

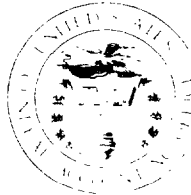
GAO

Report to the Ranking Minority  
Member, Committee on the Budget,  
U.S. Senate

June 1990

# TAX ADMINISTRATION

## IRS Needs More Reliable Information on Enforcement Revenues



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**General Government Division**

B-239247

June 20, 1990

The Honorable Pete V. Domenici  
Ranking Minority Member  
Committee on the Budget  
United States Senate

Dear Senator Domenici:

This report responds to your request for our assessment of IRS' estimates of revenues generated by its various enforcement programs. More specifically, the report provides information on IRS' (1) overall enforcement revenue estimates, (2) budget estimates for collection and document matching programs, (3) Enforcement Resource Allocation Model, and (4) efforts to develop more reliable data on the results of IRS' enforcement actions.

We are sending copies of this report to the Secretary of the Treasury, the Commissioner of Internal Revenue, and the Director, Office of Management and Budget. As arranged with your office, unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days from the date of issuance. At that time, we will send copies to congressional committees interested in the matters discussed and to other interested parties.

The major contributors to this report are listed in appendix III. Please contact me on 275-6407 if you or your staff have any questions.

Sincerely yours,

A handwritten signature in cursive script that reads 'Jennie S. Stathis'.

Jennie S. Stathis  
Director, Tax Policy and  
Administration Issues

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# Executive Summary

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## Purpose

With continuing high federal budget deficits, can Congress and the administration look to the Internal Revenue Service (IRS) for greater revenues from its enforcement programs? If so, by how much?

GAO previously questioned IRS' estimates of revenues produced by one enforcement program, the examination of tax returns. Senator Domenici, the Ranking Minority Member of the Senate Committee on the Budget, asked GAO to evaluate (1) IRS' revenue estimates for two other enforcement programs—the collection of unpaid taxes and the matching of information on tax returns with data provided by third parties, (2) IRS' estimates of total enforcement revenues, and (3) the use and usefulness of a model IRS developed to allocate enforcement resources.

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## Background

IRS makes two types of revenue estimates—projections for the year ahead and estimates of actual results at the end of each year. It estimates overall enforcement revenues and the revenues it expects from proposed staffing increases. The President's budget for fiscal year 1991, for example, proposes adding 3,600 staff to examine more tax returns, collect more unpaid taxes, and do other tax enforcement jobs. IRS estimated that with this additional staff, it would generate about \$500 million of additional revenue in 1991 and about \$6.5 billion by the end of fiscal year 1995.

IRS' enforcement revenue estimates are used in several ways. The Department of the Treasury adds IRS' revenue estimates for proposed staffing increases to its own revenue projections to arrive at total estimated federal tax receipts. The Office of Management and Budget and congressional budget and appropriations committees use IRS' estimates in deliberating on proposed staffing increases and in determining the extent to which IRS' enforcement programs can be relied on to help meet deficit reduction targets.

IRS develops its estimates from information supplied by each enforcement program. Each program, such as collection of unpaid taxes, estimates revenues from its own activities using different data sources, different methodologies, and different assumptions. IRS must estimate the revenues actually generated by its enforcement programs because, as GAO has reported on several occasions since 1981, IRS does not have the information systems needed to develop adequate data on the results of its enforcement efforts.

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## Results in Brief

There is strong evidence to suggest that IRS' after-the-fact estimates of the amounts collected from its total enforcement effort have been far too high—on the order of \$20 billion or about 40 percent off. There have also been some large differences between the revenues IRS estimated it would derive from IRS' collection and document matching programs and the revenues it said it eventually realized.

Considering the inherent difficulties in estimating results many months in advance and all the unanticipated events that can occur after an estimate is developed, it is not unreasonable for estimates to deviate from actual results. What troubles GAO is the absence of sufficient documentation to assess the reasons for the variances.

Even more troubling to GAO is IRS' continuing inability to report what revenues actually result from its enforcement programs. IRS recognized the need for such information as early as 1976, and GAO has reported that need in various reports and congressional testimonies over the years. Nonetheless, IRS has had little success in developing the requisite information systems. IRS did develop a model to help allocate additional enforcement staff in a way that would maximize revenues. That model is not being used as intended because of problems with the model's input data.

To ensure that IRS' current efforts succeed, IRS and congressional committees need to exert strong oversight. In response to concerns raised by GAO and others, IRS has several efforts planned or underway, including development of an enforcement management information system, that are directed at improving information on the results of IRS' enforcement efforts and developing better estimates of future enforcement revenues.

In the meantime, Congress is still faced with the need to make prudent funding and staffing decisions for IRS' enforcement programs. IRS now audits only about 1 percent of all tax returns, and the inventory of unpaid taxes IRS needs to collect exceeds \$60 billion. Thus, it seems reasonable to assume that adding IRS enforcement staff will generate additional revenues, especially over the longer term.

Until IRS develops more reliable information on the results of its enforcement efforts, however, Congress should use the most conservative assumption in its deliberations about additional revenues that can be expected from additional enforcement staff. Congress also needs to ensure, as it considers staffing increases, that IRS is being funded at levels sufficient for it to adequately maintain current operations. As GAO

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testified in March, funding shortages in fiscal year 1990 caused IRS to defer enforcement staffing increases that Congress had authorized, thus negating expected revenue increases.

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## Principal Findings

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### Historical Perspective on Problems With IRS' Enforcement Revenue Data

GAO reported in 1981 and subsequent years that IRS needed better information on the costs and revenues associated with its enforcement programs. As GAO noted in 1982, IRS recognized the need for an agencywide management information system as early as 1976 but had made little progress in developing such a system.

The situation today is essentially the same. IRS still does not know how much revenue its enforcement programs actually generate. As the government's tax collector, IRS has unparalleled responsibility to maintain financial management systems that are second to none. In addition to providing the foundation for improved revenue estimates, actual data on case costs and revenues generated will also allow IRS to make more informed decisions on allocating resources among enforcement programs. Further, such cost information is a necessary component of a comprehensive cost accounting system—another long-term goal of the agency. (See pp. 42 and 43.)

### Magnitude of IRS' Total Enforcement Revenues Is Uncertain

Policymakers have generally thought the annual revenue impact of IRS' enforcement programs was about \$50 billion. IRS cited numbers of that magnitude in testifying before Congress, and the Office of Management and Budget used those numbers in its budget analyses. In fact, however, IRS does not know how much revenue its enforcement programs actually generate. In recent years, IRS and the Department of the Treasury's Office of Tax Analysis explored better ways to calculate total enforcement revenues. The results for fiscal year 1989 showed revenues of \$30 billion. With such a wide variation, Congress and the administration can have little confidence as to the overall revenue impact of IRS' enforcement programs. Various projects IRS has underway, especially the development of an enforcement management information system, may eventually rectify this situation. (See pp. 18 to 21.)

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**Insufficient Information to Assess Revenue Estimates for Two Enforcement Programs**

Two of IRS' major enforcement programs are the collection of unpaid taxes and the matching of information on tax returns with information on documents filed by third parties. For these two programs, GAO compared statistics on revenues generated with estimates of revenues expected when the year began. Those variances, some of which were quite large, might be due to factors, like reduced staffing, that could not be anticipated when the estimates were developed. Attempts to understand reasons for the variances, however, are hampered by the uncertainty about actual revenues and the absence of sufficient information on how the revenue projections were made, including assumptions and data sources. IRS needs to better document its estimating process and compare estimates with results, identify reasons for differences, and adjust its estimating methodology accordingly. (See pp. 22 to 35.)

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**Enforcement Resource Allocation Model Not Used as Intended**

IRS developed the Enforcement Resource Allocation Model in 1986. As the name implies, the model was to help allocate additional staff among enforcement programs in a way that would maximize revenues; it was also to project the total costs and resulting revenues from a given increase in staffing. The model is not used as intended because its principal users (IRS' Finance Division, the Treasury Department, and the Office of Management and Budget) lack confidence in it.

One concern is that the model uses adjusted average, rather than marginal, revenue and cost data for the collection and document matching programs. Another problem is its outdated assumptions about amounts and timing of tax collections. The model assumes, for example, that 95 percent of tax assessments made by Examination's auditors are actually collected—an assumption based on a study of 1972 audit results that IRS acknowledges is outdated and invalid. (See pp. 36 to 41.)

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**Intense Management Attention Needed to Improve Enforcement Revenue Data**

In response to these data problems and to improve its revenue estimates, IRS plans an integrated enforcement management information system. Several other related projects are also underway or planned. So that IRS' current effort succeeds where others have failed, IRS needs to develop a strategy that shows how individual projects will contribute to reliable enforcement program information and how they will be integrated to provide improved revenue data. Together, the projects need to track the costs and revenues associated with all kinds of enforcement cases from start to finish but avoid unnecessary duplication or overlap. IRS needs to closely monitor implementation of the projects. Given the significance of

this issue, and IRS' continued inability to develop the requisite information, congressional oversight is also essential. (See pp. 42 to 47.)

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## Recommendations to Congressional Committees

The Budget and Appropriations Committees should monitor IRS' progress in improving its enforcement revenue data information system. The Committees may want IRS to provide plans and milestones and periodic status reports. Until more reliable information is available, the Committees should use the most conservative revenue assumptions in their deliberations about additional revenues that can be realized by providing additional enforcement staff for IRS. (See pp. 48 to 50.)

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## Recommendations to the Agency

The Secretary of the Treasury should direct IRS to provide Congress with information on the actual revenues generated by IRS' enforcement programs as soon as it becomes available. In the interim, the Secretary should direct IRS and the Office of Tax Analysis to identify the most reliable methodology for estimating total actual enforcement revenues. The Secretary should also direct IRS to explore ways to link the improved revenue data with proposed staffing increases to provide Congress with more reliable estimates of the revenue to be generated from these increases. (See p. 21.)

GAO is also making several recommendations to the Commissioner of Internal Revenue directed at developing actual revenue and cost data for IRS' enforcement programs and using that data to improve the reliability of its processes for estimating enforcement revenues. (See pp. 31, 35, and 47.)

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## Agency Comments

IRS agreed with many of GAO's recommendations and said that it had already made changes to its revenue-estimating methodologies. Among other things, IRS said that its fiscal year 1991 budget estimates are based on more conservative and better documented methodologies than prior years' estimates and that the true issue in IRS' budget is not whether IRS' revenue-estimating procedures are good but whether IRS gets the overall resources it needs to carry out its basic tax administration responsibilities. IRS noted in that regard that significant budgetary shortfalls over the past 2 years had kept it from maintaining the level of enforcement effort it had originally intended. Chapter 8 contains a detailed discussion of IRS' comments, which incorporate the views of Treasury's Office of Tax Analysis, and GAO's evaluation of those comments. (See pp. 51 and 52.)





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**Abbreviations**

EMIS	Enforcement Management Information System
ERAM	Enforcement Resource Allocation Model
IRP	Information Returns Program
IRS	Internal Revenue Service
OMB	Office of Management and Budget
OTA	Office of Tax Analysis
TCMP	Taxpayer Compliance Measurement Program
TDA	Taxpayer Delinquent Account



# Introduction

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The Internal Revenue Service (IRS) generates revenues for the federal government when it enforces existing tax laws. For example, it might identify more taxes owed upon the examination of tax returns. Deliberations on ways to reduce the federal budget deficit often raise the issue of whether IRS could generate additional revenues by intensifying its efforts. An increased interest in the revenue-generating capabilities of IRS' enforcement activities has brought with it an increased scrutiny of IRS' estimates of the revenues that have been and can be generated by those activities.

In an August 1988 report to the Senate Budget Committee,<sup>1</sup> we identified several flaws in IRS' process for estimating the revenues from its Examination program. As a follow-on to that report, the Ranking Minority Member of the Senate Budget Committee asked us to expand our inquiry to IRS' two other major revenue-generating activities—the collection of unpaid taxes and the matching of information on tax returns with information submitted by third parties, such as employers and banks. The Ranking Minority Member also asked us to inquire into IRS' estimates of total enforcement revenues and a model IRS developed for allocating enforcement resources.

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## IRS' Generation of Enforcement Revenues Involves Several Programs

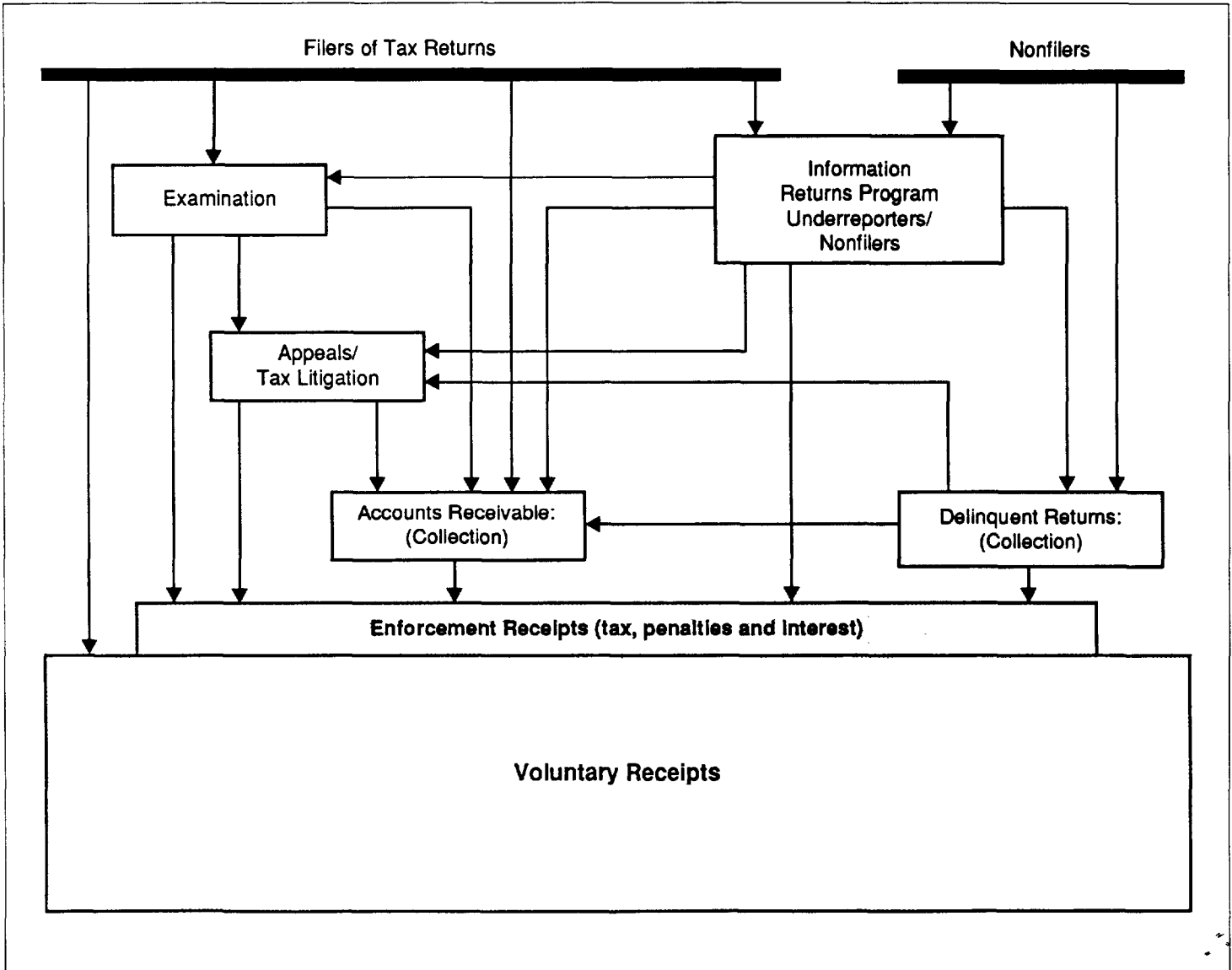
As shown in figure 1.1, IRS' generation of enforcement revenues involves several interrelated programs including Examination, Collection, the Information Returns Program (IRP), and Appeals/Tax Litigation.<sup>2</sup>

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<sup>1</sup>Tax Administration: Difficulties in Accurately Estimating Tax Examination Yield (GAO/ GGD-88-119, Aug. 8, 1988).

<sup>2</sup>IRS has other enforcement programs, such as Criminal Investigation, which also generate revenues. Those programs are not included in our discussion because, according to IRS, to the extent that their activities produce enforcement revenues they would be included in the yield of other functions, such as Examination.

Figure 1.1: Interrelationships Among IRS' Major Revenue-Generating Enforcement Programs



Source: Evaluation of the IRS System of Projecting Enforcement Revenue (Department of the Treasury, Internal Revenue Service Research Division, Publication 1501 (Nov. 1989).

Under the Examination program, IRS audits income, estate, gift, employment, and certain excise tax returns to determine whether taxpayers correctly calculated their tax liabilities. In most cases, an examination

results in the auditor recommending the assessment of additional tax.<sup>3</sup> Taxpayers might do one of several things after learning of the auditor's recommendations. They might agree with the auditor and immediately pay the additional tax, penalties, and interest due; they might agree but not immediately pay, in which case the amount due would become an account receivable to be handled by the Collection function; or they might appeal the auditor's findings through administrative channels in IRS or through litigation, in which case the Appeals/Tax Litigation function would become involved.

The Collection program includes two major components—accounts receivable and delinquent returns. Under the accounts receivable component, IRS collects past due taxes and associated penalties and interest. The amounts collected include dollars assessed by other enforcement programs, such as Examination, as well as those due from taxpayers who failed to pay the full tax due when they filed their returns. Under the delinquent returns component, IRS takes enforcement action against individuals and businesses that failed to file required tax returns. Those nonfilers are generally identified through special compliance projects operated by Collection or through documents matched under IRP.

Through IRP, a computerized document matching program, IRS matches information documents, such as bank interest statements, with related income tax returns to detect individuals who either (1) did not report all their tax liability on filed returns (underreporters) or (2) did not file returns at all (nonfilers). Within the underreporter component, certain larger and more complex cases are forwarded to Examination for further investigation. Under the nonfiler component, cases are forwarded to Collection for assessment and collection of the amount owed.

Through the Appeals/Tax Litigation programs, IRS' Chief Counsel's Office (1) provides an administrative appeals process for taxpayers who dispute IRS' audit findings or other enforcement actions and (2) represents IRS in cases litigated before the Tax Court. The amount assessed after an appeal or litigation may range from nothing to the full amount

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<sup>3</sup>IRS uses different terms to measure revenue—recommended, assessed, and collected amounts. "Recommended" is the amount of additional tax and penalties IRS initially believes a taxpayer owes after auditing the taxpayer's return. "Assessed" is the amount of taxes and penalties IRS actually decides is due and payable from the taxpayer. That amount often differs from the recommended amount because of reductions resulting from taxpayers' appeals of audit findings. "Collected" is the amount IRS receives in payment of the assessed amount, including any penalties and interest. Because IRS is not always able to collect owed taxes, the amount of additional taxes and penalties eventually collected as a result of a particular audit may be less than the amount recommended. On the other hand, the imposition of interest causes the amount eventually collected to increase.

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in dispute plus any interest and penalties. If the taxpayer does not pay the assessed amount, the unresolved case is forwarded to Collection as an account receivable.

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## IRS' Revenue- Estimating Process Involves Many Players

IRS' process for estimating enforcement revenues starts with the individual enforcement functions (Examination, Collection, etc.). Each function uses different data sources, assumptions, and methodologies to estimate the revenues to be derived from its activities. In our August 1988 report, we described the process then being used by IRS to develop its estimates of examination yield.<sup>4</sup> In chapters 3 and 4 of this report, we discuss the processes used in developing revenue estimates for the accounts receivable and delinquent returns components of Collection and the underreporter and nonfiler components of IRP.

IRS' Finance Division consolidates each function's estimates into an overall estimate of enforcement revenues. The person responsible for directly overseeing the preparation of enforcement revenue estimates is the Budget Revenue Coordinator. IRS established that position in the Finance Division in July 1988 to be more responsive to the Service's revenue estimation needs and those of Treasury, the Office of Management and Budget (OMB), and Congress. Among other duties, the Coordinator is to review estimates submitted by the individual functions and adjust them to correct for such things as double counting.

The Budget Revenue Coordinator is also responsible for maintaining a computer model, called the Enforcement Resource Allocation Model (ERAM). IRS developed ERAM to (1) project the costs and revenues associated with a given increase in enforcement staff and (2) determine how a staffing increase would best be allocated among enforcement programs to maximize revenue. We discuss ERAM's use and usefulness in chapter 5.

As interest in IRS as a potential generator of additional revenues has increased, the many users of enforcement revenue estimates have become more sensitive to their reliability. One of the key users is Treasury's Office of Tax Analysis (OTA), which is responsible for projecting total federal tax receipts and for estimating the revenue effects of tax law changes and budgetary initiatives that are intended to raise revenues through increased enforcement. In chapter 2, we discuss OTA's

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<sup>4</sup>To correct problems identified in our report, Examination has revised its estimating methodology. We recently began assessing that methodology in response to a request from the Senate Committee on the Budget.



recent involvement in trying to ensure the reliability of IRS' estimates of total enforcement revenues.

Other key users of enforcement revenue estimates are OMB; the Congressional Budget Office; and Congress, especially those committees directly involved in the budget/appropriations processes. The reliability of IRS' enforcement revenue estimates is especially critical to these users because they rely on the estimates to make decisions about the level of IRS funding and the revenues that can be expected from these programs. They also rely on IRS' estimates to evaluate the relative merits of various enforcement programs in generating additional revenues with increased staffing.

## Objectives, Scope, and Methodology

As requested by the Ranking Minority Member, our objectives were to (1) assess the reliability of IRS' estimates of total enforcement revenues and the estimates of Collection and IRP revenues included in IRS' budget submissions to Congress and (2) evaluate the use and usefulness of ERAM.

To achieve these objectives, we

- compared the various methodologies and data sources used by IRS and OTA to calculate total enforcement revenues;
- monitored IRS efforts to develop more reliable estimates of overall enforcement revenues;
- interviewed IRS National Office officials to obtain information on the methodologies used to estimate Collection and IRP revenues, including information on relevant models and databases;
- compared information in IRS' budget submissions to Congress on (1) the revenues IRS expected to realize and (2) the revenues it subsequently determined it had realized;
- reviewed IRS documentation on how the revenue data in its budget submissions to Congress were calculated, to the extent that such information was available, and talked to appropriate IRS officials about those calculations;
- identified IRS' efforts to improve its enforcement revenue databases and estimating methodologies and assessed its oversight of those efforts;
- talked to officials from Treasury, OMB, and the Congressional Budget Office about their reliance on IRS' revenue estimates and estimation models in preparing budget submissions;
- reviewed ERAM's assumptions and data input; and

- assessed ERAM's use and usefulness by reviewing IRS records, internal studies, memoranda, and other supporting documentation and by interviewing officials in IRS, Treasury, and OMB about their use of ERAM.

In evaluating IRS' estimates of Collection and IRP revenues, we compared the amount of revenue IRS said it actually received in a particular fiscal year with the amount it estimated it would receive as reported in its budget request for that year. The budget estimates we used in our comparisons were the ones available to Congress when it deliberated on IRS' appropriations. Although IRS later updated those estimates to reflect more recent workload information, we did not use those updates in our analyses because they were not available until after Congress had completed its deliberations. To gain an understanding about trends in IRS' estimates, we focused our review on the period between fiscal years 1983 and 1989.

We did our audit work between October 1988 and February 1990 using generally accepted government auditing standards. The Commissioner of Internal Revenue provided written comments, which included input from OIA, on a draft of this report. The Commissioner's major points are summarized and evaluated in chapter 8. The written comments and our additional analyses are included in appendix II.

# Magnitude of IRS' Total Enforcement Revenues Is Uncertain

The process of estimating future revenues begins with data on past performance. IRS does not have the information systems it needs to tally actual revenues generated through its enforcement programs. Absent those systems, IRS has to estimate the actual results of IRS' enforcement efforts. As discussed in chapter 6, IRS has several efforts underway, including development of an enforcement management information system, that are directed at improving enforcement revenue data.

There is much uncertainty about the level of revenues actually generated by these programs. But IRS' recent recalculation suggests that actual enforcement revenues were about \$30 billion in 1989. This varies significantly from the \$50 billion range estimated for budget purposes in recent years.

## Computations of Actual Enforcement Revenues Vary

IRS and OTA have used three different data sources in the past few years to calculate actual revenues from IRS enforcement programs. Their varying results create uncertainty as to the overall revenues generated by those programs.

For fiscal year 1987, IRS estimated that it had collected a total of \$45.9 billion in enforcement revenues. IRS calculated its total by consolidating data supplied by the component enforcement programs—its usual method.

OTA analyzed other data for fiscal year 1987 that led it to conclude that total enforcement revenues that year might be closer to \$24 billion. OTA used an IRS report (known as the "S-2 Report") which shows allocations of corporate and individual income tax revenues distributed by tax liability year. OTA arrived at its figure by assuming that the only portion of total tax revenues shown on the S-2 Report that could be attributed to IRS' enforcement activities were those stemming from tax liability years at least 2 years earlier. (This was a reasonable assumption because of the lag in beginning enforcement actions as well as the time it normally takes to conclude an enforcement action.) IRS and OTA were unable to reconcile the discrepancy between their respective numbers because of the different data sources and assumptions used in compiling them.

In June 1988, because of the differences in their numbers, IRS and OTA initiated a joint project to develop information on annual enforcement

revenues from IRS' master files.<sup>1</sup> To do this, IRS and OTA had to make certain assumptions as to which amounts in the master files reflected actual enforcement revenues. In effect, they decided to define actual enforcement revenues as payments received after an enforcement action, such as an audit or nonfiler investigation. Using that assumption, the master file data showed that IRS' enforcement programs generated \$29.6 billion in fiscal year 1989—about \$5 billion more than the \$24.6 billion derived for that year using data in the S-2 Report.

IRS considers the fiscal year 1989 master file analysis the best available information on total annual enforcement revenues; but IRS is still assessing the validity of the estimate. One validity check being considered is a further analysis of master file data to determine if fiscal year 1989 was an anomaly or if the data for other years also show revenues significantly lower than the figures derived from IRS' enforcement functions.

## IRS' Information Indicates That Past Projections of Total Enforcement Revenues Have Far Exceeded Amounts Realized

IRS has, in past years, provided congressional and administrative decisionmakers with information to indicate that it collects about \$50 billion a year as a result of its enforcement activities. IRS' recent recalculation of actual enforcement revenues for 1989 of \$30 billion suggests that the estimates have been far too high.

IRS' estimates of total enforcement revenues have been provided to officials in Congress, OMB, and Treasury. In March 1987 testimony before a House Appropriations Subcommittee, for example, the Commissioner of Internal Revenue said that IRS' proposed fiscal year 1988 budget would generate \$49 billion in enforcement revenues. An OMB official who oversees Treasury's budget also told us that his analyses of IRS' budget are based on the assumption that IRS' enforcement programs generate about \$50 billion in revenues each year.

To support its budget submissions, IRS estimates projected revenues for future years, broken down by type of enforcement. These estimates of future enforcement revenues, like those of actual enforcement revenues, are developed from data submitted by the component enforcement programs. Each component program uses its own definitions, assumptions, and methodologies for estimating revenues. IRS' and OTA's recent efforts

<sup>1</sup>IRS' Individual and Business Master Files are databases that record information about taxpayers' filing histories and their tax transactions.

to recompute actual enforcement revenues raise questions about the validity of the projections.

In a March 1988 memo to the Secretary of the Treasury, OMB expressed its interest in validating IRS' enforcement revenue estimates. The memo listed several significant policy decisions relating to IRS. One decision was to review the methodology IRS used to estimate total enforcement revenues and determine "whether the current enforcement receipt management goals of \$50 billion for 1988 and \$53 billion for 1989 are to be revised." In an April 1988 memo to IRS, Treasury's Acting Assistant Secretary for Management said that "(i)mproved estimation and quantification of enforcement receipts is a high priority item for the Department . . . and supports the Administration's efforts to quantify the relationship between funding levels and . . . revenue yields."

IRS was unable to determine why the calculation of actual enforcement revenues derived from the master files (\$29.6 billion) differed so much from the projected estimate for fiscal year 1989 (\$52.6 billion). Some of the variance may be due to problems with the data submitted by the various enforcement programs.

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## Accuracy of Information on Total Enforcement Revenues Affected by Uncertain Reliability of Component Data

IRS' estimates of total enforcement revenues actually received and its projections of future revenues have been based on estimates developed by the component enforcement programs. Each program uses different data sources, assumptions, and methodologies. In combining these estimates, the Finance Division has attempted to eliminate double counting of revenues by the programs and has converted the revenue figures submitted by each program to a common measure—dollars collected. Data submitted on tax assessments have been translated into dollars collected using assumptions about the rate at which assessments will eventually be collected and the timing of those collections.

Problems with the data supplied by the enforcement programs have affected their reliability. In our August 1988 report, for example, we questioned several key assumptions underlying Examination's revenue estimates. We found, among other things, that (1) IRS' assumptions about the number of audits completed per examination staff year varied significantly from actual results, and (2) assumptions about the percentages of recommended taxes that are actually assessed and the percentages of assessed amounts eventually collected were based on an outdated study that tracked 1972 audits.

As discussed in more detail in chapters 3 and 4, data for Collection's accounts receivable and delinquent returns components and for the underreporter and nonfiler components of IRP have unexplained variances between budget estimates and estimates of revenues actually generated. Development of their estimates are not well documented; and some estimates, such as those for accounts receivable, include amounts that are not true enforcement revenues.

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## Conclusions

Congress and the administration need reliable information on the revenue-generating capabilities of IRS' enforcement programs. This information has become even more critical in recent years as decisionmakers have deliberated the prospects of increasing tax revenues by expanding the size of IRS' enforcement staff.

IRS cannot provide decisionmakers with the actual amount of total revenues generated by its enforcement programs because it does not have the necessary information systems. As we will discuss in chapter 6, IRS has several efforts under way, including development of an Enforcement Management Information System, that may eventually enable IRS to rectify that situation. Until then, IRS must estimate its total enforcement revenues.

IRS must also estimate for budget purposes the revenues to be expected from a given level of staffing. Data available on the way the estimates are developed and the wide variance between the estimates and IRS' recent calculation of actual revenues give little assurance that Congress can rely on those estimates.

IRS and OTA need to resolve the inconsistency between IRS' two estimating techniques. If IRS considers the fiscal year 1989 master file analysis to be the best available information on annual enforcement revenues, it needs to develop a way to use that data for budget estimates.

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## Recommendations to the Secretary of the Treasury

We recommend that the Secretary of the Treasury direct IRS to provide Congress with information on the actual revenues generated by IRS' enforcement programs as soon as it becomes available. In the interim, the Secretary should direct IRS and OTA to identify the most reliable methodology for estimating actual enforcement revenues. The Secretary should also direct IRS to explore ways to link improved revenue data with proposed staffing increases to ultimately provide Congress with more reliable estimates of the revenue expected from those increases.

# Reliability of Revenue Estimates From Collection Activities Needs to Be Improved

In recent years, IRS' estimates of revenues to be generated by its Collection activities have often varied significantly from estimates of actual revenues.<sup>1</sup> These variances, in and of themselves, do not mean that IRS' estimates are unreliable. There are several reasons why estimates may differ from actuals. Some of those reasons (such as unanticipated hiring freezes) are outside its control, while others (such as misused trend information) are within its control and could warrant adjustments to its estimating methodology.

We were unable to determine what reasons applied to the variances in IRS' Collection numbers and thus were unable to assess their reliability because IRS did not have sufficient documentation supporting its estimates. Our evaluation of the variances in IRS' numbers was also hampered by the fact that IRS estimates "actual" revenues, making it unclear how much of the variance is due to erroneous estimates of future revenues versus inaccurate estimates of actual revenues.

To enhance its process for estimating Collection revenues, IRS needs to (1) document the process and the results therefrom, (2) correct the definition used in computing "actual" revenues to exclude amounts that are not true enforcement revenues, and (3) develop data linking the cost of processing Collection cases to the revenue generated—information that IRS needs to forecast the impact of additional staff in generating revenues.

## Insufficient Information Available to Explain Variances Between Estimated and "Actual" Collection Revenues

IRS develops estimates of the revenue to be generated by Collection's two major components (accounts receivable and delinquent returns). In all but one year since fiscal year 1983, the "actual" revenues from the delinquent returns component varied from the estimate by at least 25 percent. Variances for the accounts receivable component were much lower, ranging from 3 to 30 percent. We were told of certain aspects of IRS' revenue-estimating process that could help explain those differences. We were unable to determine any causal relationships, however, because IRS did not adequately document its estimating process.

### Accounts Receivable

The process for collecting accounts receivable involves three stages: correspondence, telephone contact, and personal contact. The process

<sup>1</sup>Because IRS does not have the kind of information necessary to identify the amount of revenue actually generated by its Collection activities, it estimates those results. For ease of presentation, we refer to those estimated actuals as "actual."

begins with a series of up to five computer-generated notices to individuals owing past due taxes. If the notices prove unsuccessful and the amount due is above a certain level, IRS establishes a Taxpayer Delinquent Account (TDA). Generally, IRS first attempts to resolve these TDAs through telephone contact with the taxpayer. If that fails, the TDA is sent to a district office where the case is scored on the basis of its potential yield. Cases below a certain score remain in a holding file. The remaining cases are assigned to revenue officers, who can visit the taxpayer and take various actions, such as seizing physical assets, in an attempt to satisfy the taxpayer's liability.

As shown in table 3.1, "actual" revenues from this process varied from the estimate by more than 10 percent in 3 of the 5 fiscal years between 1985 and 1989.<sup>2</sup>

**Table 3.1: Comparison of Estimated and "Actual" Accounts Receivable Revenues**

Fiscal year	Estimate	"Actual"	Difference	
			Amount	Percent of estimate
1985	17,738	18,252	514	3
1986	17,301	19,594	2,293	13
1987	17,492	22,766	5,274	30
1988	23,869	23,205	(664)	(3)
1989	26,287	23,491	(2,796)	(11)

Source: GAO analysis of IRS budget data.

Even in 1985, when the overall variance was small, comparisons of the components making up the overall estimate showed large variances. In that year, "actual" collections for the notice component varied from the estimate by 22 percent (\$2.4 billion) while those for the TDA component varied by 29 percent (\$1.9 billion). As shown in table 3.2, large variances in those components have not been uncommon over the past few years.

Even in fiscal year 1988, when "actual" TDA collections were within 1 percent of the estimate, the detailed elements of that estimate varied greatly from "actual" results. Collection's records indicated that the number of TDAs closed in fiscal year 1988 was 20 percent lower than estimated, and the average yield per case closed was 25 percent higher.

<sup>2</sup>Our analysis excluded fiscal years 1983 and 1984 because estimated and "actual" budget data for those years were not comparable.



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**Table 3.2: Comparison of Estimated and "Actual" Revenues Generated by Notices and TDAs**

In millions of dollars collected

Fiscal year	Notices <sup>a</sup>				TDAs			
	Estimate	"Actual"	Difference		Estimate	"Actual"	Difference	
			Amount	Percent of estimate			Amount	Percent of estimate
1983	\$	\$	\$		\$5,528	\$5,760	\$232	4
1984					5,934	5,159	(775)	(13)
1985	11,174	13,580	2,406	22	6,564	4,672	(1,892)	(29)
1986	11,692	14,524	2,832	24	5,609	5,070	(539)	(10)
1987	12,765	16,151	3,386	27	4,727	6,615	1,888	40
1988	16,849	16,220	(629)	(4)	7,020	6,985	(35)	(1)
1989	17,733	16,443	(1,290)	(7)	8,554	7,048	(1,506)	(18)

<sup>a</sup>Notice information is not shown for fiscal years 1983 and 1984 because the estimated and "actual" figures for those years were not comparable.

Source: GAO analysis of IRS budget data.

According to IRS' data, about 60 percent of the revenue from notices in fiscal years 1985 through 1989 was generated by first notices. As shown in table 3.3, although IRS' estimates of first notice revenues varied from "actual" results by at least 10 percent for all but one of those years, the size of the variance has generally been decreasing.

**Table 3.3: Comparison of Estimated and "Actual" Revenues Generated by First Notices**

In millions of dollars collected

Fiscal year	Estimate	"Actual"	Difference	
			Amount	Percent of estimate
1985	\$7,104	\$9,190	\$2,086	29
1986	7,789	8,998	1,209	16
1987	8,603	9,832	1,229	14
1988	10,444	10,001	(443)	(4)
1989	10,795	9,662	(1,133)	(10)

Source: GAO analysis of IRS budget data.

**Delinquent Returns**

The second major component of IRS' Collection program involves delinquent returns. IRS' first step after identifying an apparent nonfiler is to send a series of notices. If the case is not resolved through the notices, either by securing the delinquent return or obtaining a satisfactory explanation as to why a return did not have to be filed, IRS creates a delinquency case that is handled in the same manner as a TDA.

As shown in table 3.4, revenue estimates for delinquent returns varied from “actual” results by between 25 and 148 percent in all but 1 year between fiscal years 1983 and 1989. Excluding that year, the dollar magnitude of the discrepancies ranged from \$1.2 billion to \$3.0 billion.

**Table 3.4: Comparison of Estimated and “Actual” Revenues Generated by Delinquent Returns**

In millions of dollars assessed

Fiscal year	Estimate	“Actual”	Difference	
			Amount	Percent of estimate
1983	\$1,856	\$4,532	\$2,676	144
1984	2,059	5,105	3,046	148
1985	4,512	5,726	1,214	27
1986	4,466	7,308	2,842	64
1987	5,326	8,033	2,707	51
1988	8,206	7,809	(397)	(5)
1989	8,993	11,232	2,239	25

Source: GAO analysis of IRS budget data.

The supporting documentation that was available on Collection’s estimates provides some insight into factors that contributed to the differences between estimated and “actual” delinquent returns assessments. In fiscal year 1987, for example, when IRS’ estimate of assessments varied from “actual” results by 51 percent,

- the number of cases closed was 33 percent lower than projected;
- the number of delinquent returns secured per case was 75 percent higher; and
- the average yield per return secured was 27 percent higher.

Collection’s documents also show that even in fiscal year 1988, when “actual” delinquent returns assessments were within 5 percent of the estimated amount, the detailed elements of the estimate varied significantly from “actual” results. In that year, 29 percent fewer cases were closed than estimated, 19 percent more staff years were used, and average yield per return secured was 14 percent higher.

The delinquent returns revenues cited in table 3.4 include revenues generated by the nonfiler component of IRP. Under that component, IRS identifies individuals who have not filed required tax returns by comparing computerized data from information documents (such as wage and tax statements) submitted to IRS by employers and other third parties

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against the individuals' tax return filing histories recorded in the master file.

The methodology IRS uses to estimate the yield from delinquent returns is the same one it uses to estimate the yield from the nonfiler component of IRP. As shown in table 3.5, use of that methodology to estimate IRP nonfiler yield produced (1) large variances from "actual" results in fiscal years 1986, when IRS started budgeting separately for IRP, and 1987; (2) a small variance in fiscal year 1988; and (3) almost no variance in fiscal year 1989.

**Table 3.5: Comparison of Estimated and "Actual" Revenues Generated by the IRP Nonfiler Program**

Fiscal year	Estimate	"Actual"	Difference	
			Amount	Percent of estimate
1986	\$542	\$1,091	\$549	101
1987	997	1,953	956	96
1988	1,876	1,947	71	4
1989	2,112	2,111	(1)	<sup>a</sup>

<sup>a</sup>Less than 1-percent difference.  
Source: GAO analysis of IRS budget data.

Using available supporting documentation, we analyzed factors that contributed to differences between estimated IRP nonfiler assessments and "actual" results. As shown in table 3.6, there were generally large differences between estimated and "actual" amounts for the various components of the revenue estimates, even in fiscal year 1989.

**Table 3.6: Percent Differences Between Estimated and "Actual" Results for Components of IRP Nonfiler Revenue Estimates<sup>a</sup>**

Component of estimate	Percent difference between estimated and "actual" amount in fiscal year		
	1987	1988	1989
Number of cases disposed	(34)	(52)	24
Number of returns secured	31	(31)	(13)
Average number of returns secured per disposition	98	44	(30)
Average yield per return secured	58	41	30
Average number of cases disposed per staff year	(42)	(54)	14
Total staff years	14	5	9

<sup>a</sup>Percent figures in parentheses represent cases where the estimated amount was higher than the "actual" results.  
Source: GAO analysis of IRS data.

As discussed below, we were unable to further assess the differences noted in tables 3.1 through 3.6 because IRS did not adequately document its estimating methodology, including any related trend analyses and adjustments. Without such documentation, neither we nor IRS can determine why IRS' estimates differ from "actual" results.

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### **IRS' Process for Estimating Collection Revenues Not Adequately Documented**

There are various reasons why an estimate may differ from actual results. Some of those reasons, such as hiring freezes that limit expected staffing increases, cannot be anticipated and would not, if they occur, invalidate IRS' estimating methodology. There are other reasons, however, that could reflect on the methodology. Variances between IRS' estimated and "actual" Collection revenues, for example, could indicate that changes are needed in the way IRS analyzes and adjusts trend information.

There are many factors (such as first notices issued, cases disposed, returns secured, dollars assessed or collected, and staffing) for which IRS develops historical trends to project future Collection workload and results. According to the official responsible for developing the estimates, the number of years of data reviewed for historical trends has varied from year to year, and IRS has sometimes assigned different weights to the various years included in the trend analysis. As part of its methodology, IRS judgmentally adjusts the results of its trend analyses to account for such things as anticipated productivity enhancements, program revisions, and tax law changes.

To adequately assess IRS' methodology for estimating Collection revenues, we would need to determine the extent to which the inconsistencies and judgmental adjustments described above contributed to the variances between estimates and "actuals" noted in tables 3.1 through 3.6. To do that, we would need to evaluate information on IRS' trend analyses and its assumptions about staffing levels, staffing productivity, workload accomplished, and yield associated with the workload, and include a comparison of those analyses and assumptions to "actual" results. However, we were unable to make those kinds of evaluations because IRS lacked sufficient supporting documentation for its estimates. The official who develops the Collection estimates told us that IRS has never documented the trend analyses.

Federal internal control standards require that agencies document important transactions and processes, such as the basis for revenue estimates. Without such documentation, management cannot adequately

monitor its estimates over time, identify significant deviations from actual, or assess the need for any methodological adjustments to correct for those deviations. In its November 1989 report on enforcement revenue estimation, IRS recognized the need for documentation:

“A universal complaint voiced by people outside IRS who use enforcement revenue estimates is that documentation has been lacking—concerning not only the methods and the models in principle, but also concerning the assumptions that underlie specific revenue estimates.”<sup>3</sup>

The only documentation we found in support of IRS’ estimates of Collection revenues were some of the spreadsheets on which IRS recorded the results of its adjusted trend analyses. These spreadsheets—which are developed for both accounts receivable and delinquent returns—provide details on the elements of the revenue estimates. IRS had discarded the spreadsheets for all of the estimates that we reviewed except the 1988 and 1989 estimates for accounts receivable and delinquent returns and the 1987 estimate for delinquent returns.<sup>4</sup> The official who is responsible for developing the estimates said that he cannot reconstruct the estimates for other years because the information is not available.

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## Improved Data Could Enhance Estimating Process

Although insufficient information was available to assess IRS’ process for estimating the revenues generated by its Collection activities, we identified two limitations with IRS’ data that, if corrected, could enhance the results of that process. Those limitations involve (1) apparently inaccurate data on “actual” revenues and (2) the absence of data linking staffing and results.

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## Data on “Actual” Revenues May Not Be Accurate

Accurate data on revenues realized in past years can facilitate the estimation of future years’ revenues. The data in IRS’ budget submissions on “actual” accounts receivable revenues come from an internal report—the Collection Yield Report. This report, which is derived from IRS’ master files, extracts payments and credits posted to a delinquent taxpayer’s record.

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<sup>3</sup>Evaluation of the IRS System of Projecting Enforcement Revenue, Department of the Treasury, Internal Revenue Service Research Division, Publication 1501 (Nov. 1989).

<sup>4</sup>As reported in this chapter, we used the information from the available spreadsheets to analyze elements of the yield estimates for those years.

According to Research Division officials, the definition of revenue for purposes of the Collection Yield Report includes amounts that do not represent true enforcement revenues. For example, the Chief of the Research Division's Compliance Analysis Group said that the methodology used in producing the Yield Report (1) counts some overpayments made by taxpayers and (2) includes payments that taxpayers made on time but that IRS did not correctly post until after their accounts became delinquent. He also said that some IRS function other than Collection may have actually secured the payment/credit that was counted as Collection revenue because the master files do not contain sufficiently detailed data to make that determination.

The IRS official responsible for estimating Collection revenue told us that the Collection Yield Report counts as revenue overpayments or late-posted payments because these transactions represent part of Collection's workload, and Collection needs to quantify its workload for management purposes. He said that IRS may need to develop a separate report on revenues for preparing the estimates included in IRS' budget submissions while retaining the Collection Yield Report to quantify workload.

IRS does not know the dollar impact of the definitional problems described above. To identify that impact, the Research Division is developing an alternate version of the Collection Yield Report intended to correct those problems. Research officials expected the results to be available in June 1990.

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### **IRS Needs Data Linking Collection Case Staffing and Results**

To accurately project future enforcement revenues, IRS needs to understand to what extent the past efforts of its staff have resulted in productive case outcomes. IRS is limited in its ability to do that, however, because it does not have a database that (1) reports the amount of staff time spent on Collection cases and (2) links this to the results in terms of revenue. As noted above, IRS uses master file data on payments and credits that are posted to delinquent taxpayers' accounts. The master files do not contain information on the amount and type of staff resources applied to those delinquent cases. Therefore, IRS cannot measure the impact that additional staff would have on case results. Also, the master file does not identify whether Collection or some other enforcement function, such as Examination, was responsible for securing the payment or credit. Consequently, IRS must make assumptions about which master file cases generate revenues that should be

attributed to Collection—which reduces the certainty that those figures are accurate.

IRS recognizes the need to develop a database on Collection's case results. It believes that its proposed Enforcement Management Information System will eventually meet that need. IRS plans to incorporate Collection cases into the system by July 1991. Even then, however, as discussed in chapter 6, IRS may still not have data on the staffing costs associated with working individual Collection cases.

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## Conclusions

Although revenue estimation is not an exact science, federal internal control standards and prudent management require that IRS be able to support its estimates. Revenue estimates should be based on a consistent methodology for evaluating the historical trends and anticipated future changes that will influence the estimates. Changes to a revenue-estimating methodology or its underlying assumptions should be based on an understanding of the causes of problems with the methodology or assumptions.

We were unable to adequately assess IRS' estimating process or determine the reasons for differences between estimates and "actual" because IRS kept little documentation of the methodology used in preparing the estimates or the assumptions behind that methodology. Accordingly, Congress and the administration have little basis for relying on IRS' estimating process to produce the information they need to assess the revenue-generating capabilities of IRS' Collection activities.

IRS needs to document its estimating process and track estimates against results to identify differences and determine whether the differences call for adjustments to the estimating methodology. To facilitate that tracking, IRS needs to generate data on actual results. Actual data is critical to the revenue-estimating process because it provides (1) a basis to assess the reasonableness of past estimates and (2) a foundation for making future estimates. Two key data elements for which IRS needs actual data are (1) the actual amount of revenue generated by its Collection activities and (2) the amount of staff time spent on Collection cases.

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## **Recommendations to the Commissioner of Internal Revenue**

We recommend that IRS develop actual data on Collection revenues by (1) defining revenues to be attributed to collection activities and (2) developing a database that records for each Collection case the revenues resulting from that case and the staffing applied to it.

To improve estimates of future revenues, we recommend that IRS

- develop and document a consistent methodology for reviewing historical trends, incorporating anticipated program changes, and estimating revenues in the Collection function;
- fully document the data used in applying the methodology, including the trend analyses performed and the assumptions underlying those estimates, and the results therefrom; and
- monitor estimates against actual results over time, using the most reliable data on actual results available, to assess the causes of any significant discrepancies and to identify any adjustments needed in assumptions or methodology.



# IRS Needs to Fully Document and Monitor Its New Methodology for Estimating IRP Underreporter Revenues

Since IRS started budgeting separately for the Information Returns Program, estimates of the revenue generated by the underreporter part of that program have varied from "actual" results by amounts as high as 41 percent of the estimate.<sup>1</sup> We were unable to analyze possible causes for the differences because IRS did not retain adequate documentation.

IRS is now using a new methodology that appears to provide a more refined basis for developing underreporter estimates. At the time of our review, however, IRS did not have documentation available on the assumptions underlying its new methodology and was not monitoring estimates against "actual" results to identify the possible need for changes in methodology or assumptions.

## Overview of the Process for Estimating Underreporter Revenues

The underreporter component of IRP identifies individuals who may have misreported income by matching data on information documents (such as bank interest statements) to figures on individual tax returns. IRS contacts taxpayers to verify facts and amounts in question before assessing additional taxes due or refunding overpayments.

To prepare its underreporter revenue estimate for fiscal year 1989, IRS began using a computer model. To estimate revenues, the model extrapolated past case results as follows:

- Cases were first sorted into 155 categories by combining two factors: (1) type of income, such as wages, interest, and dividends; and (2) potential amount of tax adjustment.
- Cases were further sorted into 1 of 15 processing activities. These activities represent a series of related technical and clerical steps through which underreporter cases may flow as they are processed. One activity, for example, includes the following steps: (1) case is screened by tax examiner, (2) a notice is sent to taxpayer, (3) taxpayer responds to the notice, and (4) case is closed out agreed.

In estimating fiscal year 1989 underreporter revenues, IRS estimated the caseload for that year by reviewing historical trends and adjusting for program changes. The model sorted this estimated caseload into the 155 categories on the basis of the percentage distribution of the most recent

<sup>1</sup>Because IRS does not have the kind of information necessary to identify the amount of revenue actually generated by its underreporter activities in a given fiscal year, it estimates those results. For ease of presentation, we refer to those estimated actuals as "actuals." IRS has recently implemented an IRP Management Information System. As described to us, that system is designed to track cases to their conclusion, thus measuring actual dollars collected by fiscal year.

actual case results. After establishing the estimated case volume in each category, the model then calculated the flow of cases through each activity by category. The volume of cases in each activity was then multiplied by the processing rate<sup>2</sup> for that activity to calculate costs for the category. The volume of cases in each activity was also multiplied by the average assessment for each category to calculate yield (net of refunds). Finally, the model calculated a yield/cost ratio for each case category and ranked the categories in descending order on the basis of their ratios.

Compared to the process used before fiscal year 1989, the computer model provides a more refined basis for estimating underreporter revenue. As noted above, in preparing the fiscal year 1989 estimate, the model sorted cases into 155 categories on the basis of the type of income and potential amount of tax adjustment. By contrast, the process used to compute the fiscal year 1988 estimate analyzed case results into seven categories on the basis of the potential amount of tax adjustment, and the process used to compute estimates in earlier years analyzed cases in even less detail.

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## Inadequate Documentation to Assess Reasons for Variances Between Estimated and “Actual” Underreporter Revenues

As shown in table 4.1, the estimated underreporter revenues and workload included in IRS' budget submissions to Congress for fiscal years 1986 through 1988 varied significantly from “actual” amounts subsequently reported by IRS for those years. The cause of these discrepancies is not apparent from the workload data in the budgets. Although the budget data show that the “actual” number of underreporter notices issued varied greatly from the estimated number, the amounts and, in 1 year, the direction of the variances do not appear consistent with the variances in revenues. For example, although “actual” underreporter assessments exceeded the estimated amount by 29 percent in fiscal year 1986, the “actual” number of notices issued was lower than the estimated amount by 23 percent.

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<sup>2</sup>IRS defines the processing rate as the number of staff hours required to handle 1,000 cases.

**Table 4.1: Comparison of Estimated and  
 “Actual” IRP Underreporter Revenues  
 and Workload**

Fiscal year	Estimate	“Actual”	Difference	
			Amount	Percent of estimate
<b>Assessments (in millions of dollars)</b>				
1986	\$1,406	\$1,808	\$402	29
1987	2,027	1,201	(826)	(41)
1988	2,220	1,944	(276)	(12)
<b>Notices issued (in thousands)</b>				
1986	4,161	3,200	(961)	(23)
1987	5,500	2,200	(3,300)	(60)
1988	5,000	3,800	(1,200)	(24)

Source: GAO analysis of IRS budget data.

There are various reasons why estimated and “actual” revenues may vary, some of which are outside of IRS’ control and cannot be anticipated when the estimate is being developed. According to IRS, for example, the 41-percent variance in assessments for fiscal year 1987 was due, in part, to unanticipated computer problems that adversely affected the quality of its data. Because of inadequate documentation, however, we were unable to assess the extent to which the discrepancies between estimated and “actual” results for fiscal years 1986 through 1988 were due to factors that were within or outside IRS’ control.

IRS did not retain any documentation of the underreporter estimates submitted to Congress for 1986 or 1987. Although documentation for the 1988 estimates was retained, it does not support the congressional budget estimates, and IRS was unable to explain why. The official responsible for these estimates told us that he does not monitor “actual” results against budget estimates because the methodologies are continually changing.

As noted earlier, IRS used a computer model to develop its underreporter estimates for fiscal year 1989. The “actual” underreporter assessments for that year (about \$2.1 billion) were within about 5 percent of the estimate (about \$2.0 billion)—a smaller variance than IRS had experienced using its previous methodology. IRS, however, was still unable to provide the kind of documentation needed to assess the reliability of estimates generated by the model and to evaluate the cause of any problems that may arise with future estimates. IRS did not document the analyses of historical trends or the judgmental adjustments that form the basis for the estimated caseload input to the model. Further, it did

not retain any computer records showing the model's analyses of past case results, which constitute the major assumptions underlying the future years' revenue estimates. These analyses would show the percentage distributions for cases by category and activity along with the data on average assessments, case processing times, and case staffing costs.

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## Conclusions

The computer model now being used to develop IRP underreporter estimates provides a more refined basis for developing those estimates than did the methodology it replaced. Because the model was first used to produce fiscal year 1989 estimates, it is too soon to evaluate its usefulness. Any attempt to make such an evaluation in the future would be hampered by the absence of adequate documentation. As discussed in chapter 3, it is important that IRS adequately document and monitor its revenue estimates. Without doing so, it will not have an appropriate basis for identifying needed changes.

An evaluation would also be hampered by the absence of data on actual IRP underreporter revenues. IRS has implemented an IRP Management Information System, which, as described to us, will generate actual revenue data on IRP cases. We did not independently assess the adequacy of that system.

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## Recommendations to the Commissioner of Internal Revenue

We recommend that IRS

- fully document its IRP underreporter revenue estimates, including documentation of any analyses used to estimate future revenues and all other assumptions underlying the estimates;
- monitor "actual" underreporter results against estimated amounts to identify the causes of discrepancies and any needed changes in the methodology or assumptions used to estimate revenues; and
- use actual information, once it is available, to monitor the reliability of IRP underreporter estimates.

# Data Limitations Prevent IRS From Evaluating Relative Merits of Proposed Increases in Enforcement Staffing

Deliberations on proposed IRS staffing increases would be enhanced if IRS had reliable information on the relative yields of its enforcement programs in comparison to their costs. IRS developed the Enforcement Resource Allocation Model (ERAM) in an attempt to (1) determine how additional enforcement staff could be allocated among enforcement programs in order to maximize revenue and (2) estimate the total costs and total revenue flows for a given increase in enforcement staffing. Several limitations with ERAM's input data, however, have affected the model's usefulness. As a result, ERAM is not being used as intended.

## ERAM Designed to Improve Revenue Estimating and Enhance Budgeting

In the past, IRS' estimates of the revenue yield to be derived from staffing increases had several problems. First, projected revenues from each enforcement function were not additive because (1) each enforcement function expressed revenue in different terms (that is, dollars recommended, assessed, or collected); and (2) some of the accounts receivable revenue was double-counted when both Collection and Examination took credit for some of the same cases. Second, the estimates were incomplete because they omitted costs incurred by other functions—such as Appeals/Tax Litigation—in support of, or as a follow-on to, a staffing increase. Finally, the multiyear effect of a staffing increase, in terms of both revenues and costs, was not addressed; only the budget year was estimated.

In 1982, we discussed IRS' need for more complete cost and revenue data on its enforcement programs.<sup>1</sup> We recommended that IRS develop additional revenue data so that resources could be better allocated among all enforcement programs. Additionally, we recommended that to improve IRS' resource allocations and overall management of IRS' enforcement resources, the Commissioner implement a system to provide cost and revenue data from a total program and agencywide perspective.

Treasury and OMB had expressed similar concerns about IRS' revenue estimates. In response to those concerns, IRS developed the Programmatic Budgeting Model in 1984. That model was designed to express all enforcement revenues in a single term (dollars collected), eliminate double-counting of accounts receivable revenues, and include support and follow-on costs in the cost estimates. IRS developed ERAM in 1986 to further improve its estimates of the costs, workloads, and revenues associated with proposed changes in enforcement staff. In addition to

<sup>1</sup> Further Research Into Noncompliance Is Needed to Reduce Growing Tax Losses (GAO/GGD-82-34, July 23, 1982).

incorporating all of the Programmatic Budgeting Model's features, ERAM was designed to compute a staffing increase's revenue effect over 5 years and to allow the user to allocate resources across enforcement programs to maximize revenue.<sup>2</sup>

IRS documents portray ERAM as a useful tool for providing information to administration and congressional officials on IRS' budget decisionmaking process and the revenue-generating capabilities of its enforcement programs. For example, a May 1988 memorandum from IRS' Deputy Commissioner for Planning and Resources to Treasury's Acting Assistant Secretary for Management states that "the Service currently uses the Enforcement Resource Allocation Model (ERAM) for estimating revenue expected from enforcement programs, and for making calculations of total program costs." Also, in its November 1989 report on enforcement revenue estimation, IRS describes ERAM as a model that can estimate the total yield and cost consequences of a given staffing increase (or decrease) and optimize resources across enforcement programs on a marginal yield-to-cost basis.<sup>3</sup>

## ERAM Not Being Used as Intended

Although IRS designed ERAM to estimate the revenue associated with a staffing increase and to optimally allocate additional staff to maximize revenue, it does not use the model for those purposes. Also, according to OMB and Treasury Department officials, neither of those agencies—the two primary customers for whom the model was designed—uses ERAM. In each case, ERAM's nonuse was attributed to concerns about the model's reliability—concerns that can be traced primarily to limitations with the model's input data.

## Limitations With ERAM's Input Data

ERAM's input data (such as adjusted average yield and revenue flow rates) are developed by each of the enforcement functions using varying information sources, methodologies, and assumptions. Those data have several limitations that affect the model's accuracy and usefulness.

## ERAM's Yield Curves Based on Fewer Data Points Than Functions' Own Yield Curves

ERAM is designed to estimate the revenues associated with a staffing increase by constructing yield curves derived from data generated by the functions. Yield curves are graphic depictions of the relationship

<sup>2</sup>ERAM's revenue estimates are discounted to their present dollar value.

<sup>3</sup>Marginal yield is the change in total yield arising from an additional enforcement case worked.

between the amount of revenue and a given level of staffing. ERAM constructs these yield curves from four staffing points supplied by the functions. Those four points show the revenue associated with (1) the maximum additional staff that the function believes it can absorb during 1 year, (2) a staffing increase less than the function's maximum absorption figure, (3) the function's budgeted staffing figure, and (4) no staffing increase for the function.

According to IRS' Budget Revenue Coordinator, revenue estimates based on the four-point yield curves are not as accurate as revenue estimates developed for specific staffing increases by the functions during the budget process. He said that the functions' estimates are generated from a far greater number of yield points.

**Unsubstantiated Collection Flow Rates**

ERAM estimates revenues using assumptions developed by the individual functions about the extent to which assessments will actually be collected and the timing of those collections over the years. These flow rate assumptions greatly influence the total amount and 5-year distribution of revenues projected by ERAM.

On the basis of our current and prior work, the flow rate assumptions developed for Examination, Collection, and IRP Underreporter revenues are not reliable. For example, IRS based its Examination flow rates on the results of a study tracking the results of 1972 audits—a study that IRS officials acknowledge is outdated and invalid. The Collection official responsible for developing revenue estimates said that Collection's flow rates for the delinquent returns and IRP nonfiler programs were developed some time ago on the basis of a study of a sample of cases worked in Collection. IRS had no documentation of the study's methodology or of its results. The official who develops IRP underreporter revenue estimates said that the flow rates for underreporter cases worked by Examination are based on the 1972 case results discussed above, and the flow rates for the remaining underreporter cases are judgmental and were developed years ago from input provided by several IRS managers.

**Marginal Yield and Cost Data Generally Not Available**

IRS has stated that ERAM can be used to estimate the optimal revenue-maximizing allocation of additional resources across its enforcement programs on the basis of the relative marginal yield-to-cost ratios of the various programs. However, IRS does not have marginal yield and marginal cost data for Collection and IRP. For those programs, therefore, IRS substitutes adjusted average yield and cost figures for marginal data in ERAM.

In estimating the amount of revenue that can be generated from increased resources, marginal yields should be compared. Marginal yield is the change in total yield arising from an additional enforcement case worked. If IRS' enforcement programs generally pursue cases with the greatest revenue potential first, as IRS claims, the yield generated by additional enforcement staff will generally be less than the average yield. To allocate additional enforcement resources in a way that maximizes yield, IRS needs to evaluate how the marginal yield-to-cost ratios change for various levels of staffing. By substituting adjusted average yield and cost data for marginal data, IRS could be misstating its revenue projections. We do not know to what extent that might be happening because IRS had no documentation to show how it computed adjusted average yield and cost.

The Collection function—which estimates accounts receivable and delinquent returns revenues—submits judgmentally adjusted average, rather than marginal, yield and cost figures to ERAM because it lacks the necessary data to report on the effect of its activities at the margin. To obtain marginal yield and cost information, Collection would have to track the revenue resulting from individual cases and the amount of time and staff spent on closing those cases. With this information, Collection could then generate yield curves that project future revenues expected at different staffing levels.

As noted in chapter 3, Collection does not have a database linking case results and the resources applied to those cases. IRS officials said that they estimate Collection's marginal yield for ERAM by analyzing master file data for different categories of cases, broken down by potential yield. As discussed in chapter 3, however, the master file does not contain information on the amount and type of staff resources used for these cases. IRS, therefore, cannot measure the impact of additional staffing necessary for marginal yield calculations.

The Examination function also provides ERAM with adjusted average yield and cost data for the IRP underreporter component because it lacks marginal data. The recently developed IRP Management Information System mentioned in chapter 4 may eventually provide the data needed to calculate marginal yield and cost.



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## IRS Uses ERAM Only to Estimate Support and Follow-On Costs Associated With Staffing Increases

Because of data limitations, IRS does not use ERAM to estimate revenues or to allocate additional enforcement resources. IRS only uses the model to estimate the staffing costs that occur in support of, or as a follow-on to, an enforcement staffing increase. For example, a staffing increase in Examination would be expected to eventually increase the number of returns audited. That increased workload would necessitate the hiring of (1) additional support staff, such as clerks, technicians, and paraprofessionals; and (2) additional professional staff in other functions, like Collection and Appeals/Tax Litigation, to handle the increased workload that those functions can expect as a follow-on to the increased audits. The data ERAM uses to estimate those support and follow-on costs come from the individual functions.

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## Treasury and OMB Do Not Use ERAM

IRS designed ERAM to project alternate scenarios of an enforcement initiative's revenues and costs for OMB and Treasury to use in considering proposed staffing increases. Both OMB and Treasury officials said, however, that they do not use ERAM's estimates or modelling capabilities. These officials said that they thought ERAM's concept was valuable, but they believed the model's output to be unreliable.

As an example of ERAM's unreliability, the OMB official who oversees IRS' budget cited the fact that ERAM's collection flow rates indicate that IRS realizes positive revenues in the first year of an Examination staffing increase—a result that we questioned in our 1988 report on IRS' process for estimating the revenue from its Examination program and in our 1990 report on the costs associated with training new Examination staff.<sup>4</sup>

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## Conclusions

IRS needs the capability, like that envisioned for ERAM, to compare enforcement programs with each other to determine the optimal allocation of enforcement resources and to inform the administration and Congress about the relative merits of proposed staffing increases. Because of limitations with the input data provided by the individual functions—limited yield data, unsubstantiated collection flow rates, and adjusted average rather than marginal yield data—ERAM has not filled that need and is not being used as intended.

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<sup>4</sup>Tax Administration: Difficulties in Accurately Estimating Tax Examination Yield (GAO/ GGD-88-119, Aug. 8, 1988); Tax Administration: Potential Audit Revenues Lost While Training New Revenue Agents (GAO/ GGD-90-77, Apr. 6, 1990).

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**Chapter 5**  
**Data Limitations Prevent IRS From**  
**Evaluating Relative Merits of Proposed**  
**Increases in Enforcement Staffing**

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As discussed in chapter 6, IRS has various efforts underway or planned to improve its revenue estimates and other enforcement data. We believe that IRS needs to determine, among other things, how the results of those efforts will affect the use of or need for ERAM. Accordingly, we are making no specific recommendation regarding ERAM.

# IRS Needs to Ensure That Various Efforts to Improve Revenue Data Are Comprehensive and Appropriately Coordinated

As far back as 1981, we reported on the need for IRS to develop better information on the results of its enforcement programs. In 1981, for example, we testified that:

“ . . . the Service needs better data on the cost and revenue yield of its compliance programs. Generally, IRS has data showing only ‘average’ dollar yields. IRS’ management information systems do allow measurements of yield ‘at the margin’ for the examination program and do permit a rough estimate for the information returns program, but they do not provide marginal yield data for other compliance programs.”<sup>1</sup>

In a 1982 report, we noted that IRS’ information systems generally do not provide adequate data on the cost and revenue impact of its compliance programs and that, except for the Examination program, IRS’ information systems generally do not provide data necessary for estimating marginal yield.<sup>2</sup> We continued to make that point in subsequent years’ testimonies on IRS’ budget requests.<sup>3</sup> In our 1982 report, we described IRS’ long-standing need for agencywide management information and noted that:

“IRS’ management information systems do not provide adequate data to optimally allocate resources within and among its various compliance programs. The systems generally do not accumulate and report complete cost and revenue data for a compliance program, even though the data components exist at various places within the agency. Generally, each division or function within IRS has its own information systems, designed to serve its own needs, and the systems usually do not track cases or projects across divisional lines. As a result, cost/revenue data for a particular program are often incomplete.

“IRS recognized the need for an agencywide management information system as early as 1976 . . . IRS’ progress in developing a system to meet those needs has been slow, however.”

The situation we described then is essentially unchanged today. Recent concerns about the reliability of IRS’ revenue estimates, however, have again highlighted the need for a comprehensive, interfunctional database on the results of IRS’ enforcement programs. In response to that

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<sup>1</sup>Statement of William J. Anderson, Director, General Government Division, before the Subcommittee on Oversight, House Committee on Ways and Means, on the adequacy of IRS’ compliance resources for fiscal year 1982 (May 11, 1981).

<sup>2</sup>Further Research Into Noncompliance Is Needed to Reduce Growing Tax Losses (GAO/GGD-82-34; July 23, 1982).

<sup>3</sup>See, for example, statements of Johnny C. Finch, Senior Associate Director, General Government Division, before the Subcommittee on Oversight, House Committee on Ways and Means, on the administration’s budget requests for IRS for fiscal years 1986 and 1987 (Apr. 29, 1985 and May 12, 1986).

need, IRS now plans to establish an integrated enforcement management information system—the first phase of which it expects to be operational in August 1990. It also has several other efforts underway or planned that are intended to develop more reliable data on the results of its enforcement actions and that could provide a basis for more reliable revenue estimates.

Because IRS' plans for future phases of the integrated information system have not been finalized, it is unclear whether the system, when fully operational, will provide the comprehensive data needed to meet IRS' objective. Considering IRS' past record in developing such a system, however, we think there is reason for some concern. To better ensure that IRS' current efforts succeed where others have failed, IRS needs to (1) develop a strategy that shows how each of its efforts will contribute to the ultimate objective of more reliable enforcement data and revenue estimates and (2) provide executive oversight to ensure effective implementation of that strategy.

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## **Not Yet Clear Whether Planned Enforcement Management Information System Will Meet IRS' Needs**

Recognizing that IRS needs a comprehensive, interfunctional database on the results of its enforcement programs, IRS' Research Division began planning the Enforcement Management Information System (EMIS) in July 1989. IRS envisions EMIS as an integrated system that will track the workflow and measure accomplishments for each of IRS' major enforcement functions (Examination, Collection, Criminal Investigation, Chief Counsel, and IRP). The key feature of IRS' plan for EMIS is that it will track case activities across all enforcement programs through completion. In doing this, IRS hopes that EMIS will allow IRS executives to better manage the enforcement area and will ultimately provide more accurate measures of enforcement revenues and costs for Treasury, OMB, and Congress. IRS had planned to implement this system by June 30, 1990—a milestone identified as one of IRS' critical success factors in its strategic planning process.

IRS has described EMIS as a system that must be able to integrate case data from numerous functions, so that each function uses the same data element definitions, the data sources do not overlap, and cases are not double-counted. Although EMIS' development is incomplete, IRS' current plans for implementing the system raise concerns about whether it will achieve that objective.

IRS' current plans for EMIS call for incorporating and tracking Examination and certain other cases by the June 30, 1990, milestone. According

to those plans, Collection cases will be added to the system in 1991. The plans also note that IRP cases that are not referred to Examination, Collection, or Appeals will not be incorporated in EMIS but that a future enhancement to EMIS may provide for a direct link to the IRP Management Information System.

In developing plans to implement EMIS, IRS decided to primarily focus its initial efforts on the Examination program because Examination already had a case tracking system in place. That system, known as the Audit Information Management System, tracks Examination cases through the assessment of taxes. Under EMIS' design, IRS will track these cases until collection. Consequently, EMIS is expected ultimately to contain information on the actual dollars collected from all audits.

According to Research Division officials, expanding EMIS to include the large volume of IRP underreporter and nonfiler cases would be very costly.<sup>4</sup> These officials believe that the IRP Management Information System may provide adequate information on IRP case results either on its own or through integration of that system's data into EMIS. They are concerned, however, about the potential for double-counting IRP cases because some of the cases included in the IRP Management Information System are also reported in the Audit Information Management System, which is being used to develop the Examination case data in EMIS.

The Research Division plans to include Collection cases in EMIS' design by July 1991. Case data on these programs would have to be developed from the master files because Collection has no database tracking its case outcomes. According to Research Division officials, the master files are not readily accessible and, unlike the Audit Information Management System, do not provide all the needed data to track a given Collection case. In particular, the master files do not contain any data on the staffing costs associated with working individual cases. Without such data, IRS will be unable to develop marginal yield-to-cost ratios for the Collection function. These ratios are needed to allocate Collection resources in an optimal manner.

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<sup>4</sup>For tax year 1986, for example, nearly 10 million cases were worked under IRP's underreporter program.

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## IRS Needs to Ensure That Planned Improvements to the Revenue Estimation Process Are Effectively Implemented

IRS recognizes the need for more reliable enforcement revenue estimates. In addition to EMIS, IRS has 12 other ongoing or planned projects that may contribute to that end. Some of these projects are specifically aimed at improving IRS' enforcement revenue estimates, while others are designed to develop better enforcement program information. These projects, which are being developed in different organizations within IRS, are described in appendix I.

Because it is critical that IRS develop more reliable information on enforcement revenues and because attainment of that goal requires the involvement and cooperation of several functions, IRS needs to (1) develop a strategy that spells out its ultimate objective, identifies the various efforts that will contribute to the objective, and describes how the results of those efforts will be integrated; and (2) provide top management oversight over the strategy's implementation.

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## IRS Needs a Strategy for Coordinating and Integrating Its Numerous Projects

Considering the number of efforts IRS has ongoing or planned that would contribute to improved enforcement revenue data and more reliable revenue estimates, IRS needs a strategy for ensuring that the efforts are appropriately coordinated and that their results are coherently linked. In doing so, IRS needs to develop specific plans that include both a long-term strategy for developing the needed data and an interim strategy for improving the estimates in the short term. Key questions to be addressed in such a strategy include the following:

- How will IRS' numerous projects relate to its objective of improving enforcement revenue estimates?
- How will the various management information systems, databases, and estimating models resulting from these projects be integrated?
- Will the projects' results complement each other?
- How, if at all, will the results of these projects affect the use of or need for ERAM?
- Are the various projects properly timed so that their results can be integrated?
- Can the number of projects (13 or greater) be reduced to a number that can produce the same results at a lower cost?
- Are there any redundancies among these projects, and, if so, can they be eliminated or minimized?
- How will EMIS address the requirements for improving each enforcement function's revenue data, such as (1) updating collection flow rates, (2) linking marginal yield and marginal cost data on cases, and

(3) attributing revenue collected to particular enforcement functions and actions?

## Success of IRS' Data Improvement Efforts Depends on Effective Oversight

As discussed earlier, IRS has long recognized the need for improved data on enforcement results. Despite that recognition, IRS has made little progress in meeting its need. We believe that the success of IRS' current attempt to develop more reliable management information will depend on top management's active involvement in overseeing the effort.

Oversight responsibility now appears to rest with an Enforcement Revenue Estimation Steering Committee that IRS established in July 1989. That Committee is comprised of assistant commissioners from each revenue-producing function and is chaired by the Assistant Commissioner for Planning and Research. We do not believe that a committee so comprised is in the best position to provide effective oversight of this effort. In our opinion, oversight needs to be at a level that can transcend the parochial interests of the individual functions and make decisions on an IRS-wide perspective.

The steering committee's ability to effectively oversee and coordinate IRS' revenue estimation efforts might also be impaired by the fact that it had only identified for its oversight 9 of the 13 projects described in appendix I. The four missing projects are the accounts receivable management information enhancements, the Collection Budget Formulation Model, the IRP Management Information System, and the Taxpayer Compliance Measurement Program for individual nonfiler cases. Two senior IRS Research officials said they could not recall who compiled the list of nine projects for the steering group. Thus, we were unable to determine why the four projects, which are aimed at improving enforcement revenue data and would likely affect the quality of future revenue estimates, were excluded from the list.

We also found no evidence in minutes of the committee's meetings that it had defined or was pursuing an integration strategy. Most of the meetings focused on the first phase of EMIS' implementation, which, as noted earlier, primarily involves the tracking of Examination cases.

## Conclusions

As we reported on various occasions during the 1980s, IRS needs better information on the results of its enforcement programs. Although IRS has long recognized that need, it has been unsuccessful in developing systems to generate the information. There is now a renewed emphasis

within IRS to address the problem. To ensure that the emphasis is properly directed, IRS needs to develop a strategy that shows how the results of its various projects will be integrated to achieve its objective of more reliable enforcement data and revenue estimates.

To ensure that the strategy is effectively implemented and that the current emphasis is sustained over time, IRS' top management needs to closely oversee the effort. Because IRS' effort to improve its enforcement revenue estimates is so critical and cuts across the entire organization, we believe that oversight needs to be provided at the Deputy Commissioner level, where decisions can be made from an IRS-wide perspective.

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## **Recommendations to the Commissioner of Internal Revenue**

We recommend that IRS:

- Develop a comprehensive strategy for identifying and coordinating the various enforcement revenue projects and integrating their results. As part of the strategy, IRS should ensure that revenue and cost data on all enforcement cases, including Collection and Information Returns Program cases, are either incorporated into the EMIS database or are linked with EMIS data in a way that avoids double-counting.
- Assign responsibility at the Deputy Commissioner level for overseeing development and implementation of the strategy.
- Use the results of its various projects to improve the enforcement revenue-estimating process.



# Reliability of Enforcement Revenue Data Has Broad Implications

As concerns about the growing deficit mount, Congress and the administration look to IRS for increased enforcement revenues. The President's budget for fiscal year 1991, for example, includes a request for about 3,600 additional enforcement staff for IRS to use in doing more audits; collecting more unpaid taxes; and verifying certain deductions, credits, and exemptions—a staffing increase that IRS has estimated will generate about \$500 million in additional revenue in 1991 and about \$6.5 billion by the end of fiscal year 1995. A proposal introduced by Senator Conrad calls for a much larger staffing increase, including 3,000 additional examiners and 2,500 additional collection personnel, with the expectation of generating \$1.7 billion in fiscal year 1991 and \$32.9 billion by the end of fiscal year 1995.

To adequately assess such proposals, Congress and the administration need reliable data on how much revenue they can reasonably expect each of IRS' enforcement programs to generate at various levels of staffing and how soon they can expect that revenue to come into the Treasury. Reliable enforcement data are also essential if IRS is to effectively manage its programs. Without such data, IRS cannot make informed decisions as to how to use its resources in a way that maximizes revenues.

IRS provides Congress and the administration with two types of enforcement revenue data—information on the amount of revenue it expects to generate with increased staff and information on the amount of revenue it estimates it actually realized. As discussed in previous chapters, that information shows some big variances between expectations and final results.

Considering the inherent difficulties in trying to estimate results many months before the fact and all of the unanticipated events that can occur after an estimate is developed, it is not unreasonable for estimates to deviate from actuals. Our concern is not that variances exist but that IRS does not have the documentation and does not do the kind of monitoring necessary to evaluate those variances. Through such an evaluation, IRS could identify and correct problems with its methodology, such as inappropriate assumptions, and thus enhance future estimates.

What we find most intolerable is IRS' continuing inability to say what it actually receives in revenues as a result of its various enforcement programs. We think it is vital that Congress and the administration be given accurate information that they can use to judge the actual effectiveness

of IRS' various enforcement programs in generating revenues—information that they can use in deliberating on future changes to those programs. As we reported in 1982, IRS recognized the need for improved enforcement revenue information as early as 1976.<sup>1</sup> Despite that recognition, IRS has made little, if any, progress in filling that need and must still estimate its actual enforcement revenues.

Now, with growing pressure from Congress and the administration, IRS has expressed its intent to improve the reliability of its enforcement revenue data and has various projects underway or planned toward that end. Considering the fact that IRS has been unable to reach that goal since 1976, however, and recognizing that its success will require several years of sustained effort, we believe that continuing congressional oversight is essential. Congressional oversight would be enhanced if IRS provided Congress with detailed plans and milestones for improving its enforcement revenue data and periodic reports on the status of its efforts and if Congress held IRS accountable for meeting those plans and milestones.

Until IRS starts generating more reliable revenue information, however, Congress will be faced with the need to make prudent funding and staffing decisions involving IRS' enforcement activities. Faced with an audit coverage of about 1 percent and an accounts receivable inventory of over \$60 billion, it seems clear that there are benefits to be gained by increasing IRS' enforcement staff. In the absence of more reliable revenue data, however, Congress needs to ensure that its deliberations on future staffing increases are based on the most conservative assumptions—remembering, as we have reported previously, that there are limits to the number of additional staff that IRS can absorb at any one time and that the benefits from increased enforcement staff are more in the long term rather than the short term.<sup>2</sup> The Congressional Budget Office used some conservative assumptions, for example, in assessing the revenue estimate associated with the administration's request for additional IRS enforcement staff in fiscal year 1991. It reduced the administration's estimate of first year revenues from \$500 million to \$300 million after deciding that revenues would not be generated as quickly as the administration assumed.

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<sup>1</sup>Further Research Into Noncompliance Is Needed to Reduce Growing Tax Losses (GAO/GGD-82-34; July 23, 1982)

<sup>2</sup>Tax Administration: IRS' Implementation of the 1987 Revenue Initiative (GAO/GGD-88-16, Dec. 2, 1987); Tax Administration: Difficulties in Accurately Estimating Tax Examination Yield (GAO/GGD-88-119, Aug. 8, 1988); Tax Administration: Potential Audit Revenues Lost While Training New Revenue Agents (GAO/GGD-90-77, Apr. 6, 1990).

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As we testified in April 1989, Congress also needs to ensure, as it considers increases in enforcement staff, that IRS is being funded at levels sufficient to maintain current, needed operations.<sup>3</sup> IRS' recent experiences provide a case in point. As we testified in March 1990, funding shortages in fiscal year 1990 caused IRS to defer most of the enforcement staffing increases that Congress had authorized—thus negating expected revenue increases.<sup>4</sup>

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## Recommendations to the Senate and House Budget and Appropriations Committees

The Senate and House Budget and Appropriations Committees should closely oversee IRS' progress in improving its enforcement revenue data. In doing so, we suggest that the Committees require IRS to provide detailed plans and milestones and periodic status reports. Also, until more reliable data are available, the Committees should use conservative revenue assumptions in deliberating on future enforcement staffing increases, including those being proposed for fiscal year 1991.

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<sup>3</sup>Administration's Fiscal Year 1990 Budget Proposals for IRS and the Tax Court (GAO/T-GGD-89-16, Apr. 4, 1989).

<sup>4</sup>IRS' Budget Request for Fiscal Year 1991 and Status of the 1990 Tax Return Filing Season (GAO/T-GGD-90-26, Mar. 22, 1990).

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# Agency Comments and Our Evaluation

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In his June 11, 1990, comments on a draft of this report (see app. II), the Commissioner of Internal Revenue expressed agreement with many of our recommendations and said that IRS must continue to improve its enforcement revenue estimating models. As discussed more fully below, the Commissioner said that IRS has already taken action to implement some of our recommendations, especially as they relate to better documenting its estimating processes.

As a result of a comment by the Commissioner, we revised our first recommendation in chapter 6 to make it clear that information on all enforcement cases could either be incorporated into the EMIS database or linked with EMIS data. The Commissioner was concerned that our recommendation, as previously worded, would have required IRS to include IRP data in the EMIS database itself when IRS felt that linking IRP data with EMIS data would serve the same purpose.

The Commissioner did not fully agree with our second recommendation in chapter 6, in which we call for assigning responsibility at the Deputy Commissioner level for overseeing development and implementation of a comprehensive strategy for identifying and coordinating the various enforcement revenue projects. The Commissioner said that he felt oversight responsibility properly rested with IRS' Controller—a position IRS recently created in response to a previous GAO recommendation.<sup>1</sup> Considering the Controller's responsibility for establishing administrative and revenue accounting standards, tracking actual enforcement revenues against plans and coordinating estimates across IRS, and because the Controller will be reporting directly to IRS' Deputy Commissioner for Planning and Resources/Chief Financial Officer, we agree that making him responsible for IRS' strategy would be appropriate. However, given the importance of this work to IRS, we would still expect the Deputy Commissioner to actively oversee those efforts.

The Commissioner also had several broad comments that he thought needed to be recognized in order to put our report in perspective. His first comment was that our report does not put the revenue estimating issue in context. He refers to the fact that IRS' enforcement efforts, and thus enforcement revenues, have been seriously curtailed by operational budget shortfalls and that without additional resources IRS will be "hamstrung in its ability to enforce the tax laws" with a resultant loss in revenues and decline in voluntary compliance. Accordingly, while

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<sup>1</sup>Managing IRS: Actions Needed to Assure Quality Service in the Future (GAO/GGD-89-1, Oct. 14, 1988).

acknowledging the need to improve estimating procedures, the Commissioner said that the “true issue” in IRS’ budget is whether IRS gets the overall resources to carry out its basic tax administration responsibilities. We are on record as supporting IRS’ needs for additional resources for the same reasons cited by IRS—an increasing accounts receivable inventory, a decreasing rate of audit coverage, and a sizeable tax gap. IRS must recognize, however, that it will become more and more difficult for IRS to defend that position and us to support it in the absence of credible data on the value of such staffing increases—especially data on the revenues actually realized as a result of IRS’ enforcement efforts.

The Commissioner’s second point is that IRS is continuing to improve its estimating process and that the revenue estimates in the administration’s fiscal year 1991 budget are based on more conservative and better documented methodologies and thus are more defensible than the ones we reviewed. We know from other work we have done and are doing that IRS’ methodology for estimating the revenues to be generated by the increased Examination staff requested for fiscal year 1991 is more conservative than its past methodology. We could not assess the methodologies behind the Collection and IRP revenue estimates in the fiscal year 1991 budget or the adequacy of IRS’ documentation, however, because data relating to those estimates were not available until our audit work was virtually complete. Even if data had been available in time, it would have been difficult to compare current and past methodologies because of insufficient documentation behind the past methods. We acknowledge that IRS has taken steps toward improving its enforcement revenue data and estimating methodologies and have tried to recognize those efforts throughout the report, especially in chapter 6.

The Commissioner’s final point is that significant budgetary shortfalls over the past 2 years kept IRS from maintaining the level of enforcement effort it had originally intended and caused it to revise its revenue projections. We do not disagree with IRS and, as noted in chapter 7, are on record in support of the need for Congress to ensure that IRS has enough funds to maintain necessary operations. We would only point out that improved information on IRS’ enforcement efforts, including the amount of revenue actually realized, might go a long way in helping convince Congress and the administration as to the adverse effects of inadequate funding.



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# IRS Projects Relating to Enforcement Revenue Estimates

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During our work we identified 13 ongoing and planned projects that may contribute to improving IRS' enforcement revenue estimates. One of those projects, EMIS, is discussed in chapter 6. Descriptions of the other 12 projects follow.

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## Enhancements to Accounts Receivable Management Information

IRS has underway a number of efforts to improve its accounts receivable inventory data. Among these efforts are the development of two reports that together will track cases in IRS' accounts receivable inventory by fiscal year, age of receivable, and status of the receivable. Each case will be tracked through closure or until the 6-year statute of limitation expires. The purpose of these two reports is to allow IRS to take snapshots of the flow of collections from inventory cases at regular intervals. IRS is developing this information primarily to provide a basis for projecting the portion of the accounts receivable inventory that will likely be collected. Information on the timing and flow of collections would also be useful, however, in projecting future revenues from cases in the inventory.

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## Collection Budget Formulation Model

Collection is developing this model, which is also known as the Collection Resource and Database Tracking System, to (1) formulate revenue and workload data for its budget submissions and (2) execute its budget by allocating staff and generating a work plan for field offices. The model will summarize revenue data by district office and yield potential of the cases but will not track individual case costs or revenues. The model will use the same definition of yield as the Collection Yield Report discussed in chapter 3.

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## IRP Management Information System

This system, developed under the Assistant Commissioner for Human Resources Management and Support, is designed to track cases to their conclusion, thus measuring dollars collected. As described to us, once the case tracking is completed, IRS will have historical case data that can be used to project future IRP revenues.

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## Taxpayer Compliance Measurement Program (TCMP) For Individual Nonfiler Cases

TCMP is designed to measure the extent to which taxpayers comply in filing an accurately completed, timely, and fully paid return. IRS' Research Division is planning a new TCMP to develop comprehensive estimates of individual nonfilers in tax year 1988. IRS will randomly select and work a statistical sample of cases from the population of potential nonfiler cases generated through the IRP document matching program,

IRS investigative leads, and other sources. Among other things, the survey results will help IRS to estimate the total number of individual nonfiler cases and the value of the associated tax yield.

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**TCMP Estimated  
Checksheet and Unagreed  
Case Study**

Under this study, IRS will update TCMP revenue data on certain cases, including those where the taxpayer disagreed with the audit results.

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**Examination Revenue  
Estimation Project**

Under this project, the Examination function is evaluating ways to improve its revenue estimation and resource allocation model, along with the data sources used as input to that model. In the meantime, IRS has introduced an interim method of estimating the revenues associated with an increase in examination staff that is intended to update the assumptions on which the estimates are based and provide short-term improvement to Examination's revenue-estimating process.

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**Multi-Year Input-Output  
Model**

IRS' Research Division plans to develop a new system for estimating enforcement revenue called the Multi-Year Input-Output Model. This system will reflect the flow of workload from one enforcement function to the next, with each function receiving estimated inputs from other functions, as appropriate, and estimating its own outputs. In the case of Appeals/Tax Litigation, for example, the model would include as input information on the audited tax returns that Examination expects will be appealed and would include as output information on the cases that Appeals/Tax Litigation would expect to transfer to Accounts Receivable for collection. IRS has not yet developed an action plan for this model, and the responsible Research Division officials told us that implementation will take about 5 years.

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**Direct Enforcement  
Revenue Estimation Study**

IRS' Finance Division and Treasury's Office of Tax Analysis jointly undertook this project to develop improved estimates of total enforcement revenues from the master files. As discussed in chapter 2, this project was initiated in response to Treasury and OMB concerns about the reliability of IRS' past estimates, which were compiled from data submitted by the enforcement functions.

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**Collection Yield Study  
Group**

IRS' Research Division is implementing this project, which is aimed at revising the current definition of collection yield. Chapter 3 describes this project in more detail.

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**Chief Counsel Revenue  
Projection Model**

IRS' Chief Counsel's Office is developing a statistical model for projecting the additional revenue it can expect to generate through an increase in Appeals/Tax Litigation staff.

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**Chief Counsel Resource  
Allocation Model**

IRS' Chief Counsel's Office is developing this model for use in (1) allocating Appeals/Tax Litigation resources, (2) planning workload, and (3) projecting revenues.

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**Sustention Rate/Recovery  
Rate Study**

IRS' Research Division is conducting this study to determine the rate at which adjustments proposed by Examination are eventually upheld in the Appeals/Tax Litigation function.

# Comments From the Internal Revenue Service

Note GAO comments supplementing those in the report text appear at the end of this appendix.



COMMISSIONER

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

JUN 11 1990

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

Dear Mr. Fogel:

IRS' FY 1991 Revenue Estimates Are Conservative

We have reviewed your draft report concerning IRS' enforcement revenue estimates. We agree that IRS must continue to improve its direct enforcement revenue estimating models and agree with many of your recommendations. However, it should be pointed out that GAO examined estimates of total direct revenue. Neither the indirect enforcement effects nor the accuracy of the FY 1991 incremental revenues were specifically examined.

We have made substantial changes to our revenue projection techniques over the past several years. We believe our current estimates are reasonable, defensible, and conservative.

The President's FY 1991 Budget Is Essential To Improve Revenue Generation

The report does not put the revenue estimating issue in context. While it properly urges us to improve our techniques for counting the trees, we can't lose sight of the fact that the forest is burning. IRS' enforcement efforts, and thus enforcement revenues, have been seriously curtailed by operational budget shortfalls. Without added resources as begun in the President's FY 1991 Budget, the IRS will be hamstrung in its ability to enforce the tax laws -- a continuing condition that means significant revenue loss to the Federal government and a concomitant decline in voluntary compliance. Although difficult to measure, the indirect effects of enforcement on improved voluntary compliance are at least as important as the direct revenue effects.

For these reasons, while we agree the estimating procedures in place when GAO did their review needed improvement, the true issue in IRS' budget is whether we get the overall resources to carry out our basic tax administration responsibilities. At a time when our accounts receivable inventory has increased significantly, our audit rate is down to less than one percent, and the tax gap stands at \$80 to \$100 billion, it would be penny-wise and pound-foolish to focus on a discussion over the methodology for projecting incremental revenue enhancements and lose sight of the fact that IRS must receive additional funding in order to accomplish its tax administration responsibilities. Any discussion of enforcement revenue estimating must be put into

See comment 1.

See p 51

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this context so Congress will have the benefit of your advice when considering the important issues of raising revenue and funding this agency to collect that revenue.

IRS Continues to Improve Its Estimating Process

The revenue estimating procedures in place at the time GAO did its review have been modified. While we have and should continue to improve our revenue estimating methodologies, we believe the new estimates are both conservative and defensible. In fact, we have already incorporated many of GAO's earlier recommendations for improving estimating models and look forward to your review of our FY 1991 estimates.

We are continuing to refine our current revenue estimating methodologies, and are also committed to a comprehensive, cross-functional information system which can accurately track all enforcement results through to completion. The first stage of this Enforcement Management Information System will be operational by August 15, 1990.

We have also established recently a Controller organization that is responsible for establishing both administrative and revenue accounting standards. For the first time, one organization will have Service-wide accounting responsibility for both operational purposes and management information purposes, including the tracking of actual enforcement collections against planned collections and coordinating estimates across the Service.

Steady Budgets Mean Steady Progress

IRS has suffered from significant budgetary shortfalls over the past two years. These shortfalls and absorptions -- primarily mandatory cost absorptions -- required IRS to shift funds just to meet payroll. In essence, we mortgaged tomorrow to pay for yesterday's costs. In doing so, we found ourselves in a position where we could not always do the job we had been originally budgeted to do. As a practical matter, we have not been able to maintain our level of revenue officers or revenue agents for almost two years -- another year would be even more detrimental to revenue collections. As a result, revenue projections prepared several years before funds were appropriated had to be revised to reflect the approved funding levels.

The FY 1991 budget request begins to restore IRS to a sound footing budget-wise; it does not solve totally all of the shortcomings from prior years. In fact, as we testified this year, IRS will have to absorb several hundred million dollars in unbudgeted costs in the coming fiscal year. As GAO itself testified in March of this year, "The initiatives that call for

See p 52

See p 52

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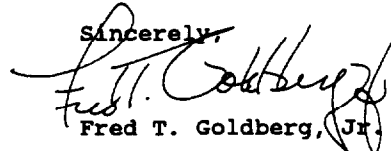
additional enforcement staff will, in effect, only serve to replace staff that IRS lost in the last year and a half due to a hiring freeze."

Detailed comments on the recommendations, as well as other specific comments on the report are included as enclosures with this letter. This includes comments provided by Treasury's Office of Tax Analysis.

Thank you for the opportunity to comment on this report.

Best regards.

Sincerely,



Fred T. Goldberg, Jr.

Enclosures

IRS' COMMENTS

TABLE OF CONTENTS AND EXECUTIVE SUMMARY

We suggest that the term "were not realized" be used when discussing the results of our previous enforcement revenue estimates. The report uses the term "overstated" and "grossly overstated" in characterizing IRS' estimates of enforcement revenue in the past.

See comment 2.

EXECUTIVE SUMMARY

Page 4 -- The report states that Congress needs to ensure that deliberations on future staffing increases are based on the most conservative assumptions. We suggest that this statement be revised to reflect that Congress should use the most conservative revenue assumptions in their deliberations about "additional revenue" rather than about future staffing increases. (See page 7 of the Executive Summary.) Deliberations about IRS' staffing levels should be discussed in terms of the overall mission Congress expects IRS to accomplish, not in terms of revenue assumptions.

Now p 3

See comment 3.

Page 4 -- We suggest that the addition of IRS enforcement staff will generate "substantial" additional revenue. Likewise, we believe that the report should note that there would be significant increased indirect revenues from such initiatives.

Now p 3

See comment 4

CHAPTER 2 -- CONFLICTING INFORMATION ON MAGNITUDE OF IRS' TOTAL ENFORCEMENT REVENUES

Recommendations to the Secretary of the Treasury

We recommend that the Secretary of the Treasury direct IRS and OTA to provide Congress with information on the actual revenues generated by IRS' enforcement programs as soon as it becomes available. In the interim, the Secretary should direct IRS and OTA to identify the most reliable methodology for estimating actual enforcement revenues. The Secretary should also direct IRS to explore ways to link improved revenue data with proposed staffing increases to ultimately provide Congress with more reliable estimates of the revenue expected from those increases.

IRS Response:

We do not disagree with this recommendation with respect to the IRS; however, OTA provides information on total federal collections but does not furnish information on enforcement revenue to Congress. However, we would simply point out that the most reliable methodology requires linking the enforcement functions' data bases to data on the IRS master file. The IRS is

See comment 5

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implementing that methodology in the development of EMIS. IRS currently cannot provide data on direct enforcement revenue (other than IRP) by function.

Other Comments:

The report states that IRS is unsure of the actual levels of enforcement revenues. The Direct Enforcement Revenue Study alluded to in the report is, in fact, the first step towards resolving this uncertainty. IRS now estimates that the amount of enforcement revenue generated in FY 1989 was at least \$29.6 billion. Absent data on actual collections from enforcement activities, this is the most accurate estimate the Department has on enforcement collections.

See comment 6

CHAPTER 3 -- NO ASSURANCE THAT ESTIMATES OF REVENUE FROM COLLECTION ACTIVITIES ARE RELIABLE

Recommendations to the Commissioner of Internal Revenue

We recommend that IRS

- Develop and document a consistent methodology for reviewing historical trends, incorporating anticipated program changes, and estimating revenues in Collection;
- Fully document the data used in applying the methodology, including the trend analyses performed and the assumptions underlying those estimates, and the results therefrom; and
- Monitor estimates against actual results over time, using the most reliable data on actual results available, to assess the causes of any significant discrepancies and to identify any adjustment needed in assumptions or methodology.

While we agree with these recommendations and believe that EMIS will accomplish these goals, we must again point out that the report critiques a revenue estimating model that has already been improved significantly -- and which can be documented. While we agree that more can be done to improve revenue estimating in the Collection function, the report does not acknowledge efforts Collection has made over the past two years to improve its estimating such as: using Collection research file data to validate assumptions; designing a model that will use more discrete data in developing the estimates; hiring an analyst to specialize and focus on developing a statistically sound estimating technique; and exploring the use of RWMS scores to improve estimates of marginal yield.

See comment 7

See comment 8

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Assumptions were also changed based on historical data. This resulted in lower projected revenue per additional staff year, specifically the estimated yield per additional staff year was reduced after examining results of the FY 1988 Collection program. Collection has documented its methodology.

See comment 9.

The changes made to Collection's methodology were first used to prepare the FY 1991 revenue estimates. To our knowledge, GAO has not reviewed this interim model which we believe provides a more accurate and reasonable estimate until EMIS includes Collection cases.

**Other Comments:**

Now p 27.

See comment 10.

Page 38 -- The report's discussion of the use of different weights and different historical patterns glosses over the use of judgmental factors. The historical data contains significant peaks and valleys that would skew a straight-line estimate. Examples of this are the 1985 filing season, introduction of Collection's Resources and Workload Management System (RWMS), and the rescheduling of delinquent returns delinquency checks. Adjustments that Collection made to its estimates were an attempt to account for known, but not precisely quantifiable, variations.

Now p 29.

See comment 11.

Pages 42-43 -- The report states that Collection does not have a data base with time expended on Collection cases and results in terms of revenue. While it is true that we do not have a single data base, this information is available on different data bases. There are plans to revise time reports to collect case information, but this information will not be put on IRS' master file.

**CHAPTER 4 -- IRS NEEDS TO FULLY DOCUMENT AND MONITOR ITS NEW METHODOLOGY FOR ESTIMATING IRP UNDERREPORTER REVENUES**

**Recommendations to the Commissioner of Internal Revenue:**

We recommend that IRS

- fully document its IRP underreporter revenue estimates, including documentation of any historical trend analyses used to estimate future revenues and all other assumptions underlying the estimates.

**IRS Response:**

We have already implemented this recommendation. For the FY 1991 budget submission, IRS has fully documented records of Tax Year case inventories for 1987 and all assumptions (flow rates, average assessments or refunds by subcategory, and average costs) underlying the revenue projection model. Beginning with FY 1989, IRS has documentation of analyses of past case results which shows the percent of distribution for cases by category with assessments by category or subcategory of use and average costs.

It is important to note that IRS has improved the documentation of its methodology in the past two years. While we believe adequate documentation exists for FY 1989, either in the form of model documentation or source documents which the model used, we have improved the model so that for FY 1991, it has all documentation immediately available in the program itself.

- monitor "actual" underreporter results against estimated amounts to identify the causes of discrepancies and any needed changes in the methodology or assumptions used to estimate revenues;

**IRS Response:**

We agree with this recommendation and are establishing management reports of actual results to be provided on a more current basis than in previous years.

- use actual information once it is available, to monitor the reliability of IRP underreporter estimates.

**IRS Response:**

We agree and would note that actual information is now available for tax year 1985 which has been used to compare against IRP underreporter estimates. Our preliminary comparison of gross revenues indicate that our estimated assessments were within one half of one percent of actual assessments. This comparison is not meant to validate the fiscal year revenue estimate itself, rather it permits IRS to validate the model's construction.

**Other Comments:**

Pages 46 and 51 -- The report states that IRS is not adequately documenting the assumptions underlying the new methodology for IRP underreporter estimates. This is incorrect. IRS now has costs, flow rates, assessed amounts by case type, number of cases in each type, etc. based on historical data. This information is readily available for FY 1991. This information permits IRS to monitor estimates against actual

See comment 12

See comment 13

See comment 14

See comment 15.

Now pp 32 and 35.  
See comment 16.



results.

Pages 49-50 -- The report discusses the lack of documentation in assessing the reasons for variances between estimated and "actual" underreporter revenues. As stated, IRS now has adequate documentation for its IRP revenue estimates. However, as the report notes, there are significant external factors for which IRS cannot project in advance when making its estimates. Specifically new legislation in the early to mid 1980s affecting information reporting (sales of securities, IRA deductions, mortgage interest deductions) greatly affected historical experience on which projections were made.

The importance of recognizing these "external influences" is clearly seen in FY 1987, the year with the greatest variance between the estimate and actual revenue (41%). The major variance between the FY 1987 estimate and the actual revenue resulted from a variety of concrete causes. First, tax year 1984 cases, which were worked in 1987, were adversely affected by SCRS and its impact on information return quality. Second, many erroneous IRP cases were created because many IRA Forms 5498 were not filed or processed in 1985. This contributed to a high screen-out rate and many unproductive cases. Third, in this first year of matching security sales, the basis for the security sales was not present. After this information was obtained from the taxpayer through correspondence, most cases were eliminated. None of these problems could have been or were anticipated when projections were made for 1987.

Page 52 -- GAO states that "IRS is implementing an IRP Management Information System." IRP MIS was implemented in January 1987. While it continues to undergo refinements and modifications, Examination considers it to be operational. When Tax Year 1986 cases (the first tax year on the system) have been worked to their completion, IRP MIS will be able to address the revenue impact of working underreporter cases.

CHAPTER 5 -- IRS LACKS CAPABILITY TO EVALUATE RELATIVE MERITS OF PROPOSED INCREASES IN ENFORCEMENT STAFFING

Page 57 -- The report contends that "ERAM is not being used by the IRS as intended." The ERAM itself was never intended to be used in every day budget development. In particular, the yield curves were only intended to be used for general estimates of yield, for quick estimating, and hence, were updated only annually. Requests for more precise estimates are therefore directed to the enforcement functions in order to use the latest assumptions and other current input data. The ERAM costing and yield subroutines (percent collected, revenue flow factors, and support and follow-on cost factors) were adopted by the enforcement functions and are used in normal budget

Now pp 33-34

See p 52

See p 34

Now p 35

See comment 17.

Now p 37

See comment 18

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development, but the model itself is not used in the normal budget process.

Page 59 -- The report states that IRS does not have marginal yield and marginal cost data for IRP. This is not correct for IRP. While IRS does have marginal yield data for underreporter cases on an individual basis, it does have marginal yield data within the categories of IRP issues. This permits IRS to rank the almost 200 issue categories according to yield and average cost ratio when deciding which cases to work first. In our opinion, this marginal yield data permits IRS to develop reasonable and defensible revenue estimates.

CHAPTER 6 -- IRS NEEDS TO ENSURE THAT VARIOUS EFFORTS TO IMPROVE REVENUE DATA ARE COMPREHENSIVE AND APPROPRIATELY COORDINATED

Recommendations to the Commissioner of Internal Revenue

We recommend that IRS

- Develop a comprehensive strategy for identifying and coordinating the various enforcement revenue projects, and integrating their results. As part of the strategy, IRS should ensure that revenue and cost data on all enforcement cases, including Collection and Information Returns Program cases, are incorporated into EMIS.
- Assign responsibility at the Deputy Commissioner level for overseeing development and implementation of the strategy.
- Use the results of its various projects to improve the enforcement revenue estimating process.

We agree that there should be a comprehensive strategy but do not agree that revenue and cost data from IRP necessarily must be included in EMIS. IRP MIS captures the necessary revenue information and appropriate cost data can also be readily obtained. IRS will ensure that the output from these information systems are included with EMIS data, while avoiding double counting.

We believe oversight responsibility properly rests with the Controller. As you know this position was created at the recommendation of GAO to play a more prominent role in IRS' budget formulation, including revenue estimation and will provide adequate executive oversight of this area. The newly chartered Controller organization will be the focal point for establishing both administrative and revenue accounting standards. For the

Now p 38  
See comment 19

See comment 20

See p 51

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first time, an organization will have Service-wide accounting responsibility for operational purposes and for management information purposes. Tracking actual enforcement collections will be a responsibility of this organization as well. The Controller reports directly to the Chief Financial Officer who is also the Deputy Commissioner (Planning and Resources).

We believe that these organizational changes will permit much more control and coordination of the revenue estimating throughout the Service.

Finally, it should be noted in the report that the Commissioner and the Senior Deputy Commissioner have been involved in these issues on an ongoing basis. As the Steering Committee has dealt with issues that cannot or should not be resolved at their level, these issues are raised with the Executive Committee. For these reasons we believe that the oversight and executive involvement the report advocates is largely in place today.

Other Comments:

Page 68 -- The report's statement that "IRS' current plans for EMIS call for incorporating and tracking Examination cases" by June 30 is incorrect. The first phase of EMIS will include data on Examination, Employee Plans, Exempt Organizations, Collection's Employment Tax Examination cases, and Appeals cases, i.e., all cases on the Audit Information Management System (AIMS).

Page 68 -- The report observes that "a future enhancement to EMIS may provide a direct link" to the IRP MIS. In fact, such enhancements will provide this link. Statements in this section also question whether IRP MIS will "provide adequate information." IRP MIS provides the same detailed information on IRP cases that EMIS will provide to non-IRP cases. There is, therefore, no reason to combine the two systems but we will link their outputs after assuring that there is no double counting. Combining the systems would be costly and would provide no additional benefits.

CHAPTER 7 -- UNRELIABLE DATA ON ENFORCEMENT REVENUES HAS BROAD IMPLICATIONS

Recommendations to the Senate and House Budget and Appropriations Committees:

The Senate and House Budget and Appropriations Committees should closely oversee IRS' progress in improving its enforcement revenue data. In doing so, we suggest that the Committee require IRS to provide detailed plans and

See p 51

Now p 43  
See comment 21

Now p 44  
See comment 22

milestones and periodic status reports. Also, until more reliable data is available, the Committees should use conservative revenue assumptions in deliberating on future enforcement staffing increases, including those being proposed for fiscal year 1991.

IRS Response:

This recommendation is a sound one. However, as already noted, and as described below in more detail, it is important to note that the IRS has made substantial progress over the past year in reviewing its estimating systems to assure that they are both conservative and consistent. We are very willing to work with outside reviewers in further sharpening our techniques. However, any revisions of these estimates should always be based on analytical techniques, not on reactions to IRS' own estimates.

The revenue estimates for the FY 1991 IRS compliance initiatives were based on the IRS' updated historical data using estimating methodologies that incorporate recent internal and external findings on ways to improve IRS' estimating. The current IRS methodologies, in every case, are improved and differ significantly from those used by the IRS in the time period FY 1983-1988, the period of study in the GAO report.

The Examination initiative estimates were based on known workload in inventory nationwide and the most recent results of audits on a class-by-class basis. In most cases the interim method was used and, where appropriate, opportunity costs were included. The interim method bases estimates of recommended tax and penalties on the number of new cases started as a result of adding additional examination personnel. The former method based estimates on the number of cases closed as a result of additional resources. Given the time some audits can take, this is a significant difference. The former method used revenue flows derived from 1972 data that is now outdated. The interim method uses the IRS' most recent experience of the time cases spend in the appeals process -- a factor that significantly extends the flow of collections.

A few of the Examination initiatives were unique and could not be estimated through the interim method. The estimates for these initiatives were calculated using known data for the unique aspects of each initiative and, while they necessarily involved the making of assumptions, efforts were made to assure the estimates were conservative.

While there were no FY 1991 initiatives in the Information Returns function, the IRP methodology has also been improved since the period studied in the GAO report. Beginning with FY 1989, a model has been used to determine the revenue likely to result from each year's planned IRP activities. The model now

See p 52

ranks almost 200 issues on a marginal basis and takes into account the amount of time that will have to be spent on each issue and the resources available to do the work. The model's outputs are based on actual data beginning with Tax Year 1985.

The Collection function has also been improving its methodology. A new model for Collection is now in the contracting stage that, upon completion, should greatly improve the Collection estimating procedures. The estimates for the FY 1991 Accounts Receivable initiative were based on the most recent experience of nationwide Collection activity in the TDA area. The estimates included the use of Collection Research File data to validate assumptions and the use of RWMS scores to determine the cases that would be worked. In addition, the estimates were discounted more heavily for time spent in training than had been done previously. As a result the estimates for the FY 1991 initiative are more realistic than estimates made in prior years.

We would also like to see the report recognize that the IRS proposes funding and staffing increases not only to increase direct enforcement revenues, but also to further voluntary compliance in our self-assessment tax system. Although more difficult to document, most revenue estimators believe there is a substantial indirect effect of additional enforcement efforts on voluntary compliance. It would be helpful if GAO could examine and advise Congress on the importance of increases in voluntary compliance that are a by-product of increases in enforcement.

See comment 1.

COMMENTS BY THE OFFICE OF TAX ANALYSIS

EXECUTIVE SUMMARY

Background Section

See comment 23.

Page 2 -- The second paragraph states that Treasury "uses the revenue estimates for proposed staffing increases in projecting total federal tax receipts." This is not accurate. Together with the IRS, the Office of Tax Analysis (OTA) develops estimates of incremental enforcement receipts associated with proposed changes in IRS staffing. These incremental receipts are added to OTA's baseline estimate of total federal tax receipts. However, in preparing the baseline estimates themselves, estimates of direct enforcement receipts are not needed or used by OTA.

CHAPTER 1

Introduction

Now pp 15-16

Page 16 -- The report states that in Chapter 2 it will document OTA's involvement in determining total enforcement

revenues. OTA has never attempted to estimate total enforcement receipts. OTA does not require or use this information to carry out its responsibility to estimate total budget receipts. This information is neither necessary nor used by OTA in evaluating estimates of incremental receipts attributable to enforcement program initiatives.

Page 17 -- OTA does not estimate total or overall enforcement revenues.

CHAPTER 2 -- COMPUTATIONS OF ACTUAL ENFORCEMENT REVENUE VARY

Page 20 -- The report states, "IRS does not have the information systems it needs to tally actual revenues generated through its enforcement programs. Absent those systems, IRS and OTA have to estimate the actual results of IRS' enforcement efforts". This is misleading. Moreover, to the extent IRS enforcement efforts lead to greater voluntary compliance (which is generally agreed to be the case, although difficult to measure), only an estimate of total enforcement revenues can ever be available.

Page 20 -- The report states that IRS and OTA used three different data sources to calculate actual revenues from IRS' enforcement programs. As discussed above, OTA does not calculate actual revenues from IRS' enforcement programs.

Page 21 -- The report says "OTA analyzed other data for fiscal year 1987 which led it to conclude that total enforcement revenues that year were about \$24 billion." OTA does not estimate total enforcement receipts. While understanding there were obvious reasons why the S-2 Report may not be a good indicator of total enforcement revenue, OTA asked IRS to reconcile its estimate of total enforcement receipts with information found in the S-2 Report. OTA did not produce its own estimate, nor did it view the \$24 billion shown in the S-2 Report as a measure of the total direct enforcement revenues.

Page 22 -- The report discusses "the 24.6 billion derived for the year using OTA's methodology." As noted above, OTA does not have a methodology for estimating total enforcement revenues.

Page 22 -- The term "budget estimate" is ambiguous. It should be made clear this \$50 billion is a number in IRS' budget documents and not an estimate of a component of federal budget receipts.

Page 23 -- As noted above, OTA does not make estimates of total enforcement receipts.

Page 26 -- The report says, "the wide variance between estimates and IRS' recent calculations of actual revenues give

See comment 24

Now p. 16  
See comment 25.

Now p 18  
See comment 26

Now p 18  
See comment 27.

Now p. 18.  
See comment 28

Now p 19  
See comment 29.

Now p. 19  
See comment 30

Now pp. 19-20  
See comment 28

Now p 21

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little assurance that Congress can rely on [IRS' estimates of revenues from a given level of staffing.]” While this “wide variance” in estimates of total direct enforcement revenues exists, it should be clarified that such evidence does not support corresponding conclusions regarding estimates of incremental revenues associated with increases in IRS staffing. The methodology used by OTA and IRS to calculate the revenue effects of additional IRS staffing does not rely on estimates of total enforcement revenues.

Page 27 -- The report recommends that IRS and OTA should be directed to provide information on actual revenues generated by IRS enforcement programs. As previously mentioned, this information can only be provided by IRS.

See comment 31.

Now p 21  
See comment 5

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## GAO Comments on IRS' Letter

1. We did not attempt to examine the indirect revenue effects of IRS' enforcement programs (e.g., the potential revenue gains from increased voluntary compliance with tax laws) because both IRS and Treasury have acknowledged that the indirect effects are difficult, if not impossible, to measure.
2. We revised the wording on pp. 3 and 8 to delete references to "overstated."
3. We revised the wording on p. 3 along the lines recommended by IRS.
4. Based on the work that we have done, we have no basis for asserting that IRS enforcement staffing initiatives will result in substantial direct and indirect revenue increases.
5. We revised the wording of the recommendation on p. 21 to direct that IRS, not IRS in conjunction with OTA, furnish Congress with information on actual enforcement revenues.
6. The Direct Enforcement Revenue Study referred to by IRS is the master file analysis that is discussed on p. 19.
7. Although EMIS is expected to provide actual data on enforcement cases, it will not by itself accomplish IRS' goal of improving documentation and monitoring of revenue estimates.
8. Regarding IRS' comments on Collection's efforts to improve its estimating process: (1) Collection had no documentation showing that data from the Collection Research File was used to validate its revenue estimating assumptions, (2) the model mentioned by IRS is discussed on p. 54, and (3) Collection's "exploration" of using data from RWMS (which is IRS' system for scoring Collection cases on the basis of their potential yield) to improve estimates was not sufficiently developed or documented to warrant inclusion in the report.
9. These comments, which relate to IRS' fiscal year 1991 budget estimates, are discussed on p. 52.
10. We believe that we have appropriately acknowledged and treated the discussion of IRS' judgmental adjustments to its revenue estimates. Since IRS did not document the results of its historical trend analyses and judgmental adjustments, it could not support (and thus we could not evaluate) the factors mentioned in this comment.



11. Our report makes the point that IRS does not have a database that links Collection staffing data on cases to the results of those cases in terms of revenue. IRS' comments seem to acknowledge that point.
12. We could not assess the adequacy of IRS' implementation of this recommendation because sufficient information was not available when we did our audit.
13. Documentation available for the fiscal year 1989 estimates was insufficient to assess the basis for those estimates because, among other things, it omits data on assumptions about average yield per case for each case category.
14. As noted in comment 13, the documentation available for fiscal year 1989 was incomplete. Also, the model documentation and source documents that were retained and used in constructing the fiscal year 1989 model were not adequate or useful for assessing the model's assumptions and results. Neither the source documents nor the available model documentation show what data IRS extracted from the source documents or how the model manipulated that data.
15. As IRS says in its comment, the comparison it made using tax year 1985 data was not meant to validate the fiscal year revenue estimate but rather to validate the model's construction. Our report, however, does not criticize the model's construction; we say on p. 32 that the model appears to provide a more refined basis for developing revenue estimates. Our point is that IRS needs to obtain actual results on a fiscal year basis and use that information to monitor the reliability of its fiscal year estimates.
16. We revised the wording on pp. 32 and 35 to indicate that we are talking about the situation at the time of our review. We discuss fiscal year 1991 estimates on p. 52.
17. We revised the wording on pp. 32 and 35 to indicate that the system was implemented.
18. Our conclusion that ERAM is not being used as intended is based on information in various IRS documents and discussions with IRS officials as to why ERAM was developed and how it is being used. Our report does

not state that ERAM was intended to be used in "everyday budget development." It states that IRS developed ERAM to estimate the costs and revenues associated with an enforcement staffing increase and to optimally allocate additional enforcement staff to maximize revenue.

19. Marginal yield is defined as the change in total yield arising from each additional case worked. IRS' revenue data, even when broken down by category, does not constitute marginal yield data.

20. We revised the wording of the recommendation on p. 47 to allow for either incorporating IRP data into the EMIS database or linking the IRP and EMIS data.

21. We revised the wording on p. 43 to show that Examination cases are not the only ones scheduled to be incorporated into EMIS by June 30, 1990.

22. Documents recently provided to us by IRS state that the IRP Management Information System and EMIS may be linked. We revised the recommendation on p. 47 to allow for such linkage.

23. We revised the wording on p. 2 to more correctly state how Treasury uses the estimates.

24. We revised the wording on pp. 15-16 to more clearly characterize OTA's involvement.

25. Although OTA does not, as a routine matter, estimate total enforcement receipts, it did use the S-2 report to calculate those receipts as a check on IRS' estimate. We revised the wording on p. 16 to avoid using the word "estimate."

26. This statement is not misleading in that it is a straightforward description of information that IRS does not have. We have clarified OTA's role in calculating enforcement revenues. See also comments 25, 27, and 28.

27. OTA did calculate a figure for such revenues using the S-2 report.

28. We agree that OTA does not, as a routine matter, estimate total enforcement receipts. It did, however, make the analysis discussed in our report.

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29. We changed the wording on p. 19 so as not to refer to a “methodology.”

30. We changed the wording on p. 19 to delete reference to “budget estimate.”

31. We do not think further clarification is necessary. We do not imply that our conclusion relates to increases in staffing. Our analysis, as stated in the report, addresses total enforcement revenues from the given staffing level—not additional revenues from incremental staffing increases.

# Major Contributors to This Report

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