
Appendix A: Provisions Affecting Low Income Taxpayers

The Taxpayer Relief Act of 1995 contains several provisions that significantly benefit low-income taxpayers. These provisions also work to increase the progressivity of the tax. For low-income households, these provisions will make New York the most favorable state in the region, in terms of income tax. By 1997, almost half of all taxpayers will either pay no taxes, or receive tax rebates. Over 90 percent of the first quintile (i.e., 20 percent of taxpayers with the lowest incomes) of taxpayers in the State will either pay no taxes or receive tax rebates.

One of the goals of the new legislation was to eliminate the scheduled tax increases that would have affected many low-income taxpayers. Another goal was to provide tax relief to moderate-income taxpayers, who would not have benefitted significantly from the scheduled changes. The income tax reduction program of 1995 accomplished these goals by retaining provisions in the tax law that benefitted low- to moderate-income taxpayers. Some of these provisions, such as the household credit and the bottom rate of 4 percent, would have been eliminated by 1997 under old law.

The enacted program also implemented the scheduled tax changes that would have benefitted low-income taxpayers. These provisions include the increase in standard deduction amounts and the full and accelerated implementation of the earned income credit.

Interpretation of Tables

This section contains tables reporting the impact of recent law changes on low-income taxpayers. Appendix B describes in detail the methodology used to construct these tables. However, there are several points to note to aid proper interpretation of results. Most importantly, an attempt was made to construct a comprehensive income measure. The components of this measure are highlighted in Appendix B. Many non-taxed sources of income were included in this measure.

As a result, there can be individuals with large incomes but little or no tax liability because their income is derived from non-taxed sources. An implication of this result is that some high-income individuals may not appear to benefit (lose) from tax reductions (increases).

Analysis of tax changes is done on a constant base of taxpayers. The 1992 Tax Department sample of income tax returns was used to derive the tax base to be analyzed. No attempt was made to grow the file to reflect economic changes. The analysis concentrates on analyzing tax changes. Introducing economic parameters could confound the analysis of specific tax measures, confusing the main focus of the report. Thus, the emphasis is on the impact of various tax parameters on a given set of taxpayers.

To provide a basis for the comparisons which follow, Table A-1 shows selected impacts on taxpayers for base year 1994 tax law:

Table A-1: Base 1994 Tax By Quintile

Quintile	Expanded AGI Range	Percent of Total Liability	Average Tax Paid	Effective Tax	Number with No Tax
First	Under \$10,461	(0.13%)	(\$10)	(0.17%)	1,612,571
Second	\$10,462-\$18,301	0.61%	\$45	0.31%	1,220,069
Third	\$18,302-\$30,161	4.95%	\$365	1.54%	592,011
Fourth	\$30,162-\$51,641	16.84%	\$1,240	3.11%	143,703
Fifth	Over \$51,641	77.73%	\$5,728	5.02%	26,361
Total		100.00%	\$1,474	3.72%	3,594,715

Tables A-3, A-5, A-6, A-7 and A-8 all follow the same format, described below reading left to right across columns. First, the data is divided into population quintiles ranked by income. The income levels associated with the quintiles are shown in the second column. Each table then reports the number of taxpayers impacted by a provision. The percentage of taxpayers within a quintile with a change is reported in the column headed "Percent." The tables also report the average change in tax paid due to the provision being analyzed, along with the average change in effective tax rate. The final column reports the decrease (increase) in taxpayers with no tax liability. All changes are relative to a baseline of 1994 law.

Household Credit

The household credit provides nonrefundable tax relief to taxpayers whose deductions and exemptions do not bring their taxable income to zero. The credit increases as family size increases. Also, the value of this credit decreases as income rises. It phases out at \$28,000 of federal adjusted gross income (FAGI) for single taxpayers and \$32,000 for all others. Table A-2 provides details of the household credit.

Table A-2: New York State Household Credit

Federal Adjusted Gross Income		Single									
		Amount of Household Credit									
<u>Over</u>	<u>But not over</u>										
\$.....	\$5,000*	\$75									
\$5,000	\$6,000	\$60									
\$6,000	\$7,000	\$50									
\$7,000	\$20,000	\$45									
\$20,000	\$25,000	\$40									
\$25,000	\$28,000	\$20									
\$28,000	\$.....	No credit is allowed									
Federal Adjusted Gross Income		Married (Filing Jointly) & Head of Household									
		Number of Exemptions Claimed on Federal Return									
<u>Over</u>	<u>But not over</u>	1	2	3	4	5	6	7	over 7**		
\$.....	\$5,000	\$90	\$105	\$120	\$135	\$150	\$165	\$180	\$15	\$15	
\$5,000	\$6,000	\$75	\$90	\$105	\$120	\$135	\$150	\$165	\$15	\$15	
\$6,000	\$7,000	\$65	\$80	\$95	\$110	\$125	\$140	\$155	\$15	\$15	
\$7,000	\$20,000	\$60	\$75	\$90	\$105	\$120	\$135	\$150	\$15	\$15	
\$20,000	\$22,000	\$60	\$70	\$80	\$90	\$100	\$110	\$120	\$10	\$10	
\$22,000	\$25,000	\$50	\$60	\$70	\$80	\$90	\$100	\$110	\$10	\$10	
\$25,000	\$28,000	\$40	\$45	\$50	\$55	\$60	\$65	\$70	\$5	\$5	
\$28,000	\$32,000	\$20	\$25	\$30	\$35	\$40	\$45	\$50	\$5	\$5	
\$32,000	\$.....	No credit is allowed									
Federal Adjusted Gross Income		Married (Filing Separately)									
		Number of Exemptions Claimed on Federal Return									
<u>Over</u>	<u>But not over</u>	1	2	3	4	5	6	7	over 7**		
\$.....	\$5,000*	\$45	\$52.50	\$60	\$67.50	\$75	\$82.50	\$90	\$7.50	\$7.50	
\$5,000	\$6,000	\$37.50	\$45	\$52.50	\$60	\$67.50	\$75	\$82.50	\$7.50	\$7.50	
\$6,000	\$7,000	\$32.50	\$40	\$47.50	\$55	\$62.50	\$70	\$77.50	\$7.50	\$7.50	
\$7,000	\$20,000	\$30	\$37.50	\$45	\$52.50	\$60	\$67.50	\$75	\$7.50	\$7.50	
\$20,000	\$22,000	\$30	\$35	\$40	\$45	\$50	\$55	\$60	\$5	\$5	
\$22,000	\$25,000	\$25	\$30	\$35	\$40	\$45	\$50	\$55	\$5	\$5	
\$25,000	\$28,000	\$20	\$22.50	\$25	\$27.50	\$30	\$32.50	\$35	\$2.50	\$2.50	
\$28,000	\$32,000	\$10	\$12.50	\$15	\$17.50	\$20	\$22.50	\$25	\$2.50	\$2.50	
\$32,000	\$.....	No credit is allowed									

* This may be any amount up to \$5,000, including "0" or a negative amount.

** For each exemption, the amount in this column is added to the column 7 amount.

The credit was scheduled to be repealed by 1997. The repeal of the credit would have increased the number of taxpayers paying tax by nearly 260,000 compared to 1994. It would have resulted in a tax increase for about 2.8 million taxpayers, most with low- to moderate-incomes with federal adjusted gross income less than \$32,000.

The 1995 legislation retains the household credit. Table A-3 shows that nearly 1.8 million taxpayers use the credit. The credit saves taxpayers an average of \$39. This provision helps reduce the tax burdens of lower income taxpayers most significantly. Nearly all taxpayers who use the credit are in the middle three quintiles, with half of these taxpayers in the third quintile. Many taxpayers in the first quintile cannot use the credit because it is not refundable. For many of these taxpayers the standard deduction is sufficient to reduce their tax liability to zero.

Table A-3: Effect of Eliminating the Household Credit*

Quintile	Expanded AGI Range**	Taxpayers with Increase in Tax Liability		Average Change in Tax Paid	Average Change in Effective Tax Rate	Change in Number with No Tax***
		Number	Percent			
First	Under \$10,461	105,925	6.1%	\$32	0.35%	(43,364)
Second	\$10,462-\$18,301	417,706	23.9%	\$44	0.30%	(38,167)
Third	\$18,302-\$30,161	815,340	46.7%	\$41	0.17%	(29,286)
Fourth	\$30,162-\$51,641	412,492	23.6%	\$34	0.09%	(8,953)
Fifth	Over \$51,641	20,445	1.2%	\$39	0.06%	(1,175)
Total		1,771,908	20.3%	\$39	0.16%	(120,945)

* Based on 1992 income data.

** Expanded AGI includes such items as nontaxable compensation (fringe benefits) and certain nontaxable transfers (welfare, workers compensation).

***Includes taxpayers with negative tax liabilities due to refundable credit.

Earned Income Credit

The State's earned income credit equals a percentage of the federal earned income credit. The federal earned income credit is calculated as a percentage of earned income, up to a maximum amount, which declines as income increases. Table A-4 summarizes the provisions of the credit in greater detail. The 1994 legislation originally scheduled the EIC to grow from 7.5 percent of the federal credit in 1994 to 20 percent of the federal credit in 1997. The tax reduction plan enacted in 1995 modified this credit and accelerated the 20 percent rate to become effective in 1996.

Table A-4: New York State Earned Income Credit

Tax Year	Federal Credit Rate	Maximum Creditable Earnings	Federal Maximum Credit	State Credit Rate	State Maximum Credit	Earnings for Start of Phase-Out	Phase-Out Rate	Income Cut-Off
1994								
Families with 1 child	26.30%	\$7,750	\$2,038	7.50%	\$153	\$11,000	15.98%	\$23,760
Families with 2 or more children	30.00%	\$8,425	\$2,528	7.50%	\$190	\$11,000	17.68%	\$25,300
Workers without children*	7.65%	\$4,000	\$306	7.50%	\$23	\$5,000	7.65%	\$9,000
1995								
Families with 1 child	34.00%	\$6,160	\$2,094	10.00%	\$209	\$11,290	15.98%	\$24,396
Families with 2 or more children	36.00%	\$8,640	\$3,110	10.00%	\$311	\$11,290	20.22%	\$26,673
Workers without children*	7.65%	\$4,100	\$314	10.00%	\$31	\$5,130	7.65%	\$9,230
1996 and after								
Families with 1 child	34.00%	\$6,160	\$2,094	20.00%	\$306	\$11,290	15.98%	\$24,396
Families with 2 or more children	40.00%	\$8,640	\$3,456	20.00%	\$518	\$11,290	21.06%	\$27,700
Workers without children*	7.65%	\$4,100	\$314	20.00%	\$46	\$5,130	7.65%	\$9,230

*Must be over age 24 and under age 65.

Notes: 1) Credit is refundable to residents, but non-refundable to nonresidents.

2) 1995 dollar amounts include indexing. After 1995 all dollar amounts will be indexed for inflation.

In addition, while the 1995 law change retained the household credit, the legislation also required that the EIC be reduced by any household credit taken. The retaining of the household credit provisions combined with the EIC insures that taxpayers do not face tax increases that would have otherwise occurred.

The earned income credit eliminates taxes for over 200,000 taxpayers. Over 1.4 million taxpayers use the EIC to reduce their tax by an average of \$216. About one in four taxpayers in each of the first three quintiles claim the credit, with the average benefit, in terms of both dollar amount and reduction in effective tax rate, greatest in the second quintile. Table A-5 reports the impact of eliminating the EIC. More than 1.4 million taxpayers would get a tax increase.

Table A-5: Effect of Eliminating the Earned Income Credit*

Quintile	Expanded AGI Range**	Taxpayers with Increase in Tax Liability				Change in Number with No Tax***
		Number	Percent	Average Change in Tax Paid	Average Change in Effective Tax Rate	
First	Under \$10,461	498,741	28.6%	\$131	2.17%	0
Second	\$10,462-\$18,301	370,588	21.2%	\$344	2.36%	(63,486)
Third	\$18,302-\$30,161	442,737	25.4%	\$208	0.88%	(115,294)
Fourth	\$30,162-\$51,641	88,972	5.1%	\$212	0.59%	(20,373)
Fifth	Over \$51,641	6,386	0.4%	\$195	0.32%	(1,683)
Total		1,407,394	16.1%	\$216	1.36%	(200,836)

* Based on 1992 income data.

** Expanded AGI includes such items as nontaxable compensation (fringe benefits) and certain nontaxable transfers (welfare, workers compensation).

***Includes taxpayers with negative tax liabilities due to refundable credit.

Standard Deduction

Under TRARA, the standard deduction was scheduled to increase from \$6,000 in 1994 to \$7,500 in 1997 for single taxpayers, and from \$9,500 in 1994 to \$10,500 in 1997 for married taxpayers. Recent legislation retained the scheduled increases in the standard deduction. This results in tax reductions for 4.5 million taxpayers.

Table A-6 indicates that among taxpayers who benefit from the higher standard deduction levels, the average cut ranges from \$38 in the first quintile to \$180 in the top quintile. However, the average reduction in effective rates generally declines as income increases. Only about 1 in 4 taxpayers in the first two quintiles benefit, because the 1994 standard deduction is already sufficient to reduce tax to zero for many taxpayers. In contrast, 81.6 percent of fourth-quintile taxpayers benefit, dropping to 61.5 percent in the top quintile, where taxpayers are more likely to itemize deductions. This provision removes 308,000 from the tax rolls. Overall, effective tax rates are reduced by 0.69 percent.

Table A-6: Effect of Standard Deduction Increases *

Quintile	Expanded AGI Range**	Taxpayers with Decrease in Tax Liability				
		Number	Percent	Average Change in Tax Paid	Average Change in Effective Tax Rate	Change in Number with No Tax***
First	Under \$10,461	226,834	13.0%	(\$38)	(0.45%)	80,965
Second	\$10,462-\$18,301	696,023	39.9%	(\$78)	(0.53%)	89,280
Third	\$18,302-\$30,161	1,168,025	66.9%	(\$106)	(0.44%)	98,380
Fourth	\$30,162-\$51,641	1,424,032	81.6%	(\$138)	(0.35%)	32,893
Fifth	Over \$51,641	1,073,061	61.5%	(\$180)	(0.19%)	6,581
Total		4,587,975	52.6%	(\$126)	(0.29%)	308,099

* Based on 1992 income data.

** Expanded AGI includes such items as nontaxable compensation (fringe benefits) and certain nontaxable transfers (welfare, workers compensation).

***Includes taxpayers with negative tax liabilities due to refundable credit.

Tax Rate

Under prior law, new rates of 5.5 percent and 7 percent would have replaced the five rates that existed in 1994, which ranged between 4 percent and 7.875 percent. The basic intent of this change was to follow the federal lead of lower and fewer tax rates. Although it accomplished the desired goal, this change would also have increased taxes for 3.1 million low- to moderate-income taxpayers by as much as 0.5 percent of their income. It would have increased the number paying taxes by more than 117,000.

The new law rate schedule eliminated tax increases that would have occurred for many low- and moderate-income taxpayers. The rate schedule provides additional tax relief and reduces the top tax rate. To accomplish these goals, the 1995 tax reduction plan retains the five bracket rate schedule that was in place in 1994. However, it replaces the rates, which ranged between 4 percent and 7.875 percent, with rates that range between 4 percent and 6.85 percent. This schedule becomes effective in 1997. In addition, new law nearly doubles the levels of taxable income at which the top rate takes effect.

The new 1997 tax rate schedules ensure that virtually no taxpayers face increases relative to the 1994 tax rate schedules. Table A-7 indicates that nearly 4.1 million taxpayers benefit from an average tax cut of over \$460 as a result of the rate schedule change. Effective tax rates are reduced by an average 0.69 percentage points. Taxpayers in the first quintile receive an average tax reduction of \$90.

Table A-7: Effect of New Rate Schedule *

Taxpayers with Decrease in Tax Liability						
Quintile	Expanded AGI Range**	Number	Percent	Average Change in Tax Paid	Average Change in Effective Tax Rate	Change in Number with No Tax***
First	Under \$10,461	336	0.0%	(\$90)	(0.95%)	0
Second	\$10,462-\$18,301	162,470	9.3%	(\$24)	(0.15%)	441
Third	\$18,302-\$30,161	777,446	44.5%	(\$96)	(0.39%)	1,366
Fourth	\$30,162-\$51,641	1,452,973	83.2%	(\$220)	(0.55%)	696
Fifth	Over \$51,641	1,690,657	96.8%	(\$886)	(0.77%)	1,626
Total		4,083,882	46.8%	(\$464)	(0.69%)	4,129

* Based on 1992 income data.

** Expanded AGI includes such items as nontaxable compensation (fringe benefits) and certain nontaxable transfers (welfare, workers compensation).

***Includes taxpayers with negative tax liabilities due to refundable credit.

Total Impact on 1995 Plan

Table A-8 reports the impact of the 1995 tax reduction plan across income quintiles. Over 6 million taxpayers get a tax reduction. The average tax cut equals \$464. The average change in effective tax falls by almost 1.0 percent. The plan removes 452,000 taxpayers from the tax rolls. The new rate schedule prevents many low-income taxpayers from paying higher taxes, as originally scheduled under TRARA.

Table A-8: Effect of Fully Phased-In 1995 Plan

Taxpayers with Decrease in Tax Liability						
Quintile	Expanded AGI Range**	Number	Percent	Average Change in Tax Paid	Average Change in Effective Tax Rate	Change in Number with No Tax***
First	Under \$10,461	607,191	34.8%	(\$84)	(1.28%)	73,073
Second	\$10,462-\$18,301	801,388	45.9%	(\$176)	(1.20%)	149,265
Third	\$18,302-\$30,161	1,275,605	73.0%	(\$224)	(0.93%)	174,111
Fourth	\$30,162-\$51,641	1,608,804	92.1%	(\$361)	(0.90%)	47,620
Fifth	Over \$51,641	1,715,797	98.3%	(\$1,008)	(0.88%)	8,471
Total		6,008,735	68.8%	(\$464)	(0.91%)	452,540

* Based on 1992 data.

** Expanded AGI includes such items as nontaxable compensation (fringe benefits) and certain nontaxable transfers (welfare, workers compensation).

***Includes taxpayers with negative tax liabilities due to refundable credit.

Appendix B: Methodology and Data

The results presented in Appendix A and in the report in general are based on examining taxes paid, as a proportion of income received, for over 8.6 million individuals. This includes both taxpayers and individuals with no taxable income. To simplify the analysis, the income and tax data are aggregated into quintiles. The quintiles (20 percent shares of the population) have equal numbers of taxpayers. The box on page B-3 more completely defines the concepts and data used in this report.

For simplicity, the term “taxpayer” as used in this report includes not only the “traditional” taxpayer who files a tax return and owes tax, but also individuals who do not owe personal income taxes. These individuals have taxable income below the statutory filing thresholds and are not required to complete a State tax return. This methodology classifies taxpayers into quintiles using an expanded definition of income. This expanded definition of income adds several sources of income not reported on tax returns. It makes the evaluation of progressivity more complete by more accurately reflecting the economic income of taxpayers. By expanding the income base and increasing the proportion of New York households covered, this method provides a more comprehensive measure of taxpayers’ ability to pay.¹

To allow for consistent comparisons of tax burdens by quintiles, tax burdens are expressed as effective tax rates. An effective tax rate equals the total tax liability of a quintile divided by the total expanded adjusted gross income in that quintile. See the box beginning on page B-3 for an overview of concepts and methodology.

Data Sources

The database used to analyze tax burdens based on expanded income draws on three sources. The main source, into which the other data sources have been merged, is the Department’s stratified sample of approximately 70,000 tax returns for calendar year 1992, known as the “PIT Sample.” All tax returns drawn for the sample are put through

clerical and computer verification for accuracy. These tax returns are then assigned weights so that collectively they represent the population of all resident and nonresident tax returns. Relative to other data sources, the PIT sample is reliable for analysis of all non-negative levels of income.

BOX METHODOLOGY ISSUES¹

Data Used. The analysis uses income data from 1992 tax returns. This data represents the most current actual information available at the time of analysis. It supplements this data with 1992 data from the Internal Revenue Service's Statistics of Income and the Consumer Population Survey.

Comparability With Other Data. The data used in the analysis are not directly comparable with the data used to produce the report analyzing personal income tax returns published annually by the Department of Taxation and Finance. This incomparability results from the modifications described below.

Unit of Analysis. The analysis in Appendix A and in the report in general uses New York resident nondependent potential taxpayers as the unit of analysis. The term "taxpayer" refers both to individuals who file a tax return and to nonfilers (potential taxpayers). Filers include those who paid taxes, those with no tax liability, and those who obtained refunds. Nonfilers are units with taxable incomes below the filing threshold and therefore not required to file a tax return. The unit of analysis excludes nonresidents because the purpose is to examine the distribution of New York's personal income tax only on New York residents. Further, the data required to extend this analysis to nonresidents is not available. The analysis excludes dependents because these taxpayers are economically dependent on other taxpayers (e.g., students working part time, living with their parents). Including dependents would bias the results because they would be treated as separate, low-income taxpayers. Data constraints prevented the calculation of household units (whether or not related) composed of dependents correctly joined to taxpayers to form a household.

Income Group Definition. To summarize the distribution of tax burden by income level, the taxpayers in New York are divided into five groups, called quintiles. Taxpayers are sorted from lowest to highest income and divided into five groups, where each contains the same number of taxpayers. Therefore, the first quintile includes the 20 percent of taxpayer units with the lowest incomes, while the fifth quintile includes the 20 percent of taxpayer units with the highest incomes.

Effective Tax Rates. The analysis measures the distribution of the tax burden by effective tax rates in each quintile. Effective tax rates are calculated by dividing the total tax liability in each quintile by the total income of taxpayers in that quintile. Effective tax rates, calculated in this manner, summarize the burden in each quintile. This approach to calculating effective tax rates by quintiles is equivalent to assuming that each quintile is represented by the average taxpayer in that quintile.²

Income Concepts. Ideally, for the purposes of this analysis, each taxpayer's income should measure the well-being of that taxpayer. A theoretically ideal measure of income would measure the taxpayer's "utility" or well-being achieved from all activities, including both consumption and leisure. However, this theoretically ideal definition of income is not measurable because it does not take place in the market. For example, it is not possible to put a dollar value on the well-being achieved by spending time with one's family, or the negative well-being of spending time in traffic. The Haig-Simons measure of income attempted to provide a broad, yet more accessible measure of well-being. It is defined as the amount consumed by a household in a year

¹For further discussion of the concepts and methodologies used in these types of analysis, see also, Congressional Budget Office, the *Changing Distribution of Federal Taxes: 1975-1990*, October 1987; Minnesota Department of Revenue, Tax Research Division; *Minnesota Tax Incidence Study: Who Pays Minnesota's Household and Business Taxes?*, November 1993; and Joint Committee on Taxation, *Methodology and Issues in Measuring Changes in the Distribution of Tax Burdens*, U.S. Government Printing Office, Washington, June 14, 1993.

²Another method of calculating effective tax rates by decile is to calculate the effective tax rate for each taxpayer in the decile and take the average of effective tax rates in each decile. This method weights each taxpayer's effective tax rate equally, while the method used here weights each taxpayer by that taxpayer's income.

1992 Expanded AGI

<u>Income Source</u>	<u>Amount (Millions)</u>	<u>Percent Distribution</u>
Income Tax Filers:		
Adjusted Gross Income	\$276,477	80.00%
Adjustments	2,706	0.78%
NYS Additions	569	0.16%
Tax Exempt Interest	4,674	1.35%
Tax Exempt Social Security	6,680	1.93%
Tax Exempt IRA Distributions	2,611	0.76%
Tax Exempt Pensions	6,291	1.82%
Food Stamps	229	0.07%
Workers Compensation	537	0.16%
SSI	212	0.06%
Public Assistance	176	0.05%
Veterans Benefits	330	0.10%
Survivors Benefits	852	0.25%
Disability Income	610	0.18%
Educational Assistance	974	0.28%
Medicare Benefits	4,519	1.31%
Medicaid Benefits	1,086	0.31%
Employer Health Insurance	11,655	3.37%
Expanded AGI for filers	321,188	92.94%
Expanded AGI - Non filers	<u>24,395</u>	<u>7.06%</u>
Total Expanded 1992 AGI	\$345,583	100.00%

plus the annual change in the household's wealth (i.e., changes in the inflation-adjusted value of assets).³ However, the Haig-Simons measure also includes items that prove difficult or impossible to measure. For example, this concept includes the flow of household services consumed by households residing in owner-occupied houses, i.e., imputed rent, and changes in the value of stocks, bonds, real estate, and other unsold assets. For these reasons, this analysis does not use the Haig-Simons definition of income. Including questionable estimates of these components may be more distortive than informative. Furthermore, although the Haig-Simons definition of income is widely accepted by economists, it is not consistent with the average citizen's concept. In short, although the Haig-Simons approach is closer to the theoretically ideal measure of economic income, it is very difficult to implement for practical analysis.

AGI alone encompasses too narrow a definition. It may lead to misleading results if a household has a significant proportion of nontaxable income. Therefore, expanded AGI includes such items as nontaxable compensation (fringe benefits) and certain nontaxable transfers (welfare, workers compensation). Note that the expanded AGI measure does not include items such as imputed rent and unrealized capital gains that are included in the Haig-Simons measure of income. The above table displays the items of income added to AGI to obtain the measure of expanded AGI used in this section. Expanded AGI exceeds AGI reported on New York State tax returns by \$64 billion, an increase of 24.5 percent.

³Henry Simons, *Personal Income Taxation: The Definition of Income as a Problem of Fiscal Policy* (Chicago: The University of Chicago Press), 1938.

The second data source is the U.S. Internal Revenue Service 1992 subsample of federal tax returns from New York residents (from the IRS “Statistics of Income” Division, or “SOI”). This database provides information on tax-exempt components of income such as tax-exempt interest, nontaxable portions of social security and IRA contributions not available from New York tax returns. This sample, which also has all federal taxable sources of income, does not contain New York adjustments to federal adjusted gross income (i.e., addition and subtraction modifications). As such, the SOI data is not sufficient to support, by itself, an analysis of the progressivity of New York’s income tax.

The third data source is the New York subsample of the U.S. Bureau of the Census “Current Population Survey” (CPS) conducted for the Bureau of Labor Statistics in March of 1992. The CPS contains information on various nontaxable transfer payments, compensations and benefits, also not available from State tax returns. It also includes amounts of transfer payments associated with food stamps, Medicare and Medicaid. In addition, information from the CPS has been used to simulate a profile of the State’s nonfiler population. The strength of the CPS consists of its focus on income received at the lower end of the income spectrum. Its weakness is a small sample size with a survey based on voluntary interviews.

Income Definition

The analysis in Appendix A and in the report in general utilizes a concept close to cash income, termed “expanded AGI.” This means, for example, that the cash equivalent value of major transfer payments is included in the income measure. However, this measure does not utilize the theoretically ideal measure of income (see “Income Concepts” in the box on page B-3). This approach would have required the inclusion of the value of each individual’s leisure time, which would have been impossible to measure. The income concept used here also does not employ the Haig-Simons measure of income. This is because the Haig-Simons measure includes items of income that are difficult or impossible to measure, such as imputed rent.

For the purpose of measuring expanded AGI, the corporation is regarded as a separate legal person whose income is not attributable to the stockholder unless actually distributed. Other measures have had alternative implementations of an income concept. Table B-1 on page B-7 compares the income components used here with those used in

three previous studies, labeled “Minnesota,”² “JCT”³ and “U.S. Treasury.”⁴ The Minnesota study used tax information from calendar year 1990 and implemented a “monetary” income concept. The JCT study used a five-year present value projection for the years 1994-1998 and implemented an “economic” income concept (“Haig-Simons”). The U.S. Treasury Department, in its analysis of tax reform proposals and subsequent tax legislation, has used the broadest definition of economic income.

Data Imputation

The Office of Tax Policy Analysis followed a fairly standard methodology to construct expanded income. First, nonresident and dependent tax returns were removed from the PIT sample (See Methodology Issues - Unit of Analysis, page B-3). Dependents also were dropped from the SOI sample. The PIT sample was then matched with the SOI sample for all millionaire returns common to both samples.⁵ This reduced the uncertainty associated with the statistical merge of high-income taxpayers who exhibit the most variability in income components.

The next step consisted of statistically merging the desired nontaxable income items from the SOI to the PIT sample. First, the collection of nontaxable income items on the SOI sample was summed for each record to create a “merge variable.” Secondly, items common to both samples, such as “wages and salaries,” were summed to create a “match variable.” Both samples were then sorted by increasing values of the match variable and divided into “match classes” (e.g., \$0-\$10,000). Next, the SOI was further sorted by the merge variable, and, within each match class, divided into 11 “merge groups” (namely, a zero-value group and 10 deciles with positive values.) The PIT sample was then prepared for the merge by randomly shuffling the returns in each match class, to reduce the chance of an unintentional correlation due to the patterns in the ordering of tax returns on the PIT sample. A percentage of PIT tax units equal to the percentage of SOI taxpayer units in the zero-value group were assigned the same value of zero for the merge variable, for each match class. The remaining returns in successive tenths of the PIT tax units in each match class were each assigned the weighted average value of the merge variable from the corresponding decile and match class of SOI tax units. One feature of the whole procedure is to preserve the conditional distribution of the merge variable, for each match class. However, merging by groups gives rise to less variation than is found in the other variables from typical tax returns in the PIT sample.

Table B-1: Expanded Income Definitions

	New York	Minnesota	JCT	U.S. Treasury
Federal Adjusted Gross Income	*	*	*	*
Adjustments to Federal gross income added back:				
IRA Deduction	*			*
KEOGH Deduction	*			*
Self-Employment Tax	*			*
Self-Employment Insurance Deduction	*	*		*
Non-Taxable or Non-Taxed Transfer Payments				
Social Security	*	*	*	*
IRA Contributions	*	*		*
Pensions and Annuities	*	*		*
SSIA	*			*
Veteran's Compensation	*			*
Public Assistance	*	*		*
Workman's Compensation	*	*	*	*
Food Stamps	*(1)		*	*(1)
Other Support	*			*
Medicare	*(1)		*(2)	*(1)
Medicaid	*(1)			*(1)
Employer Contributions to Benefit Programs and Other Employer Provided Benefits				
E.C. to Health Insurance	*		*	*
E.C. to Life Insurance			*	*
Employer Share of Payroll Taxes			*	*
Other Income				
Imputed Rent				*
Tax Exempt Interest	*	*	*	*
Corporate Payments Imputed to Individual Holders of Corporate Equity			*	*
Minimum Tax Preferences			*	*
Excluded Income of U.S. Citizens Living Abroad			*	*

(1) Cash-equivalent value

(2) Insurance value (benefits-premiums)

The imputation of nontaxable items from the CPS sample proceeded similarly, but not until the different form of organization of the CPS sample was taken into account. The CPS sampling unit is based on a household survey which groups the population into families and unrelated individuals living together, not into taxpayer units. Thus, an approximate model of New York tax law was first applied to the “consumer units” to reorganize them as probable “tax units.” The model also separated the tax units into probable dependents and nondependents for tax purposes, and into tax filers and nonfilers. Merge and match variables were created for the nondependent filers, and the income match and merge imputation was carried out as previously described. Finally, the sample of nondependent nonfilers was appended to the PIT sample. Thus, the PIT sample was expanded in two ways: by an expanded definition of income and by an expansion of the population to include nonfilers.

Endnotes

1. For further discussion of more comprehensive measures of income, see Congressional Budget Office, *The Changing Distribution of Federal Taxes: 1975-1990*, October 1987; Minnesota Department of Revenue, Tax Research Division; *Minnesota Tax Incidence Study: Who Pays Minnesota's Household and Business Taxes?*, November 1993; and Joint Committee on Taxation, *Methodology and Issues in Measuring Changes in the Distribution of Tax Burdens*, U.S. Government Printing Office, Washington, June 14, 1993. Each of the reports asserts that expanded income more accurately measures taxpayers' economic well-being.
2. Minnesota Department of Revenue, *Minnesota Tax Incidence Study* (November 1993).
3. Joint Committee on Taxation, *Methodology and Issues in Measuring Changes in the Distribution of Tax Burdens* (June 1993).
4. A description of the construction of economic income in the Treasury Department's individual income tax model is contained in *Tax Reform for Fairness, Simplicity and Economic Growth*, volume 3, Table 3-8.
5. Because both the PIT and SOI samples are stratified, different categories of returns are assigned different sampling "weights." A taxpayer's New York and U.S. returns may have different weights in the event that the returns are included in the respective samples. Direct matches were restricted to returns where weights were equal to one.

Appendix C: Representative Taxpayer Model

Description of Model

The Office of Tax Policy Analysis developed a model that computes income tax liabilities for an individual taxpayer. To allow for useful comparisons of representative taxpayers, the model calculates tax not only based on New York State tax but also for neighboring states which impose an income tax. The model computes tax liabilities under the tax laws of New York, its contiguous neighboring states (Connecticut, New Jersey, Pennsylvania, Massachusetts, and Vermont) and federal tax liability. The model incorporates all major provisions in each state's and federal laws.

In calculating tax liabilities, the representative taxpayer model is designed to simulate each state's income tax returns. Therefore, it operates by:

- summing items of income, including applicable exclusions
- subtracting federal adjustments, such as contributions to IRAs
- adding state additions (e.g. bond interest from other states) and subtracting state subtractions (e.g. federal bond interest, and in New York, certain retirement income)
- subtracting exemptions for taxpayers and dependents
- subtracting standard or itemized deductions
- computing tax using the tax rate schedule
- subtracting credits and property tax rebates, and

- applying any other provisions that affect tax liability, such as Pennsylvania’s tax forgiveness and Massachusetts’ and New Jersey’s no-tax thresholds

Assumptions Used in This Report

The model was used in this study to compute detailed tax liabilities for a selected set of representative taxpayers. Components of income and types and amounts of deductions were derived using the 1992 personal income tax study file. Average amounts for taxpayers at selected income levels were used to construct the representative taxpayers. The assumption used in this report is to assign average income sources, adjustments, deductions, and credits to representative taxpayers only when more than half of taxpayers at the given income level have these particular items.

This report examines representative taxpayers with gross incomes equal to: the 1994 poverty level, \$15,000, \$25,000, \$50,000, \$75,000, \$100,000, and \$150,000.¹ These levels were selected to provide a useful spectrum of taxpayers at different income levels. Listed below is a brief overview of the major assumptions used to compute tax for the taxpayers analyzed in this report.

Income Base

All taxpayers have wage income. Taxpayers at \$75,000 and up are assumed to have interest income as well. Taxpayers at \$100,000 and \$150,000 also have dividend income.

Adjustments

No taxpayers have any federal adjustments.

State Additions and Subtractions

No taxpayer is assumed to have income modifications.

Deductions

Based on 1992 tax data, the report assumes that taxpayers with gross incomes of \$75,000 and higher have sufficient deductions to itemize their deductions. Taxpayers below this level do not, and therefore use the standard deduction. Itemizing taxpayers are assumed to have itemized deductions for property tax, mortgage interest, and contributions. The amounts used are the averages at each income level based on 1992 New York income tax returns.

For New York, the model computes the federal and State limitations on upper-income taxpayers' itemized deductions, and for Vermont, the federal limitation.

Rates

The model uses each state's tax rate schedule, including the supplemental tax in New York, and the two-rate schedule, on earned and unearned income, in Massachusetts.

Credits

The model computes generally available credits, including the earned income credit where applicable, in each state.

Sample Results

For illustrative purposes, the following tables provide the data and tax liabilities computed for selected representative taxpayers under New York State law for tax year 1994, and under the fully phased-in 1995 tax reduction program. They also contain corresponding information for New York's neighboring states for tax year 1994 (and New Jersey's scheduled 1996 law).

Table C-1 shows effective tax rates in New York and neighboring states for single taxpayers and married couples with two children. For all but lower-income single taxpayers, New York's 1994 effective rates exceeded those in all other states. By 1997, the rates still exceed those in other states except Massachusetts, but are clearly more in line with Connecticut, New Jersey and Vermont.

Table C-1: Summary of New York and Neighboring State Personal Income Taxes

Single Taxpayer							
Income Levels & Effective Tax Rates							
States	(Poverty) \$7,743	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
New York State							
New York (1994)	0.23%	2.40%	4.39%	6.21%	5.72%	6.07%	7.06%
New York (1997)	(0.17%)	1.70%	3.14%	5.03%	4.87%	5.19%	6.14%
Neighboring States							
Connecticut (1994)	0.00%	0.23%	2.14%	4.50%	4.50%	4.50%	4.50%
Massachusetts (1994)	0.00%	3.63%	4.38%	5.45%	5.70%	5.99%	6.17%
New Jersey (1994)	1.27%	1.57%	1.78%	3.06%	4.10%	4.73%	5.37%
New Jersey (1996)	0.83%	1.11%	1.28%	2.43%	3.46%	4.18%	4.91%
Pennsylvania (1994)	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%
Vermont (1994)	0.41%	2.19%	2.81%	4.61%	4.27%	4.95%	5.88%
Married Taxpayer, 2 Dependents							
Income Levels & Effective Tax Rates							
States	(Poverty) \$15,207	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
New York State							
New York (1994)	(0.60%)	(0.68%)	1.92%	4.63%	4.98%	5.36%	6.56%
New York (1997)	(3.41%)	(3.57%)	1.14%	3.30%	4.11%	4.50%	5.70%
Neighboring States							
Connecticut (1994)	0.00%	0.00%	0.05%	2.14%	4.05%	4.50%	4.50%
Massachusetts (1994)	1.78%	1.73%	3.23%	4.66%	5.15%	5.58%	5.90%
New Jersey (1994)	1.08%	1.07%	1.40%	1.95%	2.34%	3.16%	4.16%
New Jersey (1996)	0.74%	0.73%	1.00%	1.44%	1.73%	2.47%	3.49%
Pennsylvania (1994)	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%
Vermont (1994)	(2.93%)	(3.03%)	1.27%	2.54%	2.68%	3.52%	4.63%

For married couples with children, New York's refundable earned income credit results in comparatively low (and actually negative) tax rates for lower-income taxpayers, with the benefits growing substantially by 1997. For other taxpayers, the story is similar to that for single taxpayers, with New York's 1994 effective rates higher than all other states', except Massachusetts in some cases.

On the other hand, the 1995 tax cut legislation will, by 1997, bring New York in line with most neighboring states. However, Pennsylvania will continue to be the low-tax state, and New Jersey will continue to impose relatively low effective rates on all but higher-income taxpayers.

Tables C-2 through C-17 provide greater detail on taxpayer characteristics, and show the computation of tax for each state.

Table C-2: New York State Personal Income Tax

1994 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
+ NY Additions	0	0	0	0	0	0	0
- NY Subtractions	0	0	0	0	0	0	0
NY Adj. Gross Income (NYAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
Standard or Itemized Deds.	Standard	Standard	Standard	Standard	Itemized	Itemized	Itemized
- NY Deductions	6,000	6,000	6,000	6,000	15,922	18,403	15,479
- NY Dep. Exemptions	0	0	0	0	0	0	0
NY Taxable Income	1,743	9,000	19,000	44,000	59,078	81,597	134,522
Base Tax	70	405	1,138	3,106	4,294	6,067	10,235
+ Supplemental Tax	0	0	0	0	0	0	359
Tax Before Credits	70	405	1,138	3,106	4,294	6,067	10,594
- Household Credit	45	45	40	0	0	0	0
Tax Before EIC	25	360	1,098	3,106	4,294	6,067	10,594
- State EIC	7	0	0	0	0	0	0
Tax After State EIC	18	360	1,098	3,106	4,294	6,067	10,594
- Property Tax Credit	0	0	0	0	0	0	0
Final Tax	18	360	1,098	3,106	4,294	6,067	10,594
Effective Tax Rate	0.23%	2.40%	4.39%	6.21%	5.72%	6.07%	7.06%

Table C-3: New York State Personal Income Tax

1994 Law: Married Taxpayer, 2 Dependents							
	Income Levels						
Tax Computation Items	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
+ NY Additions	0	0	0	0	0	0	0
- NY Subtractions	0	0	0	0	0	0	0
NY Adj. Gross Income (NYAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
Standard or Itemized Deds.	Standard	Standard	Standard	Standard	Itemized	Itemized	Itemized
- NY Deductions	9,500	9,500	9,500	9,500	16,431	20,776	23,040
- NY Dep. Exemptions	2,000	2,000	2,000	2,000	2,000	2,000	2,000
NY Taxable Income	3,707	3,500	13,500	38,500	56,569	77,224	124,960
Base Tax	148	140	565	2,314	3,737	5,364	9,123
+ Supplemental Tax	0	0	0	0	0	0	718
Tax Before Credits	148	140	565	2,314	3,737	5,364	9,841
- Household Credit	105	105	80	0	0	0	0
Tax Before EIC	43	35	485	2,314	3,737	5,364	9,841
- State EIC	134	137	4	0	0	0	0
Tax After State EIC	(91)	(102)	481	2,314	3,737	5,364	9,841
- Property Tax Credit	0	0	0	0	0	0	0
Final Tax	(91)	(102)	481	2,314	3,737	5,364	9,841
Effective Tax Rate	(0.60%)	(0.68%)	1.92%	4.63%	4.98%	5.36%	6.56%

Table C-4: New York State Personal Income Tax

1997 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
+ NY Additions	0	0	0	0	0	0	0
- NY Subtractions	0	0	0	0	0	0	0
NY Adj. Gross Income (NYAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
Standard or Itemized Deds.	Standard	Standard	Standard	Standard	Itemized	Itemized	Itemized
- NY Deductions	7,500	7,500	7,500	7,500	15,922	18,403	15,544
- NY Dep. Exemptions	0	0	0	0	0	0	0
NY Taxable Income	243	7,500	17,500	42,500	59,078	81,597	134,456
Base Tax	10	300	826	2,514	3,650	5,192	8,813
+ Supplemental Tax	0	0	0	0	0	0	397
Tax Before Credits	10	300	826	2,514	3,650	5,192	9,210
- Household Credit	45	45	40	0	0	0	0
Tax Before EIC	0	255	786	2,514	3,650	5,192	9,210
- State EIC	13	0	0	0	0	0	0
Tax After State EIC	(13)	255	786	2,514	3,650	5,192	9,210
- Property Tax Credit	0	0	0	0	0	0	0
Final Tax	(13)	255	786	2,514	3,650	5,192	9,210
Effective Tax Rate	(0.17)%	1.70%	3.14%	5.03%	4.87%	5.19%	6.14%

Table C-5: New York State Personal Income Tax

1997 Law: Married Taxpayer, 2 Dependents							
	Income Levels						
Tax Computation Items	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
+ NY Additions	0	0	0	0	0	0	0
- NY Subtractions	0	0	0	0	0	0	0
NY Adj. Gross Income (NYAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
Standard or Itemized Deds.	Standard	Standard	Standard	Standard	Itemized	Itemized	Itemized
- NY Deductions	13,000	13,000	13,000	13,000	16,431	20,776	23,127
- NY Dep. Exemptions	2,000	2,000	2,000	2,000	2,000	2,000	2,000
NY Taxable Income	207	0	10,000	35,000	56,569	77,224	124,873
Base Tax	8	0	400	1,651	3,081	4,496	7,760
+ Supplemental Tax	0	0	0	0	0	0	794
Tax Before Credits	8	0	400	1,651	3,081	4,496	8,554
- Household Credit	105	105	80	0	0	0	0
Tax Before EIC	0	0	320	1,651	3,081	4,496	8,554
- State EIC	518	535	34	0	0	0	0
Tax After State EIC	(518)	(535)	286	1,651	3,081	4,496	8,554
- Property Tax Credit	0	0	0	0	0	0	0
Final Tax	(518)	(535)	286	1,651	3,081	4,496	8,554
Effective Tax Rate	(3.41%)	(3.57%)	1.14%	3.30%	4.11%	4.50%	5.70%

Table C-6: Connecticut Personal Income Tax

1994 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
+ CT Additions	0	0	0	0	0	0	0
- CT Subtractions	0	0	0	0	0	0	0
CT Adj. Gross Income (CTAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- CT Exemptions	12,000	12,000	11,000	0	0	0	0
CT Taxable Income	0	3,000	14,000	50,000	75,000	100,000	150,000
X Tax Rate	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
CT Tax Before Credits	0	135	630	2,250	3,375	4,500	6,750
- Personal Tax Credit	0	101	95	0	0	0	0
- Credit for Other Jurisdictions Tax	0	0	0	0	0	0	0
Final Tax	0	34	536	2,250	3,375	4,500	6,750
Effective Tax Rate	0.00%	0.23%	2.14%	4.50%	4.50%	4.50%	4.50%

Table C-7: Connecticut Personal Income Tax

1994 Law: Married Taxpayer, 2 Dependents							
	Income Levels						
Tax Computation Items	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
+ CT Additions	0	0	0	0	0	0	0
- CT Subtractions	0	0	0	0	0	0	0
CT Adj. Gross Income (CTAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
- CT Exemptions	24,000	24,000	24,000	22,000	0	0	0
CT Taxable Income	0	0	1,000	28,000	75,000	100,000	150,000
X Tax Rate	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%	4.50%
CT Tax Before Credits	0	0	45	1,260	3,375	4,500	6,750
- Personal Tax Credit	0	0	34	189	338	0	0
- Credit for Other Jurisdictions Tax	0	0	0	0	0	0	0
Final Tax	0	0	11	1,071	3,038	4,500	6,750
Effective Tax Rate	0.00%	0.00%	0.05%	2.14%	4.05%	4.50%	4.50%

Table C-8: Massachusetts Personal Income Tax

1994 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Total Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000

A. 5.95% Income Tax

Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Pension/Annuity	0	0	0	0	0	0	0
Taxable Mass. Bank Interest	0	0	0	0	1,015	1,738	3,484
Other Income	0	0	0	0	0	0	0
Total 5.95% Income	7,743	15,000	25,000	50,000	73,784	95,046	140,126
- FICA Tax Deduction(a)	592	1,148	1,913	2,000	2,000	2,000	2,000
- Rent Deduction(b)	2,500	2,500	2,500	0	0	0	0
- Personal Exemption	2,200	2,200	2,200	2,200	2,200	2,200	2,200
- Dependent Exemption	0	0	0	0	0	0	0
- Children Under 12 Exemption	0	0	0	0	0	0	0
Taxable 5.95% Income	2,451	9,153	18,388	45,800	69,584	90,846	135,926
X Tax Rate	5.95%	5.95%	5.95%	5.95%	5.95%	5.95%	5.95%
Final 5.95% Tax	146	545	1,094	2,725	4,140	5,405	8,088

B. 12.00% Income Tax

Interest (Excl. Mass. Banks)	0	0	0	0	1,116	1,838	3,585
Dividends	0	0	0	0	0	3,016	6,189
Taxable Capital Gains	0	0	0	0	0	0	0
Taxable 12.00% Income	0	0	0	0	1,116	4,854	9,774
X Tax Rate	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Final 12.00% Tax	0	0	0	0	134	582	1,173

C. Combined 5.95% & 12.00% Tax

5.95% Tax	146	545	1,094	2,725	4,140	5,405	8,088
12.00% Tax	0	0	0	0	134	582	1,173
Total Tax	146	545	1,094	2,725	4,274	5,988	9,260

Mass. Adj. Gross Income	7,743	15,000	25,000	50,000	74,900	99,900	149,900
No Tax threshold(c)	8,000	8,000	8,000	8,000	8,000	8,000	8,000
Final Tax Pre-Credit	0	545	1,094	2,725	4,274	5,988	9,260
- Limited Income Credit	0	0	0	0	0	0	0
Combined Final Tax	0	545	1,094	2,725	4,274	5,988	9,260

Effective Tax Rate	0.00%	3.63%	4.38%	5.45%	5.70%	5.99%	6.17%
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(a) FICA tax assumed at prevailing rates.

(b) Taxpayers with total gross income below \$50,000 are assumed to be renters with \$6,000 annual rent.

(c) If Massachusetts adjusted gross income does not exceed specified thresholds, no tax liability exists.

Table C-9: Massachusetts Personal Income Tax

1994 Law: Married Taxpayer, 2 Dependents

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Total Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
A. 5.95% Income Tax							
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Pension/Annuity	0	0	0	0	0	0	0
Taxable Mass. Bank Interest	0	0	0	0	915	1,638	3,384
Other Income	0	0	0	0	0	0	0
Total 5.95% Income	15,207	15,000	25,000	50,000	73,684	94,946	140,026
- FICA Tax Deduction(a)	1,163	1,148	1,913	3,825	4,000	4,000	4,000
- Rent Deduction(b)	2,500	2,500	2,500	0	0	0	0
- Personal Exemption	4,400	4,400	4,400	4,400	4,400	4,400	4,400
- Dependent Exemption	2,000	2,000	2,000	2,000	2,000	2,000	2,000
- Children Under 12 Exemption(c)	600	600	600	600	600	600	600
Taxable 5.95% Income	4,544	4,353	13,588	39,175	62,684	83,946	129,026
X Tax Rate	5.95%	5.95%	5.95%	5.95%	5.95%	5.95%	5.95%
Final 5.95% Tax	270	259	808	2,331	3,730	4,995	7,677
B. 12.00% Income Tax							
Interest (Excl. Mass. Banks)	0	0	0	0	1,116	1,838	3,585
Dividends	0	0	0	0	0	3,016	6,189
Taxable Capital Gains	0	0	0	0	0	0	0
Taxable 12.00% Income	0	0	0	0	1,116	4,854	9,774
X Tax Rate	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%	12.00%
Final 12.00% Tax	0	0	0	0	134	582	1,173
C. Combined 5.95% & 12.00% Tax							
5.95% Tax	270	259	808	2,331	3,730	4,995	7,677
12.00% Tax	0	0	0	0	134	582	1,173
Total Tax	270	259	808	2,331	3,864	5,577	8,850
Mass. Adj. Gross Income	15,207	15,000	25,000	50,000	74,800	99,800	149,800
No Tax threshold(d)	12,000	12,000	12,000	12,000	12,000	12,000	12,000
Final Tax Pre-Credit	0	259	808	2,331	3,864	5,577	8,850
- Limited Income Credit	0	0	0	0	0	0	0
Combined Final Tax	0	259	808	2,331	3,864	5,577	9
Effective Tax Rate	1.78%	1.73%	3.23%	4.66%	5.15%	5.58%	5.90%

(a) FICA tax assumed at prevailing rates.

(b) Taxpayers with total gross income below \$50,000 are assumed to be renters with \$6,000 annual rent.

(c) All dependents are assumed to be children under 12.

(d) If Massachusetts adjusted gross income does not exceed specified thresholds, no tax liability exists.

Table C-10: New Jersey Personal Income Tax

1994 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Taxable Pension/Annuity	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
New Jersey Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Personal Exemption	1,000	1,000	1,000	1,000	1,000	1,000	1,000
- Dependent Exemption	0	0	0	0	0	0	0
New Jersey Taxable Income	6,743	14,000	24,000	49,000	74,000	99,000	149,000
New Jersey Base Tax	128	266	475	1,530	3,073	4,731	8,056
- Homestead Credit(a)	30	30	30	0	0	0	0
Final Tax	98	236	445	1,530	3,073	4,731	8,056
Effective Tax Rate	1.27%	1.57%	1.78%	3.06%	4.10%	4.73%	5.37%

(a) Taxpayers with total gross income below \$50,000 are assumed to be renters.

Table C-11: New Jersey Personal Income Tax

1994 Law: Married Taxpayer, 2 Dependents

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Taxable Pension/Annuity	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
New Jersey Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Personal Exemption	2,000	2,000	2,000	2,000	2,000	2,000	2,000
- Dependent Exemption	3,000	3,000	3,000	3,000	3,000	3,000	3,000
New Jersey Taxable Income	10,207	10,000	20,000	45,000	70,000	95,000	145,000
New Jersey Base Tax	194	190	380	974	1,758	3,158	6,246
- Homestead Credit(a)	30	30	30	0	0	0	0
Final Tax	164	160	350	974	1,758	3,158	6,246
Effective Tax Rate	1.08%	1.07%	1.40%	1.95%	2.34%	3.16%	4.16%

(a) Taxpayers with total gross income below \$50,000 are assumed to be renters.

Table C-12: New Jersey Personal Income Tax

1996 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Taxable Pension/Annuity	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
New Jersey Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Personal Exemption	1,000	1,000	1,000	1,000	1,000	1,000	1,000
- Dependent Exemption	0	0	0	0	0	0	0
New Jersey Taxable Income	6,743	14,000	24,000	49,000	74,000	99,000	149,000
New Jersey Base Tax	94	196	350	1,215	2,597	4,181	7,366
- Homestead Credit(a)	30	30	30	0	0	0	0
Final Tax	64	166	320	1,215	2,597	4,181	7,366
Effective Tax Rate	0.83%	1.11%	1.28%	2.43%	3.46%	4.18%	4.91%

(a) Taxpayers with total gross income below \$50,000 are assumed to be renters.

Table C-13: New Jersey Personal Income Tax

1996 Law: Married Taxpayer, 2 Dependents

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Taxable Pension/Annuity	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
New Jersey Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Personal Exemption	2,000	2,000	2,000	2,000	2,000	2,000	2,000
- Dependent Exemption	3,000	3,000	3,000	3,000	3,000	3,000	3,000
New Jersey Taxable Income	10,207	10,000	20,000	45,000	70,000	95,000	145,000
New Jersey Base Tax	143	140	280	718	1,295	2,474	55,236
- Homestead Credit(a)	30	30	30	0	0	0	0
Final Tax	64	166	320	1,215	2,597	4,181	7,366
Effective Tax Rate	0.74%	0.73%	1.00%	1.44%	1.73%	2.47%	3.49%

(a) Taxpayers with total gross income below \$50,000 are assumed to be renters.

Table C-14: Pennsylvania Personal Income Tax

1994 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
PA Adj. Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
X Tax Rate	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%
PA Base Tax	217	420	700	1,400	2,100	2,800	4,200
- PA Tax Forgiveness	0	0	0	0	0	0	0
Final Tax	217	420	700	1,400	2,100	2,800	4,200
Effective Tax Rate	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%

Table C-15: Pennsylvania Personal Income Tax

1994 Law: Married Taxpayer, 2 Dependents

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
PA Adj. Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
X Tax Rate	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%
PA Base Tax	426	420	700	1,400	2,100	2,800	4,200
- PA Tax Forgiveness	0	0	0	0	0	0	0
Final Tax	426	420	700	1,400	2,100	2,800	4,200
Effective Tax Rate	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%	2.80%

Table C-16: Vermont Personal Income Tax

1994 Law: Single Taxpayer

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
A. Federal Tax Portion							
Wages & Salaries	7,743	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	7,743	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	7,743	15,000	25,000	50,000	75,000	100,000	150,000
Standard or Itemized Deds.	Standard	Standard	Standard	Standard	Itemized	Itemized	Itemized
- Federal Deductions	3,800	3,800	3,800	3,800	15,922	18,403	20,725
- Federal Personal Exemptions	2,450	2,450	2,450	2,450	2,450	2,450	1,744
Federal Taxable Income	1,493	8,750	18,750	43,750	56,628	79,147	127,531
Base Tax	224	1,313	2,813	9,215	12,823	19,804	35,282
- Child Care Credit	0	0	0	0	0	0	0
Tax Before EIC	224	1,313	2,813	9,215	12,823	19,804	35,282
- Federal EIC	96	0	0	0	0	0	0
Final Tax	128	1,313	2,813	9,215	12,823	19,804	35,282
Effective Federal Tax Rate	1.65%	8.75%	11.25%	18.43%	17.10%	19.80%	23.52%
B. Vermont Tax Portion							
Vermont Base Tax	56	328	703	2,304	3,206	4,951	8,821
- Vermont EIC	24	0	0	0	0	0	0
Vermont Final Tax	32	328	703	2,304	3,206	4,951	8,821
Vermont Effective Tax Rate	0.41%	2.19%	2.81%	4.61%	4.27%	4.95%	5.88%

Table C-17: Vermont Personal Income Tax

1994 Law: Married Taxpayer, 2 Dependents

Tax Computation Items	Income Levels						
	Poverty	\$15,000	\$25,000	\$50,000	\$75,000	\$100,000	\$150,000
A. Federal Tax Portion							
Wages & Salaries	15,207	15,000	25,000	50,000	72,769	93,308	136,642
Interest Income	0	0	0	0	2,231	3,676	7,169
Dividends	0	0	0	0	0	3,016	6,189
Capital Gains	0	0	0	0	0	0	0
Pension/Annuity	0	0	0	0	0	0	0
Taxable SSI	0	0	0	0	0	0	0
Other Income	0	0	0	0	0	0	0
Federal Gross Income	15,207	15,000	25,000	50,000	75,000	100,000	150,000
- Adj. to Income	0	0	0	0	0	0	0
Federal Adj. Gross Income (FAGI)	15,207	15,000	25,000	50,000	75,000	100,000	150,000
Standard or Itemized Deds.	Standard	Standard	Standard	Standard	Itemized	Itemized	Itemized
- Federal Deductions	6,350	6,350	6,350	6,350	18,431	21,776	25,127
- Federal Personal Exemptions	9,800	9,800	9,800	9,800	9,800	9,800	9,800
Federal Taxable Income	(943)	(1,150)	8,850	33,850	46,769	68,424	115,073
Base Tax	0	0	1,328	5,078	8,025	14,089	27,775
- Child Care Credit	0	0	0	0	0	0	0
Tax Before EIC	0	0	1,328	5,078	8,025	14,089	27,775
- Federal EIC	1,784	1,821	53	0	0	0	0
Final Tax	(1,784)	(1,821)	1,275	5,078	8,025	14,089	27,775
Effective Federal Tax Rate	(11.73%)	(12.14%)	5.10%	10.16%	10.70%	14.09%	18.52%
B. Vermont Tax Portion							
Vermont Base Tax	0	0	332	1,269	2,006	3,522	6,944
- Vermont EIC	446	455	13	0	0	0	0
Vermont Final Tax	(446)	(455)	319	1,269	2,006	3,522	6,944
Vermont Effective Tax Rate	(2.93%)	(3.03%)	1.27%	2.54%	2.68%	3.52%	4.63%

Endnotes

1. Poverty levels are from U.S. Bureau of the Census, *Current Population Reports*, pp. 60-182.