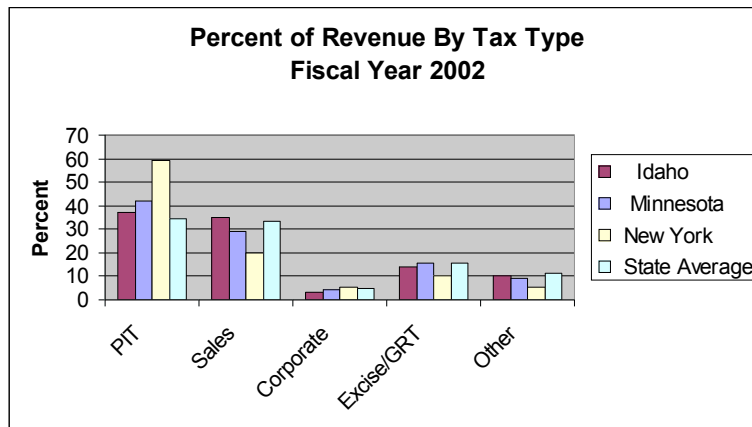


# New York State Personal Income Tax Compliance Baseline Study Tax Year 2002

Office of Tax Policy Analysis  
NYS Department of Taxation & Finance

Presented at FTA Conference on Revenue  
Estimation and Tax Research  
Oklahoma City, Oklahoma  
October 2005

## Which Taxes To Analyze For Tax Gap



Source : State Tax Collections" (2002), US Bureau of the Census

## Which Measures of Personal Income Tax Non-Compliance to Focus On

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- Underreported income
- Overstated deductions, exemptions, and tax credits
- Non-filing
- Credits or refunds denied (taxpayers ineligible)
- Underpayments

## What is the Best Approach for Analyzing the Personal Income Tax Gap in New York State?








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Three Approaches were Considered :

- 1) IRS Studies of the Tax Gap (1979, 1983, 1988)
  - Taxpayer Compliance Measurement Program (TCMP)
- 2) Minnesota Approach (1999 Tax Year)
  - Census-based method
- 3) Idaho Approach (1994 Tax Year)
  - Share-down of the Federal Income Tax Gap

## Overview of Study

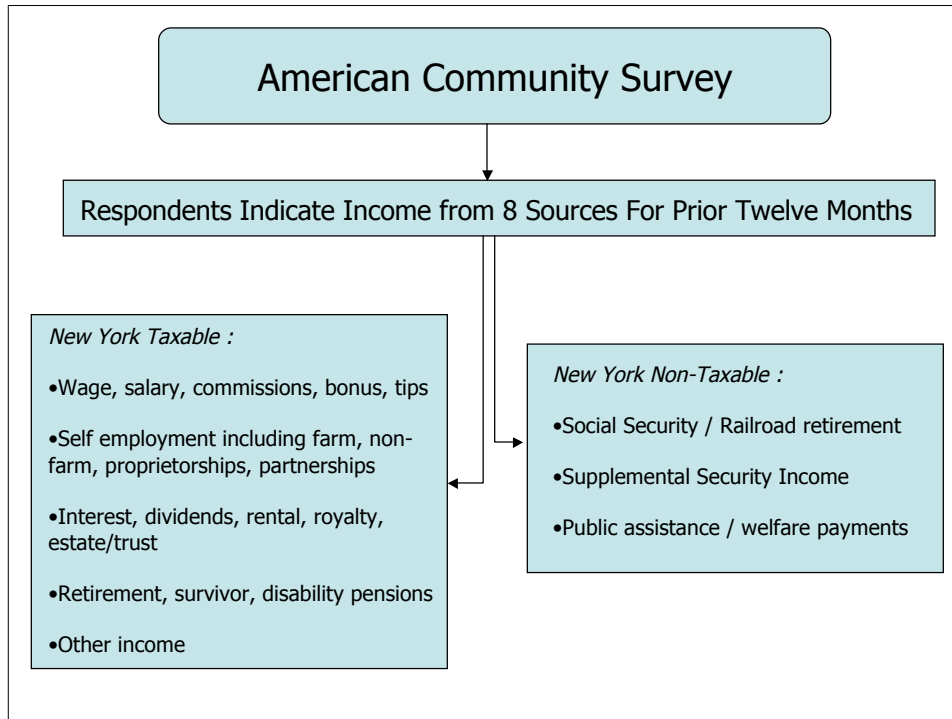
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-  Focused on estimation of personal income tax gap only
-  Focused on non-compliance related to the underreporting of income only (Tax gap related to modifications, deductions, exemptions, credits, underpayments were excluded)
-  Pursue a methodology based on comparison to federal census survey data ("Minnesota-like" approach).
-  Noncompliance disaggregated between the unreported income/tax of non-filers and underreporting of income/tax by filers
-  Non-filer and underreporting non-compliance rates were broken down further between wage and non-wage income sources
-  Estimates of noncompliance were developed by filing status
-  Estimated gross and net tax gaps in the NYS PIT

## Data Sources for Estimating Gross Tax Gap

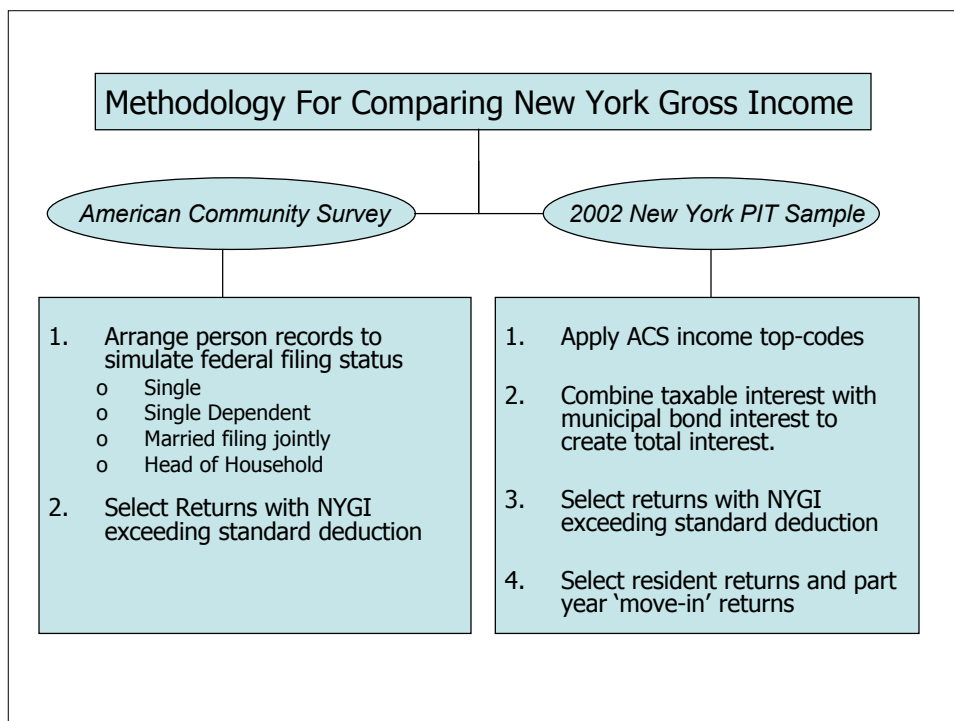
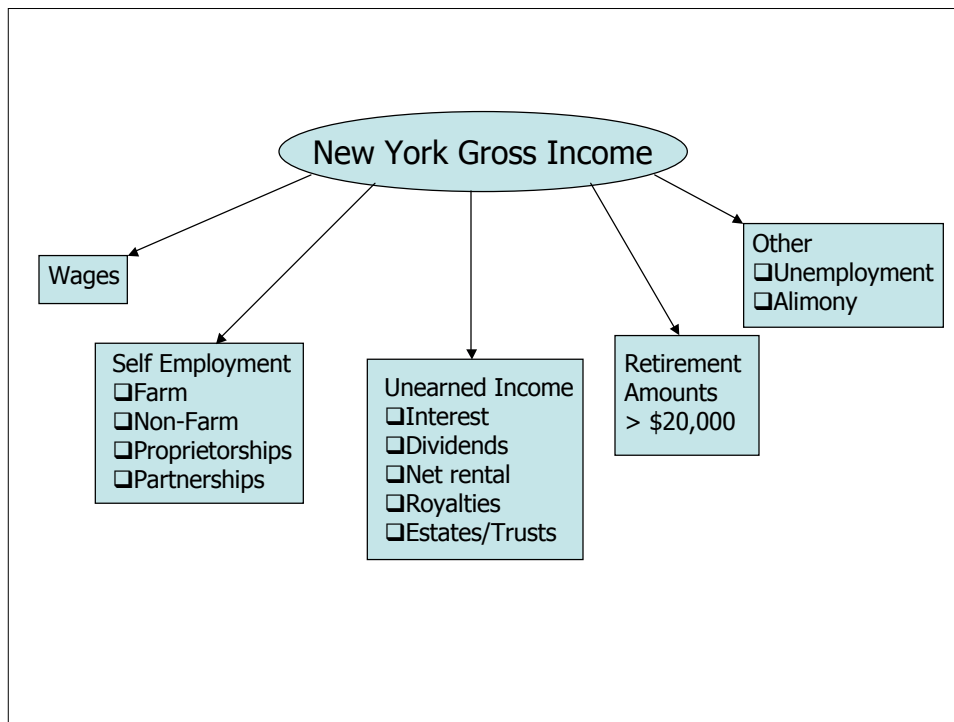
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- ❖ *American Community Survey Public Use Sample of New York Resident Households Surveyed in 2002*
  - Population File : Weighted sample of 57,000 person records
    - ✓ Contains detailed wage/non-wage income information
  - Household File : Weighted sample of 25,000 household records
    - ✓ Contains household sample weight for construction of married joint and head of household returns
- ❖ *2002 New York Personal Income Tax Return Sample*
  - ✓ Weighted sample of 113,000 records containing information from returns filed for the 2002 tax year.



## Limitations of ACS Data for Tax Gap Analysis

1. Income definitions do not precisely match those in federal AGI  
Example : Total interest on ACS vs. taxable interest in FAGI
2. Does not include non-periodic income such as capital or other gains
3. Amounts are top-coded to maintain confidentiality for higher income individuals. Top-codes for the New York sample in 2002 are:
  - Wages \$368,178
  - Self employment \$182,753
  - Unearned (interest ,etc) \$172,097
  - Retirement \$69,054
  - Other \$44,159
4. 2002 amounts are estimates partially inflated from 2001 income



## Returns with New York Gross Income Exceeding New York Standard Deduction:

### ACS Sample vs. PIT Return Sample

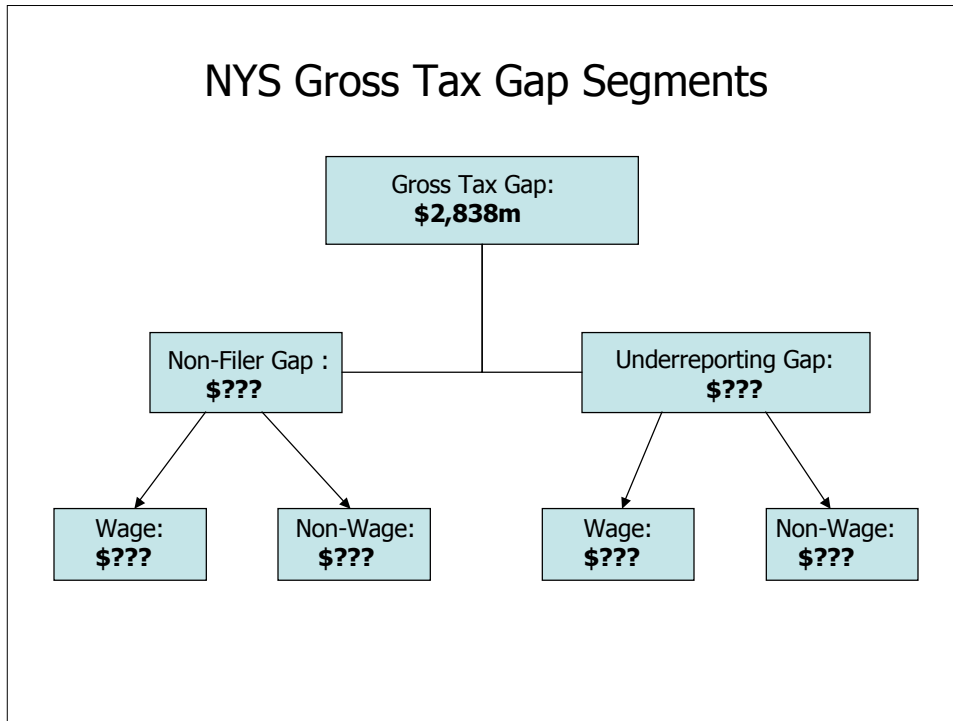
<b>Filing Status</b>	<b>2002 ACS : # Simulated Returns</b>	<b>2002 PIT Sample: Filed Returns #</b>	<b>Difference</b>	<b>% Non-Compliance</b>
<i>Single</i>	2,904,932	2,423,554	481,378	16.6%
<i>Single Dependent</i>	441,301	300,407	140,894	31.9
<i>Married Joint</i>	2,668,764	2,421,300	247,464	9.3
<i>Head of Household</i>	1,197,938	1,176,197	21,741	1.8
<b>Total</b>	<b>7,212,935</b>	<b>6,321,458</b>	<b>891,477</b>	<b>12.4%</b>

## NYS Personal Income Tax Gap By Filing Status Tax Year 2002

(Dollars in Millions)

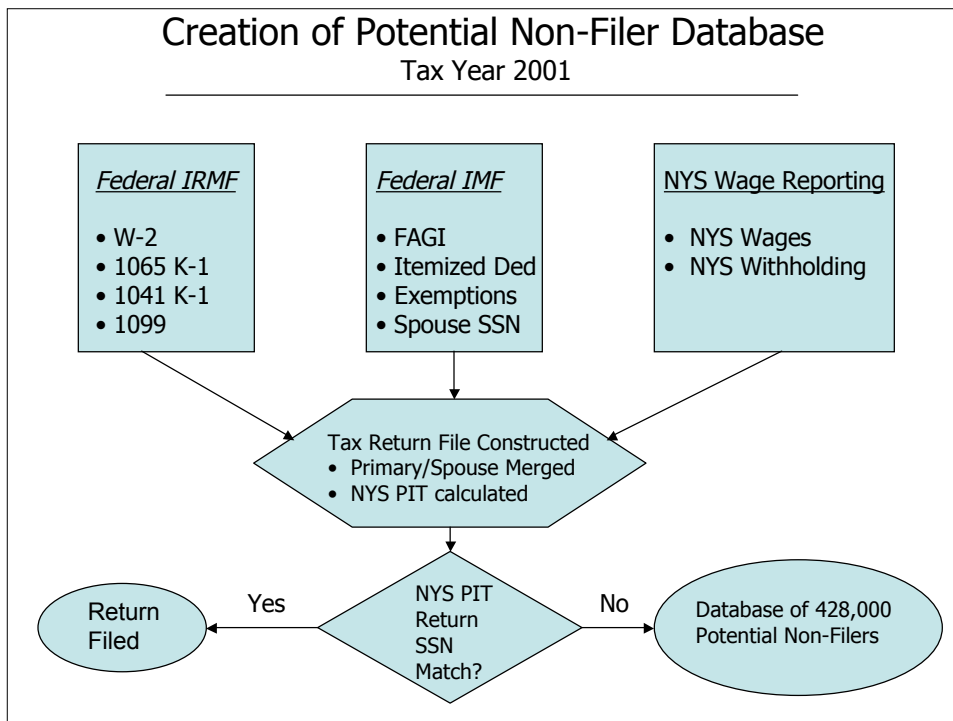
---New York Gross Income ---							
<b>Filing Status</b>	<b>2002 American Community Survey</b>	<b>2002 PIT Sample File</b>	<b>Income Ratio</b>	<b>2002 PIT Liability</b>	<b>Baseline Tax Liability</b>	<b>Gross Tax Gap</b>	<b>% Tax Gap</b>
<i>Single</i>	\$116,652	\$ 97,977	1.191	\$4,819	\$5,737	\$919	16.0%
<i>Single Dependent</i>	5,788	2,600	2.226	65	146	80	55.1
<i>Married Joint</i>	230,943	201,858	1.144	11,977	13,703	1,726	12.6
<i>Head of Household</i>	47,681	41,189	1.158	722	836	114	13.6
<b>Total</b>	<b>\$401,065</b>	<b>\$343,624</b>		<b>\$17,583</b>	<b>\$20,421</b>	<b>\$2,838</b>	<b>13.9%</b>

## NYS Gross Tax Gap Segments

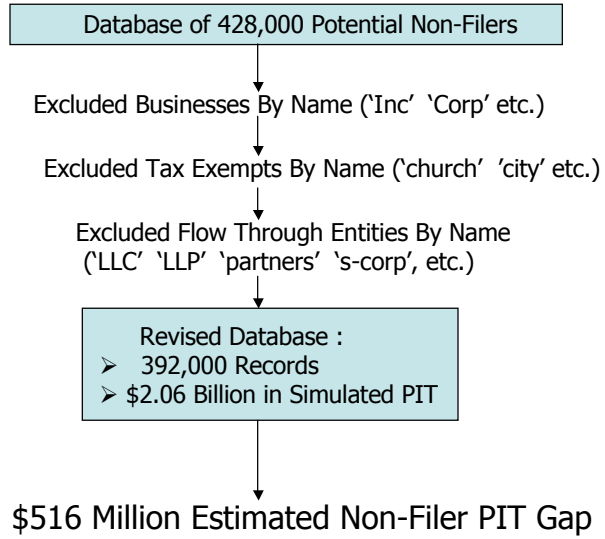


## Creation of Potential Non-Filer Database

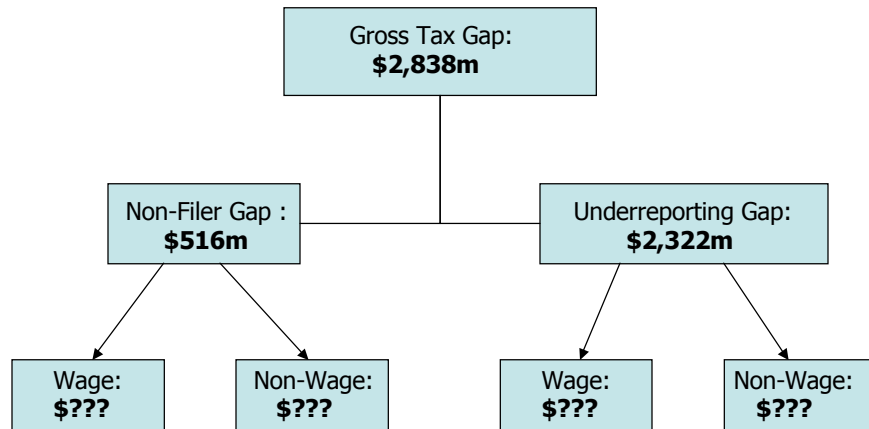
Tax Year 2001



## Estimation of 2001 Non-Filer Tax Gap



## NYS Gross Tax Gap Segments





## Wage vs. Non-Wage Components

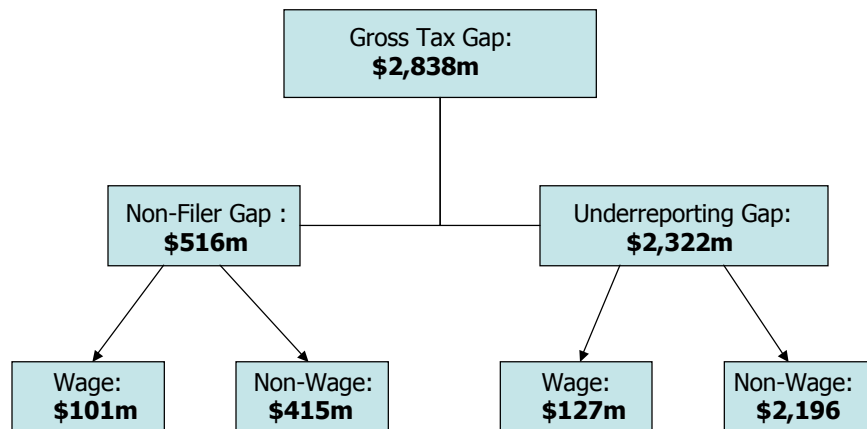
### Non-Filers :

- Analysis of Non-filer database indicated that 19.6% of total identified income was wage
- $516m * .196 = \$101m$  attributed to wage

### Underreporting:

- According to 1992 federal tax gap estimates, 5.45% of their tax gap from underreporting income was from wage income
- $\$2,322m * .0545 = 127m$  attributed to wage

## NYS Gross Tax Gap Segments



Baseline Tax Liability, Voluntary Reporting, and Tax Gap  
By Wage/Non-Wage Categories  
Tax Year 2002  
(Millions of Dollars)

Source	Baseline Tax Liability	Voluntary Tax Reported	-----\$ Tax Gap-----			Percent Tax Gap
			<i>Underreporting</i>	<i>Non-filers</i>	<i>Total</i>	
<i>Wage</i>	\$12,923	\$12,695	\$127 +	\$101 =	\$228	1.8 %
<i>Non-Wage</i>	7,499	4,888	2,196 +	415 =	2,611	34.8 %
<b>Total :</b>	<b>\$20,421</b>	<b>\$17,583</b>	<b>\$2,322 +</b>	<b>\$516 =</b>	<b>\$2,838</b>	<b>13.9 %</b>

## 2002 Net NYS PIT Tax Gap

Gross Tax Gap : \$2,838 million  
Audit/Compliance Revenue: - \$ 500 million  
 Net Tax Gap : \$2,338 million

## Issues Relevant to NY Tax Gap Analysis

- Data Limitations
- Sample Issues
- Non-Resident Tax Gap

**NEW YORK STATE  
PERSONAL INCOME TAX  
COMPLIANCE BASELINE STUDY**

**Tax Year 2002**

**New York State Department of Taxation and Finance  
Office of Tax Policy Analysis  
March 2005**

## **Acknowledgements**

The lead analyst on this study was Dan Bolognino in the Office of Tax Policy Analysis. Also contributing to the report were Arthur Friedson, David Boughtwood and Harry Sheevers in the Office of Tax Policy Analysis.

Special thanks are extended to Diana Sieczkarski and Lucy Caranfa in the Enterprise Services Division for their work in constructing the non-filer database.

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Thanks also to Rod Hoheisel and his staff at the Minnesota Department of Revenue for discussing the Minnesota tax gap study.

## Introduction and Executive Summary

The purpose of this study is to estimate the degree of compliance with New York State personal income tax law requirements for the reporting of taxable income. The tax which goes uncollected because of non-compliance is generally referred to as the “tax gap”. This is defined as the difference between taxes owed if one complied with all tax laws, or the true “baseline” tax liability, and taxes actually paid by taxpayers. The baseline amount of tax owed is estimated by comparing income amounts reported on income tax returns with similar income amounts households reported on federal census surveys. Tax associated with income amounts derived from the federal survey which were in excess of income amounts reported on returns were assumed to be unreported tax and therefore constituted the tax gap. For this analysis, income amounts reported on the federal American Community Survey for calendar year 2002 were compared to income amounts reported on New York State personal income tax returns for tax year 2002. The “gross” tax gap is defined as the difference between the baseline tax owed and the amount of tax voluntarily and timely reported on tax returns. The “net” tax gap is the amount which remains after the subtraction of audit and compliance collections from the gross tax gap. This study did not attempt to estimate non-compliance with regard to the overstatement of deductions, exemptions or credits.

The findings of this analysis of 2002 income are as follows:

- True “baseline” tax liability was \$20.4 billion compared to \$17.6 billion which was voluntarily reported on returns for tax year 2002. The gross tax gap was therefore estimated at \$2.8 billion, or 13.9 percent of the baseline tax.
- The gross tax gap of \$2.8 billion consisted of \$2.3 billion associated with the underreporting of income by filers and \$0.5 billion associated with potential non-filers. Furthermore, \$2.6 billion of the \$2.8 billion gap was related to non-wage income.
- Analysis of the American Community Survey household data implies that approximately 7.2 million resident returns should have been filed for 2002 compared to 6.3 million actually filed. The difference of 0.9 million returns implies a non-compliance rate of 12.4 percent with regard to filing.
- The trends in non-compliance regarding income reporting in New York State for tax year 2002 were similar to those estimated by the Internal Revenue Service in a 1992 study of the federal income tax gap.
- A recent study by the state of Minnesota using a similar methodology determined that the gross income tax gap in their state was 10.5 percent.
- Audit and compliance income tax collections for tax year 2002 were estimated to be \$500 million. Subtracting this from the \$2.8 billion gross tax gap yielded a “net” tax gap estimate of \$2.3 billion, or 11.3 percent.

## Overview

The purpose of this study is analyze the degree to which New York State residents are complying with state tax law requirements for the reporting of taxable income. Since the late 1970s, the Internal Revenue Service, as well as a number of other states, have attempted to measure what is commonly referred to as the “tax gap”. This is defined as the difference between taxes owed (if one complied with all tax laws) and taxes actually paid by taxpayers. Since the 1970’s, the IRS has periodically conducted a series of detailed studies which attempted to analyze levels of compliance with regard to income reporting, claiming of adjustment, deductions, exemptions, and tax credits, and with underpayment of declared tax liability. This report will only focus on the non-compliance relating to the reporting of components of income. These are the individual income items which constitute federal adjusted gross income such as wages, interest, dividends, business income, etc. The methodology involves comparing levels of income reported on filed New York State personal income tax (PIT) returns with federal survey data compiled by the U.S. Census Bureau where persons are asked to detail income items which are similar to federal adjusted gross income. Estimates of underreported tax liability are then derived from the analysis of underreported income.

The following section presents a detailed description of the data sources and methodology used to determine the level of compliance with regard to reporting of income on New York State personal income tax returns for the 2002 tax year. Also presented are the results, including the overall non-compliance rate and an estimate of the amount of underreporting of liability by filing status. The analysis also disaggregates levels of non-compliance between those not filing tax returns (non-filers) and those persons filing returns but failing to report all of their income (underreporting). Using results generated by the IRS in their historical tax gap studies, these “non-filer” and “underreporting” non-compliance rates are further broken down between wage and non-wage income sources.

## Data and Methodology

The methodology used in this study is primarily modeled on procedures recently used by the State of Minnesota Department of Revenue to measure the tax gap in their individual income tax based on census income for the 1999 calendar year. The methodology employed here relies on the analysis of income reported by New York residents on the annual American Community Survey (ACS) conducted by the U.S. Bureau of the Census. The ACS data is compared to information reported by New York personal income taxpayers on their state income tax returns to determine the level of compliance with filing and income reporting requirements for the tax.

The analysis requires that these two data sources be made compatible with each other to facilitate the direct comparison of income reporting by subgrouping. Specifically, the limits which are imposed on the ACS data with regard to top and bottom coding of information and the exclusion of certain types of income were also imposed on the state PIT return information. Top and bottom coding is a procedure whereby income amounts are not permitted to exceed certain threshold values. Where reported amounts exceed these thresholds, the threshold amount is given. This technique is employed to preserve confidentiality for higher income individuals. While this limits the ability to directly analyze the trends in compliance for high income taxpayers, it does provide a valid basis for analyzing these trends for most taxpayers.

### *American Community Survey Data (New York Sample)*

The ACS Public Use Microdata sample for New York residents was used for this study. Detailed income information was obtained from the “population” sample file of New York residents which consists of 57,000 “person records” surveyed during calendar year 2002. These records are weighted to represent information for 18.5 million New York State residents. The ACS is a “rolling” survey conducted throughout the year and the income data questions ask respondents to indicate their income from 8 different sources received during the prior 12 months. Those surveyed in March 2002 are therefore asked to provide information on income received during March 2001 to February 2002. Likewise, those surveyed later in 2002 are providing information which covers parts of the 2001 and 2002 tax years. The Census Bureau applies an inflation factor to these income amounts to grow the income amounts to the later year. Therefore, income reported for respondents surveyed during 2002 calendar year is measured in 2002 dollars.

Five of the eight income categories consist of income sources which are primarily taxable for New York personal income tax. These are:

- Wages, salary, commissions, bonuses, or tips ;
- Self employment income from farm and non-farm business including sole proprietorships and partnerships;
- Interest, dividends, net rental income, royalty income, or income from estates/trusts;
- Retirement, survivor, or disability pensions (taxable above \$20,000 for NYPIT and fully exempt if government or military pension);
- Other sources of taxable income.

As mentioned earlier, the income items on the ACS are top-coded so as not to exceed certain values to protect confidentiality for higher income individuals. The New York top-codes range from \$44,000 for ‘other’ income to \$368,000 for wages. Self-employment and interest income categories are also bottom-coded at negative \$9,999.

### *New York Personal Income Tax Return Sample*

Income amounts from the 2002 ACS New York sample were compared to the sample of PIT returns filed for the 2002 tax year. Because the 2002 ACS sample data includes an estimate of 2002 income (derived from a mix of 2001 and 2002 data), the comparison with the ‘actual’ income data from 2002 returns will be slightly distorted.

In order to make a valid comparison between the ACS and the return data, income amounts on the PIT sample were top and bottom coded using the same threshold amounts as the ACS. The PIT sample analysis was limited to resident returns and those part-year (IT-203) returns indicating they “moved-in” during the 2002 tax year.



## *Methodology for Comparing ACS Data with PIT Sample Return Data*

In order to derive “tax gap” estimates from these two data sources, the analysis of the ACS data focused on those persons or households indicating enough income to file returns and have New York State tax liability. To do this, information regarding persons and households from the ACS was used to organize individuals by federal filing status. Specifically, a determination was made as to whether the taxpayer would be filing as a single, single dependent (typically students), married joint, or head of household. Only those returns with taxable income which exceeded the standard deduction were selected. This was done to exclude income from non-taxable individuals from the calculation of the tax gap.

### *Definition of Income*

Income information from the ACS does not neatly correspond to the definition of New York adjusted gross income (NYAGI). For example, the ACS contains total interest income including state and local bond interest which is not included in federal taxable interest. In addition, retirement income amounts from the ACS are only partly taxable in New York because there is a \$20,000 exclusion on private pension income and a complete exclusion for public sector pensions. Adjustments were made to the data to make both interest and retirement income from these files compatible.

In addition to top-coding, the most significant impediment to using the ACS information is the fact that non-periodic sources of income, primarily net capital gains and other gains and losses, are not included in the survey. This is especially problematic for New York where these sources of income are more significant than in most other states.

For purposes of this analysis, a modified version of New York gross income was derived from available sources of taxable income which appear on the ACS. The definition is as follows:

New York Gross Income (NYGI) =

- Wages
- + Self employment income (farm/nonfarm businesses and proprietorships and partnerships)
- + Interest/dividends/net rental income/royalties/estates and trusts
- + Retirement income (only amounts over \$20,000)
- + Other income (unemployment compensation, alimony, etc)

### *Gross Tax Gap*

The “gross” tax gap is defined by the IRS as the amount of tax liability for a given tax year that is not paid voluntarily and timely. It is the difference between the “true” baseline tax liability owed and the amount voluntarily remitted by taxpayers. In order to calculate this, NYGI amounts were derived from both the ACS and the PIT sample file and were tabulated by filing status. These amounts were then compared for each filing status and “income gap” ratios were derived to gauge the degree of underreporting of income

for each individual filing status. This procedure derived “aggregate” tax gap estimates for each filing status by calculating the ratio of total NYGI from the ACS to total NYGI for the PIT sample and then applying this ratio to the total tax liability for the filing status. The resulting tax gaps by filing status were then summed to estimate the total “gross” tax gap.

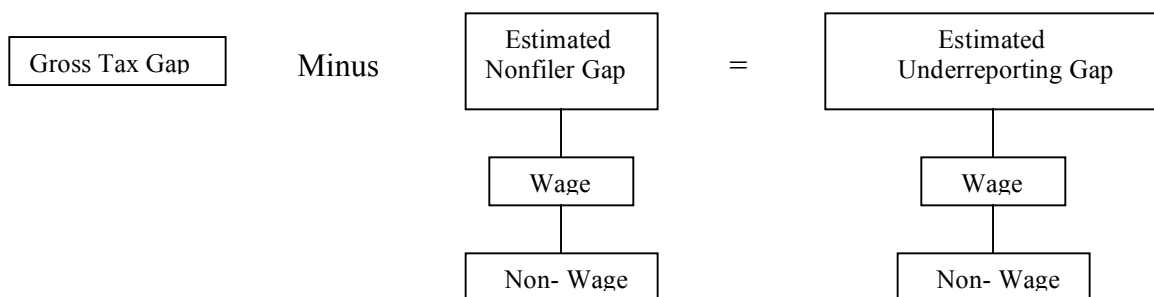
The gross tax gap is disaggregated further into the amount attributable to underreporting of income by those filing returns and the amount attributable to those not filing, or the “non-filers”. This is done by first determining the tax gap associated with non-filers from the analysis of federal and state tax data sources. Once the non-filer tax gap is determined, the gap associated with underreporting is the “gross” tax gap minus the “non-filer” tax gap.

To determine the non-filer gap in New York State, income data on New York residents available from federal and state tax sources was used to determine who had New York source income sufficient to trigger a state income tax liability. These data sources included the federal IRMF file, the federal IMF file, and data from the NYS Wage Reporting system. The analysis was done on the most complete year available which was 2001 and was conducted by staff in the Enterprise Services Division. These sources include income information supplied on federal and NYS W-2 and federal 1099 forms. These potential taxpayers were matched against NYS income tax returns actually filed for 2001 to see if these individuals had filed returns and paid the appropriate tax. Those individuals identified from federal and state sources with potential liability that did not file returns were selected as potential non-filers. This information will also be used to aid department staff in the administration of ongoing non-filer programs.

Experience with non-filer audit programs indicates that a significant portion of potential non-filer income identified through data matches with filed returns is not taxable income to New York. This is mainly due to the identified income belonging to non-individuals (banks, trust funds, or investment groups) or organizations not subject to tax. Also, addresses sourced to New York on the federal or state data often belong to someone other than the taxpayer such as the taxpayer’s bank or tax preparer. Based on discussions with audit division staff experienced with these programs, assumptions were made regarding the percentage of total outstanding non-filer liability identified which might actually owed to New York.

The “non-filer” and “underreporting” tax gaps categories were broken down further between amounts attributable to wage and non-wage income. The portion of the non-filer tax gap associated with wage income was derived by an analysis of the percentage of wage income to total non-filer income for those identified non-filers. The allocation of the underreporting tax gap between wage and non-wage sources was based on results obtained by the IRS in their analysis of the federal income tax gap for the 1992 tax year.

The following diagram presents the breakdown of the gross tax gap:



## Net Tax Gap

The “net” tax gap is defined as the gross tax gap minus the amount of taxes collected for the tax year in question through audit activities and compliance enforcement. The IRS defines this as the “true” tax liability for a given tax year that is not eventually paid. The audit, assessment, and collection cycle for a particular tax year encompasses a number of years following the tax year in question. Some amounts are assessed and collected within six months of the filing of a return, as in cases where automated processing systems can detect problems or omissions and issue bills expeditiously. Other amounts are assessed much later following a more intensive analysis by audit staff. Standard reports generated by information systems in the department do not detail collections by tax year. It is therefore necessary to estimate this from available data and discussions with department staff.

## Results of Analysis

The following sections presents the detailed results of the analysis of the compliance baseline study of New York State tax returns for the 2002 tax year. The first section discusses the results of the analysis of the gross tax gap and its’ components and also compares these results with the most recent federal income tax gap estimates. The second section discusses the impact of audit, compliance, and enforcement efforts to recover some of this total unpaid liability and computes the remaining “net” tax gap.

### Computation of the Gross Tax Gap

Table 1 illustrates NYGI amounts derived from the 2002 ACS data and the 2002 PIT return sample and the associated income ratio by filing status. Actual 2002 PIT liability reported on tax returns are multiplied by these ratios to scale-up to the true “baseline” tax liability for each of these categories. The difference between the baseline tax and the tax actually calculated from returns constitutes the level of unreported tax liability. As the table indicates, income ratios range from 1.144 for married joint returns to 2.226 for single dependent returns. Although there does appear to be a significant amount of non-compliance from single dependent filers, small sample sizes for this group also resulted in some volatility. The non-compliance rate, defined as the tax gap as a percentage of the true baseline liability, ranges from 12.6 percent for married joint returns to just over 55 percent for single dependent returns. The overall baseline tax liability of \$20,421 million is \$2,838 million above the \$17,583 million which appears on tax returns for the 2002 tax year. This “gross” tax gap of \$2.8 billion implies an overall non-compliance rate of 13.9 percent.

**Table 1**

Summary of New York State Personal Income  
Tax Gap By Filing Status For Tax Year 2002  
(Dollars in Millions)

-----New York Gross Income (NYGI)-----

Filing Status	2002 American Community Survey	2002 PIT Sample	Income Ratio	2002 PIT Liability	Baseline Tax Liability	Gross Tax Gap	%Tax Gap
Single	\$116,652	\$ 97,977	1.191	\$4,819	\$5,737	\$919	16.0%
Single Dependent	5,788	2,600	2.226	65	146	80	55.1
Married Joint	230,943	201,858	1.144	11,977	13,703	1,726	12.6
Head of Household	47,681	41,189	1.158	722	836	114	13.6
<b>Total :</b>	<b>\$401,065</b>	<b>\$343,624</b>		<b>\$17,583</b>	<b>\$20,421</b>	<b>\$2,838</b>	<b>13.9%</b>

Table 2 presents a comparison by filing status between the number of 2002 tax year income tax returns actually filed and the number of ‘simulated’ returns from the ACS sample. The table shows that the number of returns actually filed by New York State residents totaled 6.3 million in 2002 compared to the number of ‘simulated’ returns from the analysis of the ACS person data which totaled 7.2 million, or 891,000 returns more. This difference is composed of both potential non-filers and those for whom no federal or state data exists to assess the taxpayer. The latter group was referred to in the Minnesota study as the ‘invisibles’.

**Table 2**

Comparison of Simulated Returns from ACS Sample  
With NYS PIT Filed Returns for Tax Year 2002

<b>Filing Status</b>	<b>2002 ACS : # Simulated Returns</b>	<b>2002 PIT Sample: # Filed Returns</b>	<b>Difference</b>	<b>% Non-Compliance</b>
<i>Single</i>	2,904,932	2,423,554	481,378	16.6%
<i>Single Dependent</i>	441,301	300,407	140,894	31.9
<i>Married Joint</i>	2,668,764	2,421,300	247,464	9.3
<i>Head of Household</i>	1,197,938	1,176,197	21,741	1.8
<b>Total :</b>	<b>7,212,935</b>	<b>6,321,458</b>	<b>891,477</b>	<b>12.4</b>

The diagram below presents the disaggregation of the gross tax gap by the ‘underreporting’ and ‘non-filers’ categories of non-compliance and by wage and non-wage sources within these categories. The non-filer tax gap of \$516 million was derived from the analysis of federal and state wage and non-wage tax data sources described on page 5. An analysis of the non-filer data collected indicated that approximately 20 percent of the identified income is related to wage income. The portion of the \$516 million nonfiler gap associated with wage was therefore assumed to be \$101 million. The amount of underreported liability which is attributable to wages was based on the percentage of the wage tax gap to the total underreporting tax gap derived by the IRS in their analysis of the 1992 federal personal income tax gap.

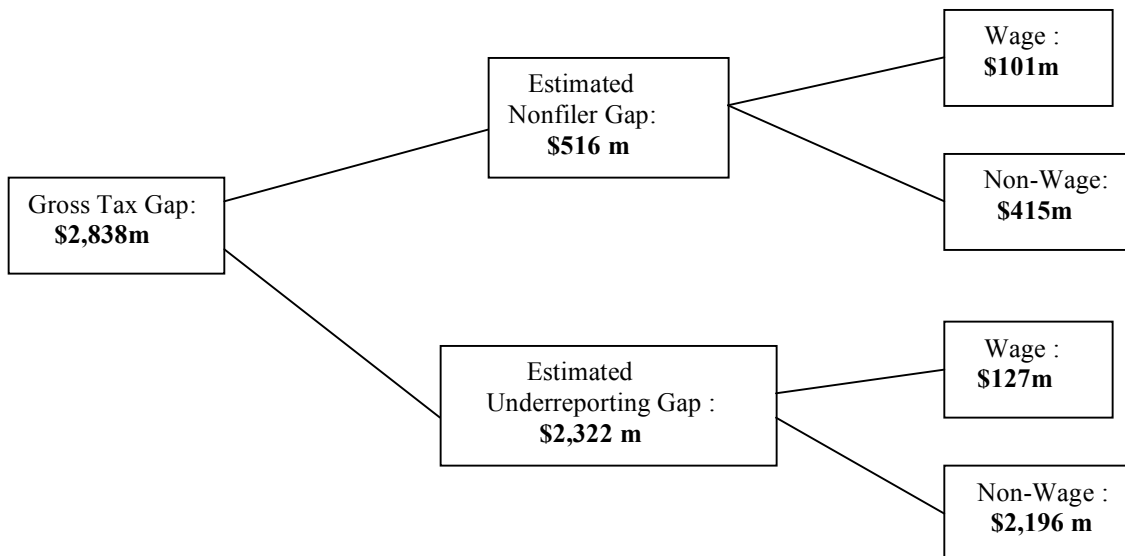


Table 3 presents a breakdown of baseline (or “true”) liability between the tax voluntarily reported on returns and the components of the gross tax gap by wage and non-wage sources. The ratio of wage to total income on filed returns was used to determine that \$12.7 billion of the \$17.6 billion in voluntary tax reported was associated with wage income. Although wages comprise a large portion of both “true” and “voluntarily” reported tax liability, wage income does not constitute a significant portion of the tax gap attributable to underreporting and non-filing. Federal tax gap studies have demonstrated that the level of underreporting of non-wage income greatly exceeds the non-compliance rate for wage reporting. For example, the 1992 study of the federal income tax gap determined that business income, especially non-farm proprietor income and informal supplier income, constituted the largest percentage of total underreported income. In total, the “wage” non-compliance rate is less than 2 percent. Conversely, the non-compliance rate related to the underreporting/non-filing of non-wage income is significant at nearly 35 percent.

**Table 3**  
Comparison of Baseline Tax Liability, Voluntary Reporting,  
and Components of Tax Gap By Wage and Non-Wage Categories For 2002  
(Millions of Dollars)

Source	Baseline Tax Liability	Voluntary Tax Reported	-----\$ Tax Gap-----			Percent Tax Gap
			Underreporting	Non-filers	Total	
<i>Wage</i>	\$12,923	\$12,695	\$127	\$101	\$228	1.8%
<i>Non-Wage</i>	7,499	4,888	2,196	415	2,611	34.8
<b>Total :</b>	<b>\$20,421</b>	<b>\$17,583</b>	<b>\$2,322</b>	<b>\$516</b>	<b>\$2,838</b>	<b>13.9%</b>

*Gross Tax Gap : 2002 NYS Results vs. 1992 IRS Estimates*

The results of this analysis of the 2002 New York State income tax gap were compared to the results obtained by the federal IRS in their detailed 1992 estimation of the federal income tax gap. Table 4 provides a comparison of non-compliance rates between these two studies. The amounts and percentages presented for the IRS analysis are for the “high” scenario presented in the study which concluded that the tax gap attributable to underreporting and nonfiling was \$72.4 billion, or 13.7 percent (the “low” scenario was only slightly lower at 13.4 percent). The aggregate 2002 New York State tax gap of \$2.84 billion is approximately 13.9 percent of ‘true’ baseline tax liability. This is therefore slightly higher than the “high” IRS scenario for the 1992 tax year.

**Table 4**  
Comparison of Personal Income Tax Gaps:  
1992 IRS Study vs. 2002 NYS Analysis  
(Billions of Dollars)

Source :	-----1992 IRS -----		-----2002 NYS -----	
	Amount	Percent	Amount	Percent
<i>Voluntary</i>	\$457.0	86.3%	\$17.58	86.1%
<i>Tax Gap:</i>	<b>\$72.4</b>	<b>13.7</b>	<b>\$2.84</b>	<b>13.9</b>
<i>Underreporting</i>	\$58.6	11.1	\$2.32	11.4
<i>Non-Filers</i>	13.8	2.6	0.52	2.5
<b>“True” Tax Liability</b>	<b>\$529.4</b>	<b>100.0</b>	<b>\$20.42</b>	<b>100.0</b>

It is important to note that the New York tax gap analysis focuses only on the underreporting of income by filers and income not reported by non-filers. These results are compared in Table 4 to only that part of the federal tax gap which relates to those areas. The 1992 federal analysis was broader in scope and included an additional tax gap of \$22.9 billion which was associated with overstated offsets to income, net math errors, and underpayment situations (remitting less tax than shown on return). Adding these tax gap categories resulted in a ‘true’ 1992 federal tax liability of \$552.3 billion, or a total tax gap of 95.3 billion (17.3 percent).

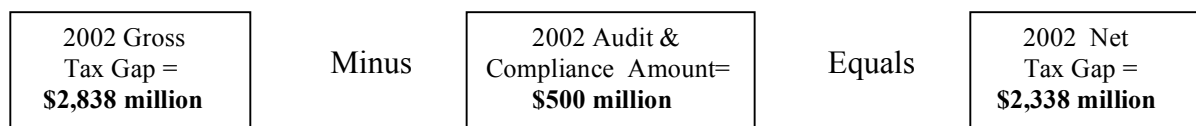
*Estimation of the Net Tax Gap*

The results presented above detail the characteristics of the \$2.8 billion “gross tax gap” in the New York State personal income tax for tax year 2002. This represents the total difference between what is “true”, or baseline tax liability owed by New York residents and the amount voluntarily reported and paid with tax returns. Of course, some of this unreported liability is recovered through audit, compliance, and enforcement efforts of New York State. As defined earlier, the amount of unpaid liability which remains after these collection efforts is the “net” tax gap.

The Department of Taxation and Finance has a number of audit and compliance programs in place to identify delinquent taxpayers and to assess these taxpayers for the underpayment amounts. While collections from these programs are tracked on a fiscal year basis, these amounts are derived from audits covering a number of tax years. As mentioned earlier, information systems are not generally designed to allocate audit and enforcement collections for a particular fiscal year on a tax year basis. Furthermore, since tax law allows for the auditing of returns for three years following the due date of the return, audit and assessment activities for 2002 tax returns will continue until the spring of 2006. It is therefore necessary to estimate audit and compliance collections for tax year 2002.

Information of the amounts of personal income collected through these operations for the 2002 tax year were estimated from data supplied by NYS Department of Taxation and Finance staff involved in audit, processing, tax compliance, and accounting. Tax Operations Collections Reports, which detail audit and compliance income tax revenues sourced to New York State by fiscal year, were also reviewed, as were standard accounting reports specifying assessment collections. Based on data available and an analysis of recent annual trends, it is estimated that audit and compliance collections of personal income tax liability for 2002 tax year will be approximately \$500 million. This amount may be overstated since interest and penalty is also included in the reporting of these collections. Ideally, only collected tax amounts should be subtracted from the gross tax gap to arrive at the net tax gap.

The following diagram summarizes the analysis of the “gross” and “net” tax personal income tax gaps for the 2002 tax year. As indicated, a substantial portion of the tax gap in 2002 will not be assessed.



## **Issues Relevant to the Analysis of the New York Income Tax Gap**

This section presents a discussion of various issues concerning the analysis presented in this report.

### *Sample Issues*

The analysis presented in this report is based on sample data. The size of these samples and the methods used to construct them determine the level of accuracy in analyzing various sub-groupings of the information such as by filing status or income class. The analysis in this report was originally conducted by looking at data from the ACS and NYS PIT samples by income classes within filing status. Other states like Minnesota have attempted to conduct tax gap studies by looking at trends by income class. The results obtained by this level of analysis using the New York samples were not robust because of the insufficient sample sizes. The small number of observations in many of the data cells resulted in significant sampling errors in these estimates. This was especially true with the ACS data which is a much smaller sample than our PIT return file and has limited income information for high income taxpayers. Inadequate ACS sample sizes in the \$500K and over class by filing status was especially problematic. Both samples, however, appeared large enough to produce valid aggregate results by filing status.

### *Focus on New York Residents*

New York is one of only a few states which have significant nonresident taxpayer populations. However, federal census data such as the American Community Survey only provide information for persons and households which reside in a particular state. This data therefore does not allow for the analysis of the tax gap associated with New York taxpayers that reside in other states. Since over 600,000 full year nonresident taxpayers paid nearly \$3 billion in taxes to New York in 2002, the tax gap attributable to these taxpayers could be significant. Imputing the nonresident tax gap from resident information would be less accurate than developing estimates from actual nonresident household data.

The non-resident tax gap may not be as significant as expected, however, because nearly 85 percent of nonresident income sourced to New York is wage income. This is because unearned income is typically sourced to the state of residence. As discussed earlier, the IRS studies have concluded that wages are only a small portion of the federal income tax gap.

### *Data Limitations*

The census practice of top-coding high income amounts presents a substantial problem in analyzing the income tax gap in New York. For 2002, there were 196,000 full year resident filers with NYAGI over \$200,000. NYAGI of these taxpayers totaled \$123 billion and their tax liability equaled \$7.4 billion, or 42 percent of all resident tax liability in 2002. The lack of specific information on these households in the federal survey data severely limits the ability to accurately calculate a baseline of total New York income tax due for these taxpayers.

Also limiting the usefulness of the federal ACS data for analysis of unreported taxable income is the lack of information on capital gains income. Although this was noted as an issue in the Minnesota tax gap study, conducting the analysis absent this income source is a more substantial problem in the estimation of the tax gap in New York. Because of the large number of high income taxpayers in New York, capital gains are a significant source of taxable income. Although the level of capital gains income can vary significantly from year to year, depending on the economy, this source of income has comprised from 4 to

12 percent of gross income in New York in recent years. Without capital gains income in the definition of federal gross income used in this analysis, non-compliance rates for this type of income are assumed to be similar to the rates applicable to other sources of income. It is not known whether this is valid or not. Federal studies, however, have indicated that underreporting of capital gains income is not a significant portion of the federal income tax gap. This is due to the fact that many transactions involving capital gains are well documented.



## References

Minnesota Department of Revenue. *Individual Income Tax Gap: Tax Year 1999* (June 7, 2004).

U.S. Department of Treasury, Internal Revenue Service. *Federal Tax Compliance Research: Individual Income Tax Gap Estimates for 1985, 1988, 1992* (Rev. 4-96).

## Suggested Readings

Brown, Robert E. and Mark J. Mazur. "IRS's Comprehensive Approach to Compliance Measurement," *National Tax Journal* (September 2003).

Idaho State Legislature Office of Performance Evaluations. *Estimating and Reducing the Tax Gap in Idaho* (December 1996).

Topeka Capital-Journal. "IRS Leader Tackles \$225 Billion Tax Gap," (April 6, 2004).

U.S. General Accounting Office. *Tax Administration: IRS' Tax Gap Studies* (March 1988).

U.S. General Accounting Office. *Taxpayer Compliance: Analyzing the Nature of the Income Tax Gap* (January 9, 1997).