Evaluating the Ability of the Individual Taxpayer Burden Model To Measure Components of Taxpayer Burden: The Alternative Minimum Tax as a Case Study

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This paper presents some estimates of the taxpayer compliance burden attributable to the individual alternative minimum tax (AMT). This paper has two motivations. First, because compliance burdens have an impact on AMT taxpayers in addition to the higher tax liability usually associated with AMT filers, a better understanding of the magnitude of the compliance burdens imposed on taxpayers by the AMT is important for tax policy and tax administration. Second, the development and analysis of the estimates produced using the new Individual Taxpayer Burden Model (ITBM) also provide an opportunity to evaluate the ability of the ITBM to produce reasonable and accurate burden estimates for specific tax provisions, current or proposed, that are usable for tax policy and tax administration purposes.

Compliance burden is defined as the total of a taxpayer's time spent and monetary outlay from complying with his or her Federal income tax obligations up to and including the completion and filing of the taxpayer's income tax return. This measure does not include any additional burden that a taxpayer may incur subsequent to filing, such as the burden associated with IRS examination of the filed tax return. Further, when examining specific tax provisions, the ITBM estimates incremental burden from that tax provision. Thus, as estimated by the ITBM, the burden of the AMT is the incremental burden on taxpayers because the AMT exists.

This paper is divided into five sections:

- The first section provides some background on the ITBM, including the method the model uses to estimate taxpayer compliance burden and the underlying data sources.
- The second section provides a summary of the structure of the AMT.
- The third section discusses the steps taken to obtain compliance burden estimates for the AMT from the ITBM and includes estimates for taxpayers who file the IRS AMT form (Form 6251) with their tax returns.

- The fourth section develops AMT compliance burden for taxpayers not directly affected by the AMT.
- The fifth section presents some observations about the use of the ITBM for making taxpayer burden estimates, especially estimates for specific tax provisions, and summarizes some suggestions for future refinement of the ITBM.

Overview of the Individual Taxpayer Burden Model: An ITBM Primer

How the Model Works

The Individual Taxpayer Burden Model (ITBM) is a microsimulation model that estimates compliance burden taxpayer-by-taxpayer for a sample of taxpayers believed to be representative of the entire tax-filing population. The ITBM was developed to use known information to impute and quantify behavior that generally cannot be observed directly.

The first stage in the development of the ITBM was to interview approximately 15,000 representative Federal individual income tax filers to determine which activities they had undertaken in order to comply with their Federal income tax obligations. This included collecting data on the amount of time respondents had spent performing those activities, and the out-of-pocket expenditures they had incurred, predominantly but not solely, for paid preparation, tax advice, tax software and other tax materials, and mailing and submission costs. The interview information was combined with the information transcribed from these taxpayers' income tax returns, and the combined information was used to develop equations which related the information about the lines and patterns of lines on IRS tax forms and schedules used by the interviewed taxpayers to the time and expenditures that those taxpayers reported having expended for complying with their Federal income tax obligations.

The ITBM then applies the equations developed to estimate the time and out-of-pocket expenditures of a nationally representative sample of taxpayers based on those taxpayers' activities, as reflected by their tax form line usage. In an ITBM microsimulation, burden is estimated for each taxpayer record to determine a compliance burden for each sample taxpayer in the given year and under the given set of actual or hypothetical provisions of the tax system. The results for the sample taxpayers are weighted to reflect the entire population and can be categorized in various ways, such as by adjusted gross income, tax form used, filing status, or other desired characteristics.[1]

The representative taxpayer sample currently being used by the ITBM is the Continuous Work History Sample (CWHS) for Tax Year 2000. The CWHS

is a one-in-two-thousand (0.05-percent) sample of tax returns based on certain digits in the filers' taxpayer identification numbers. The CWHS has records for about 65,000 taxpayers. For ITBM purposes, CWHS taxpayer records of tax returns filed in 2001 but for tax years prior to 2000 were deleted, and the weights of the remaining returns were adjusted by sample class to compensate for the deletions. Because only a small number of CWHS records may reflect less commonly-used tax provisions, there may be limits on the accuracy of ITBM taxpayer burden estimates for such tax provisions. The extent of such limitations has not been explored in detail.

Imputing Taxpayer Burden from Tax Return Information: The Attribute Methodology

The process of relating completed tax form lines to taxpayers' time and monetary outlay was enhanced by associating each specific tax form line with taxpayer behaviors and activities that can be inferred from the fact that the given line was used by the taxpayer. Associating tax form lines with the underlying activities that a taxpayer probably performed was intended to provide a better measurement of taxpayer burden based on tax form usage by giving differential weight to various tax form lines. The implicit assumption is that these tax form and instruction characteristics either directly reflect or are a good proxy for taxpayer burden. The contractor developing the model, IBM Consulting Services, painstakingly determined and classified the various activities that taxpayers might typically undertake if their tax returns showed that they had used a given tax form, schedule, or a given line on a form or schedule.[2] Those activities were divided into three groups representing the source of the information, the various operations that the taxpayer may have had to undertake for the line, and the complexity of the various activities. In all, six possible source activities, seven possible operation activities, and eight possible activities representing complexity were identified.

Each of the 21 identified activities is called an "attribute." If a line or form is associated with one or more of the 21 attributes, that line is assigned the total weight of those attributes, and the attribute count for each taxpayer who used that line is incremented accordingly. Moreover, the model attempts to recognize that the burden related to a given tax form line may differ if the operations associated with the line are different for taxpayers who reach the line after having followed different paths or have different characteristics. Hence, in some circumstances, two different taxpayers using the same line may be assigned different attributes or attribute counts. Source and operation attributes are binary, that is, they are either zero or one. Complexity attributes are assigned a numerical total. For example, the complexity attribute count

for a line would be three if the instructions for that line had two references to instructions for other lines on the same form and one reference to a separate publication. The types of attributes are summarized in Figure 1.

Figure 1

Types of Attributes to Indicate Taxpayer Burden

Source Attributes
-- A line item that requires information from a source.

- Personal information
- Information return
- Other taxpayer records
- Other third party records
- From entry on same form or worksheet
- From entry on other form or worksheet

Operation Attributes
-- A line item that requires the taxpayer to perform an operation at least once.

- Compare
- Evaluate conditions
- Calculate
- Decide
- Document
- Consult lookup table or list
- Refer to instructions

Complexity Attributes
-- Each instance of the attribute in the instructions for a line item.

- Tax tips or caution
- Income/expense exclusion
- Exceptions to rule
- Temporal rule
- Reference to publication
- Reference to instruction (same form)
- Reference to instruction (other form)
- Reference to Internal Revenue Code

In short, the attribute concept is used to separate taxpayer activities into discrete elements that require taxpayer time or may cause an out-of-pocket expenditure. The underlying hypothesis is that, if the attributes correctly measure the elements of burden, the resulting model can be used to measure

the burden of new tax provisions not represented in the initial survey of taxpayers.

It should be noted that the simple sum of a taxpayer's attributes does not bear a one-to-one relationship to the taxpayer's total burden. The attribute-to-burden conversion is performed by the ITBM's equations which relate the sum of each of the 21 categories of attributes to burden. Statistical methods (largely principal components and ordinary least squares) were used to develop equations that quantitatively relate attributes and actual attribute counts to time and monetary burden. Separate equations were developed for time burden for each of seven categories of burden and for each of three tax return preparation methods. The seven categories and three preparation methods are summarized in Figure 2.

Figure 2

ITBM Burden Categories and Tax Preparation Methods

Burden Category	*Tax Preparation Method*
1. Recordkeeping	1. Self-preparation by manual methods
2. Gathering Tax Materials	2. Self-preparation using software
3. Using IRS Services	3. Preparation by a paid preparer
4. Using a Paid Professional	
5. Tax Planning	
6. Form Completion	
7. Form Submission	

The attribute index and the attribute count assigned to each tax form or tax form line were the same for the development of equations for most burden categories and tax preparation methods. However, a different attribute index using fewer categories of source attributes was used for a more accurate development of the recordkeeping equations. In addition, for the form completion equations, taxpayers using paid preparers and self-preparers using software were not assigned attributes for the copying of previously entered information or calculations, lookups, or comparisons. It was assumed that these types of preparers did not incur incremental burden because such operations were performed by tax software.

Additional ITBM Features

The burden model also includes a tax calculator which is essential to "what if" simulations of legislative and administrative changes in the Federal individual

income tax system. The tax calculations help to determine the precise activities that a taxpayer will undertake to comply with the tax law and administrative requirements included in the tax forms and tax form lines that must be completed in order to prepare a tax return with the correct tax liability. In the ITBM, the output from the tax calculator might determine whether the taxpayer itemizes his or her deductions or uses the standard deduction. Or, as is relevant for this paper, the tax calculator helps to determine whether the taxpayer has AMT liability or is otherwise required to file a Form 6251 (the tax form used to report the AMT). Because it serves a more limited purpose, in some instances, the ITBM tax calculator need not be as detailed as the tax calculators used in revenue estimating models, nor is it intended to substitute for such models.[3]

The precise steps required to produce a "what if" simulation with the ITBM depend on the question being asked. For example, if one is simulating administrative changes (such as the changed content of a tax form, eligibility for use of a form, or the requirement that a form be completed) a model run generally requires only that attributes and attribute assignment conditions be altered. Of course, if a new form or tax form line is being simulated, the user must develop the "attributes" for the new form or line in a manner consistent with how attributes were assigned when the model was developed. If legislative changes are being simulated, the tax engine may also have to be altered to reflect the determination of tax liability under the simulated tax law. If the legislative change to be simulated involves something structurally different from Tax Year 2000 law, additional taxpayer characteristics and behavior may have to be imputed based on non-tax return information and then be appended to each tax record in the model's production data file.

The very sophisticated ITBM interface includes an almost unlimited number of options for setting tax law, tax structures, tax parameters, and the content of tax forms and instructions without having to reprogram the model. The interface also includes options for changing certain program logic and code in the Java language without having to understand the programming of the entire model. It is anticipated that most simulations will be constructed using those features. However, a knowledgeable programmer could modify any part of the existing program code if that became necessary to perform a desired simulation. Typically, the most time-consuming portions of setting up a model run will be the redetermination of attributes and the conditions for assigning attributes to taxpayers and, where applicable, the modification of tax structures. The determination of attributes becomes more burdensome as the number of new tax features that are being simulated increases.

Another feature of the model is that it includes options for assigning certain taxpayer behavior on the basis of probabilities rather than on the assumption that each taxpayer follows the path that minimizes tax liability. The ability to simulate nontax-minimizing behavior activity is important because

the ITBM is attempting to simulate the burden of what taxpayers actually do, whether or not that minimizes their compliance burdens or their tax liabilities. In practice, many taxpayers follow paths which appear to be more complicated than required. For example, several millions of taxpayers file on Form 1040 rather than on the simpler Forms 1040A or 1040EZ for which they are eligible. Of particular relevance for the simulations underlying this paper, some taxpayers file the AMT form (Form 6251) even though they are not required to do so, while others do not file Form 6251 even though they are instructed to file it. The ITBM includes the ability to simulate such behavior and its impact on taxpayer compliance burden.

Finally, it should be recognized that the ITBM was designed to serve two related, but distinct, purposes. The first purpose is to provide estimates of the total burden of the individual income tax system and how that burden changes as both tax law and taxpayers' financial situations change. The second purpose is to measure the burden of specific features or provisions of the tax system including enacted provisions, possible legislative changes, and changes to tax forms or instructions. The ability of the ITBM to provide accurate estimates for specific tax provisions has not been fully validated. This paper provides some ITBM results that can be used in that continuing evaluation.

Background on the Alternative Minimum Tax

The alternative minimum tax (AMT) is essentially a parallel system to the ordinary income tax. It was enacted to assure that high-income taxpayers pay reasonable levels of income tax even if they use the provisions, or combinations of provisions, of the ordinary income tax to eliminate or greatly reduce their ordinary income tax liabilities. In essence, taxpayers compute both the ordinary income tax and the tentative amount of the AMT. If the tentative AMT is larger than the ordinary tax, they pay an additional tax in the amount by which their tentative AMT exceeds their ordinary income tax. This additional tax is the AMT.

Taxable income for AMT purposes is calculated under a somewhat different set of accounting rules than for the regular income tax. AMT income includes certain types of income that are not included for regular income tax purposes (for examples, see Figure 3). The AMT does not allow certain regular income tax deductions, such as the itemized deduction for State and local taxes, the itemized deduction for the types of miscellaneous expenses that are subject to the two percent of adjusted gross income floor, the first portion of the itemized deduction for medical expenses, the standard deduction, and the deduction for personal exemptions. The AMT has its own exemption amount, which differs by filing status but not by the number of persons in the tax-filing unit.

For Tax Year 2000, the AMT exemption was $33,750 for single taxpayers and $45,000 for married taxpayers filing jointly. The AMT exemption was reduced (but not below zero) by 25 percent of AMT income in excess of $112,500 for single taxpayers and $150,000 for married taxpayers. The AMT rate was 26 percent on the first $175,000 of AMT income in excess of the AMT exemption, and 28 percent on any amount above $175,000.[4] Taxpayers were allowed to use most nonpersonal tax credits only against the ordinary income tax; that is, such credits can only be taken to the extent their regular tax liability exceeds their tentative minimum tax. In 2000, most personal tax credits could be used to reduce the AMT as well as ordinary income tax liability. Figure 3 provides a simplified summary of the calculation of the AMT.

Figure 3

Simplified Calculation of the Alternative Minimum Tax

plus	**Adjusted Gross Income (AGI) less Itemized Deductions (but not Personal Exemptions)**
less	State and local tax refunds included in AGI
plus	Standard deduction
plus	Itemized deduction for medical expenses *(only amount between 7.5% and 10% of AGI)*
plus	Itemized deduction for taxes
plus	Itemized deduction for miscellaneous expenses *(only miscellaneous itemized deductions subject to the 2% of AGI floor)*
plus	Differences between ordinary tax and AMT income or deduction for: Investment interest Post-1986 depreciation Adjusted gain or loss Incentive stock options Passive activities Certain flow-throughs from estates and trusts Net Operating Loss (NOL)
plus	14 other income items included for AMT but not ordinary tax purposes *(none of these items affected more than 37,000 taxpayers and together they affected only 130,000 taxpayers)*
less	AMT Exemption
Equals	**AMT taxable income (AMTI)**
Calculate:	**Tentative AMT tax on AMTI (26% of first $175,000 and 28% of any excess)**
Less:	Ordinary tax (with adjustments for certain tax credits)
Equals:	**AMT (if greater than zero)**

The AMT may impose compliance burdens on taxpayers (that is, require taxpayers to expend additional time or incur additional out-of-pocket costs), including some burdens on taxpayers whose tax liabilities are not increased by the AMT. Based on the structure of the AMT, we would expect that the AMT compliance burden would be different for classes of taxpayers. As with many tax provisions, a large number of taxpayers have to consider whether the AMT might affect them. Next, a smaller number of taxpayers may have to undertake some computations to determine whether, in fact, they are affected by the AMT. Finally, an even smaller number actually have their tax liabilities affected by the AMT.

Under the IRS instructions for the individual income tax, some taxpayers are instructed to complete the AMT tax form; others are directed to a worksheet, the results of which indicate that the taxpayer either needs to take no further action or should complete the AMT tax form. Of course, it is probable that many taxpayers bypass the instructions and preliminary steps based on their prior-year experiences. Once a taxpayer proceeds to the AMT tax form (Form 6251), the compliance burden would seem to depend upon whether the particular taxpayer has information applicable only to tax form lines that transfer information already computed and entered on other tax form lines or whether the taxpayer has to enter information not previously entered. The former class of taxpayers would simply be determining their taxable incomes under the different set of rules applicable to the AMT. The latter class of taxpayers would generally be adding new items of income or making adjustments to certain types of income. The latter taxpayers would, on average, be expected to have greater compliance burdens from completing the AMT tax form and, more importantly, for maintaining records and learning about the law for these other types of income.

After completing the AMT form, taxpayers will be in one of three situations:

1. They will have additional tax liability because of the AMT and will be required to submit a completed Form 6251 with their income tax returns.

2. They will not have any additional tax liability but will be required to submit a completed Form 6251. In such cases, submission of the Form 6251 is required so that, when processing the taxpayer's return, the IRS will have sufficient information to know that the taxpayer did not have AMT liability and had not simply neglected to compute his or her AMT liability. This eliminates the need for the IRS to correspond with the taxpayer and, thereby, reduces costs

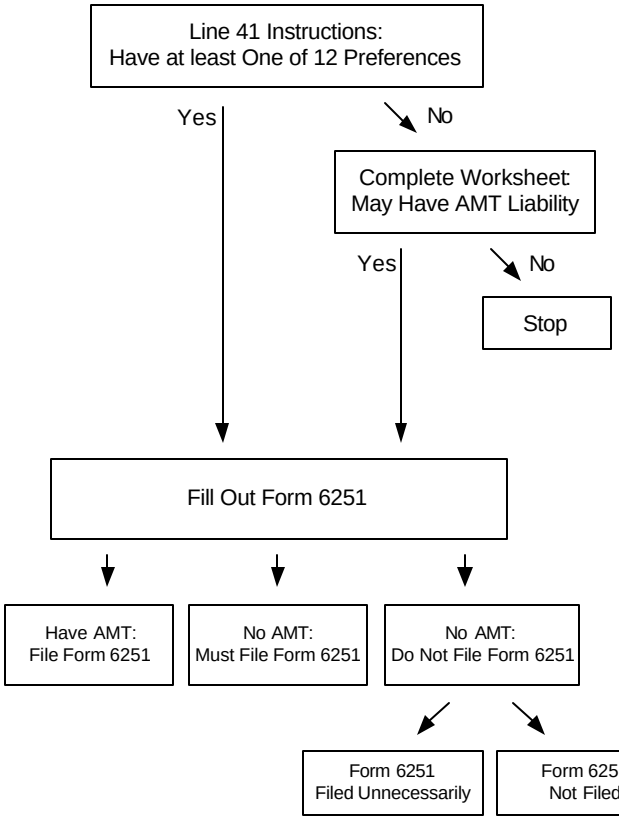
for the IRS and prevents postfiling burden for the taxpayer from corresponding with the IRS.

3. The taxpayer does not have increased liability from the AMT and is not required to submit a completed Form 6251 with his or her tax return.

Figure 4 includes a simplified flow chart of a taxpayer's decisions and actions in completing the tax return paperwork for the AMT.

Figure 4

Taxpayer Decisions for Completing Form 6251



We would generally expect taxpayers who have items of income reportable for AMT purposes but not for regular income tax purposes to have more incremental burden from the AMT, on average, than do taxpayers whose AMT

calculations involve only refiguring based on information already entered elsewhere on the tax return. Similarly, we would hypothesize that the burden of transferring and recomputing would be lower for taxpayers who prepare their returns using tax software than those who prepare their returns manually.

Why Select the AMT for this Analysis?

The AMT is a particularly good provision to use in the examination of the ITBM's ability to measure the incremental burden from specific tax provisions. The AMT affects a sufficiently large number of taxpayers for a microsimulation model to yield estimates. The AMT is largely self-contained and interacts with the ordinary income tax in only a limited number of ways that the ITBM should capture. Estimation of the AMT's burden should be straightforward because it requires only that tax structures and attributes already contained in the ITBM be eliminated. Estimating the burden of the AMT does not require the development and modeling of new tax structures, the creation of new tax forms and instructions, nor the determination of new or additional attributes for the ITBM model. The AMT includes sufficient variation in its use by, and impact on, taxpayers that the model's ability to measure such differentiation can be tested. Finally, there is significant and growing interest in the AMT in the tax community—and in the general public—to warrant the investment required for such analysis.

Simulation of AMT Burden

Estimating the burden of the AMT using the ITBM is straightforward. A simulation is prepared in which (1) the tax structure of the AMT is eliminated and (2) the tax forms and worksheets and parts of other tax forms associated with the AMT are effectively eliminated by setting the attributes for each of those items equal to zero.[5] To provide some internal error checks, to simplify the production of output tables, and to help examine the burden for various subgroups, the target group of taxpayers for the simulation is also specified. The difference between ITBM simulations with and without the AMT-related features provided the estimates of the marginal burden attributable to the AMT.

Because one of the goals of this exercise is to help validate the ITBM model, the simulations described above were run at Tax Year 2000 levels, the base year for the ITBM's equations and the year of the CWHS taxpayer sample used by the ITBM as its data file for estimation. The model should be more accurate for 2000 than for later years, since that was the year of the surveys for some of the interviewed taxpayers and only one year later for the other interviewees. Using the model at 2000 income levels also eliminated the need to extrapolate the data to income levels in a later year, a process that may introduce its own inaccuracies. If the ITBM simulations were performed for

a later year, it would be difficult to separate the effects of changes in taxpayer behavior and of the data extrapolations from the accuracy of the underlying ITBM model. Using the ITBM at 2000 levels allowed the analysis to focus on the structure of the model, its attribute methodology, and its current assignment of attributes.

Designing simulations included specifying the taxpayers to be examined. In this instance, the taxpayers to be examined were limited to Form 1040 filers whose returns either showed additional tax liability (including reduced tax credits) attributable to the AMT or who had filed the AMT tax form, Form 6251.[6] Thus, the inclusion of a Form 6251 was the primary indicator of AMT burden. For purposes of analysis, simulations were performed, and the results were separated into subclasses of affected taxpayers.

Taxpayers who filed Form 6251 were grouped by the method of tax form preparation (three groups) and by an indicator of the complexity of the taxpayer's AMT-related information (two groups). These six groups of taxpayers were also subdivided by the reason for filing the Form 6251 or by the source of the compliance burden (seven classifications). Less detailed simulations were performed grouping the AMT returns by an indicator of the overall complexity of the taxpayer's entire return (two groups), but the very small sample sizes in some of the cells prevented the data from being useful. The differences in burden between simulations including and excluding the AMT tax structures (and the associated burden indicators) provided the estimates of AMT burden. The analysis of the results involved comparing the numbers of taxpayers estimated by the ITBM against other sources of taxpayer information, comparing ITBM burden estimates against the Form 6251 burden estimates derived under IRS's current burden estimating methodology, examining and comparing the absolute and relative sizes of the estimated burden across subgroups for consistency, and evaluating those burden differences against our *a priori* notions of taxpayer burden from the AMT.

Numbers of Taxpayers Affected by the AMT

ITBM simulations showed that nearly 5.7 million taxpayers filed Form 6251 for Tax Year 2000. Of those, 1.4 million taxpayers filed Form 6251 because they had additional tax liabilities due to the AMT, 0.5 million filed Form 6251 because they were required to do so by IRS instructions even though they did not have liabilities attributable to the AMT, and an additional 3.8 million filed although they did not appear to have been required to do so. As previously mentioned, IRS requires some taxpayers without AMT liability to file Form 6251 with their tax returns because the information on Form 6251 helps IRS to determine that such taxpayers did not have liabilities from the AMT. Without this information, IRS might incur additional costs, and taxpayers might

incur postfiling compliance burden from IRS inquiries about the taxpayers' possible AMT liabilities.

Since accurate information about the number of taxpayers affected by the AMT is a major determinant of the aggregate level of taxpayer burden, some validation of the ITBM estimates was attempted by comparing the ITBM estimates to those from other sources. With relatively few exceptions, tax return statistics are based on samples of tax returns that are weighted to represent the entire tax-filing population. Thus, there is sampling error even for estimates for the entire population. Sample-based estimates may differ even for conceptually identical samples drawn from the same population. Thus, counts of tax returns from the ITBM cannot be expected to match other sources precisely. ITMB estimates of taxpayers with liabilities from the AMT, the number without liabilities but are required to file Form 6251, and the total number of taxpayers who filed Form 6251 whether required to do so or not were compared to similar data based on the sample of taxpayers drawn for IRS's Statistics of Income (SOI) program and with the Continuous Work History Sample (CWHS). As previously noted, the CWHS is included in the SOI sample and is the source of the sample used by the ITBM. Figure 5 shows the return counts from each of the three data sources for various groups of Form 6251 filers.

Figure 5

AMT Forms (Forms 6251) -- 2000

(millions of returns)

	Individual Taxpayer Burden Model (ITBM)	Continuous Work History Sample (CWHS)	Statistics of Income (SOI)
Reason for Filing Form 6251			
AMT Liability or Reduced Tax Credits	1.393	1.520	1.436
No Liability But Required to File	0.477	0.410	0.364
Filed, But Not Required to File	3.786	3.104	2.923
Total Forms 6251 Filed	5.657 1/	5.034 2/	4.724 2/

Note: Detail may not add to totals due to rounding.

1/ Calculated from IRS requirements for completing, but not necessarily filing, Form 6251.
2/ Based on a tax return indicator that a Form 6251 was filed.

The differences between the SOI and the CWHS are based on both sampling variation and the samples themselves. Because the SOI sample is designed to obtain larger numbers of higher income tax returns and of those

with "interesting" characteristics, the sample number of tax returns with Form 6251 filers is far greater (65,800 in the SOI sample and 2,500 in the CWHS sample). As a result, it is likely that the SOI estimates of return counts are more precise. The differences between the ITBM and CWHS are more puzzling. One possibility is that the deletion of prior-year returns from the ITBM data file, and the associated reweighting, eliminated a disproportionate number of returns with the AMT. That would be the situation if such late-filed returns are more likely to have liability from the AMT. Another possible source of the discrepancies is differences in the ITBM's tax calculator, which was based on more limited AMT information in each tax record. Nevertheless, the number of returns with AMT liability in the ITBM is only 3 percent lower than the number estimated from the SOI sample.

It was determined that there was a conceptual difference between data sources in the numbers of Forms 6251 filed. The totals for the SOI and CWHS are based on indicators that a Form 6251 was included with the filed tax return. That indicator was not available in the ITBM data file and was replaced with an indicator determined on the basis of ITBM calculations that a Form 6251 should have been filed. But this conceptual difference seems to account for only a small portion of the differences in the numbers of Forms 6251, since applying similar algorithms to the SOI file did not narrow the gap appreciably. Overall, the ITBM estimates of taxpayers who filed Form 6251 are 12 percent higher than the CWHS estimate and 20 percent higher than the SOI estimate. The source or sources of these differences will be the subject of future examination.

The differences in the number of taxpayers affected by the AMT may have a significant impact on estimates of aggregate taxpayer burden from the AMT. However, if the ITBM selects inappropriate taxpayers for measurement of AMT burden, the average per taxpayer burden may be measured incorrectly. Further analysis would be required to determine if such errors tend to be offsetting.

Given the differing estimates of the numbers of taxpayers affected by the AMT, estimates of aggregate taxpayer compliance burden could be developed in two ways. One method would be to apply the average burden changes from the ITBM to estimates of taxpayers from other sources that may be more accurate. If taxpayer estimates from the SOI are used, the burden estimates would tend to be more consistent with revenue estimates. However, the burden estimates would be more difficult to develop, might not be internally consistent, and might not be consistent with ITBM estimates for other proposals or tax provisions. The second method would be to accept the taxpayer counts from the ITBM, at least until such time as the ITBM can be developed further. The advantages of using ITBM taxpayer counts are that aggregate estimates can be produced solely from ITBM model runs, and there will be more consistency between burden estimates for various tax provi-

sions. The risk is that, if obviously erroneous estimates of the numbers of taxpayers affected are used, the burden estimates may be less accurate, leading to less-informed decisions. The burden estimates in this paper were developed using the ITBM's own estimates of the numbers of taxpayers affected.[7] In the longer run, for the ITBM to be more usable, the differences between the ITBM, the SOI, and the CWHS need to be reconciled and reduced or eliminated.

AMT Burden Estimates for Form 6251 Filers

The results of the simulations for taxpayers who filed the AMT form—Form 6251—for Tax Year 2000, divided into 18 separate groups, are shown in Figures 6 through 8. Figure 6 shows the numbers of taxpayers, and the numbers of taxpayers as a percentage of the total number of Form 6251 filers. Figure 7 shows average compliance burden in hours, both the total burden for the taxpayer and the portion of the burden attributable to the AMT. Figure 8 is the analog to Figure 7 for money burden. In each of the figures, the results for the 18 separate groups of taxpayers are shown in bold type. The information for individual groups is shown toward the top and left of each figure. The remaining entries in the figures are for various combinations of the 18 taxpayer groups.

The 18 separate groups of Form 6251 filers are three-way classifications of preparation method, reason for filing Form 6251, and an indicator of the complexity of the taxpayer's AMT situation.

The three preparation methods are: (1) paid-preparation; (2) self-preparation (or other unpaid-preparation) using tax preparation software; and (3) self-preparation (or other unpaid-preparation) by manual methods. For Tax Year 2000, nearly 98 percent of Forms 6251 prepared by paid tax preparers were completed using software. However, the ITBM data file did not distinguish between preparation method for paid preparers. Hence, for purposes of analysis, all Forms 6251 submitted with paid-preparer returns were treated as if the paid preparer had completed the forms using software.

The three classifications of the reason for filing Form 6251 are: (1) the taxpayer had AMT liability or reduced credits because of the AMT; (2) the taxpayer did not have liability from the AMT but was required by IRS instructions to file Form 6251; and (3) the taxpayer filed Form 6251 even though he or she apparently was not required to do so.

A complexity indicator for the taxpayer's AMT situation was developed on the basis of the line items that taxpayers used on Form 6251. If all of a taxpayer's entries on Form 6251 were based on the transfer of information entered for ordinary income tax purposes or were the result of calculations based on that information, the taxpayer was classified as being a "simple" Form 6251 filer. One would expect there to be little incremental compliance

burden from such transcription of entries and arithmetic and logical calculations when a return is prepared with the use of tax preparation software. All other Forms 6251 were classified as being "complex." These taxpayers had at least one item of tax preference or adjustment, information for which had to be entered on the tax return solely for AMT purposes. Often, there are recordkeeping and other burdens associated with such income or adjustments. Hence, it seems probable that complex AMT returns would have higher burden attributable to the AMT.

Figure 6 shows that 80 percent of Form 6251 filers but only 60 percent of taxpayers with AMT liability are simple Form 6251 filers. This discrepancy is due to the differing percentages between simple and complex AMT taxpayers of Forms 6251 that are filed for no apparent reason. Only 22 percent of simple Form 6251 filers file Form 6251 because they are required to do so; there is no apparent reason for the remaining 78 percent to file. The percentage of unnecessarily filed Forms 6251 is very high for all three preparation methods for simple AMT filers. The percentage of unnecessarily filed Forms 6251 is much lower (23 percent) for complex AMT filers.

Figure 6 also shows that 79 percent of Forms 6251 are filed by taxpayers who use paid preparers. Thus, the compliance burdens of the AMT associated with paid tax return preparation dominate the total burden. In addition, over 70 percent of self-prepared Forms 6251 are prepared using software. Less than 6 percent of all Forms 6251 submitted are manually prepared. (The Arthur D. Little burden measure, discussed below, currently used by the IRS was developed when manual preparation was the norm.) Figure 6 also shows that only 20 percent of Forms 6251 fall into the complex category, and that an even smaller percentage of these (3 percent) are prepared manually.

The entries in the lower right corners of Figures 7 and 8 show the ITBM estimates of the weighted average total compliance burden for AMT filers and the compliance burden attributable to the AMT. The average time burden of the AMT is 1.9 hours. That represents under 4 percent of the total compliance burden of taxpayers who filed Form 6251. The average money burden of the AMT is $88, which is 15 percent of the compliance burden for Form 6251 filers.

Preparation Method

The average AMT time burden is greatest for Form 6251 filers who prepare their own tax returns without the assistance of tax software (4.6 hours) and least among Form 6251 filers who hire paid professionals to complete their tax returns (1.7 hours). Software self-preparers have an average AMT time burden of 2.4 hours. Average AMT money burden is highest for taxpayers who use paid preparation ($107). It is much lower for self-preparers but is about the same for manual ($17) and software ($15) preparation.

Figure 6

Number of Forms 6251 Filed – 2000

	Paid-Preparation		Self-Preparation				Total	
			Software Preparation		Manual Preparation			
	Returns (000)	Percentage of Total	Returns (000)	Percentage of Total	Returns (000)	Percentage of Total	Returns (000)	Percentage of Total
Simple Form 6251 Filers								
AMT Liability or Reduced Credits	**621**	11%	**176**	3%	**56**	1%	852	15%
No Liability, But Required to File	**116**	2%	**30**	1%	**5**	*	151	3%
No Liability, Not Required to File	**2,801**	50%	**519**	9%	**214**	4%	3,533	62%
Sub-total	3,539	63%	724	13%	274	5%	4,537	80%
Complex Form 6251 Filers								
AMT Liability or Reduced Credits	**436**	8%	**82**	1%	**23**	*	541	10%
No Liability, But Required to File	**283**	5%	**32**	1%	**11**	*	326	6%
No Liability, Not Required to File	**236**	4%	**13**	*	**5**	*	253	4%
Sub-total	954	17%	127	2%	38	1%	1,120	20%
Simple & Complex Form 6251 Filers								
AMT Liability or Reduced Credits	1,057	19%	258	5%	79	1%	1,393	25%
No Liability, But Required to File	400	7%	62	1%	16	0%	477	8%
No Liability, Not Required to File	3,037	54%	531	9%	218	4%	3,786	67%
TOTAL	4,493	79%	851	15%	313	6%	5,657	100%

Note: Detail may not add to total due to rounding.
* Less than 0.5 percent.

Figure 7

Estimated Average Time Burden, Total and AMT – 2000 (in hours)

	Paid-Preparation		Self-Preparation				Total	
			Software Preparation		Manual Preparation			
	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/
Simple Form 6251 Filers								
AMT Liability or Reduced Credits	47.9	**1.8**	61.1	**2.2**	37.4	**4.9**	49.9	2.1
No Liability, But Required to File	51.6	**1.1**	62.8	**2.9**	56.7	**2.2**	54.0	1.5
No Liability, Not Required to File	46.0	**1.6**	67.1	**2.5**	47.6	**4.3**	49.2	1.9
Sub-total	46.5	1.6	65.5	2.4	45.7	4.4	49.5	1.9
Complex Form 6251 Filers								
AMT Liability or Reduced Credits	68.7	**2.1**	80.9	**2.3**	67.7	**7.2**	70.5	2.3
No Liability, But Required to File	70.8	**1.8**	87.4	**2.1**	74.3	**4.2**	72.5	1.9
No Liability, Not Required to File	68.1	**1.6**	67.1	**2.1**	65.7	**3.7**	68.0	1.6
Sub-total	69.2	1.9	81.1	2.2	69.3	5.9	70.5	2.1
Simple & Complex Form 6251 Filers								
AMT Liability or Reduced Credits	56.5	1.9	67.4	2.2	46.2	5.6	57.9	2.2
No Liability, But Required to File	65.2	1.6	75.5	2.5	68.5	3.5	66.6	1.8
No Liability, Not Required to File	47.7	1.6	67.1	2.5	48.0	4.3	50.4	1.9
TOTAL	51.3	1.7	67.8	2.4	48.6	4.6	53.6	1.9

Note: Detail may not add to total due to rounding.
1/ Total Burden is the average compliance burden from all tax provisions.
2/ AMT Burden is the average compliance burden attributable to the AMT.

These findings are directionally intuitive and sensible in light of *a priori* expectations. Within the various preparation methods, manual self-preparers should have the highest average time burden and lowest average dollar burden because these filers are trading off compliance burden cost savings for the time it takes to complete their own tax forms. Filers who hire tax preparers

Figure 8

Estimated Average Money Burden, Total and AMT – 2000
(in dollars)

	Paid-Preparation		Self-Preparation				Total	
			Software Preparation		Manual Preparation			
	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/
Simple Form 6251 Filers								
AMT Liability or Reduced Credits	$523	**$106**	$91	**$13**	$50	**$15**	$403	$81
No Liability, But Required to File	$685	**$105**	$102	**$15**	$76	**$15**	$549	$84
No Liability, Not Required to File	$615	**$105**	$103	**$15**	$82	**$19**	$508	$87
Sub-total	$601	**$106**	$100	**$14**	$75	**$18**	$489	$86
Complex Form 6251 Filers								
AMT Liability or Reduced Credits	$1,054	**$117**	$131	**$15**	$101	**$10**	$873	$97
No Liability, But Required to File	$1,166	**$109**	$202	**$14**	$91	**$13**	$1,037	$97
No Liability, Not Required to File	$1,199	**$102**	$236	**$20**	$133	**$20**	$1,131	$97
Sub-total	$1,123	**$111**	$160	**$15**	$102	**$12**	$979	$97
Simple & Complex Form 6251 Filers								
AMT Liability or Reduced Credits	$742	$111	$104	$14	$65	$13	$586	$87
No Liability, But Required to File	$1,026	$108	$154	$14	$86	$13	$882	$93
No Liability, Not Required to File	$660	$105	$106	$15	$83	$19	$549	$88
TOTAL	$712	$107	$109	$15	$79	$17	$586	$88

Note: Detail may not add to total due to rounding.
1/ Total Burden is the average compliance burden from all tax provisions.
2/ AMT Burden is the average compliance burden attributable to the AMT.

should have the lowest average time burden and highest average dollar burden for opposite reasons; they are shifting time savings for paid-preparation fees. Finally, self-preparers who use software should be in between the other two and resemble manual preparers for average dollar burden and filers who use paid preparers for average time burden. These filers are paying a nominal fee invariably less than a professional tax preparer's fee, but the software should decrease—at least at the margin—the amount of time required for these filers to satisfy their tax requirements.

Given that 79 percent of AMT filers used paid tax preparers, the results for that group drive the 1.9-hour average time burden and $88 average dollar burden for all Form 6251 filers.

Simple and Complex AMT Returns and Reasons for Filing Form 6251

When burden levels, especially money burden, within preparation method groups are examined by simple versus complex AMT filers and by reason for filing a Form 6251, the results are more difficult to interpret. *A priori*, one would expect AMT burden to be lower for taxpayers with simple AMT situations. In particular, one might expect the marginal time burden for simple AMT self-preparers who use software to be very close to zero because the software transfers all necessary data (that is the definition of a simple AMT return), performs all of the necessary logical and arithmetic operations, and controls the printing of the additional tax form for the AMT. At most, the taxpayer

would have to answer negatively five or six questions posed by the software about possible AMT-related income items or adjustments to income items.

The ITBM results, however, do not confirm the expectation that simple AMT self-preparers using software should have extremely low marginal time burdens from the AMT. The ITBM results indicate that simple AMT software self-preparers have an AMT time burden averaging 2.4 hours and that their burden level burden does not vary appreciably by the reason for filing Form 6251. Moreover, average burden for all simple AMT software self-filers is slightly greater than for all complex AMT software self-filers. Only for filers who actually had AMT liability is the burden lower for simple AMT taxpayers, and, even then, the difference is only 0.1 hour. Note, however, that the modest variation between subgroups in the number of burden hours attributable to the AMT suggests that the ITBM is determining burden based on taxpayer activities rather than as a percentage of total average taxpayer burden, which does vary considerably between the subgroups.

The results for manual self-preparers are generally more explicable, especially for taxpayers who file Forms 6251 because the AMT affects their tax liabilities. Simple manual self-preparers with AMT liability have an AMT burden of 4.9 hours (13 percent of their average total time burden); whereas complex AMT manual self-preparers have average AMT burden of 7.2 hours (11 percent of their average total time burden). While the direction of the differential burden is noticeably positive, the size of the differential seems quite modest, given that taxpayers with complex AMT situations are more likely to have to maintain records and learn about the proper handling of complicated income or adjustment items.

Some of these results may be because the ITBM calculates burden on the assumption that taxpayers incur the burden associated with reading and following tax form instructions fully. The instructions for the AMT line on Form 1040 are quite lengthy and, under the ITBM attribute methodology, burdensome. Following these instructions, simple AMT taxpayers would not only incur the burden of the instructions but would also incur burden from completing an AMT worksheet before actually completing a Form 6251. Following the tax form instructions, the complex AMT taxpayer would bypass the worksheet. Because the worksheet uses only information previously entered, its burden is set to zero in the ITBM for taxpayers using paid preparation or tax preparation software. Taxpayers using all three preparation methods, however, are assigned the burden of the instructions themselves. The extra burden of the instructions (and for manual self-preparers, the worksheet) may be accounting for a significant portion of the AMT burden for simple AMT filers and may also be the reason that the burden for many groups of simple AMT filers is greater than for complex AMT filers. If, as some observers believe, relatively few taxpayers actually read these particular tax form instructions, the ITBM is overassigning burden to the AMT. Surveys of manual

self-preparers might provide better information. Different attributes could be assigned for software self-preparers, based on the instructions and questions included in the software interface.[8] Attributes for taxpayers who use paid preparers might be based on the questions paid preparers typically ask their clients about possible AMT liability.

Results by Categories of Burden

The ITBM estimates time burden in seven separate categories and aggregates the category burden estimates to determine total time burden. Figure 9 shows estimates of AMT burden by category of burden for each of six preparation-complexity classifications. For all Form 6251 filers combined, the ITBM simulations estimate that nearly half of the average time burden from the AMT is for tax planning. Nearly one-quarter of total time burden is due each to

Figure 9

Estimated Average Time Burden by ITBM Compliance Burden Category, Total and AMT – 2000 (in hours)

	Paid-Preparation		Self-Preparation				Total	
			Software Preparation		Manual Preparation			
	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/
Simple Form 6251 Filers								
Record Keeping	29.5	*	30.8	*	22.2	**0.1**	29.3	*
Gathering Tax Materials	0.7	*	3.5	**0.1**	1.8	**0.2**	1.2	0.1
Using IRS Services	0.2 3/	**0.0** 3/	0.5 3/	**0.0** 3/	0.7	**0.1**	0.3	*
Using a Paid-Professional	5.2	**0.5**	1.4 4/	**0.1** 4/	1.3	**0.4**	4.4	0.4
Tax Planning	7.1	**0.8**	15.0	**1.2**	7.5	**1.8**	8.4	0.9
Form Completion	3.1	**0.2**	13.3	**1.0**	10.6	**1.7**	5.2	0.4
Form Submission	0.7	**0.1**	1.0	*	1.7	**0.1**	0.8	0.1
Sub-Total Time Burden	46.5	**1.6**	65.5	**2.4**	45.7	**4.4**	49.5	1.9
Sub-Total Money Burden (in $)	$601	**$106**	$100	**$14**	$75	**$18**	$489	$86
Complex Form 6251 Filers								
Record Keeping	45.5	**0.1**	43.4	**0.1**	36.7	**0.7**	44.9	0.1
Gathering Tax Materials	1.0	**0.1**	4.3	**0.1**	3.0	**0.2**	1.4	0.1
Using IRS Services	0.2 3/	**0.0** 3/	0.4 3/	**0.0** 3/	0.4	**0.2**	0.2	*
Using a Paid-Professional	8.4	**0.6**	1.3 4/	**0.0** 4/	2.9	**1.4**	7.4	0.6
Tax Planning	9.5	**0.9**	14.4	**0.8**	9.7	**1.4**	10.1	0.9
Form Completion	3.8	**0.2**	16.1	**1.2**	14.8	**2.1**	5.6	0.4
Form Submission	0.8	**0.1**	1.2	*	1.8	*	0.9	0.1
Sub-Total Time Burden	69.2	**1.9**	81.1	**2.2**	69.3	**5.9**	70.5	2.1
Sub-Total Money Burden (in $)	$1,123	**$111**	$160	**$15**	$102	**$12**	$979	$97
Simple & Complex Form 6251 Filers								
Record Keeping	32.9	*	32.7	*	23.9	0.1	32.4	*
Gathering Tax Materials	0.7	0.1	3.6	0.1	1.9	0.2	1.2	0.1
Using IRS Services	0.2 3/	0.0 3/	0.5 3/	0.0 3/	0.7	0.1	0.3	*
Using a Paid-Professional	5.9	0.5	1.4 4/	0.1 4/	1.5	0.6	5.0	0.4
Tax Planning	7.6	0.8	14.9	1.1	7.8	1.8	8.7	0.9
Form Completion	3.2	0.2	13.8	1.1	11.1	1.7	5.3	0.4
Form Submission	0.7	0.1	1.1	*	1.7	*	0.8	0.1
Total Time Burden	51.3	1.7	67.8	2.4	48.6	4.6	53.6	1.9
Total Money Burden (in $)	$712	$107	$109	$15	$79	$17	$586	$88

Note: Detail may not add to total due to rounding.

* Less than 0.05 hour.

1/ Total Burden is the average compliance burden from all tax provisions.

2/ AMT Burden is the average compliance burden attributable to the AMT.

3/ The estimate reflects an anomaly in the estimation equation where the coefficient of the attribute index is negative.

4/ The estimate reflects an anomaly in the estimation equation where the coefficient of the attribute index is negative and not statistically significant.

forms completion and use of a paid professional (time expended, not monetary cost). The remaining two-tenths of an hour of AMT burden are from gathering tax materials and forms submission. While the averages for all Form 6251 filers mask some differences between preparation methods, those differences are modest.

The lack of virtually any AMT burden from recordkeeping, especially for taxpayers with complex AMT returns, is surprising. The ITBM indicates that these taxpayers have an average total recordkeeping burden of 44.9 hours, but the ITBM assigns virtually none of that to the AMT. Similarly, only 0.9 hours out of a total of 10.1 hours of tax planning time are attributed to the AMT for these filers. Given the complexity of the income items and financial situations that lead to the AMT, especially for complex AMT filers, these allocations may require further investigation. Are these burdens really low for the AMT, or is the ITBM failing to allocate properly a portion of each taxpayer's total burden from these sources to the AMT?

The ITBM estimates that even software self-preparers in simple AMT situations incur an average of 1.0 hour of tax form completion burden from the AMT. Given that, by definition of the classification, these taxpayers do not have to enter any additional information because of the AMT, make any data transcriptions manually, or undertake any arithmetic operations or logical decisions, it is difficult to understand the source of most of this burden. Up to one-half hour of AMT burden may be attributable to the ITBM methodology which assigns to these taxpayers, even those using software or paid tax preparation, the attributes for certain tax form instructions for the AMT. The underlying assumption is that, regardless of preparation method, taxpayers incur some burden from determining how to deal with the AMT. But form completion burden in excess of that level for simple AMT software self-preparers is difficult to explain and also raises questions about the form completion burden determined for other classifications of Form 6251 filers.

The estimate that AMT burden for form submission is very close to zero seems reasonable. One would expect that form completion burden would be largely fixed for a tax return and would vary very little if additional forms are required to be submitted. The time for making copies of extra forms should be almost immeasurably low when most copies are made with a photocopier or are printed as part of computerized tax return preparation.

ITBM and Arthur D. Little Compliance Burdens Compared

Another validation of ITBM results can be performed by comparing ITBM results with the current burden estimates used by the IRS and which are based on research undertaken by Arthur D. Little, Inc. in the mid-1980's. Those estimates are shown on each tax form or the instructions for the tax

form. Under the A.D. Little methodology, the estimated average time to complete the Form 6251 for Tax Year 2000 was 5 hours and 1 minute.[9]

Recordkeeping	1 hr., 32 min.	30%
Learning about the law or the form	1 hr., 11 min.	24%
Preparing the form	1 hr., 50 min.	37%
Copying, assembling, and sending the form	28 min.	9%
Total	5 hr., 1 min.	100%

Estimates from the ITBM indicate that the average taxpayer burden of Form 6251, although burden is defined somewhat differently, is 1.9 hours and $88. If money burden were converted back to time burden at a rate of $25 per hour, the estimated average ITBM burden would be 5.4 hours. At a $30-per-hour conversion rate, the ITBM's estimated compliance burden would be 4.8 hours. Thus, for the mix of users of Form 6251 for Tax Year 2000, the total burden levels calculated using the A.D. Little and ITBM models are not too dissimilar. However, the results by time burden categories are noticeably different. The ITBM subdivides estimated average time to complete Form 6251 in greater detail than the A.D. Little model. The seven categories into which the ITBM can decompose time burden and the distribution of that burden for all Form 6251 filers are:

Recordkeeping	*	2%
Tax Planning	0.9 hr.	47%
Gathering Tax Materials	0.1 hr.	4%
Using IRS Services	0.0 hr.	0%
Using a Paid Professional	0.4 hr.	22%
Form Completion	0.4 hr.	21%
Form Submission	0.1 hr.	4%
Total	1.9 hr.	100%

* Less than 0.05 hour.

Despite the large differences in the distribution of the components of time burden between the two methodologies, there are some overall similarities. Most strikingly, under both methodologies, tax form completion is less than one-half of total time burden, although it is nearly two-fifths of burden under the A.D. Little methodology but only one-fifth under the ITBM. Recordkeeping is relatively more burdensome under the A.D. Little method. The A.D. Little model assigns the 30 percent of average time burden to

recordkeeping, a category in which the ITBM does not assign any burden. Similarly, the A.D. Little estimates for preparing the form and copying, assembling, and sending the form to the IRS are greater than the ITBM's analog, form completion and form submission, by a factor of almost five.

The A.D. Little and ITBM estimates have been compared using the ITBM estimates for all Form 6251 filers because the A.D. Little estimates are currently used by the IRS for estimating AMT burden for all Form 6251 filers. However, the A.D. Little methodology was developed when manual methods were the norm for self-preparers, and the A.D. Little methodology did not explicitly reflect paid tax preparation. Thus, comparing the A.D. Little estimates with the ITBM estimates for manual self-preparation may better show the differences in estimated burdens between the two methods. The ITBM estimate of the per taxpayer AMT burden for manual self-preparers (simple and complex Forms 6251 combined) is 4.6 hours and $17. The time burden is divided into burden categories as follows:

Recordkeeping	0.1 hr.	3%
Tax Planning	1.8 hr.	38%
Gathering Tax Materials	0.2 hr.	5%
Using IRS Services	0.1 hr.	3%
Using a Paid Professional	0.6 hr.	12%
Form Completion	1.7 hr.	38%
Form Submission	*	1%
Total	4.6 hr.	100%

* Less than 0.05 hour.

The ITBM's total AMT time burden of 4.6 hours and $17 of out-of-pocket expense is remarkably close to the A.D. Little estimate of 5 hours and 1 minute, and the estimated times for form completion are reasonably similar. However, the distribution of other time burden categories is quite different. The ITBM estimate of virtually no incremental form submission burden is more consistent with *a priori* expectations, but, again, the negligible amount of burden assigned to recordkeeping is troubling and suggests the need for further examination of how the ITBM assigns total recordkeeping burden to individual tax provisions.

Combined AMT Burden for Form 6251 Filers

Figures 10 and 11 show the aggregate time and money compliance burdens, respectively, for Form 6251 filers, both total burden and the burden attributable to the AMT. The entries in these figures can be derived by multiplying the

Figure 10

Estimated Aggregate Time Burden, Total and AMT – 2000
(in millions of hours)

	Paid-Preparation		Self-Preparation				Total	
			Software Preparation		Manual Preparation			
	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/
Simple Form 6251 Filers								
AMT Liability or Reduced Credits	29.7	**1.1**	10.7	**0.4**	2.1	**0.3**	42.5	1.8
No Liability, But Required to File	6.0	**0.1**	1.9	**0.1**	0.3	*	8.2	0.2
No Liability, Not Required to File	128.8	**4.4**	34.8	**1.3**	10.2	**0.9**	173.7	6.6
Sub-total	164.5	5.6	47.4	1.8	12.6	1.2	224.5	8.6
Complex Form 6251 Filers								
AMT Liability or Reduced Credits	29.9	**0.9**	6.7	**0.2**	1.5	**0.2**	38.1	1.3
No Liability, But Required to File	20.1	**0.5**	2.8	**0.1**	0.8	*	23.6	0.6
No Liability, Not Required to File	16.0	**0.4**	0.9	*	0.3	*	17.2	0.4
Sub-total	66.0	1.8	10.3	0.3	2.6	0.2	79.0	2.3
Simple & Complex Form 6251 Filers								
AMT Liability or Reduced Credits	59.7	2.0	17.4	0.6	3.6	0.4	80.7	3.0
No Liability, But Required to File	26.1	0.7	4.7	0.2	1.1	0.1	31.8	0.9
No Liability, Not Required to File	144.8	4.8	35.7	1.3	10.5	0.9	190.9	7.0
TOTAL	230.5	7.5	57.7	2.0	15.2	1.4	303.4	10.9

Note: Detail may not add to total due to rounding.
* Fewer than 50,000 hours.
1/ Total Burden is the average compliance burden from all tax provisions.
2/ AMT Burden is the average compliance burden attributable to the AMT.

Figure 11

Estimated Aggregate Money Burden, Total and AMT – 2000
(in millions of dollars)

	Paid-Preparation		Self-Preparation				Total	
			Software Preparation		Manual Preparation			
	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/	Total Burden 1/	AMT Burden 2/
Simple Form 6251 Filers								
AMT Liability or Reduced Credits	$325.0	**$66.1**	$16.0	**$2.4**	$2.8	**$0.8**	$343.8	$69.2
No Liability, But Required to File	$79.7	**$12.2**	$3.0	**$0.4**	$0.4	**$0.1**	$83.2	$12.8
No Liability, Not Required to File	$1,722.3	**$295.5**	$53.5	**$7.7**	$17.5	**$4.1**	$1,793.3	$307.3
Sub-total	$2,127.0	$373.8	$72.5	$10.5	$20.7	$5.0	$2,220.2	$389.3
Complex Form 6251 Filers								
AMT Liability or Reduced Credits	$459.0	**$51.0**	$10.8	**$1.2**	$2.3	**$0.2**	$472.1	$52.4
No Liability, But Required to File	$330.5	**$30.9**	$6.4	**$0.5**	$1.0	**$0.1**	$337.9	$31.5
No Liability, Not Required to File	$282.5	**$24.1**	$3.0	**$0.3**	$0.6	**$0.1**	$286.2	$24.5
Sub-total	$1,072.0	$106.0	$20.3	$1.9	$3.9	$0.5	$1,096.2	$108.4
Simple & Complex Form 6251 Filers								
AMT Liability or Reduced Credits	$783.9	$117.1	$26.8	$3.6	$5.1	$1.0	$815.9	$121.7
No Liability, But Required to File	$410.2	$43.2	$9.5	$0.9	$1.4	$0.2	$421.1	$44.3
No Liability, Not Required to File	$2,004.8	$319.6	$56.5	$8.0	$18.2	$4.2	$2,079.4	$331.8
TOTAL	$3,198.9	$479.8	$92.8	$12.4	$24.6	$5.5	$3,316.4	$497.7

Note: Detail may not add to total due to rounding.
1/ Total Burden is the average compliance burden from all tax provisions.
2/ AMT Burden is the average compliance burden attributable to the AMT.

numbers of taxpayers in each category as determined by the ITBM (shown in Figure 6) by the average compliance burdens for that category (shown in Figure 7 for time burden and Figure 8 for money burden).

Based on ITBM estimates, the total time burden from the AMT for filers of Form 6251 was 10.9 million hours, and the total money burden was $498 million.[10] However, only 36 percent of total AMT burden (3.9 million hours) and 33 percent of total AMT money burden ($166 million) fall upon taxpayers who have additional tax liabilities from the AMT or were otherwise required to file Form 6251 under IRS instructions. The remaining two-thirds of money and time burden from the AMT are incurred by taxpayers who file Form 6251 without any requirement to do so. As discussed and quantified below, a portion, perhaps one-fourth, of that burden is incurred in determining whether taxpayers may be affected by the AMT, but the remainder is not required. This result highlights a feature of the underlying conceptual framework of the ITBM. The ITBM attempts to measure the burden from what taxpayers actually do rather than what they are required to do. For the AMT, the actual burden incurred is over twice the burden that is needed to be incurred.

Taxpayers who use paid tax return preparers have 68 percent of AMT time burden and 96 percent of money burden. Self-preparers using software incur 19 percent of time burden and 2 percent of money burden. The remaining 13 percent of time burden and 1 percent of money burden are incurred by taxpayers who prepare their own returns using traditional, manual methods.

Finally, the 80 percent of Form 6251 filers who fall into the simple AMT category have 79 percent of the time burden and 78 percent of the money burden. This reflects both the mix of the simple and complex AMT taxpayers by return preparation method and the ITBM estimates that per taxpayer AMT burdens for simple and complex AMT taxpayers do not differ greatly.

Alternate Aggregate Burden Estimate Based on SOI Data

Given the discrepancy in the numbers of Form 6251 filers between the ITBM and direct tabulations from SOI data, an alternate burden estimate was prepared by applying the ITBM's per taxpayer burden estimates (shown in Figures 7 and 8) to the counts of affected taxpayers in each subgroup as determined directly from SOI data.

Not surprisingly, given the smaller number of Form 6251 filers estimated from the SOI data, aggregate AMT burden as determined from SOI counts of Form 6251 filers is lower than when internally consistent ITBM return estimates are used. Using the numbers of taxpayers from SOI tabulations, the estimated time burden attributable to the AMT is 8.7 million hours, which is 2.2 million hours, or 20 percent, lower than the 10.9-million-hour time burden taken directly from the ITBM. Similarly, based on numbers of taxpayers from the SOI, the total money burden of the AMT for Form 6251

filers is $440 million, which is $57 million, or 11 percent, lower than the $498-million AMT burden calculated with ITBM data.

Although there is a risk of introducing additional error by combining numbers of returns based on SOI data and averages based on the ITBM, given the relatively modest differences in average time burden between the various subgroups of Form 6251 filers, it seems probable that the risks of using data from two different sources are quite modest. The difference in aggregate burdens between affected tax return counts based on SOI tabulations and based on the ITBM highlights the need to reconcile the two data sources if consistent compliance burden and tax liability estimates are to be obtained and used routinely.

AMT Burden for Nonfilers of Form 6251

The burden estimates presented in the previous section for taxpayers who actually filed Form 6251 with their income tax returns include some burden from deciding whether the AMT applies to them. Those estimates do not include similar burdens from similar threshold decisions for taxpayers who may have considered whether the AMT applied to them but did not ultimately file a Form 6251. These taxpayers experience some burden—largely time expended—from learning about the AMT, keeping records, reading instructions, and performing calculations in order determine if the AMT applies to them. This type of threshold burden is not unique to the AMT. For example, some taxpayers who use the standard deduction have a burden from determining whether they should itemize their deductions and from keeping records that might be required if they did itemize their deductions. Because of the AMT's complexity, the threshold burden due to the AMT may be appreciable.

Given the methodology underlying the ITBM, the burden of threshold decisions for nonusers of a tax provision is included in their total burden. However, since the ITBM determines burden based on "attributes," and specific AMT-related attributes were generally not assigned to nonfilers of Form 6251, their threshold burden is not automatically assigned to the AMT. Using the ITBM to estimate the threshold burden of the AMT for nonfilers of Form 6251 requires the estimator to make some assumptions about which groups of taxpayers are probably affected by the threshold decision and the specific attributes related to that decision that should be assigned to nonfilers.[11]

One method of deriving estimates of the threshold burden for non-AMT filers is to use the attributes of the tax form instructions that taxpayers may have examined in determining that they were not affected by the AMT. For Tax Year 2000, taxpayers report AMT liability on Form 1040, line 41. As previously described and as summarized in Figure 4, the lengthy instructions for line 41 direct taxpayers to consider 12 enumerated income adjustment or

preference items and, in many instances, to complete an AMT worksheet. Even without consideration of the worksheet, the line 41 instructions have considerable burden, as measured under the ITBM's methodology. Since ITBM simulations permit changes in how attributes are assigned to taxpayers, estimates of AMT burden for nonfilers of Form 6251 can be approximated by assigning the attributes associated with Form 1040, line 41 to some or all of those nonfilers of Form 6251.

The extent to which taxpayers without AMT liability actually read the instructions, partially or fully, or complete the worksheet is not known but is probably based on a taxpayer's previous experiences with the need to take such steps. Further, it is likely that taxpayers who use paid preparers are little affected and that taxpayers who self-prepare using tax preparation software deal only with a much shorter set of queries that are built into a software interface. Thus, the threshold burden associated with the AMT can be expected to be concentrated on the subset of manual self-preparers who actually read the instructions thoroughly, complete the worksheet, or both. Additional research is needed to better understand and quantify the extent to which taxpayers who do not use various provisions expend time to make the determination about applicability.

Our approach was to approximate the AMT threshold burden for non-AMT taxpayers by assigning the attributes for line 41 to all Form 1040 manual preparers who did not file Form 6251. While not all manual self-preparers actually go through the line 41 instructions in detail, some manual self-preparers may incur burden from completing the worksheet associated with line 41. Still others—self-preparers using software—incur burden from the questions posed by the software interface about adjustments that might be required for AMT purposes.[12] The burden from the line 41 instructions for 100 percent of Form 1040 manual self-preparers who did not file a Form 6251 may be a suitable proxy for the overall unmeasured threshold burden for all nonfilers of Form 6251.

The assumption about the percentage of manual self-filers who actually incur burden from these attributes can be adjusted to reflect differing views about actual taxpayer behavior. Given increased public discussion about the AMT, we would hypothesize that, each year, a larger percentage of taxpayers is likely to be knowledgeable or curious about the AMT and, hence, read at least a portion of the tax form instructions for the AMT. However, the aggregate impact of a larger percentage of manual self-preparers incurring AMT threshold burden would be offset by the ever-decreasing percentage, and absolute number, of Form 1040 filers who self-prepare their tax returns manually.

The simulation results show an average burden increase for manual self-preparers of 0.5 hours and $3. These per return estimates may seem high for the instructions for a single tax form line, but, given the length and complexity

of the line 41 instructions, the estimated burdens may not be excessive, especially for those dealing with the instructions for the first time. Moreover, these results are fundamental to the model.

Using the assumption that the threshold AMT burden for nonfilers of Form 6251 can be approximated by the calculated burden of the line 41 instructions for 100 percent of manual Form 1040 self-preparers who do not file Form 6251, the threshold burden for nonfilers of Form 6251 would be 7.5 million hours and $40.4 million. Thus, the burden from the existence of the AMT for those not affected by the AMT is equal to about 41 percent of the ITBM's estimate of the time burden and 7 percent of the money burden for Form 6251 filers. The top bank of Figure 12 summarizes the combined aggregate AMT burden for Form 6251 filers and the burden from the threshold decision for nonfilers of Form 6251. The first row shows the number of Form 6251 filers with AMT, their time and money burdens, and their time and money burden as a percentage of the total for all taxpayers. The second row contains similar data for the taxpayers affected only by the threshold decisions about the AMT. For these taxpayers, the time and money estimates shown may be spread over more or fewer taxpayers than indicated. The bottom row is the total estimated taxpayer compliance burden from the AMT for all taxpayers for Tax Year 2000. As noted in the overview of the AMT, this estimate is based on the ITBM's own internal estimates of the number of taxpayers who filed Form 6251 for Tax Year 2000.

Figure 12

AMT Burden Including Threshold Burden for Nonfilers of Form 6251 – 2000

	Time Burden		Money Burden	
	Hours (in millions)	Percentage of Total	Dollars ($) (in millions)	Percentage of Total
Classified by Filing of Form 6251				
Taxpayers filing Form 6251	10.9	59%	$498	93%
Other Taxpayers	7.5	41%	$40	7%
TOTAL	18.4	100%	$538	100%
Classified by Liability from AMT				
Taxpayers with liability attributable to the AMT	3	16%	122	23%
Taxpayers without liability attributable to the AMT	15.7	84%	416	77%
TOTAL	18.4	100%	$538	100%

Note: Detail may not add to total due to rounding.

The total AMT burden for filers and nonfilers of Form 6251 can be reclassified into burden for taxpayers whose liability is actually affected by the AMT and all other taxpayers. Taxpayers without liability from the AMT but who filed Form 6251 regardless of any requirement to do so would be grouped with nonfilers of Form 6251. This classification shows that only 16 percent of the total time burden and 23 percent of the total money burden fall on taxpayers with AMT liability or reduced tax credits because of the AMT. This information is summarized in the bottom bank of Figure 12.

As shown in Figure 12, the ITBM estimates that the combined AMT compliance burden for Tax Year 2000 for Form 6251 filers and the threshold compliance burden for taxpayers not filing Form 6251 is 18.4 million hours and $538 million. Of this combined burden, 10.9 million hours and $498 million are incurred by taxpayers who actually file Form 6251, whether or not required to do so. Further, of the combined burden, only 3.0 million hours and $122 million of burden are incurred by taxpayers with liability attributable to the AMT. Thus, taxpayers with liability from the AMT incur only 16 percent of the total time burden and 23 percent of the total money burden of the AMT. The remainder falls on other taxpayers.

Combined AMT compliance burden is just over 0.5 percent of the time burden and about 3 percent of the money burden for all individual income tax filers from all income tax provisions. Direct AMT liability was $9.6 billion (AMT-related liability including reduced credits was $13.5 billion), or 1.0 percent to 1.4 percent of individual income tax liability.

Conclusions and Recommendations

The use of the new Treasury-IRS Individual Taxpayer Burden Model (ITBM) to develop estimates of the taxpayer compliance burden attributable to the AMT had two goals. First, it was intended to develop AMT compliance burden estimates that would help inform the current public debate about the burden impact of possible changes to, or even elimination of, the AMT. Second, the process of developing those AMT burden estimates was intended to explore the ability of the ITBM to provide compliance burden estimates for specific tax provisions. As such, this paper is part of a continuing effort to test, validate, and uncover elements of the ITBM that may require further investigation or change.

The model proved capable of providing estimates of average taxpayer burden that we believe to be usable, although certain limitations of the ITBM raise doubts about their precision. Overall, the results showed that each taxpayer who files an AMT form, whether required to do so or for no apparent

reason, incurs a compliance burden that averages 1.9 hours and $88 dollars, but the results vary greatly by the method of tax return preparation. Taxpayers using a paid-preparer have an average AMT compliance burden of 1.7 hours and $107. Taxpayers self-preparing with tax software have a 2.4-hour and $15 burden, and taxpayers self-preparing manually have an average burden of 4.6 hours and $17. Overall, less than one-quarter of burden was estimated to be from actual completion of the tax return. Thus, relative burdens by preparation method meet reasonable *a priori* expectations. The results were less acceptable when classified by a measure of the complexity of the taxpayer's AMT situation and by types of burden. It does not seem reasonable for taxpayer burdens to be nearly identical for simple and complex AMT taxpayers. Nor does it seem reasonable for complex AMT filers to have almost no burden from recordkeeping. When classified by the reason that the taxpayer filed the AMT return, burden did not follow a systematic pattern. Either there is no systematic difference in burden between such groups, or the model is not able to capture it.

In developing estimates, the richness of the ITBM became apparent. By examining the assignment of the ITBM's attributes (the ITBM's basic building blocks of taxpayer burden) to each tax form line and the related instructions for each line, it is possible, although cumbersome, to determine much of the causes of time burden. These same features provide instruments for determining how estimates of burden vary under alternative assumptions, such as assumptions about the extent to which taxpayers actually read tax form instructions or use instructions and worksheets in separate IRS publications. It is also possible to examine how burden is affected as the investigator varies the ITBM's attributes.

Aggregate levels of AMT compliance burden for AMT filers are dependent on the number of AMT filers. Determining the appropriate number of taxpayers using the ITBM proved very difficult, and the numbers of affected taxpayers as estimated by the ITBM differed enough from estimates from the SOI sample of taxpayers to raise questions that require further investigation. The ITBM's estimate of aggregate burden from the AMT for all Form 6251 filers for Tax Year 2000 is 10.9 million hours (under 4 percent of their total burden) and $498 million (14 percent of their total burden). An alternative estimate based on SOI estimates of the numbers of taxpayers affected is 8.7 million hours and $440 million. The ITBM's estimate for combined AMT burden, aggregate AMT burden plus AMT threshold burden, is 18.4 million hours (about 0.5 percent of total burden for all taxpayers) and $538 million (3 percent of total burden for all taxpayers). In 2000, AMT-related liability, depending on how it is measured, is between 1.0 percent and 1.4 percent of total individual income tax liability.

The structure of the ITBM allows an investigator to make previously unavailable estimates of the compliance burden of the AMT on taxpayers who consider whether they are affected by the AMT and ultimately decide that it does not affect them. This type of taxpayer burden from threshold decisions is probably incurred from several features and options in the tax system, and attempts to simplify the tax system and reduce taxpayer burden require a better understanding of how taxpayers handle such decisions. While that burden is included in the ITBM's overall compliance burden estimate, the ITBM also provides tools that enable an investigator to allocate that burden to specific tax provisions. Determining such allocations, however, requires investigators to better understand taxpayer behavior or to make assumptions about how taxpayers actually behave. Using assumptions that the authors believe to be reasonable, ITBM simulations allocated 7.5 million hours and $40 million of burden to the AMT threshold decisions for other Form 1040 filers. The threshold burden attributable to the AMT represents an additional 69 percent of time burden and 8 percent of money burden.

In the course of this attempt to estimate AMT burden, several current limitations of the ITBM were highlighted. Some of these may be relatively easy to resolve over time. Others, including whether the model produces reliable estimates, are more challenging. Even if one could argue that current ITBM results are "reasonable," they should be used very cautiously and with the explicit realization that ITBM results showing small changes or small differences may be reflecting features of the model or analysts' decisions about use of those features as much as, or even more than, underlying taxpayer burden. In addition, time is needed to develop a cadre of analysts familiar enough with both the ITBM and the complex structure of the Federal individual income tax system to use the ITBM in a production environment. That development process is already under way. Continued attempts to use, validate, and improve the ITBM go hand-in-hand with development of analysts' skills in model use.

The sample of taxpayer records that is used by the ITBM to represent national taxpayer activity needs to be re-examined. In particular, differences between the ITBM's data file and the CWHS need to be tracked down and eliminated. Prior-year returns may have to be included in the model's data file to better represent current-year taxpayers who file their returns very late. The sample may have to be enriched so that better estimates can be made for less commonly used tax provisions. For each taxpayer record that is included, more of the data items from the original tax return may need to be retained. (For example, if the amount of tax as recalculated by the ITBM differs from the amount of tax shown on the tax return, both values should be included in the database.) Similarly, in performing the simulations for the AMT, the diffi-

culty in determining the number of Form 6251 filers may be partially attributable to the elimination of an administratively recorded form indictor from the ITBM's data file. Many of these changes are noncontroversial or could be addressed by using the full SOI sample instead of the Continuous Work History Sample as the basis for the model's data.

The ITBM's underlying method of determining burden based on imputed taxpayer activity requires further exploration and refinement. Some improvements may require additional research into, and collection of information about, actual taxpayer behavior. Non-tax return information may have to be used to determine the relative importance of the various types of attributes on time and money burden. Moreover, the ITBM currently estimates taxpayer burden under the assumption that taxpayers actually read tax form instructions or, at least, that the attributes of those forms and instructions are a reasonable proxy for the actions that taxpayers actually take. Even if that is an accurate assumption for taxpayers who prepare their own tax returns manually, it may not accurately reflect the activities of taxpayers who use tax preparation software or use paid tax return preparers. Manual self-preparation is becoming less prevalent each year. For self-preparers using software, the printed tax return may be inapplicable, and, to get better estimates, the attributes associated with paper forms may need to be replaced with the attributes from the visual interface of the software. Appropriate changes may also have to be made for taxpayers using paid preparers. With these changes, the ITBM may be better able to model the burden because it would be measuring the activities that a taxpayer is likely to undertake. The ITBM must be updated and extrapolated to represent tax years beyond 2003 or 2004. Solutions to many identified problems are already being explored and will be incorporated into the ITBM. Moreover, many elements and features—particularly its ability to answer "what if" questions—can only be tested and validated through continued ITBM use.

Despite its current limitations, the ITBM has obvious strengths and has tremendous potential. The ITBM will provide a major increase in our ability to measure taxpayer burden and to understand the elements that produce burden. With a continually improving ITBM, policymakers and tax administrators will have more tools to help them achieve their goals while minimizing the compliance burden imposed on taxpayers.

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Endnotes

[1] For a more detailed description of the ITBM, see Guyton, John L.; O'Hare, John F.; Stavrianos, Michael P.; and Toder, Eric J. (2003), "Estimating the Compliance Cost for the U.S. Individual Income Tax." *National Tax Journal* 56, Number 3, pp. 673-88.

[2] During the course of this project, IBM Consulting Services was known as Price Waterhouse, PriceWaterhouseCoopers, and PWC Consulting.

[3] This paper does not attempt to compare the tax liability estimates implicitly produced by the ITBM to the estimates produced by other models, such as revenue models whose primary focus is the estimation of tax liability changes.

[4] Net capital gains are taxed at the same rates that apply to capital gains under the ordinary income tax.

[5] An alternative would be to leave the attributes unchanged but not assign those attributes to any taxpayers.

[6] The ITBM estimated that fewer than 10,000 Form 1040A taxpayers were subject to the AMT. They were not included in this analysis.

[7] As previously discussed, the ITBM overstates the true number of Form 6251 filers. Comparisons of unweighted counts of Form 6251 filers with zero AMT liability and who were not otherwise required to file Form 6251 against Treasury Department administrative data revealed significantly different results. See Figure 5.

[8] One commercial tax preparation software program for Tax Year 2000 included five questions about sources or income or adjustments that may have an impact on a taxpayer's potential AMT. Taxpayers who are not affected would answer no to all of the questions. Given the wording of the questions, it seems doubtful that answering all of those questions negatively would require more than a minute or two of consideration.

[9] The estimated average time to complete Form 6251 was shown in the tax form instructions for Tax Year 2000 as 6 hours exactly. When Form 6251 was modified for Tax Year 2002 and its completion time was recalculated, a clerical error was discovered. The corrected estimated

average time, under the A.D. Little methodology, to complete Form 6251 for Tax Year 2000 is 5 hours and 1 minute.

[10] Under the A.D. Little methodology, the aggregate AMT burden for Form 6251 filers would be calculated as 28.4 million hours.

[11] Because attributes were not assigned specifically to threshold decisions for nonfilers of Form 6251 when the ITBM equations were estimated, the ITBM may actually be reflecting that burden in slight misestimates of many ITBM coefficients. The extent of this effective inclusion of threshold burden is not known and probably varies from provision to provision.

[12] See footnote 5.