Cost Analysis of Federal Programs* (October 29, 1992) and OMB Circular A-130, *Management of Federal Information Resources* (revised November 30, 2000).