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**GAO**

**United States General Accounting Office**

**Report to the Chairman  
Committee on Small Business  
U.S. Senate**

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**May 2000**

**TAX  
ADMINISTRATION**

**IRS Is Working to  
Improve Its Estimates  
of Compliance  
Burden**



**G A O**

**Accountability \* Integrity \* Reliability**

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G A O

Accountability \* Integrity \* Reliability

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

General Government Division

B-283788

May 22, 2000

The Honorable Christopher S. Bond  
Chairman, Committee on Small Business  
United States Senate

Dear Mr. Chairman:

Taxpayers spend considerable time and money complying with the federal income tax rules. While much of this compliance burden is attributable to the tax code, another portion can be linked to Internal Revenue Service (IRS) actions. Reliable estimates of the burdens imposed by such compliance could assist Congress in reducing those burdens, and assist IRS in developing measures of its own performance, making better informed resource allocation decisions within the agency, and meeting reporting requirements under the Paperwork Reduction Act. We have reported that the estimation model that IRS currently uses for compliance burden ignores important components of burden and has limited capabilities for analyzing the determinants of burden.<sup>1</sup>

You asked us to report on the status of IRS' efforts to improve its estimates of taxpayer compliance burden. Accordingly, in this report, our objectives were to (1) describe IRS' overall strategy to improve its methodology for estimating compliance burden, (2) describe what IRS has done to begin implementing its overall strategy and how IRS expects this to improve its methodology, and (3) determine whether IRS expects that its new methodology will be able to measure the burden associated with the complex tax rules identified in IRS' forthcoming first annual report on tax complexity.<sup>2</sup>

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## Results in Brief

To improve its methodology for estimating compliance burden for all types of federal taxpayers, IRS is pursuing a multiphased strategy. Initially, IRS is focusing on taxpayers who have only wage and investment (W&I) income because they bear a large portion of the overall compliance burden and because their burden may be easiest to estimate. Later phases would develop estimates for other taxpayer groups, such as small businesses and the self-employed and large and medium-sized businesses. This

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<sup>1</sup>Small Business Tax Compliance Burden (GAO/GGD-99-96R, May 5, 1999).

<sup>2</sup>This report was mandated by the IRS Restructuring and Reform Act of 1998 (P.L. 105-206, July 22, 1998).

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incremental strategy should give IRS and its contractors the flexibility to incorporate lessons learned from early phases of the process into later efforts.

IRS has begun to implement its strategy by contracting for the development of two models that, when combined, should provide more reliable estimates of W&I taxpayers' prefiling, filing, and postfiling compliance burdens. Compared with IRS' current methodology, these models are designed to produce more comprehensive estimates of federal income tax compliance burdens and to provide IRS with a greater capacity to analyze the impact of tax law and administrative changes on those burdens. As with all such modeling, the specific capabilities and precision of the new models will depend on the quality of the underlying data.

IRS expects that one of the new models, covering prefiling and filing activities, will provide some assistance in estimating burdens associated with the complex rules identified in IRS' forthcoming first annual report on tax complexity.<sup>3</sup> For some rules, the model may be able to show both the number of W&I taxpayers affected and the approximate size of their burdens. For other rules, IRS expects that the model will only be able to show the potential number of taxpayers affected. The other model, which is to estimate postfiling burden, is in the early design stage, and its capabilities have not yet been determined.

IRS reviewed a draft of this report and agrees with the content.

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## Background

IRS has been seeking to improve its compliance burden estimation methodology for several reasons. First, it would like a tool to assist policymakers in understanding the sources of burden and evaluating options for reducing that burden. Second, IRS would like to know how its own programs and activities affect compliance burden. This information could be used to develop additional performance goals and measures for reducing burden and would assist managers in targeting resources and developing new programs. Third, the 1995 amendments to the Paperwork Reduction Act of 1980 and the 1993 Government Performance and Results Act (GPRA) impose new reporting requirements that IRS' existing methodology was not designed to meet.

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<sup>3</sup>The IRS report will focus on the Alternative Minimum Tax (AMT) for individuals, the variety of definitions that taxpayers must learn in order to determine their filing status and eligibility to claim dependents and credits, and the estimated tax rules.

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IRS' current model for estimating taxpayer compliance burden, developed by Arthur D. Little, Inc. (ADL), was considered a substantial improvement over the agency's previous methodology when it was first introduced in the 1980s. However, IRS and other observers have identified several significant shortcomings of the model that limit its usefulness and accuracy. Two important limitations of the model are that it ignores significant components of burden, as well as important determinants of burden.<sup>4</sup>

The ADL model was designed to meet reporting requirements arising from the Paperwork Reduction Act. Pursuant to that act, the Office of Management and Budget (OMB) established the annual Information Collection Budget and required federal agencies to provide estimates of the paperwork burdens that they impose on the public.<sup>5</sup> The definition of burden that the ADL model uses to meet this reporting requirement includes the estimated time costs (burden hours) imposed by information collections but excludes costs associated with tax planning and postfiling activities, such as preparing for an audit. It also excludes most monetary expenses. For example, paid preparer fees were converted into an equivalent time amount, but expenditures on books, software, and delivery services were excluded. Amendments to the Paperwork Reduction Act in 1995 now require IRS and other agencies to include these monetary expenses in their burden estimates. IRS would like to use an even broader definition of compliance burden—including the tax planning and postfiling burdens—when developing performance measures under GPRA or when evaluating the effects of changes in tax laws and administrative practices.

Past reviews of the ADL model have criticized the approach that it uses to update estimates of compliance burden from year to year as simplistic.<sup>6</sup> These reviews noted that the model does not account for changes in important determinants of burden, such as tax preparation technology and taxpayers' education and experience. These shortcomings limit the

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<sup>4</sup>See appendix I for more detail on these and other limitations of the model.

<sup>5</sup>The Information Collection Budget is the means by which the federal government, through OMB, measures and controls the number of hours individuals, businesses, state and local governments, and others must spend complying with federal reporting requirements. The Information Collection Budget is prepared annually based upon the prior fiscal year's experience and current estimates of the "burden hours" imposed by individual forms, surveys, and other information collections.

<sup>6</sup>See, e.g., IRS, "Report of the Taxpayer Burden Study Group: Roadmap for a New Measure and Pilot Study for Individual Non-Business Taxpayers," Request for Proposal (Aug. 19, 1998); Marsha Blumenthal, Burden Reduction Research and Analysis, report submitted to the Analysis and Studies Division, IRS (May 1996); and Henry Beale, untitled draft report on Arthur D. Little Compliance Burden Model, submitted to the Analysis and Studies Division, IRS (1996).

model's usefulness as an analytical tool and raise concerns about the accuracy of its estimates.

In August 1998, an IRS study group identified the type of burden estimation model that the agency would like to have.<sup>7</sup> Ideally, the model would be able to

- estimate the burden associated with all prefilling, filing, and postfiling activities undertaken to comply with federal income, estate and gift, employment, and excise tax rules;
- disaggregate total compliance burden by type of tax, taxpayer, and activity;
- disaggregate burden by origin of compliance requirements (tax laws, regulations, and administrative procedures);
- estimate changes in burden associated with potential tax law changes;
- function in an integrated manner, allowing users to see how certain tax changes affect multiple taxpayer groups;
- disaggregate burden by IRS function (e.g., submission processing and customer service) for burdens associated with the requirements of, and taxpayer interactions with, those functions;
- estimate the impact on taxpayer burden of alternative enforcement programs and techniques providing customer service;
- provide different types of estimates for different purposes (e.g., the estimates required for the Information Collection Budget are different from those that IRS would use for performance measurement under GPRA);
- estimate burden in terms of dollars as well as time; and
- incorporate new data with sufficient ease so that the model, itself, would not have to be replaced in the near future.

## Scope and Methodology

To address the first two objectives of this report we interviewed IRS officials about their ongoing and planned efforts to develop new burden estimation methodologies. We also reviewed extensive documentation prepared by IRS' contractor PricewaterhouseCoopers (PwC), which described (1) the objectives of the new compliance burden estimation models; (2) the conceptual and operational designs of the model covering prefilling and filing burdens and the conceptual design of the model for postfiling burdens; and (3) research that PwC completed to inform its design decisions. We did not evaluate the effectiveness or appropriateness of the designs for the new models. We also reviewed documentation relating to the ADL model, as well as existing evaluations of that model by

<sup>7</sup>IRS, "Report of the Taxpayer Burden Study Group."

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IRS and external analysts, in order to identify differences between that model and the new models.

To address the third objective we obtained information from IRS about the expected content of their forthcoming complexity report. We reviewed PwC's description of how it expects the new prefiling/filing burden model will operate and inferred how that model could be used to estimate the burden associated with certain aspects of the tax rules discussed in IRS' report. We confirmed with IRS officials that our understanding of how the model could be used with respect to these complex rules was consistent with IRS' expectations of the model's capabilities.

We conducted our review from July 1999 through April 2000 in accordance with generally accepted government auditing standards. We requested comments on a draft of this report from the Commissioner of IRS. His comments are discussed near the end of this letter and are reproduced in appendix III.

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## IRS Is Pursuing a Multiphased Approach in Developing New Burden Estimation Methods

To accomplish its goal of improving its methodology for estimating compliance burden for all types of federal taxpayers, IRS is pursuing a multiphased strategy. Initially, IRS is focusing on taxpayers who have only W&I income. Later phases would develop estimates for other taxpayer groups, such as small businesses and the self-employed and large and medium-sized businesses.

IRS' incremental approach is intended to mitigate the risks associated with developing a new methodology for estimating compliance burden. The approach should give IRS and its contractors an opportunity to incorporate lessons learned from early phases of the process into later efforts. It also should give IRS the flexibility to significantly modify or terminate the overall development process or its relationship with a particular contractor. IRS' Office of Program Evaluation and Risk Analysis is responsible for overseeing the contractor's work.

The first phase of the development process focuses on the design and implementation of models for estimating the federal income tax compliance burden of W&I taxpayers—those that derive all of their income from wages, pensions, interest, dividends, and capital gains. This taxpayer group was selected for the initial phase because it accounts for a large share of IRS' overall compliance burden and because its burden may be the easiest to estimate. The conceptual definition of compliance burden developed for this group, along with the theoretical framework for

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measuring that burden, are intended to build a foundation for developing burden estimates for other taxpayer groups.

In subsequent phases, estimation methodologies are to be developed for other segments of the taxpayer population, such as small businesses and self-employed taxpayers and large and medium-sized businesses. The timing of these later phases will depend on resource availability and the accumulation of experience. IRS expects to contract out later this year for a study that would develop a methodology for estimating the time and money that self-employed individuals spend preparing and filing their federal income tax returns. The agency also expects to begin work on employment taxes later this year and on small corporate taxpayer burden in calendar year 2001.

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## New Estimation Models for W&I Taxpayers Are in Development

IRS has begun to implement its strategy by contracting for the development of two models that, when combined, are to estimate W&I taxpayers' prefiling, filing, and postfiling compliance burdens. Compared with IRS' current methodology, these models are designed to produce more comprehensive estimates of federal income tax compliance burdens and to provide IRS with a greater capacity to analyze the impact of tax law and administrative changes on those burdens. As with all such modeling, the specific capabilities and precision of the new models will depend on the quality of the underlying data.

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## IRS' Contractor Has Begun Developing Two Models

PricewaterhouseCoopers, the contractor engaged to assist IRS in the initial phase of its strategy, has begun to develop two models covering W&I taxpayers—one for estimating the prefiling and filing burdens, the other for estimating the postfiling burdens of those taxpayers. This work began in September 1998. The model for estimating prefiling and filing burdens is expected to be delivered to IRS in May 2001. The postfiling burden model also is expected to be designed by then, but the operational model is to be delivered at a later date. Before delivering either model, PwC is to provide IRS with paperwork burden estimates for this taxpayer group, using the new methodology, for the agency's Information Collection Budget due in December 2000. The cumulative cost of this initial effort is expected to reach approximately \$5 million by the end of fiscal year 2001. Expenditures for later years have not yet been determined.



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## The New Models Are Intended to Produce More Comprehensive Estimates of Burden

The two models are intended to produce more comprehensive estimates of burden by including all of the time costs covered by the ADL model, plus time spent on tax planning and postfiling activities. They are also to estimate the monetary expenditures associated with federal income tax compliance, such as the purchase of books and software, which are not covered by the ADL model.<sup>8</sup>

PwC said it used focus groups of taxpayers and tax preparers to identify a lengthy list of activities and costs involved in the prefiling and filing stages of the tax compliance process. It has grouped these activities and costs into six broad categories: recordkeeping, gathering tax materials, using IRS services, tax planning, form completion, and form submission. The initial plan for the postfiling burden model is also to group activities and burdens into six categories: recordkeeping and retrieval, gathering tax materials, using IRS services, form completion and form submission, using a paid professional, and interviewing.<sup>9</sup>

The definition of compliance burden for both models excludes any activities or costs associated with

- the basic financial planning and recordkeeping that individuals might do even if there were no income tax,
- requirements imposed by federal taxes other than the income tax,
- requirements imposed by state or local taxes,
- criminal tax investigations, and
- Tax Court proceedings.

According to PwC, its models will not distinguish between “required” and “voluntary” compliance activities because there is no clear benchmark of “required” activities against which to measure “voluntary” tax minimizing activities. PwC noted that, although the expenditure of time and money spent on tax minimizing activities, such as itemizing deductions, is voluntary,<sup>10</sup> some taxpayers would incur the cost of higher taxes if they did not make those expenditures.

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<sup>8</sup>Neither of the new models is to estimate the costs of employers, banks, and other third parties that are required to provide information returns to individual taxpayers. Those costs are to be included when the total tax compliance costs of those entities are estimated at a later date.

<sup>9</sup>Even though some of the category names are the same for the two models, the activities covered by the two models do not overlap. For the postfiling model, e.g., “form completion and submission” covers only submissions that may have to be made after the initial filing of the taxpayer’s return.

<sup>10</sup>Taxpayers have the option of claiming the standard deduction, which is less burdensome than itemizing.

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## The New Models Are Also Intended to Provide IRS With Increased Analytical Capabilities

The two new estimation models are intended to provide IRS with increased capabilities to analyze burden, disaggregated by type of taxpayer activity. In addition, the prefiling/filing burden model, which is further along in development, is intended to enable IRS to analyze the effects of changes in tax laws, IRS programs and services, and other important determinants of burden.

PwC determined that, to meet IRS' analytical requirements, its prefiling/filing burden model would have to take into account the influences of many significant determinants of burden that the ADL model ignores. PwC said it relied on its focus groups of taxpayers and interviews with tax preparers to identify important determinants of burden and to gain a better understanding of the complex relationships between these determinants and burden. The insights obtained through the focus groups and interviews have guided PwC's model design, data gathering, and model construction efforts.

PwC conceives the tax compliance process as a series of decisions made by taxpayers that result in a variety of activities, each of which imposes some burden. For example, a taxpayer incurs additional recordkeeping and reporting burdens if he or she chooses to itemize deductions from income, rather than claim the standard deduction. These taxpayer decisions and activities are influenced by such factors as tax system characteristics (e.g., specific recordkeeping and reporting requirements), demographic characteristics (e.g., age, income, and tax-filing experience of individual taxpayers), and others (e.g., tax preparation and filing technologies).

One important insight from the focus groups was that, in most cases, the activities a taxpayer engages in change little from year to year. Another important insight was that the most significant changes in compliance activities are due to life changes (e.g., marriage or birth of dependents), changes in financial situation (e.g., the purchase of a house), and changes in the tax code. According to PwC, changes in these factors have particularly significant effects on compliance burden when they lead taxpayers to change their basic approach to tax preparation. This is due to the fact that the types of activities taxpayers engage in vary significantly, depending on whether they prepare their return by hand, use tax preparation computer software, or hire a professional to prepare their tax return. PwC also determined that the more experience taxpayers gain in filling out returns, the less of a burden it becomes. PwC expects that models that account for these determinants of burden will provide IRS with analytical capabilities it does not possess now.

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## Realizing the Increased Capabilities Depends on Complicated Data Collection and Analysis

There are three phases in the construction and operation of the prefilling/filing burden model, all of which must be successfully completed for IRS to realize the increased analytical capabilities it is seeking. First, data must be collected that describe taxpayer characteristics, decisions, activities, and burdens. Second, statistical techniques must be used to estimate the relationships between key outcomes, such as taxpayer decisions and compliance burden levels, and their determinants. Finally, the estimated relationships must be applied to data from a representative sample of taxpayers in order to simulate taxpayer decisions and the resulting level of burden.

## Data Collection Will Be Challenging

PwC intends to meet many of its data requirements by relying upon existing IRS administrative and research data files. It also hopes to make use of demographic and personal finance data that the Census Bureau and other government agencies collect from samples of households. However, PwC and IRS have decided that they need to survey a representative sample of taxpayers in order to collect information on the compliance burdens those taxpayers incur. Each telephone interview is expected to cover up to 92 questions and last approximately 20 minutes, depending on the characteristics of the respondent. Data from this survey are to be directly merged with data from IRS' computer files for these same taxpayers. In addition, statistical imputation techniques<sup>11</sup> are to be used to supplement the data record for each taxpayer with information that is not available from IRS files (such as information on the taxpayer's educational background and spending behavior).

The data collection and analysis tasks that PwC must accomplish are ambitious for several reasons. First, the taxpayers surveyed by PwC will be relying on their memories to estimate the amounts of time and money they spent preparing their 1999 tax returns. Second, for each of these taxpayers, PwC will have to be able to collect or impute accurate data on the numerous determinants of their compliance burdens, including the specific tax rules that apply to them. Third, PwC will have to estimate statistical equations that accurately isolate the individual effect that specific tax rules have on the compliance burdens of specific types of W&I taxpayers. While the data collection and analysis tasks are ambitious, PwC believes that the

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<sup>11</sup>Imputation techniques are commonly used to combine data from separate sources when it is not possible to use a common identifier, such as a Social Security Number, to ensure that the data being linked from each source pertain to the same individual. One could use, e.g., detailed data from a survey to estimate a regression equation showing the relationship between variables, such as income and area of residence on the one hand, and level of education on the other. With the estimate of this relationship, one could then "impute" the level of education of individuals represented in a different database, as long as the second database contained data on income and area of residence.

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available data will enable it to estimate equations that improve upon IRS' current methodology.

The data most critical to the modeling effort—those relating to the time and money that taxpayers spend complying with tax rules—are subject to measurement error of an unknown degree. The accuracy of the burden data that PwC collects in its survey will depend, in part, on each respondent's ability to understand the definition of burden used in the model. PwC recognizes that there are limits to the amount of guidance it can provide to respondents during a survey.<sup>12</sup> For example, it does not intend to provide guidance on how to separate the travel time attributable to purchasing tax software from the time attributable to other errands completed during a multipurpose shopping trip. Individual respondents will decide for themselves whether all, or only a portion, of the time spent on the trip should be considered a burden.

The accuracy of the burden data that PwC collects will also be limited by recall bias on the part of respondents. The focus groups that PwC conducted reconfirmed findings from earlier focus groups conducted by ADL that taxpayers are not able to recall the amount of time they spent on tax compliance very accurately. ADL provided further evidence of this problem when it used two different methods to collect burden estimates from taxpayers—a mail survey and a diary study (in which taxpayers kept logs of their activities as they prepared their returns). On average, compliance time estimates made by respondents to ADL's mail survey were 78 percent greater than the estimates made by participants in its diary study (see app. I). PwC recommended a telephone survey for collecting its burden data because that approach usually yields a higher response rate than a mail survey and allows interviewers to clarify questions. However, PwC acknowledges that telephone surveys do not permit taxpayers to consult documents when responding and that respondents' recall may not be as accurate as in a diary study.<sup>13</sup>

The accuracy of the model's underlying data for several important determinants of burden, such as taxpayers' education level and experience in completing returns, will depend on the precision of PwC's imputation techniques. Although PwC intends to collect information on some of these

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<sup>12</sup>PwC has drafted a questionnaire to be used in a telephone and mail survey of taxpayers. Appendix II summarizes the instructions from that questionnaire.

<sup>13</sup>PwC intends to send an advance letter to respondents, telling them the general nature of the questions they will be asked. PwC also intends to mail a written version of the questionnaire to taxpayers for whom they cannot find telephone numbers.

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determinants in its taxpayer survey, it will have to impute values for them in the model's production file that is to be updated each year.

IRS and PwC recognize the limitations of the data on burden and its determinants that will be used in the model. They have concluded that their plans represent a cost-effective approach for collecting the data needed to improve IRS' burden estimation methodology.

**Numerous Equations Describing Taxpayers' Decisions and Burden Must Be Estimated**

Once this initial database is constructed, PwC plans to use statistical techniques to estimate equations that describe the important relationships needed for making simulations. One set of equations is to show how the decisions that each taxpayer makes during the tax compliance process are related to specific factors, such as that taxpayer's age and education, the particular forms that the taxpayer must complete, and the costs of alternative preparation methods. Another set of equations is to show how the amount of burden that a taxpayer bears is related to specific characteristics of that taxpayer and the particular compliance requirements that the taxpayer faces. These relationships are to be estimated separately for each of the six categories of burden (recordkeeping, form completion, etc.).

If the estimation efforts are successful, the relationships described in both sets of equations should enable IRS to regularly update its model using data on taxpayer characteristics that it already collects every year (or that can be imputed from other available sources). IRS should not need to collect new data on burden for each update of this "production" data file.<sup>14</sup>

To estimate the aggregate prefiling and filing compliance burden for tax years after 1999, IRS will need to update the model's data file to reflect changes in the taxpayer population and enter information about any tax law changes made since 1999. The model is to then process this information in several stages. First, it is to simulate the effect that the law changes have on the compliance requirements faced by each taxpayer represented in the data file. Second, the model is to simulate taxpayer decisions to determine if the changes in the tax laws, or changes in taxpayers' circumstances from one year to the next, would cause any of

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<sup>14</sup>The core of the production data file is to consist of detailed data that IRS' Statistics of Income Division collects annually from a large sample of individual tax returns.

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the taxpayers to change their preparation or submission methods.<sup>15</sup> Finally, the model is to take this updated information on tax requirements and compliance methods for each taxpayer and, by applying the relationships from the previously estimated equations, estimate the time and money that each taxpayer spent on each of the six categories of burden activities.<sup>16</sup>

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### The Prefiling/Filing Burden Model, by Itself, Will Not Provide Everything IRS Was Seeking

While IRS expects the new prefiling/filing burden model to improve its burden estimation capabilities, the model, by itself, will not provide all of the capabilities that IRS was originally seeking. It will not disaggregate burden by specific IRS function (e.g., submission processing and customer service), nor will it disaggregate burden by origin of compliance requirement (tax law vs. administrative procedure). The model is supposed to be able to accommodate these capabilities at a future date, but it will be up to IRS to determine how these disaggregations would be done.

In addition, PwC is not expected to statistically estimate the effect that each and every tax rule has on the average burdens of W&I taxpayers. However, even in cases where PwC has not statistically estimated the average burden of a particular tax rule, the model may be able to identify how many and what types of W&I taxpayers are affected by the rule. IRS could then use some independent method, such as a targeted research project, to estimate the change in the average amount of burden that a specific change in the tax rule would cause. By combining this estimate with the information on the number of taxpayers affected, IRS would be able to estimate the aggregate burden change that would result from the tax rule change. At this time, PwC does not know for how many, or which, tax rules it will be able to make specific statistical estimates.

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<sup>15</sup>Although the model is to simulate changes in compliance-related behavior, as currently designed, it would not, by itself, simulate other types of behavioral changes that affect aggregate burden. For example, it would not simulate how an increase in documentation requirements for charitable contributions would affect the number of taxpayers who claim deductions for such contributions. The model, however, is to allow users to make “off-model” estimates of those behavioral changes and then adjust the data in the model to capture the effects of such changes.

<sup>16</sup>If appropriate data become available, the model would have the capability to translate time spent by taxpayers into a monetary cost. The methodology for monetizing taxpayer time is to be based on forthcoming guidance from OMB. A PwC subcontractor has drafted a “white paper” on monetizing compliance burden that summarizes existing research and identifies best practices. OMB is to review that paper before developing its guidance. OMB has also solicited input to its guidance from the broader public.

## Fundamental Decisions on the Design of the Postfiling Model Remain to Be Made

The primary functional requirements of the postfiling burden model are the ability to

- estimate the change in burden due to changing factors, such as the number of audits IRS undertakes;
- disaggregate burden estimates by postfiling segment<sup>17</sup> and by taxpayer activity; and
- link to the prefiling/filing burden model.

Fundamental decisions remain to be made regarding the operational design of the postfiling model. A report that presents PwC's broad conceptual design for the model notes that PwC and IRS need to agree on specific interpretations of the general requirements that were set by the contract's scope of work. The report also indicates that the ultimate functionality of the model may be constrained by the limitations of IRS' data systems. For example, IRS has no database that tracks the activities of individual taxpayers throughout the entire postfiling process. This may prevent the model from determining if the burdens that taxpayers experience in one segment of the postfiling process are influenced by their experiences in a preceding segment.

## The New Models Could Assist IRS in Estimating the Burdens Associated With Some Aspects of Complex Tax Rules

The prefiling/filing burden model may assist IRS in estimating burdens associated with some aspects of the complex rules identified in IRS' forthcoming report on tax complexity. That report will devote detailed attention to three areas of concern for W&I taxpayers: the Alternative Minimum Tax for individuals, the variety of definitions that taxpayers must learn in order to determine filing status and eligibility to claim dependents and credits, and the estimated tax rules.<sup>18</sup> The data that the contractor plans to collect for the prefiling/filing burden model will provide it with the opportunity to directly estimate the burdens associated with some, but not all, aspects of those complex rules. IRS has not yet decided whether the postfiling model should have any ability to estimate burdens associated with specific tax rules.

The current list of variables that PwC intends to incorporate in its statistical equations includes many that relate to the complex tax rules

<sup>17</sup>PwC proposes to divide the postfiling process into five segments: clarification (relating to IRS requests for further information), collection, audit, appeals, and amendment (relating to the filing of amended returns).

<sup>18</sup>IRS selected these three areas after reviewing over 40 reports and testimonies published since 1989 and meeting with both internal and external stakeholders interested in tax complexity/simplification.

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covered in the Commissioner's report. Among these are variables that indicate<sup>19</sup>

- whether taxpayers spent any time dealing with the AMT form, even if they ultimately did not have to submit it;
- whether taxpayers who did file the AMT form filled in selected lines on that form;
- which filing status, dependents, and credits taxpayers actually claimed; and
- whether taxpayers paid estimated taxes and estimated tax penalties.

The availability of data for these variables may enable PwC to make estimates, such as the average amount of time that the existence of the AMT adds to the total compliance time of different groups of W&I taxpayers. In those cases where PwC is able to estimate average burden effects, the model should be able to use that information, along with information on the number of taxpayers affected by the tax rules in question, to estimate the aggregate burdens attributable to those rule. However, as previously noted, PwC is not expected to directly estimate the average burden effect of every aspect of these complex tax rules. For some rules, IRS expects that the model will only be able to show the number of taxpayers affected.

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## Agency Comments and Our Evaluation

We received written comments from the Commissioner of IRS in a letter dated May 3, 2000. In his letter, the Commissioner agreed with the contents of our report and emphasized two points that we had mentioned: (1) in contrast to the ADL model, the new model will incorporate tax preparation method as a key determinant of burden, and (2) IRS expects to be able to keep the new model up to date without unduly burdening itself or taxpayers.

In addition to the written comments, IRS provided technical comments on the report, which we incorporated where appropriate. The Commissioner's letter is reproduced in appendix III.

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As agreed with your office, unless you announce its contents earlier, we plan no further distribution of this report until 30 days from the date of this letter. We will then send copies to Senator William V. Roth, Jr., Chairman, and Senator Daniel P. Moynihan, Ranking Minority Member, Senate Committee on Finance; Senator John F. Kerry, Ranking Minority Member,

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<sup>19</sup>PwC notes that its list of variables is "dynamic" and that some will be dropped and new ones added as the development of the model proceeds.

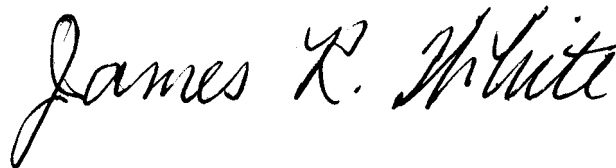


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Committee on Small Business; Representative Bill Archer, Chairman, and Representative Charles B. Rangel, Ranking Minority Member, House Committee on Ways and Means; the Honorable Lawrence H. Summers, Secretary of the Treasury; the Honorable Charles O. Rossotti, Commissioner of Internal Revenue; and the Honorable Jacob J. Lew, Director, Office of Management and Budget. We will also make copies available to others on request.

Please contact me or James A. Wozny at (202) 512-9110 if you have any questions. Marvin G. McGill and Margarita Vallazza made key contributions to this report.

Sincerely yours,

A handwritten signature in black ink that reads "James R. White". The signature is written in a cursive style with a large, looping initial "J".

James R. White  
Director, Tax Policy and  
Administration Issues

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## Abbreviations

ADL	Arthur D. Little, Inc.
AMT	Alternative Minimum Tax
GPRA	Government Performance and Results Act of 1993
IRS	Internal Revenue Service
OMB	Office of Management and Budget
PwC	PricewaterhouseCoopers
W&I	Wage and investment income

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# Limitations of the Arthur D. Little Model

## IRS and Other Reviewers Have Identified a Number of Limitations

To measure the paperwork dimension of compliance burden, IRS sponsored a study in 1984 that has been the basis of its burden estimation methodology since that time. Arthur D. Little, Inc. (ADL), an IRS contractor, released the results of the paperwork burden study in 1988. Since then, IRS and other reviewers of ADL's paperwork burden estimation model have criticized it for number of reasons.<sup>1</sup> The reported limitations of the model and its estimates can be categorized into four areas: (1) the age of the underlying survey data, (2) the exclusion of certain components of burden, (3) the model's simplistic treatment of the determinants of burden, and (4) the questionable statistical validity and poor documentation of the estimates.

## Underlying Data Are Outdated

Several reviewers of the ADL model, including IRS, have criticized the age of the burden model's survey data. They have observed that the survey data reflect 1983 information and lack relevance to today's tax environment because of the many significant changes in tax law and tax preparation technologies that have taken place since then.

Reviewers have also expressed concern over the accuracy of the burden estimates taxpayers provided when they were surveyed. To obtain the information about burden, ADL used two collection methods—a mail and a diary study. The burden estimates yielded by the two methods varied significantly. On average, diary respondents' estimated burden, by return, was 8.32 hours, while mail survey respondents' estimated burden was 14.82 hours—78 percent higher. ADL could not determine which estimate was more accurate, so it decided to use the average of the two estimates.<sup>2</sup>

## Certain Components of Burden Are Excluded

Past reviewers have noted that the definition of burden used in the ADL model excludes important components of burden. The ADL model does include the time costs (burden hours) imposed by information collections but excludes costs associated with tax planning and postfiling activities, such as preparing for an audit. It also excludes most monetary expenses. For example, paid preparer fees are converted into an equivalent time

<sup>1</sup>IRS, "Report of the Taxpayer Burden Study Group: Roadmap for a New Measure and Pilot Study for Individual Non-Business Taxpayers," Request for Proposal (Aug. 19, 1998); Henry Beale, Report on Arthur D. Little Taxpayer Compliance Burden Model, untitled draft report submitted to the Analysis and Studies Division, IRS (1996); Marsha Blumenthal, Burden Reduction Research and Analysis, Report submitted to the Analysis and Studies Division, IRS (May 1996); PricewaterhouseCoopers, Compliance Burden Literature Review, draft report submitted to IRS (June 16, 1999).

<sup>2</sup>ADL made this correction by multiplying the burden estimates that would have been obtained if it had relied exclusively on the mail survey results by 0.78. The corrected estimate equals the average of the two estimates that would have been obtained by using the diary results and the mail survey results separately.

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amount, but expenditures on books, software, and delivery services are excluded.

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### The Determinants of Burden Are Simplistically Incorporated

The ADL model has been criticized for the simplistic nature of the equations it uses to represent the relationship between burden and its determinants. In its report, ADL acknowledged the simplicity of its equations but explained that IRS decided it would be operationally infeasible to use more detailed and precise models.

One past reviewer noted that the only determinants of burden used in the final model were measures of return size (numbers of forms and attachments), form size (number of words or number of line items), the number of references to the tax code in forms and instructions, and the number of line items requiring records.<sup>3</sup> As a consequence, many important determinants were omitted from the model. For example, the model does not allow for alternative filing methods, such as electronic filing software programs, and it also does not differentiate levels of burden between simple and complex types of forms. The model does not differentiate burden between simple and complex line items on a form, and it does not separate burden within the form and identify parts of the form that represent the greatest burden. In some cases the model erroneously estimates the impact of efforts to simplify forms, instructions, or procedures. For instance, if new lines are added to a form's worksheet to simplify computations, the ADL model reports an increase in burden.

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### The Statistical Validity of the Model Has Been Questioned

Reviewers have also called into question the statistical validity of the model. IRS indicates that errors were made in the sample weighting techniques. In addition, the model's methodology was poorly documented. IRS noted that the ADL burden estimates are inconsistent because they yield results that assign unrealistically high levels of burden to certain forms (e.g., Form 4789, Currency Transaction Report, and Form 8300, Report of Cash Payments Over \$10,000 Received in a Trade or Business). At the same time, IRS noted that the ADL burden estimates for many other forms did not include the amount of time taken to mail them, even though those forms had to be mailed to IRS. Researchers have also questioned the validity of the business burden estimates because the ADL model yields an estimate of burden greater than that found in the survey data on which the model is based.

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<sup>3</sup>Beale, Report on Arthur D. Little Taxpayer Compliance Burden Model.

# Details on the Definition of Burden to Be Used in the PwC Survey

## Draft Questionnaire on Prefiling/Filing Burden

PwC has drafted the questionnaire that it plans to use to gather information on prefilling and filing from a sample of wage and investment taxpayers. This appendix summarizes the parts of the questionnaire that instruct respondents on the types of costs to include in their estimates of compliance burden and ask respondents to estimate the specific components of their burden. The full draft questionnaire includes over 90 questions. In addition to the questions listed below, the questionnaire asks respondents for selective demographic information that is not available from IRS files and information on tax preparation practices. Additional questions are designed, in part, to prompt respondents' memories about other activities that they may have undertaken in preparing their tax returns.<sup>1</sup>

## Recordkeeping

The recordkeeping category includes maintaining documents needed as proof of income or expenses for federal income tax purposes. Relevant documents include receipts, W-2 forms, and 1099 statements of interest or dividends. Time and money spent balancing checkbooks, paying bills, or keeping records for state or local tax purposes are not to be included. The draft questions include the following:

- How much time did you personally spend on recordkeeping activities related to your 1999 federal income tax return? Include
  - Time spent retrieving and organizing your records in preparation for completing your return.
  - All the time spent on activities you did related to your federal income tax return even if you also needed the information for other purposes.
- How much time, if any, did your spouse, relatives, or friends spend in assisting you with these recordkeeping activities?
- How much money, if any, did you spend on these recordkeeping activities? Include
  - Expenses such as overnight delivery fees, appraisal costs, and faxing or copying fees.

Do not include

- The cost of any accounting software, such as Quicken, unless you use it only for federal income tax record keeping purposes.
- Any costs associated with helping someone else.

<sup>1</sup>Examples of such questions are: "Did you maintain any documentation related to the household employee tax?" and "Did you attend any classes, seminars, or workshops primarily to complete your tax return last year?"

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## Gathering Tax Materials

The gathering tax materials category covers time and money spent gathering materials needed to complete the taxpayer's federal income tax return or for tax planning purposes. These materials may include any tax forms, tax-related publications, books, or guides collected from IRS or other sources and tax preparation software or 1999 upgrade. Some of the draft questions are the following:

- How much time did you spend gathering the materials we just discussed?
- How much time, if any, did your spouse, relatives, or friends spend in gathering your materials?
- How much money, if any, did you spend obtaining the materials we just discussed?

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## Using IRS Services

The using IRS services category covers the time and money spent using services, such as the Toll-Free Tax Assistance telephone line, Walk-in Customer Assistance site, Volunteer Income Tax Assistance site, Tax Counseling for the Elderly, IRS Web site, or Tele-Tax Telephone line. Some questions for taxpayers include the following:

- In total, how much time did you spend using these IRS services, including the time reaching an assistor, being put on hold, waiting, and using these services?
- How much time, if any, did your spouse, relatives, or friends spend using these IRS services related to your return, including the time reaching an assistor, being put on hold, waiting, and using these services?
- Of the [time amount], how much time was spent actually using the service after waiting to see someone or holding on the telephone?
- How much money, if any, did you spend, using these IRS services?

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## Paid Professionals

The paid professional category covers time and money spent by taxpayers when consulting with professionals for tax planning purposes or to prepare and complete their tax returns, including the time spent finding and selecting the professional. It does not include time spent obtaining general investment advice that was not directly related to the taxpayer's federal income tax; nor does it include costs for consulting on someone else's behalf. The category includes the professionals' fees for consultation and services, such as overnight delivery fees, appraisal costs, and faxing and copying. Some draft and survey questions are the following:

- How much time did you spend consulting with paid professionals?
- How much time, if any, did your spouse, relatives, or friends spend consulting with paid professionals about your federal income taxes?
- How much did you pay the professionals with whom you consulted?

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- Was any of the [dollar amount] paid in order to file your return electronically?
  - How much did you spend to file your return electronically?
  - Was any of the [dollar amount] paid in order to receive an accelerated or instant refund?
  - How much did you spend to get an accelerated refund?
  - Was any of the [dollar amount] paid in order to complete your state or local tax return?
  - How much did you spend to get the state or local tax return completed?

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## Tax Planning

The tax planning category covers the time and money spent considering the federal income tax implications of activities, such as contributing to an Individual Retirement Account, including withdrawals and distributions; participating in a 401(k) plan or other employer-sponsored retirement plan; taking advantage of tax-exempt or tax-preferred investments; realizing capital gains or capital losses on any investments; exercising stock options; and planning charitable contributions. A few of the draft questions are the following:

- How much time did you spend on federal income tax planning activities?
- How much time (in hours or minutes), if any, did your spouse, relatives, or friends spend in activities related to federal income tax planning for your federal income taxes?
- How much money, if any, did you spend on these activities, including the cost of classes, seminars, or workshops attended for tax planning purposes? Do not include the costs of a paid professional or costs related to tax planning for someone else.

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## Form Completion

The form completion category covers the time and money spent completing forms, whether they were submitted or not; consulting instructions, publications, or other materials while filling out forms; or completing your federal income tax and related returns. It also includes the time reviewing and checking the returns no matter how they were prepared and completing nonreturn forms such as the W-4 and 1040ES. The category may also include the time spent filing for an extension or installing or updating tax preparation software.

The form completion category does not include time submitting the returns; preparing state, local, or someone else's tax returns; or recordkeeping. It also does not include the costs of a paid professional or costs related to completing someone else's return. Draft questions include the following:



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- How much time did you spend completing your 1999 federal income tax return?
  - How much time if any, did your spouse, relatives, or friends spend completing your 1999 federal income tax return?
  - How much time did you spend on forms or worksheets that you did not submit?
  - How much money, if any, did you spend to complete your 1999 federal income tax return?

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**Form Submission**

The form submission category may include photocopying and mailing charges and cost of electronic filing, including service fees. Draft questions include the following:

- How long did it take you, your spouse, relatives, or friends to submit your return [and complete the form 8453], including the time spent photocopying and assembling your return?
- How much money did you spend to submit your return?

# Comments From the Internal Revenue Service



COMMISSIONER

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

May 3, 2000

Mr. James White  
U.S. General Accounting Office  
Room 1T47  
441 G Street, NW  
Washington, DC 20548

Dear Mr. White:

Thank you for the opportunity to comment on the General Accounting Office's (GAO) draft report on the status of the Internal Revenue Service (IRS) efforts to improve its estimates of taxpayer compliance burden. We agree with the information in the report and are pleased that GAO shares our view that better estimates of taxpayer burden are important to both the Congress and the IRS.

There are two points discussed briefly in the report that I would like to further emphasize: the new burden estimation model's ability to differentiate taxpayer burden by how the return is prepared and our intent to improve the model and the data supporting it over time. In addition, we have provided a few technical comments directly to your staff.

First, the burden estimation methodology the IRS currently uses does not consider how the return is prepared in calculating burden. This is a problem because taxpayers are increasingly using tax preparation software and paid preparers, the costs of which are not included in the current model. The method of preparing the return affects not only total taxpayer burden but also how the burden is split between time and dollar costs. Consequently, one of the key variables in the new model is how the return is prepared.

Second, as we develop the new model it must be capable of making estimates in the future without needing to completely redo the data supporting the model. A more complete model will help us manage costs of updating the model and reduce the burden placed on taxpayers from our data collection efforts. For certain specific issues and activities, such as the Alternative Minimum Tax or tax

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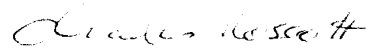
**Appendix III**  
**Comments From the Internal Revenue Service**

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planning, we will conduct targeted burden studies to enhance our understanding of where and how burden is generated and to support burden reduction efforts.

I look forward to working with you in the future on this important effort.

Sincerely,



Charles O. Rossotti

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