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## HOW VERSUS HOW MUCH: THE DISTRIBUTIONAL DIFFERENCES BETWEEN INDIVIDUAL INCOME TAX CHANGES

by

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Please contact [David Zin](#), SFA Chief Economist, with any comments or questions on this paper.

## TABLE OF CONTENTS

	Page
INTRODUCTION .....	1
BACKGROUND OF THE MICHIGAN INDIVIDUAL INCOME TAX .....	2
Individual Income Tax Rate.....	2
Personal Exemption.....	2
Exemption for Retirement Income.....	3
Earned Income Tax Credit .....	3
TAX CHANGES INCLUDED IN THE ANALYSIS .....	4
Individual Income Tax Rate.....	4
Personal Exemption.....	4
Exemptions for Retirement Income .....	4
Earned Income Tax Credit .....	5
Child Tax Credit.....	5
Rebate.....	5
RESULTS OF THE ANALYSIS .....	6
The Income Distribution for Michigan Income Tax Taxpayers.....	8
The Distribution of Michigan Income Tax Liabilities.....	11
The Distributional Impact of an Individual Income Tax Rebate.....	12
The Distributional Impact of Lowering the Individual Income Tax Rate .....	14
The Distributional Impact of Increasing the Personal Exemption.....	15
The Distributional Impact of Implementing a Child Tax Credit.....	16
The Distributional Impact of Increasing the Earned Income Tax Credit .....	19
The Distributional Impact of Increasing the Deductions for Retirement Income.....	21
Comparing the Distributional Impact of a Lower Income Tax Rate with an Increase in the Personal Exemption .....	22
Comparing the Distributional Impact of a Child Tax Credit with an Increase in the Earned Income Tax Credit .....	24
REPRESENTATIVE TAXPAYERS.....	25
INCREMENTAL CHANGES.....	26
CONCLUSION.....	27
APPENDIX.....	28

## INTRODUCTION

At the beginning of the COVID-19 pandemic, the economic implications suggested a substantial negative impact on State tax revenue. Generally, when the unemployment rate rises tax collections decline, especially individual income tax withholding. The unemployment rate rose from 3.8% in March 2020 to 22.7% in April 2020 and did not drop below 10.0% until August 2020, suggesting a substantial loss of tax revenue. However, Federal stimulus efforts and employers' creative adaptations to working in a pandemic environment mitigated many of the most negative potential impacts on tax revenue, and revenue forecasts became more positive. Each of the Consensus Revenue Estimating Conferences (CRECs) since May 2020 have revised expected tax revenue upward significantly, with many of the revisions exceeding \$1.0 billion. The May 2022 CREC revised the forecast for combined General Fund/General Purpose and School Aid Fund revenue up by \$2.5 billion in fiscal year (FY) 2021-22. Although the forecast for FY 2022-23 was lowered by \$351.5 million because of timing issues associated with the adoption of pass-through entity (e.g., partnerships, S-corporations, and limited liability corporations, which traditionally have paid business taxes under the individual income tax instead of the corporate income tax) tax provisions, baseline revenue—the revenue reflecting the underlying economic fundamentals—was revised up by \$2.0 billion. The FY 2021-22 revenue estimates were raised \$1.5 billion at the January 2023 CREC, however, because the paper will focus on 2022 legislation and the bulk of the analysis was completed before the January 2023 CREC, the analysis will use the May 2022 CREC estimates.

When revenue collections exceed expectations, collections also exceed the spending budgeted as the result of earlier revenue estimates, which lead to budget surpluses. In 2022, both the Governor and the Legislature put forward various proposals that would have reduced a portion of surplus of revenue over expenditure. Most of these proposals involved modifications to the Michigan individual income tax. The types of changes proposed varied; some would have reduced the tax rate, others offered new credits or expanded existing credits, increased deductions or exemptions, or provided for tax rebates. Some of the proposed changes would have been permanent in nature while others would have been one-time changes.

This paper examines the distributional impact of changing the Michigan individual income tax. While many of the proposal changes have concerned multiple provisions and the impact of each of the changes has differed from the other, this paper assumes an arbitrary chosen tax reduction of \$500.0 million and examines the distributional effects of changing each provision so that it would reduce revenue by approximately that amount. Consequently, distributional differences between the various changes generally will reflect the nature of those provisions rather than the magnitude of the tax cut.

The examined tax proposals include: 1) lowering the individual income tax rate; 2) increasing the personal exemption; 3) a one-time tax rebate; 4) expanding the Earned Income Tax Credit (EITC); 5) adopting a child tax credit; and 6) expanding exemptions for retirement income received by seniors. In some cases, the examined changes will have several alternative ways of implementing the provisions, such as adopting a refundable or nonrefundable child tax credit. These alternatives are not intended to represent a comprehensive list of potential changes nor does their inclusion suggest these changes are preferable to any other change, regardless of whether it is included in the analysis. However, the list is representative of the changes that were proposed in 2022.

## **BACKGROUND OF THE MICHIGAN INDIVIDUAL INCOME TAX**

Public Act 281 of 1967 implemented an individual income tax in Michigan, effective for the last three-fourths of FY 1967-68. The Michigan individual income tax generates more revenue for the State than any other revenue source, with the May 2022 CREC forecasting the tax would generate \$13.5 billion in net collections in FY 2021-22. Individual income tax withholding represents the largest component of collections, accounting for \$12.0 billion of the \$13.5 billion in net collections forecasted for FY 2021-22. Taxpayers with substantial income not subject to withholding requirements must make estimated payments on a quarterly basis. All taxpayers reconcile their annual tax liabilities when they file their annual returns, which results in either annual payments or refunds. In FY 2020-21, the individual income tax generated \$11.8 billion in net revenue, of which withholding accounted for \$11.1 billion, with the remainder representing other gross collections such as quarterly and annual payments partially offset by individual income tax refunds. Under current law, 23.8% of gross individual income tax collections are directed to the School Aid Fund. (As a result, refunds reduce General Fund revenue but do not reduce School Aid Fund revenue.) Of the remaining revenue, each year \$600.0 million is directed to the Michigan Transportation Fund and \$69.0 million is directed to the Renew Michigan Fund. Aside from approximately \$1.0 million per year that is directed to the Campaign Finance Fund, the remaining revenue is directed to the General Fund. Based on the May 2022 CREC estimates, the individual income tax is expected to generate \$8.8 billion in General Fund revenue and \$4.0 billion in School Aid Fund revenue in FY 2021-22.

### ***Individual Income Tax Rate***

The tax rate under the individual income tax was initially established at 2.6% but was raised to 3.9% in 1971 and to 4.6% in 1975. Except for some temporary rate increases in the early 1980s to address budget problems, the rate remained at 4.6% until Proposal A was adopted in 1994. Proposal A lowered the rate to 4.4% and legislation adopted in 1999 began a phased reduction of the rate to 3.9%. Subsequent budget difficulties reversed and/or postponed many of the scheduled rate reductions, until Public Act 38 of 2011 established the current tax rate of 4.25% effective October 1, 2011.

The tax is a flat rate across all income levels because Article IX, Section 7 of the Michigan Constitution of 1963 states, "No income tax graduated as to rate or base shall be imposed by the state or any of its subdivisions." As a result, the 4.25% tax rate is applied to all taxable income regardless of a taxpayer's income level. Progressive tax structures, like the Federal individual income tax, apply higher tax rates to additional income as income rises. The Michigan Constitution prohibits Michigan from adopting a progressive income tax. For Michigan, adopting a progressive tax structure would require amending the Constitution.

### ***Personal Exemption***

The individual income tax does not tax all income received by an individual. Certain types of income, such as interest earned on United States obligations, are exempt or may be deducted before determining income subject to tax. Taxpayers generally receive a personal exemption, equal to a specified amount times the number of exemptions a taxpayer may claim, which is subtracted from the income subject to tax to calculate taxable income. (Taxpayers who are claimed as a dependent on another return receive a different exemption.) Certain individuals, such as individuals who qualify for special exemptions as a result of being deaf, blind, paraplegic, quadriplegic, or totally and permanently disabled; qualified disabled veterans; and those who

receive a certificate of stillbirth; are entitled to receive larger exemptions. Exemption amounts are adjusted each year for inflation and rounded to the nearest \$100 increment.

For tax year 2021, the standard personal exemption was \$4,900. In FY 2020-21, the standard personal exemption was estimated to reduce revenue by approximately \$1.6 billion or 13.6% of the net revenue collected in FY 2020-21.

Personal exemptions may not reduce taxable income below zero. For example, assume a taxpayer claiming two exemptions (such as a single parent with one child or a married couple with no children) claimed \$9,800 as an exemption amount. If that taxpayer's income totaled \$20,000, he or she would subtract the \$9,800 from \$20,000 and pay tax on the remaining \$10,200. However, if the taxpayer's income totaled \$7,500, the personal exemption would reduce taxable income to \$0, not -\$2,300. As a result, the personal exemption is a nonrefundable provision; increases in the exemption will reduce tax revenue but not increase refunds. In the example just discussed, if the personal exemption increased to \$5,400 per exemption (for a total exemption amount of \$10,800), it would reduce the tax liability for the taxpayer with \$20,000 of income but would have no impact on the taxpayer with total income of \$7,500.

### ***Exemption for Retirement Income***

The Michigan individual income tax has additional provisions that affect taxpayers age 67 and older. The provisions differ based on when the taxpayer was born, with provisions varying for those born before 1946, those born between 1946 and 1952, and those born after 1952. The specific provisions are more complex than warrants a detailed discussion in this paper.<sup>1</sup> However, taxpayers born before 1946 may exempt all qualifying retirement and pension benefits received from Federal or Michigan public sources. If the exemption for public retirement and pension income does not exceed a certain amount (for tax year 2022, \$54,404 for a single return and \$108,808 for a joint return) then private retirement and pension income (and certain other retirement income) also can be exempted until the total exemption reaches that amount. The exemption amount for private retirement and pension benefits is adjusted for inflation each year. For those born 1946 and later, the exemption amounts are less, apply to a broader range of income, and are not adjusted for inflation each year.

### ***Earned Income Tax Credit***

Michigan provides an EITC based on the Federal EITC. The credit is targeted to low-income wage earners. Eligibility requirements depend on number of dependent children and earned income. Earned income is income received from sources such as wages, income received from jobs such as "gig economy" work or freelance work, self-employment income (including owning or operating a farm). Earned income excludes income such as interest or dividends, social security income or pension income, child support or alimony, or unemployment benefits. The credit is structured so that as earned income rises, the credit increases up to a maximum level. As earned income rises above the level associated with the maximum credit, the credit is phased-out until it reaches zero. The maximum credit and income thresholds depend on the taxpayer's filing information; the credit and income thresholds are substantially lower for those without children than those with children. For those eligible taxpayers with children, the amounts increase with the number of children up

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<sup>1</sup> See Zin, David, "Michigan Income Taxes on Seniors and Retirees Under the 2011 Tax Restructuring Legislation", Senate Fiscal Agency, *State Notes*, Summer 2011; and Zin, David, "Michigan Taxation of Seniors and Retiree Income", Senate Fiscal Agency, Presentation to the Senate Finance Committee, February 6, 2019.

to a maximum of three children. The EITC is refundable, i.e., if the credit amount exceeds the taxpayer's liability, then it will be refunded.

When originally enacted, the Michigan EITC was 10% of the Federal credit for tax year 2008. The credit was raised to 20% of the Federal credit for tax years 2009 through 2011 and lowered to 6% of the Federal credit beginning with tax year 2012.

## **TAX CHANGES INCLUDED IN THE ANALYSIS**

As mentioned above, this paper analyzes proposed changes (described below) designed to each reduce revenue by approximately \$500.0 million. Some of the changes, such as the rebate, likely would be one-time events. Other changes, such as a change in the tax rate or the personal exemption could be either permanent or one-time events. The analysis does not consider the ongoing impact of any of the changes, but instead reflects the first-year impacts on a full-year basis. Adjustments are not made to reflect how impacts would be distributed across fiscal years. Bills referenced below are from the 2021-2022 legislative session unless noted otherwise.

### ***Individual Income Tax Rate***

The analysis assumes the individual income tax rate is reduced from 4.25% to 4.05%. Several bills considered by the Legislature would have reduced the individual income tax rate. Senate Bill (SB) 388 would have reduced the individual income tax rate to 4.0%, while House Bill (HB) 5688 would have reduced the tax rate to 4.15%. Earlier in the session, the Legislature passed SB 0784 and HB 4568 (the bills were tie-barred) which, in addition to other changes, would have reduced the income tax rate to 4.0%. House Bill 4568 was vetoed by the Governor, meaning the rate reduction did not occur. Tax rate reductions do not directly increase refunds, but lowering the tax liability can result in higher refunds being paid to taxpayers if those taxpayers have refundable credits.

### ***Personal Exemption***

The analysis assumes the personal exemption is increased to \$7,100. While the personal exemption was \$4,900 per exemption in tax year 2022, because the amount is adjusted for inflation, it is likely that the personal exemption will be \$5,400 for tax year 2023. Senate Bill 784 and HB 4568 (mentioned above) would have increased the personal exemption to \$6,700. As with a reduction in the tax rate, a higher personal exemption would not directly increase refunds; however, a reduction in tax liability can result in payment of higher refunds to taxpayers if those taxpayers have refundable credits.

### ***Exemptions for Retirement Income***

The model has limited capabilities to simulate increases in the exemptions for retirement income. Furthermore, the impact of any change increases each year as more taxpayers move into the tier of taxpayers born after 1952. Senate Bill 467 proposed increasing the exemption for those age 67 or older, and born in 1946 or later, from \$20,000 for a single filer and \$40,000 for a joint return, to \$25,000 and \$50,000, respectively. The Governor's FY 2022-23 budget proposal recommended a change that would have allowed taxpayers to choose between filing under the provisions affecting those born before 1946 or those of current law.

The analysis presented in this paper assumes any current exemption limit is increased to 350% of the current limit. As a result, for a taxpayer born before 1946, this increase would continue the 100% exemption for public pensions but would increase the private retirement income exemption

for single returns from \$54,404 to \$190,414, and from \$108,808 to \$380,828 for joint returns. Similarly, for those born 1946 or later, the analysis assumes that the \$20,000 limit for singles would increase to \$70,000 and the \$40,000 limit for joint returns would increase to \$140,000.

As with increases in the personal exemption, or decreases in the tax rate, increasing the exemption for retirement income would not directly increase refunds, but lowering the tax liability can result in higher refunds being paid to taxpayers if those taxpayers have refundable credits.

### ***Earned Income Tax Credit***

The analysis assumes the EITC is increased from 6% of the Federal EITC to 33%. The Governor's FY 2022-23 budget proposal recommended increasing the EITC to 20% of the Federal EITC for tax year 2022. As introduced, Senate Bill 417 proposed to increase the EITC to 10% of the Federal credit by 2024. However, the S-2 substitute for that bill proposed to increase the EITC to 30% by 2025. The SB 784/HB 4568 package would have increased the EITC to 20% of the Federal credit. Because the credit is refundable, any increase in the credit will increase refunds paid under the tax.

### ***Child Tax Credit***

At various times, Michigan has offered an additional special exemption for children under certain ages, the most recent of those exemptions (a special exemption of \$600 for dependents age 18 or younger) was eliminated as of tax year 2012. Senate Bill 378 proposed a \$500 credit, available through tax year 2025, for each qualified dependent age 18 or younger.

The analysis assumes several variations on the child tax credit. Variations include both refundable and nonrefundable credits, as well as adding an income phase-out to reduce the credit at higher income levels. To maintain the expected revenue reduction of \$500.0 million, the analysis assumes a refundable credit with no income phase-out would total \$205 per child and \$260 if the credit is nonrefundable. Assuming an income phase-out beginning at \$75,000 for single filers and \$150,000 for joint filers, with the credit reduced 10% for each \$1,000 above the threshold, the refundable credit would total \$250 per child, while the nonrefundable credit would be \$350 per child.

### ***Rebate***

In the discussion of additional revenue and tax policy, concerns always exist about whether above-forecast or above-trend revenue represents one-time phenomena or structural, ongoing increases in revenue. For example, if an event (perhaps with Federal fiscal policy) generates a run-up in the stock market that prompts sizeable realizations of capital gains, individual income tax revenue may surge. In contrast, if a tight labor market results in broad wage increases, individual income tax revenue also may surge. Under these examples, the surge from the capital gains is not likely to be repeated in later years, while gains from the wage increase are likely to continue into future years. Consequently, a permanent tax reduction adopted in response to the surge would be less likely to have negative implications for the budget in future years if the surge is the result of rising wage rather than capital gains. Arguments can be made that a portion of the increase in revenue, particularly for FY 2021-22, represents one-time revenue events or at least events that do not represent permanent changes. One way to address a one-time surge in revenue is to adopt a one-time rebate, as the Governor suggested doing in May 2022.

The key question for any rebate is how to distribute the funds across taxpayers. This paper analyzes four different ways to implement a rebate:

- 1) By return. Each tax return would receive an equal amount. Based on the approximately five million returns filed on under the individual income tax each year, the analysis estimates a \$100.30 rebate for each tax return.
- 2) By taxable income. When individual income tax returns are filed, taxpayers report their adjusted gross income (AGI). However, for some taxpayers a portion of this income is not subject to tax. For example, nonresidents will report their total AGI, but will pay tax on only the portion attributed to Michigan. Some income, such as interest earned on US obligations, is not subject to state income taxes. As a result, the paper assumes a rebate distributed according to taxable income. Generally, a rebate calculated based on taxable income would equal approximately 0.2% of the taxable income.
- 3) By exemptions. For tax administration purposes, a rebate distributed based on the number of exemptions conceptually resembles a rebate distributed on a per capita, or per-person, basis. The analysis estimates a rebate distributed based the number of exemptions would equal \$56.20 per exemption.
- 4) By tax liability after nonrefundable credits. While the starting point for computing the Michigan individual income tax is AGI, even after AGI is reduced to taxable income, various tax provisions (e.g., the personal exemption) will change tax liability in ways that will differ across taxpayers. A rebate distributed across tax liability after nonrefundable credits would allocate the rebate based on a taxpayer's tax liability relative to the total liability for all taxpayers. Using the amount after nonrefundable credits excludes provisions for refundable credits that may not reflect individual income tax liabilities (e.g., the Homestead Property Tax Credit), Federal funded tax provisions (e.g., the Home Heating Credit), or other credits meant to make payments to the taxpayer for some other provision. Refundable credits also may result in a taxpayer's having a negative tax liability (the refundable credits exceed the taxpayer's liability) and distribution of a rebate across net liability after all credits would imply that certain taxpayers would receive a "negative rebate" that they would have to pay the State. A rebate distributed based on tax liability after nonrefundable credits would equal approximately a 4.85% reduction in liability.

## RESULTS OF THE ANALYSIS

Before addressing the implications of potential changes in the individual income tax, the current distribution of the tax will be examined. [Figure 1](#) illustrates how tax returns are distributed across different income groups. The distribution shown in [Figure 1](#) includes all returns for the model, regardless of filing status, residency, number of exemptions, or age. Adjusted gross income is used as the measure on the horizontal axis because, while taxable income may better represent the ultimate Michigan tax liability faced by the taxpayer, AGI better reflects the economic circumstances of the taxpayer. Summary tables of the analysis are presented in the Appendix, [Tables 1](#) through [4](#).

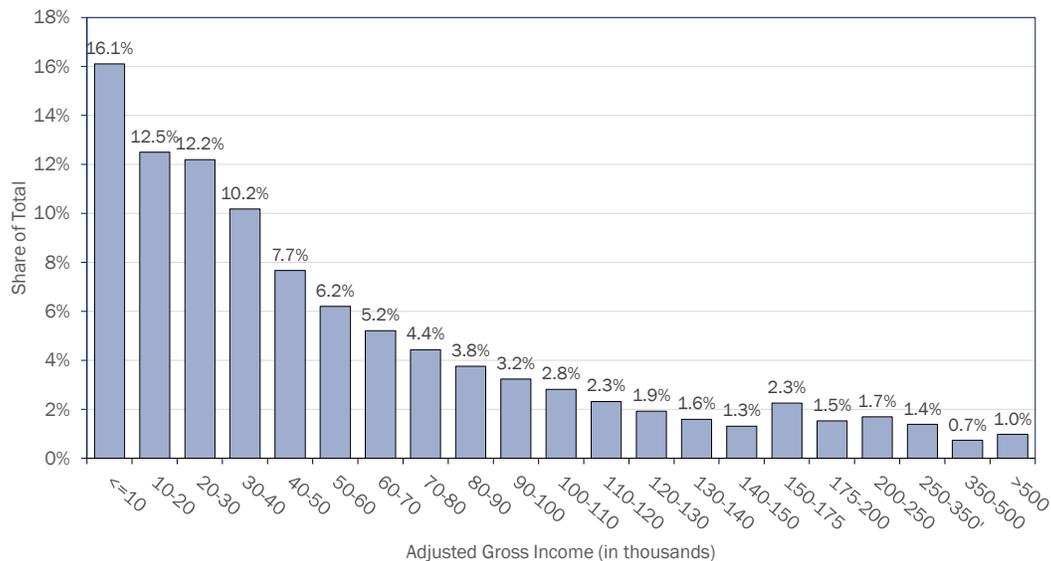
The lowest AGI income group (AGI of \$10,000 or less) shown in [Figures 1](#) through [15](#) is dominated by several very different populations who bear little resemblance to each other. In addition to those who have returns typical of most other taxpayers but simply receive little in the way of income, this income group also contains many returns not comparable to a more traditional low-income taxpayer. First, many returns in this group represent individuals required to file a

return, but who are claimed as an exemption on another return, e.g., a high school or college student who is still claimed as a dependent on a parent's return. Approximately 5.3% of returns are filed by individuals who are not able to claim themselves as a deduction, with an average income of approximately \$8,675. Second, taxpayers with business income losses reported on their individual income tax returns also are heavily represented in the lowest AGI group. An example of these returns would be a taxpayer who operates a sole proprietorship or who is a member of a pass-through entity (such as a partnership or S-corporation or other business entity that generally does not pay tax at the business level but "passes-through" business income to the individual owners, who then pay tax on the income on their individual income tax returns) and experienced business losses reported on their individual income tax return. Often these returns will exhibit negative AGI and, in some cases, the negative AGI will be significant (even totaling millions of dollars). These income losses often represent one-time accounting events or sales resulting in capital losses. While returns with negative AGI represent approximately 1.0% of all returns, the average AGI approximates negative \$162,800.

**Figure 1**

**Michigan Tax Return Distribution**

Almost Half of All Tax Returns Report Income Between \$10,000 and \$60,000



**Source:** Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

The diverse nature of the lowest income group creates two important factors when analyzing the results:

- 1) It will be difficult to generalize as to how many tax changes will affect taxpayers in this group. For example, those claimed as a dependent on another return will not directly benefit from an increase in the personal exemption—although the taxpayer who claims them as a dependent will benefit. Similarly, increasing the personal exemption or lowering the tax rate will not lower the tax liability of an individual with negative income due to losses.
- 2) Readers should take care when making normative judgments about whether it is "good" or "bad" that taxpayers in this group appear to benefit or not benefit from any given tax change.

An important caveat regarding the distributional analysis contained in this report: the data reflect results derived from the Senate Fiscal Agency (SFA) Individual Income Tax model for tax year 2020. The data for this model are provided by the Department of Treasury and do not contain information for all returns. The SFA model represents a sizeable sample of returns, sampled in order to provide representative information on Michigan returns so that the SFA is able to evaluate the aggregate impact of either tax or economic changes on State revenue. The model is not sampled in a way designed to model, or match the statistical distribution of, taxpayers across the wide variety of demographic characteristics present in the full universe of tax returns. The intent of the model is to be able to produce accurate **aggregate** results rather than results for specific demographic characteristics. As is discussed in the next section, despite this limitation in using the model's data, the model does appear to accurately represent certain key demographics.

### ***The Income Distribution for Michigan Income Tax Taxpayers***

Under the SFA model, 16.1% of tax year 2020 returns (slightly less than one out of every six returns) fell in the lowest income group—virtually the same as the 16.2% reported by the Michigan Department of Treasury for the full population of 2020 tax returns. At the other extreme, the model's 1.0% of returns at \$500,000 or more exactly matched the Treasury data for the full population. The model's other income groups also exhibited a similar distribution as reported by the Department of Treasury—with the overwhelming majority of income groups exhibiting the same distributional shares as those reported by the Department of Treasury. Average AGI under the model totaled \$81,591, only a few hundred dollars more than the \$81,175 average reported for all taxpayers. For the remainder of this report, any distributional shares and figures that are reported will refer to the data derived from the model rather than from the full population of 2020 returns.

Most returns exhibit income levels well below average AGI. Tax returns exhibiting incomes between \$10,000 and \$30,000 represent nearly one out of every four (24.7%) returns. (See [Figure 1](#).) Taxpayers with incomes within roughly \$10,000 of average AGI (those with AGI between \$70,000 and \$90,000) represented 8.2% of all returns. As illustrated in [Figure 1](#), a significant number of returns report lower AGIs and higher incomes can extend upward significantly. As a result, the average AGI of \$81,175 is substantially above the median AGI of approximately \$38,810, although that median is pulled down by the issues discussed in the previous section for the lowest income group regarding income losses and individuals claimed as dependents on another return.<sup>2</sup> High income taxpayers represent a minority of returns. Taxpayers with income of \$150,000 or more represent 8.6% of all returns, while those with incomes of \$250,000 represent 3.1%.

While the distribution of returns is weighted toward lower incomes, the distribution of total income is somewhat the opposite, with lower income individuals representing a small portion of AGI despite representing a majority of returns (see [Figure 2](#)). Returns with incomes between \$10,000 and \$30,000 comprised 24.7% of all returns but only 6.0% of total AGI. Those returns near average AGI (between \$70,000 and \$90,000) represented 8.0% of all income, almost the same as their share of returns. In contrast, taxpayers with income of \$150,000 or more represent 52.0% of total AGI (compared to 8.6% of returns), while those with incomes of \$250,000 or more represent 39.4% and those with AGI of \$500,000 or more represent 30.7%. As a result, slightly less than one-third of all Michigan income is received by approximately 1.0% of the returns.

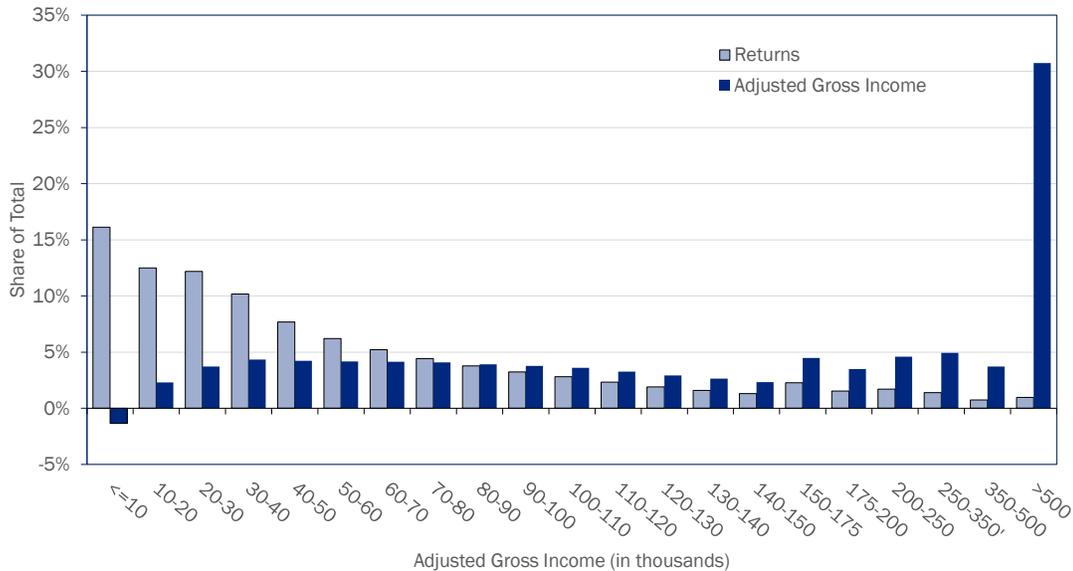
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<sup>2</sup> One could make arguments about which taxpayer groups should be included when computing the median income. The median presented here is across all tax returns. A compelling argument could be made that individuals claimed as dependents on another return should be excluded from the computation. However, although this group represents 5.3% of returns and generally exhibits lower incomes, omitting those returns likely would increase the median only marginally.

Figure 2

## Michigan Income Distribution

Almost One-Third of Total Income Earned by Those Making More than \$500,000



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

A portion of the income skew in the distribution of Michigan incomes reflects income that is ultimately not subject to tax. Michigan is not legally able to tax certain income, such as income earned from US debt obligations or income earned in other states by nonresidents. Other subtractions reflect policy choices enacted in Michigan statute. Total subtractions from AGI represented 34.1% of income excluded from tax in tax year 2020, with income attributable to another state representing 67.9% of total subtractions. Retirement and pension income taxed by the Federal government but subtracted for Michigan tax purposes represented 19.4% of total subtractions while subtractions for social security and active military benefits represented 7.8%.

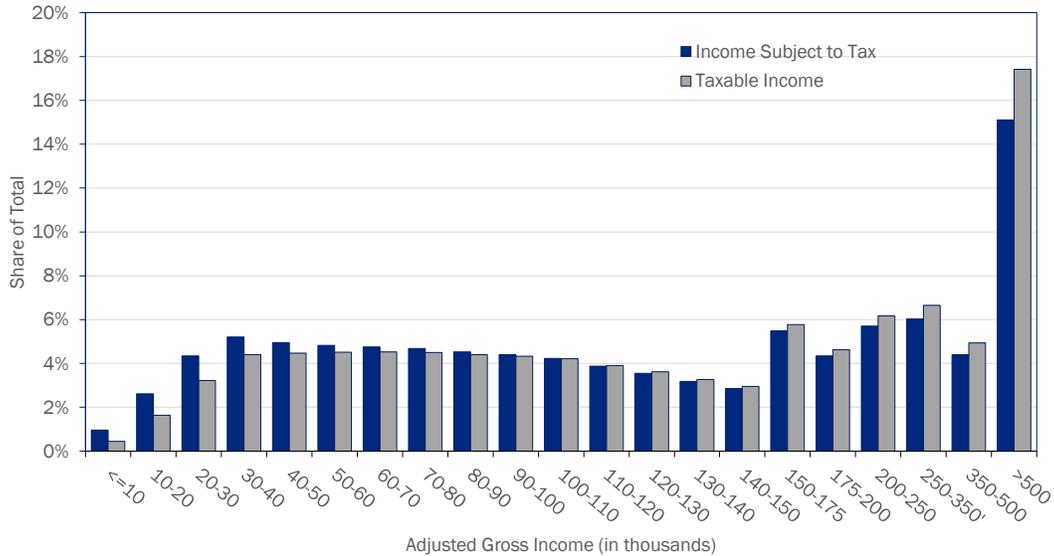
The distribution of Michigan income subject to tax follows the same pattern as AGI but is less skewed toward upper incomes because it excludes some very high income nonresident individuals who must file a Michigan return because they have income attributable to Michigan. For example, a professional athlete or professional musician may play a game or perform a concert in Michigan. The athlete or musician may earn millions in a year, but only the portion earned in Michigan is taxable. Similarly, a wealthy nonresident individual might own an office building or other property in Michigan and receive rental or lease income from the property, but the majority of the individual's income is received from sources not based in Michigan.

When examining income subject to tax, individuals with AGI of between \$10,000 and \$30,000 represented 6.9% of total income subject to tax--slightly more than their share of total AGI (see [Figure 3](#)). Returns near average AGI (between \$70,000 and \$90,000) represented 9.2% of all income subject to tax, more than both their share of AGI and share of returns. Taxpayers with income of \$150,000 or more represented 41.1% of income subject to tax (compared to 8.6% of returns), while those with incomes of \$250,000 or more represented 25.5% and those with an AGI of \$500,000 or more represented 15.1%. As a result, slightly more than one-fourth of all Michigan income subject to tax is received by approximately 3.1% of the returns and slightly less than one out of every six dollars subject to tax is received by the top 1.0% of returns.

**Figure 3**

**Distribution of the Individual Income Tax Base**

Personal Exemptions Significantly Reduce Taxable Income at Lower Income Levels



**Source:** Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

The application of deductions, as opposed to subtractions, shifts the distribution of taxable income even more toward higher incomes. Subtractions generally represent types of income excluded from taxation, while deductions generally represent amounts that taxpayers are eligible to subtract from income not excluded from taxation. Income attributable to other states is an example of a subtraction while the personal exemption is an example of a deduction, as are special deductions for those who are deaf, blind, totally and permanently disabled, or disabled veterans. These deductions are subtracted from the income subject to tax to determine taxable income.

Subtractions can make income subject to tax become negative (especially when AGI already is negative), but deductions cannot make taxable income become negative. A taxpayer with negative AGI has a taxable income of zero. A taxpayer with an income subject to taxation of \$10,000 but \$15,000 of deductions will report a taxable income of \$0, not negative \$5,000. As a result, deductions such as the personal exemption are more likely to reduce taxable income to zero for low income than for wealthier individuals, and thus shift the distribution of taxable income more toward higher incomes.

When examining taxable income, individuals with AGI of between \$10,000 and \$30,000 represented 4.9% of taxable income compared to 6.9% of total income subject to tax (see [Figure 3](#)). Returns near average AGI (between \$70,000 and \$90,000) represented 8.9% of taxable income, slightly less than the share of income subject to tax. Taxpayers with income of \$150,000 or more represented 45.6% of taxable income (compared to 8.6% of returns and 41.1% of income subject to tax), while those with incomes of \$250,000 or more represented 29.0% and those with an AGI of \$500,000 or more represented 17.4%. As a result, 29.0% of all Michigan taxable income is received by approximately 3.1% of the returns and more than one out of every six dollars of taxable income is received by the top 1.0% of returns.

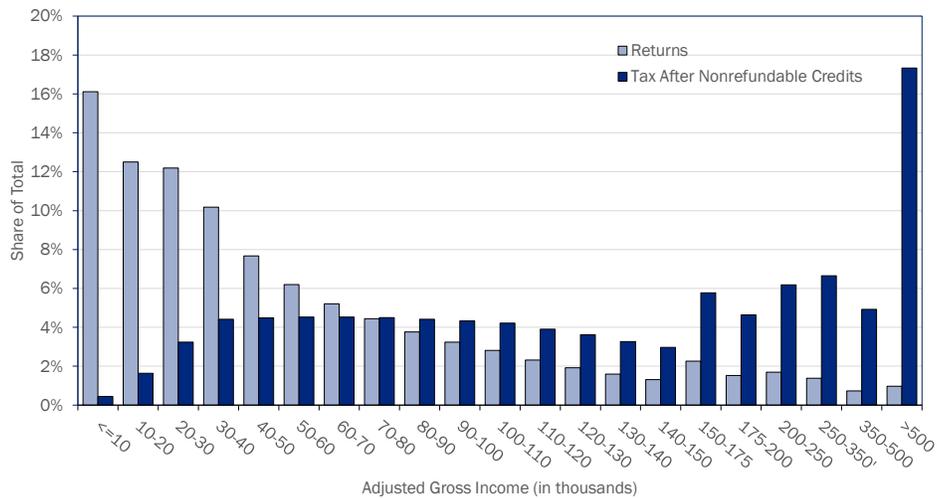
## The Distribution of Michigan Income Tax Liabilities

Under the SFA model, 16.1% of tax year 2020 returns (slightly less than one out of every six) reported an income of \$10,000 or less (including negative income). Because negative AGI results in a tax liability of zero, this group paid very little (0.4%) of the tax after nonrefundable credits. (See [Figure 4.](#)) Once refundable credits are included, this group in aggregate received money back from the State, with net liability (liability after all credits, including refundable credits) representing negative 2.5% of total net liability (see [Figure 5](#)). In dollar terms, individuals in this group received \$238.8 million in payments from the State because their refundable credits exceeded the \$46.0 million in tax liability after nonrefundable credits the group reported in tax year 2020.

**Figure 4**

### Distribution of Income Tax After Nonrefundable Credits

Although Less than 10% of Returns, Almost 50% of Tax is on Those Making More than \$150,000

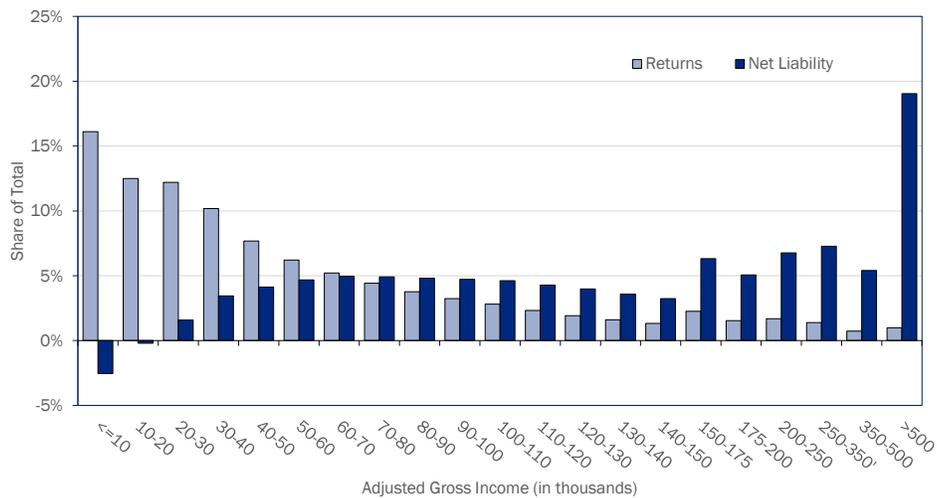


Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**Figure 5**

### Distribution of Net Income Tax Liability

With Refundable Credits, the 60% of Returns Below \$50,000 Pay About 6% of the Tax



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

Refundable tax credits are dominated by property tax credits such as the Homestead Property Tax Credit, which represented \$794.6 million (or 89.2%) of the refundable credits received in tax year 2020. Property tax credits are available for both homeowners and renters. In contrast to the magnitude of refundable property tax credits, the next two largest refundable credits include the Home Heating Credit, which totaled \$73.4 million in tax year 2020, and the EITC, which totaled \$90.2 million. Even if a credit is refundable, the taxpayer may not receive a payment from the State. Refunds only occur if the refundable credit exceeds tax liability after nonrefundable credits.

Refundable credits result in the distribution of tax liability differing between liability after nonrefundable credits and total net liability (i.e., after refundable credits). Because most refundable credits have some income requirement, such as the Homestead Property Tax Credit and the EITC, refundable credits tend to affect lower income filers. As a result, higher income taxpayers represent a larger share of net liability than tax after nonrefundable credits, and lower income taxpayers represent a larger share of tax after nonrefundable credits than net liability.

<u>Income Group (AGI)</u>	<u>Share of Returns</u>	<u>Share of AGI</u>	<u>Share of Income Subject to Tax</u>	<u>Share of Tax After Nonrefundable Credits</u>	<u>Share of Net Liability</u>
Low (\$10,000-\$30,000)	24.7%	6.0%	6.9%	4.9%	1.4%
Median (\$30,000-\$50,000)	17.8%	8.6%	10.2%	8.9%	7.6%
Average (\$70,000-\$90,000)	8.2%	8.0%	9.2%	8.9%	9.7%
High (\$150,000 or more)	8.6%	52.0%	41.1%	45.5%	49.8%

Similarly, just as the income distribution is more concentrated at incomes below the average, the distribution of tax liabilities is more concentrated toward higher incomes. As mentioned earlier, a taxpayer with negative AGI does not receive "negative tax" but only has a zero liability (before refundable credits), and a taxpayer will have a negative net liability (i.e., receive a payment from the State) only if they receive a refundable credit. As a result, while returns with incomes between \$10,000 and \$30,000 represent 24.7% of returns, 6.0% of AGI, and 6.9% of income subject to tax, the returns represent 4.9% of tax after nonrefundable credits and only 1.4% of net liability. Returns near average AGI (between \$70,000 and \$90,000) represent 8.2% of returns, 8.0% of AGI and 9.2% of income subject to tax but represent 8.9% of tax after nonrefundable credits and 9.7% of net liability. Returns with incomes above \$150,000 represent 8.6% of returns, 52.0% of AGI and 41.1% of all income subject to tax but represent 45.5% of tax after nonrefundable credits and 49.8% of net liability. Returns with incomes above \$250,000 represent 3.1% of returns, 39.4% of AGI and 25.5% of all income subject to tax but represent 28.9% of tax after nonrefundable credits and 31.7% of net liability.

***The Distributional Impact of an Individual Income Tax Rebate***

As mentioned above, income tax rebates represent a way to return money to taxpayers quickly and without changing the tax code, making rebates more suited to being an effective way of dealing with "one-time" phenomena that generate "extra" revenue or providing a one-time tax cut. Similarly, the primary issue is how to distribute rebates. Of the four distributional methods discussed earlier, [Figure 6](#) illustrates the impact of three of them (omitting the option based on taxable income because the distribution of taxable income is not meaningfully different from the distribution of tax after nonrefundable credits), assuming the rebates totaled \$500.0 million:

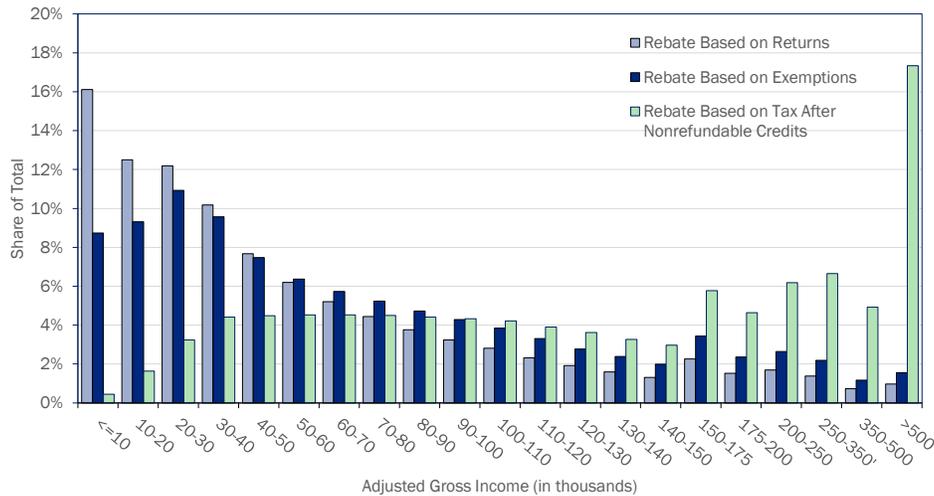
- 1) a rebate based on the number of returns
- 2) a rebate based on exemptions
- 3) a rebate based on tax after nonrefundable credits

<b>Distribution of Tax Change Impact for Select Income Groups</b>			
<b>Tax Change: Income Tax Rebate</b>			
<u>Income Group</u>	<u>Based on Returns</u>	<u>Based on Exemptions</u>	<u>Based on Tax After Nonrefundable Credits</u>
Low (\$10,000-\$30,000)	24.7%	20.2%	4.9%
Median (\$30,000-\$50,000)	17.8%	17.0%	8.9%
Average (\$70,000-\$90,000)	8.2%	10.0%	8.9%
High (\$150,000 or more)	8.6%	13.3%	45.5%

**Figure 6**

**Distribution of an Individual Income Tax Rebate**

Significant Differences Exist Between Different Bases Used to Calculate a Rebate



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

Obviously, a rebate based on returns received would follow exactly the distribution of returns. Lower incomes (from \$10,000 to \$30,000) would receive approximately one out of every four dollars rebated (24.7%), while those near median AGI (\$30,000 to \$50,000) would receive 17.8% of the rebate, those near average AGI (\$70,000 to \$90,000) would receive 8.2%, and higher income individuals (those returns reporting income of \$150,000 or more) would receive 8.6%.

A rebate based on the number of exemptions, which essentially is a "per-person" rebate, would provide proportionally less in rebates to the lowest income levels while increasing the proportion provided to all other income levels. This shift is not surprising given that many individuals in the lowest income category are not able to claim themselves as an exemption. These individuals still would receive a rebate amount, but it would be distributed to the taxpayer who claimed them as an exemption rather than to their individual, and likely lower income, return. For a rebate distributed based on exemptions claimed, lower incomes (from \$10,000 to \$30,000) would receive approximately one out of every five dollars rebated (20.2%), while those near median AGI (\$30,000 to \$50,000) would receive 17.0% of the rebate, those near average AGI (\$70,000 to \$90,000) would receive

10.0% of the rebate, and higher income individuals (those reporting income of \$150,000 or more) would receive 13.3%.

A rebate based on the tax liability after nonrefundable credits would be distributed identically to the distribution of tax liabilities after nonrefundable credits and would provide proportionally much more money to higher income taxpayers than either of the other two rebate approaches. For a rebate distributed based on tax liability after nonrefundable credits, lower incomes (from \$10,000 to \$30,000) would receive less than 5% of the rebate (4.9%), despite representing 24.7% of returns and 20.2% of exemptions. Taxpayers near median AGI (\$30,000 to \$50,000) would receive 8.9% of the rebate. Taxpayers near average AGI (\$70,000 to \$90,000) would receive 8.9% of the rebate, slightly more than the share of returns (8.2%) but less than the share of exemptions (10.0%), while higher income taxpayers (with AGI of \$150,000 or more) would receive 45.5% of the rebate (nearly half of the rebate), despite representing less than one out of every 10 taxpayers. Taxpayers who reported income of \$250,000 or more would receive more than one out of every four rebate dollars (28.9%) despite representing 3.1% of returns and 4.9% of exemptions.

### ***The Distributional Impact of Lowering the Individual Income Tax Rate***

Lowering the tax rate generally is the structural change that will affect the broadest array of taxpayers because lowering the tax rate will reduce tax liabilities for all taxpayers who have positive taxable income. However, lowering the tax rate will not reduce tax liabilities for those who already exhibit a zero liability, such as those with negative taxable income and those in which the value of any exemptions (such as the personal exemption) exceeds income subject to tax. Unlike most other options for reducing the individual income tax, lowering the rate also is one of the few options that will not eliminate any taxpayer's liability unless the rate is lowered to zero (which would eliminate all taxpayers' liabilities).

However, because the tax rate is levied against taxable income, rate reductions closely mirror the distribution of taxable income. As a result, when rate reductions are expressed in dollar terms wealthier taxpayers will receive the majority of the tax reduction even though the change will reduce all taxpayers' liabilities by the same proportion. In other words, if the tax rate is reduced 20%, it will lower the tax liability of both a taxpayer with \$10,000 in taxable income and a taxpayer with \$1.0 million of taxable income by 20%. At Michigan's current 4.25% rate, a 20% reduction would lower the tax rate to 3.4%. A taxpayer with \$10,000 in taxable income would see his or her liability fall from \$425 to \$340, a 20% reduction. The \$85 reduction in tax liability would represent 0.85% of taxable income. Similarly, a taxpayer with \$1.0 million in taxable income would see his or her liability fall from \$42,500 to \$34,000, a 20% reduction that totals \$8,500 but also represents 0.85% of taxable income. In this example, the wealthier taxpayer receives most of the dollar amount of the reduction, but proportionally the same reduction as the lower income taxpayer.

<b>Distribution of Tax Change Impact for Select Income Groups</b>		
<b>Tax Change: Lower Tax Rate to 4.05%</b>		
<u>Income Group</u>	<u>Share of Returns</u>	<u>Share of Tax Reduction</u>
Low (\$10,000-\$30,000)	24.7%	4.9%
Median (\$30,000-\$50,000)	17.8%	8.9%
Average (\$70,000-\$90,000)	8.2%	8.9%
High (\$150,000 or more)	8.6%	45.6%

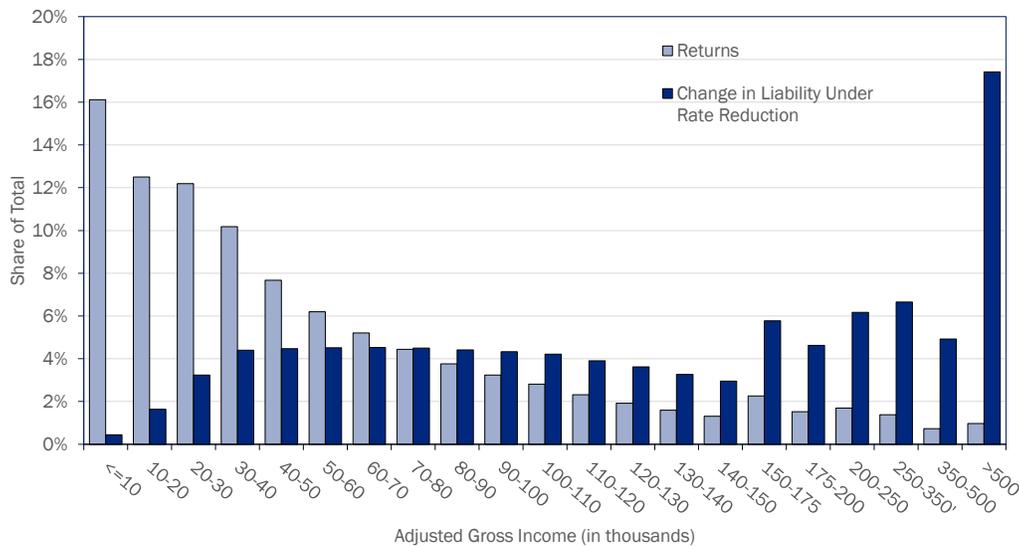
For the purposes of this analysis, a tax rate reduction that would lower revenue by \$500.0 million would lower the rate from 4.25% to approximately 4.05%. As with the distribution of taxable

income, individuals with AGI of between \$10,000 and \$30,000 would receive 4.9% of the tax cut. (See [Figure 7](#).) Taxpayers near the median AGI (between \$30,000 and \$50,000) would receive 8.9% of the tax reduction. Taxpayers near average AGI (between \$70,000 and \$90,000) would receive 8.9% of the tax reduction. Taxpayers with income of \$150,000 or more would receive 45.6% of tax reduction (compared to representing 8.6% of returns), while those with incomes of \$250,000 or more would receive 29.0% of the tax reduction and those with an AGI of \$500,000 or more would receive 17.4%. As a result, although a rate reduction would lower all taxpayers' liabilities proportionately, 29.0% of the impact would reflect the reduction received by approximately 3.1% of the returns. In other words, more than one out of every six dollars of the rate reduction would be received by the top 1.0% of returns even though all taxpayers would experience the same proportional reduction in their tax liability.

**Figure 7**

**Distributional Impact of Reducing the Income Tax Rate**

While Rate Cuts Affect All Returns with Liabilities, Almost 50% of the Benefit Would Go to Returns Reporting Income of \$150,000 or More



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**The Distributional Impact of Increasing the Personal Exemption**

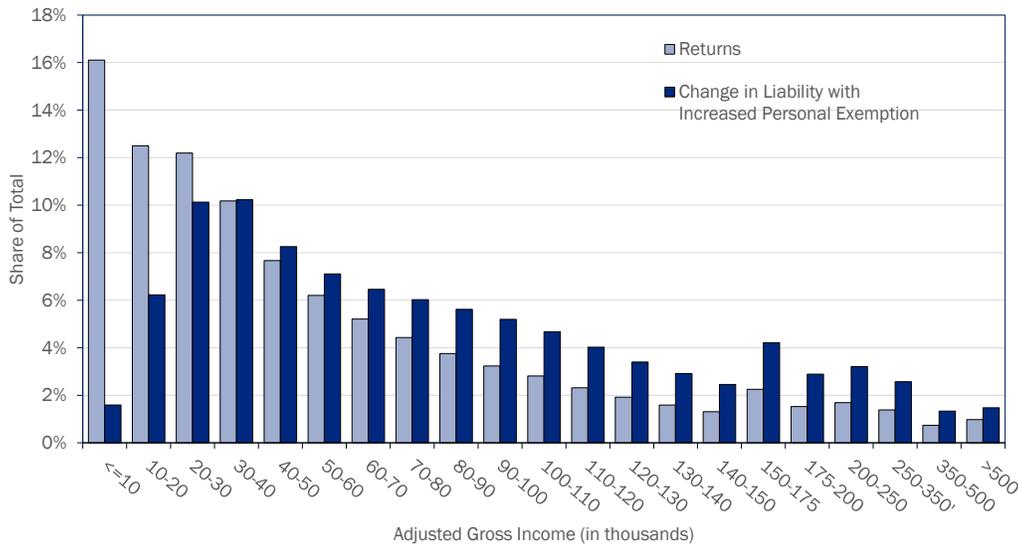
As mentioned above, the personal exemption reduces taxable income for lower income individuals by proportionately more than for higher income individuals. However, the personal exemption also cannot lower taxable income below zero, so if an individual's taxable income is lower, it is more likely that the individual will not realize the full amount of the tax reduction from an increase in the personal exemption. These two aspects work in opposite directions in how they affect the distribution of the impact of an increase in the personal exemption. The first effect shifts more of the impact to lower income individuals while the second effect shifts it more toward middle and higher incomes.

If the personal exemption were increased to a level that would reduce tax revenue by \$500.0 million, it would require the personal exemption to increase from the \$5,400 estimated for tax year 2023 under current law to approximately \$7,100. The interaction of the two effects described in the previous paragraph result in distributing the tax reduction in a way such that the greatest portions of the tax reduction are received by individuals near the median income. (See [Figure 8](#).)

**Figure 8**

**Distributional Impact of Increasing the Personal Exemption**

Almost 30% of the Impact Affects Taxpayers with Incomes Between \$20,000 and \$50,000



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

<b>Distribution of Tax Change Impact for Select Income Groups</b>		
<b>Tax Change: Increase Personal Exemption to \$7,100</b>		
<u>Income Group</u>	<u>Share of Returns</u>	<u>Share of Tax Reduction</u>
Low (\$10,000-\$30,000)	24.7%	16.4%
Median (\$30,000-\$50,000)	17.8%	18.5%
Average (\$70,000-\$90,000)	8.2%	11.6%
High (\$150,000 or more)	8.6%	15.7%

Individuals with AGI of between \$10,000 and \$30,000 would receive 16.4% of the tax cut, and individuals near the median income (those with AGI between \$30,000 and \$50,000) would receive 18.5%. Taxpayers near average AGI (between \$70,000 and \$90,000) would receive 11.6% of the tax reduction. Taxpayers with income of \$150,000 or more would receive 15.7% of tax reduction, while those with incomes of \$250,000 or more would receive 5.4% of the tax reduction and those with an AGI of \$500,000 or more would receive 1.5%. As a result, for taxpayers with incomes of \$30,000 or more, the distribution of the tax reduction closely follows the distribution of tax returns.

***The Distributional Impact of Implementing a Child Tax Credit***

As mentioned previously, tax credits may either be refundable or nonrefundable and the distribution differs between the two. Similarly, some tax credits have income limits and those that do often provide some range over which the credit is gradually reduced and phased out. Because this analysis keeps the amount of tax reduction constant across different policy variations, the maximum child tax credit that could be provided to taxpayers will be larger for nonrefundable credits than for refundable credits and larger for those that impose income limits, although nonrefundability and income limits will eliminate some taxpayers from receive either a credit or the full amount of the credit.

The analysis assumes that for variants of the child tax credit that impose an income phase-out, that the phase-out starts at \$75,000 for single filers and \$150,000 for joint filers and the credit is reduced by 10% for every \$1,000 of income beyond the limit. As a result, single filers with incomes above \$85,000 and joint returns with incomes of more than \$160,000 will not receive a credit under the variations that impose an income limit on the credit.

An important caveat in the analysis and estimated dollar values for credits involves the number of children. Versions of the child tax credit proposed in 2022 restricted eligibility to dependents under the age of 19. However, the Michigan tax return does not collect the age of claimed dependents. As a result, it is impossible to distinguish between dependents who are under the age of 19 and those who are not. To simplify the analysis, this paper assumes 1) all claimed dependents are under the age of 19, and 2) that the distribution of those who are not under the age of 19 matches the distribution of those who are under 19. The first assumption, which is known to be incorrect, will cause the maximum credit available under each option to be understated because the cost will include that of providing the credit to dependents who are not eligible. However, the second assumption is reasonable and because the focus of the paper is on the distributional effects of the tax change, the impact on the paper's analysis is likely negligible, and would affect only taxpayers at the lowest income levels on the nonrefundable options.

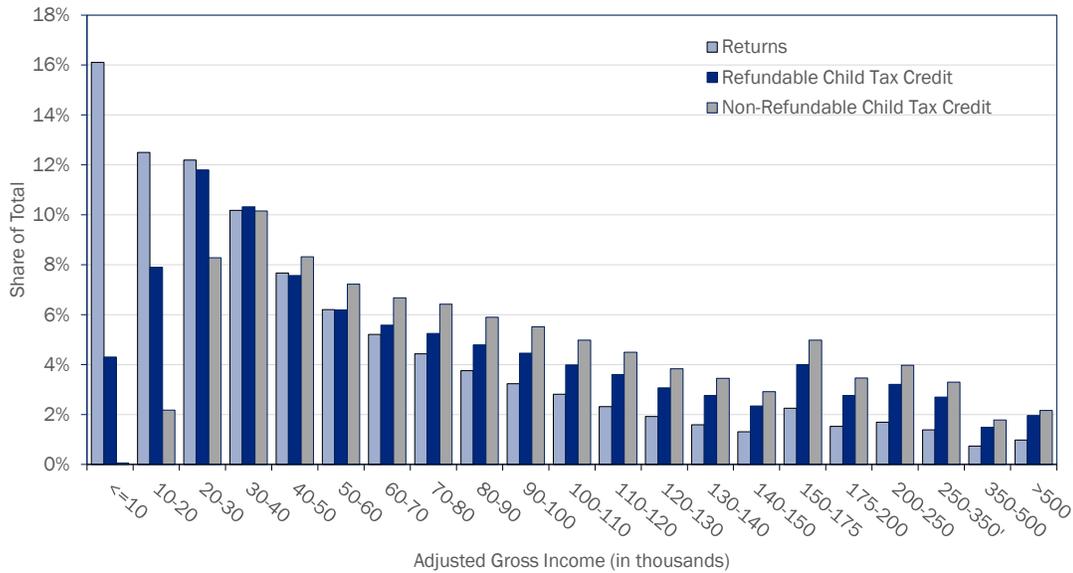
<b>Distribution of Tax Change Impact for Select Income Groups</b>			
<b>Tax Change: Child Tax Credit Without Income Limits</b>			
<u>Income Group</u>	<u>Share of Returns</u>	<u>Share, Refundable Credit</u>	<u>Share, Nonrefundable Credit</u>
Low (\$10,000-\$30,000)	24.7%	19.7%	10.5%
Median (\$30,000-\$50,000)	17.8%	17.9%	18.5%
Average (\$70,000-\$90,000)	8.2%	10.0%	12.3%
High (\$150,000 or more)	8.6%	16.1%	19.6%

When income limits are not imposed on a child tax credit, a refundable child tax credit that would reduce revenue by \$500.0 million would total \$205 per child (again, it would probably be slightly higher because of dependents over the age of 18 who would not qualify for the credit), while a nonrefundable credit would be \$260 per child. Without income limits, the greatest distributional differences between the nonrefundable and refundable child tax credit appear at lower income levels. (See [Figure 9](#).) With the refundable child tax credit, taxpayers with AGI between \$10,000 and \$30,000 would receive 19.7% of the tax reduction (taxpayers with AGI between \$10,000 and \$40,000 would receive 30.0%) while under the nonrefundable version, those taxpayers would receive 10.5% of the reduction (and those taxpayers with AGI between \$10,000 and \$40,000 would receive 20.6%). As a result, for low-income taxpayers, making the child tax credit nonrefundable would reduce these taxpayers' share of the tax cut by between 30% and 75%. For taxpayers near the median AGI (between \$30,000 and \$50,000), refundability is less of an issue; those taxpayers would receive 17.9% of the tax reduction under a refundable credit and 18.5% under a nonrefundable credit. Similarly, taxpayers near average AGI (\$70,000 to \$90,000) would receive 10.0% of the tax reduction under a refundable credit and 12.3% under a nonrefundable credit. Taxpayers with an AGI of \$150,000 or more would receive 16.1% of the refundable credit and 19.6% of the nonrefundable credit.

**Figure 9**

**Distribution of A Child Tax Credit With No Income Phaseouts**

Non-Refundability Pushes More of the Impact to Higher Income Levels



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

<b>Distribution of Tax Change Impact for Select Income Groups</b>			
<b>Tax Change: Child Tax Credit With Income Limits</b>			
<u>Income Group</u>	<u>Share of Returns</u>	<u>Share, Refundable Credit</u>	<u>Share, Nonrefundable Credit</u>
Low (\$10,000-\$30,000)	24.7%	23.9%	12.1%
Median (\$30,000-\$50,000)	17.8%	21.7%	22.8%
Average (\$70,000-\$90,000)	8.2%	11.3%	15.0%
High (\$150,000 or more)	8.6%	1.1%	1.5%

When income limits are imposed on the child tax credit, a refundable child tax reduce that would reduce revenue by \$500.0 million would total \$250 per child (as mentioned above, the assumptions regarding the number of dependents result in the \$250 per child credit being understated), while a nonrefundable credit would be \$350 per child. Relative to no income limits, the distribution is shifted more toward lower-income taxpayers primarily because high income taxpayers are ineligible for the credit. As with the child tax credit with no income limits, the greatest distributional differences between the nonrefundable and refundable child tax credit appear at lower income levels. (See [Figure 10](#).)

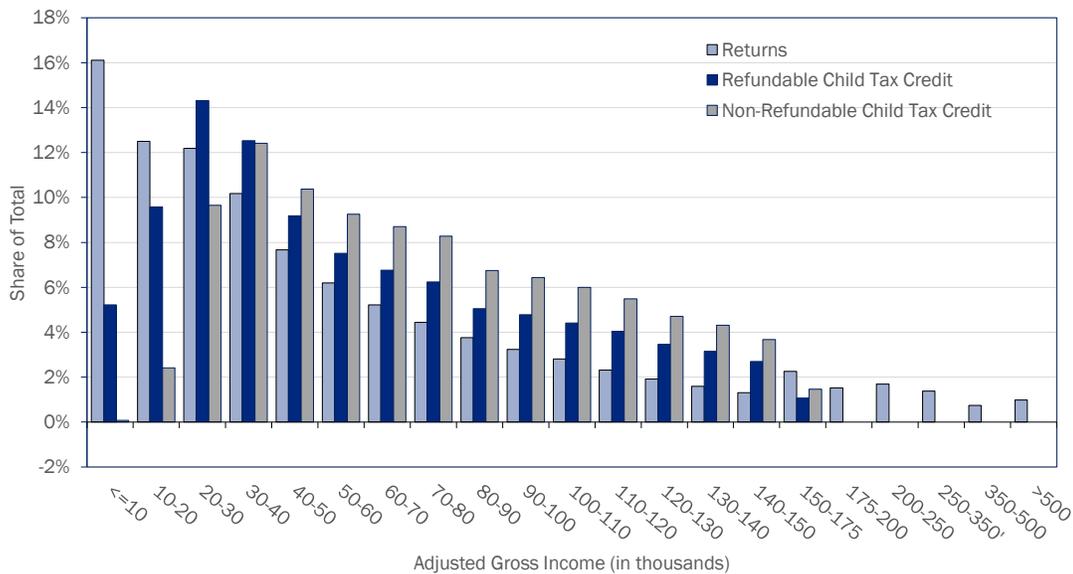
With the refundable child tax credit and income limits, taxpayers with AGI between \$10,000 and \$30,000 would receive 23.9% of the tax reduction (taxpayers with AGI between \$10,000 and \$40,000 would receive 36.4%) while under the nonrefundable version, those taxpayers would receive 12.1% of the reduction (and those taxpayers with AGI between \$10,000 and \$40,000 would receive 24.5%). As with the version with no income limits, for low-income taxpayers, making the child tax credit nonrefundable reduces these taxpayers' share of the tax cut by between 30% and 75%. Like the version without income limits, for taxpayers near the median AGI (between \$30,000 and \$50,000), refundability is less of an issue. These taxpayers would receive 21.7% of

the tax reduction under a refundable credit and 22.8% under a nonrefundable credit. For taxpayers near average AGI (\$70,000 to \$90,000), nonrefundability has more of an effect of directing more of the tax credit to them; these taxpayers receive 11.3% of the tax reduction under a refundable credit and 15.0% under a nonrefundable credit. Because of the income phaseouts, taxpayers with an AGI of \$150,000 or more receive almost none of the tax reduction, with taxpayers making between \$150,000 and \$175,000 (actually \$160,000 due to the income limit) receiving 1.1% of the refundable credit and 1.5% of the nonrefundable credit.

**Figure 10**

**Distribution of A Child Tax Credit With Income Phaseouts**

Non-Refundability Raises Higher Income Share While Phaseout Boosts Low and Middle Income Shares



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**The Distributional Impact of Increasing the Earned Income Tax Credit**

The EITC is a refundable credit that faces income limits. As such, any increase in the credit is going to be limited to individuals with lower incomes. In order to qualify for the credit, a taxpayer must have "earned income", which includes income such as wages, salaries, and self-employment income, but excludes income such as social security or unemployment benefits, alimony or child support, pensions and annuities, and dividends and interest. The credit is larger for those with children than for those with no children (although the credit is maximized at three children), and for any given income the credit is larger for married individuals than for single individuals. However, the credit is not available to taxpayers with incomes that exceed the limits, which are adjusted each year for inflation. In tax year 2022, singles with an income of more than \$53,057 were not eligible for the credit regardless of the number of children (singles without children were no longer eligible once income reached \$16,480), and those married filing jointly were no longer eligible for the credit once income reached \$59,187 (those without children were no longer eligible once income reached \$22,610).

Increasing the Michigan EITC to a level that would reduce revenue by \$500.0 million would require increasing the credit from 6% of the Federal credit to 33% of the Federal credit. This change would not affect eligibility for the credit, so it would not expand the number of taxpayers affected

beyond the roughly 750,000 taxpayers that claim it each year. However, the change would increase the amount of any credit they would receive from Michigan (the Federal credit amount would remain unaffected).

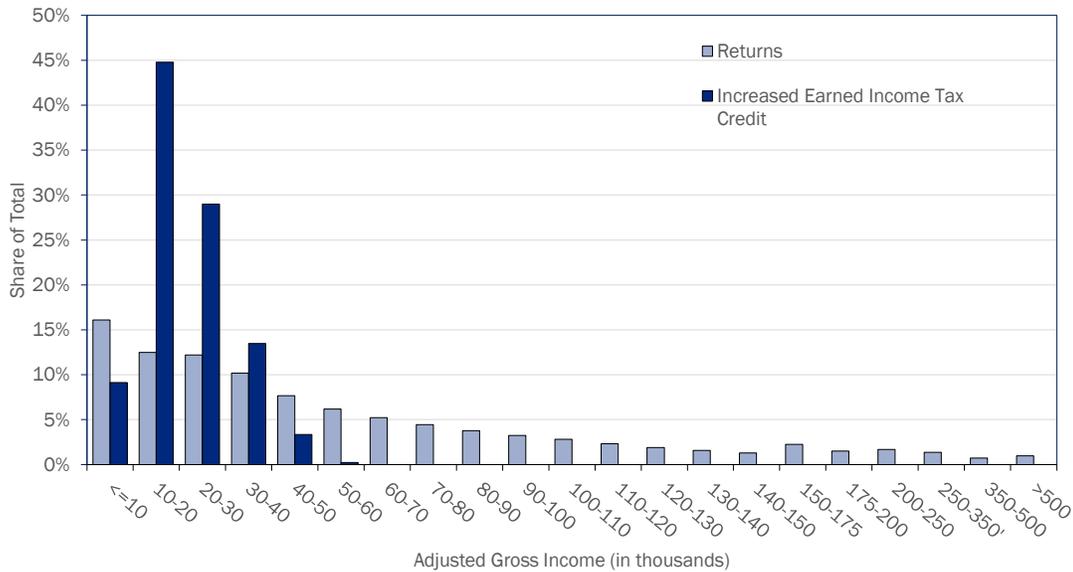
<b>Distribution of Tax Change Impact for Select Income Groups</b>		
<b>Tax Change: Increase EITC to 33% of Federal Credit</b>		
<u>Income Group</u>	<u>Share of Returns</u>	<u>Share of Tax Reduction</u>
Low (\$10,000-\$30,000)	24.7%	73.8%
Median (\$30,000-\$50,000)	17.8%	16.8%
Average (\$70,000-\$90,000)	8.2%	0.0%
High (\$150,000 or more)	8.6%	0.0%

Because increasing the EITC would change only the amount of credit received and not eligibility or the number of credits, the distribution of the tax change would exactly mirror the distribution of the current EITC (see [Figure 11](#)). Taxpayers with AGI between \$10,000 and \$30,000 would receive 73.8% of the tax reduction (taxpayers with AGI below \$10,000 would receive 9.1%). Because of the income limits associated with eligibility, no taxpayers with AGI of \$60,000 or more were eligible for the EITC and none of these taxpayers would receive the tax reduction from increasing the EITC. Because of the income limits and the rates at which the EITC phases out, taxpayers with AGI between \$40,000 and \$60,000 would receive only 3.6% of the reduction from increasing the EITC.

**Figure 11**

**Distributional Impact of Increasing the EITC**

Almost 50% of the Impact Affects Taxpayers with Incomes Between \$10,000 and \$20,000



**Source:** Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2019 Data.

***The Distributional Impact of Increasing the Deductions for Retirement Income***

Beginning in tax year 2012, Michigan adopted a new approach to taxing both retirement income and income received by those of retirement age. The previous system was based on source of income; the age of the taxpayer was mostly irrelevant to how the income was taxed. Some sources of income were completely exempt from taxation, other sources received deductions of various levels, while some sources of income were fully taxed. The system adopted in tax year 2012 began transitioning the system to one based on the age of the taxpayer rather than the source of income. Under the transition, taxpayers who were born before 1946 (who would have been at least 67 years old when the legislation took effect) were exempt from the changes. Taxpayers born after 1952 (those under the age of 60 when the legislation took effect) were subject completely to the new rules, while those born between 1946 and 1952 (those between 60 and 66 years old when the legislation took effect) were subject to a variant of the new rules but with some more generous provisions regarding certain types of income.

The analysis for changing retirement deductions in a way that would reduce revenue by \$500.0 million was limited by the nature of the data available to the Michigan Department of Treasury as well as the data contained in the Individual Income Tax model. Taxpayers do not report their age, and the complexity of the available deductions and exemptions make it difficult (if not impossible) in the context of the data available to the Senate Fiscal Agency to differentiate between different types of individuals. For example, the data do not allow the analysis to differentiate between an individual born before 1946 who is deducting \$20,000 because it is from a fully exempt public pension, from a taxpayer who is deducting the same amount from a private pension. Similarly, the data do not allow the analysis to differentiate a person born in 1953 who is deducting the \$20,000 from wages from that same person deducting it from a public or private pension. For the purposes of this analysis, and to the extent possible, we have assumed that deductions facing a dollar amount limit were increased to 350% of current law limits (to produce the \$500.0 million fiscal impact). At its most basic implementation, the analysis assumes that a single taxpayer born after 1953, subject to the \$20,000 deduction under current law, would be able to deduct \$70,000; or that a married filing joint return for taxpayers born before 1946 would be able to deduct \$380,828 from private pension income.

Unlike average AGI for the general population, many sources of retirement income provide less income to taxpayers. For example, pension income averages around \$20,000 per year for most taxpayers. In other words, single taxpayers who receive a pension average about \$20,000 of pension income while married couples average about \$40,000 in pension income. The pension income values are much lower than the \$81,175 average total income reported for all taxpayers. As a result, for many taxpayers, the current deductions eliminate the majority of retirement income from taxation, and increases in the exemption will primarily benefit only retirees with higher incomes.

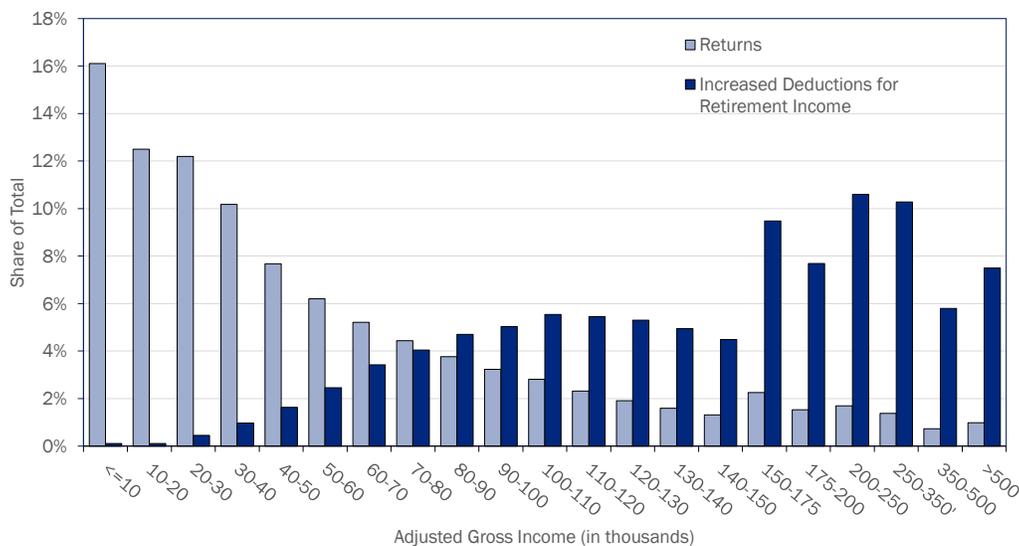
<b>Distribution of Tax Change Impact for Select Income Groups</b>		
<b>Tax Change: Increase Retirement Exemptions to 350% of Current Law</b>		
<u>Income Group</u>	<u>Share of Returns</u>	<u>Share of Tax Reduction</u>
Low (\$10,000-\$30,000)	24.7%	0.6%
Median (\$30,000-\$50,000)	17.8%	2.6%
Average (\$70,000-\$90,000)	8.2%	8.8%
High (\$150,000 or more)	8.6%	51.3%

Under the increased retirement exemptions, individuals with AGI of between \$10,000 and \$30,000 would receive 0.6% of the tax cut. This figure is not surprising given that the majority of income these individuals receive should already be exempt from taxation. (See [Figure 12](#).) Individuals near the median income (those with AGI between \$30,000 and \$50,000) would receive 2.6% of the tax reduction, a figure that reflects the same issue as with low-income filers. Taxpayers near average AGI (between \$70,000 and \$90,000) would receive 8.8% of the tax reduction. Taxpayers with income of \$150,000 or more would receive 51.3% of tax reduction, while those with incomes of \$250,000 or more would receive 23.6% of the tax reduction and those with an AGI of \$500,000 or more would receive 7.5%. As a result, taxpayers with roughly average income or less (\$90,000 or less) would receive 17.9% of the tax reduction from increasing exemptions on retirement income, despite representing 78.3% of returns.

**Figure 12**

**Distributional Impact of Increasing Retirement Exemptions**

More than Half of the Impact Affects the 9% of Taxpayers with Incomes Above \$150,000



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

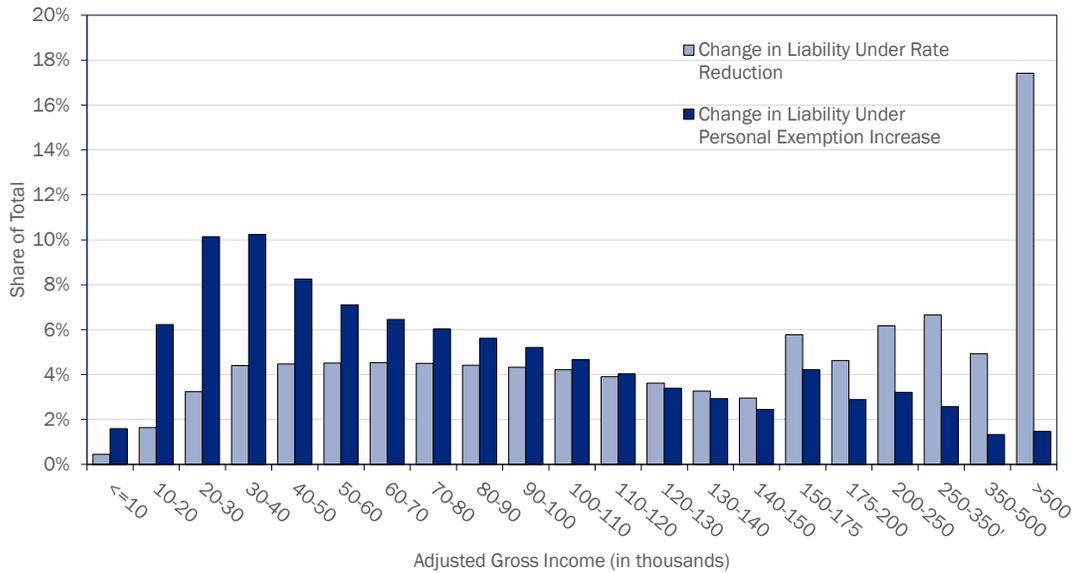
**Comparing the Distributional Impact of a Lower Income Tax Rate with an Increase in the Personal Exemption**

Reducing the individual income tax rate and increasing the personal exemption are broad-based changes that will affect nearly all taxpayers who currently exhibit a liability. However, as shown in [Figure 13](#), the two changes have different distributional impacts. Lower-income taxpayers will receive more of the tax reduction when enacted as an increase in the personal exemption, while higher income taxpayers will receive more of the tax reduction under a tax rate reduction.

**Figure 13**

**Reduced Income Tax Rate vs. Increased Personal Exemption**

Under Equal Revenue Reductions, Lower Incomes Benefit More from Exemption Increase



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

Taxpayers at or below average AGI generally will receive a larger share of the tax reduction under a personal exemption increase than under a lower tax rate. Individuals with AGI of between \$10,000 and \$30,000 would receive 16.4% of the tax reduction under an increase in the personal exemption, but only 4.9% of the reduction if the rate is lowered. This difference occurs despite the fact that many taxpayers in this income group are not able to fully utilize the entire increase in the personal exemption. Individuals near the median income (i.e., those with AGI between \$30,000 and \$50,000) would receive 18.5% of the tax reduction under an increase in the personal exemption, compared to 8.9% of the reduction if the rate were lowered. Taxpayers near average AGI (between \$70,000 and \$90,000) would receive 11.6% of the tax reduction under a personal exemption increase, compared to 8.9% of the reduction under a lower tax rate. For every income group below \$110,000 in AGI, taxpayers receive a greater share of a tax rate reduction under a personal exemption increase than under a lower tax rate.

In contrast, higher income taxpayers will receive a larger portion of the tax reduction under a decrease in the tax rate than under an increase in the personal exemption. Taxpayers with income of \$150,000 or more would receive 15.7% of the reduction under a personal exemption increase, but 45.6% of tax reduction under a lower tax rate. Similarly, those with incomes of \$250,000 or more would receive 5.4% of the tax reduction under a personal exemption increase, but 29.0% of the reduction under a lower tax rate. Those with an AGI of \$500,000 or more would receive 1.5% of the reduction under a personal exemption increase, but 17.4% of the reduction under a lower tax rate. For every income group above \$110,000 in AGI, taxpayers would receive a greater share of a tax rate reduction under a lower tax rate than under a personal exemption increase.

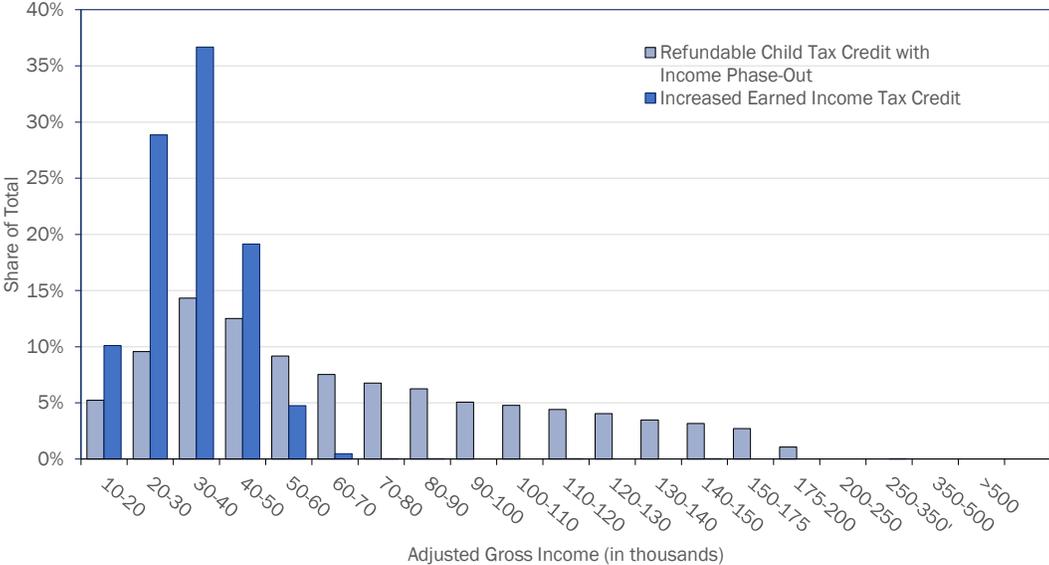
**Comparing the Distributional Impact of a Child Tax Credit with an Increase in the Earned Income Tax Credit**

The EITC and child tax credits are tax reductions targeted to broad taxpayer groups but affect fewer taxpayers than broad-based reductions like increasing the personal exemption or tax rate reductions. The EITC and child tax credits focus on different groups; the EITC attempts to offer tax relief to the working poor while a child tax credit attempts to offer tax relief to those with children. However, because the calculation of the EITC is very affected by the presence and number of children (up to three children), there is some degree of overlap not only between the populations affected but how much relief is provided. The similarities are even greater if an income phase-out is used when implementing a child tax credit.

Because the analysis used higher income limits for a child tax credit than exist for those eligible for the EITC, increasing the EITC directs more of the tax reduction to lower income taxpayers than would the adoption of a child tax credit with an income phase-out, even if the child tax credit is refundable. (See [Figure 14](#).) Individuals with AGI of between \$10,000 and \$30,000 would receive 73.8% of the tax reduction under an increase in the EITC, but only 23.9% of the reduction under a refundable child tax credit with income limits. Individuals near the median income (those with AGI between \$30,000 and \$50,000) would receive 16.8% of the tax reduction under an EITC increase, compared to 21.7% of the reduction under a refundable child tax credit with income limits. Taxpayers near average AGI (between \$70,000 and \$90,000) would receive none of the tax reduction under an EITC increase, compared to 11.3% of the reduction under a refundable child tax credit with income limits. Because of the income limits used for the analysis, for every income group between \$60,000 and \$160,000 in AGI, taxpayers receive a greater share of a tax rate reduction under a refundable child tax credit than with an increased EITC. Taxpayers with AGI above \$160,000 do not receive a reduction under either tax change.

**Figure 14**

**Refundable Child Tax Credit With Income Phaseouts vs. EITC**  
 Broader Relief Under Refundable Child Credit Trades Off With Relief for Low Incomes



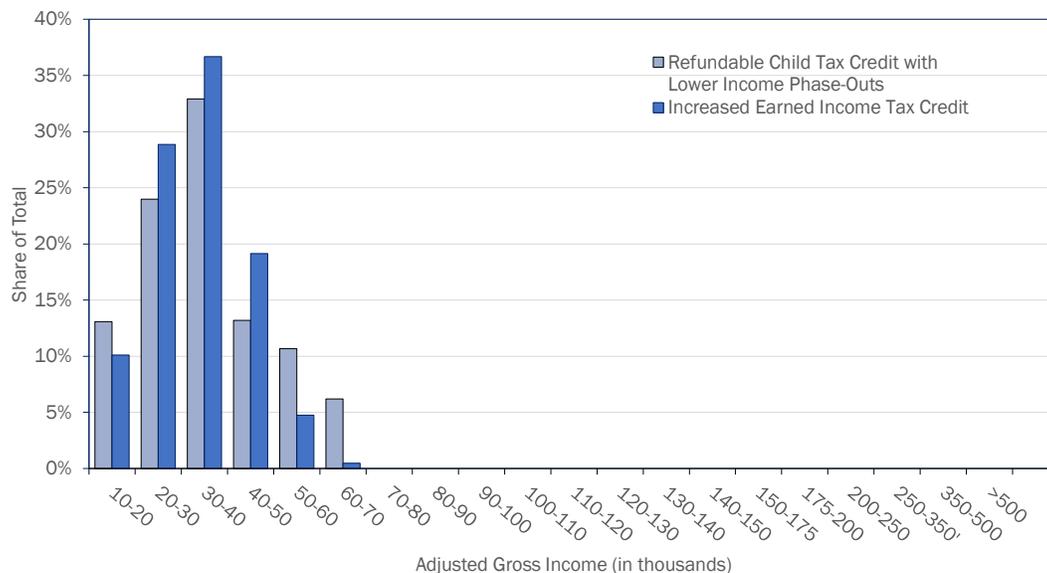
Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data, Except EITC which is 2019 Data.

The income limits used for the phase-out on the child tax credit account for almost all of the distributional differences between the EITC and child tax credit. If the income phaseout for the child tax credit is lowered to begin at \$25,000 for singles and \$50,000 for married individuals (effectively eliminating the credit at \$35,000 for singles and \$60,000 for married filing joint) and the credit is increased to bring the total revenue loss to \$500.0 million (resulting in a refundable credit of \$625 instead of \$250 per child), the distributions are almost identical. (See [Figure 15](#).) The greatest distributional differences would occur for taxpayers with AGI between \$40,000 and \$60,000 because of the different computational formulas for phasing out the two credits. The similarity between the two distributions when matched against similar income ranges lends support to the view that the two tax reductions options affect similar demographics.

**Figure 15**

**Refundable Child Tax Credit With Lower Income Phaseouts vs. EITC**

Distributions Very Similar Between the Two Policy Options



Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data, Except EITC which is 2019 Data.

**REPRESENTATIVE TAXPAYERS**

Viewing income distributions is useful for observing how the entire population of taxpayers might be affected by a tax change but fails to provide detail as to what these changes might mean for individual taxpayers. Furthermore, while aggregate analysis can discuss an average income or averages of some other variable, very few individual taxpayers match these averages. As the data above demonstrate, taxpayers can vary markedly. There are a substantial number of taxpayers with negative AGI, or who can be claimed as a dependent on another tax return, or who are seniors. Significant differences exist between returns for a single individual with two children from a married couple with two children, even if both exhibit the same AGI (or both report average or median AGI). As a result, this section will provide illustrate the impacts for sample taxpayers.

[Table 5](#) illustrates the impacts of the changes considered in this paper for single individuals under two different income levels, with varying numbers of children. [Table 6](#) provides similar information, but for married filing joint returns, while [Table 7](#) provides information for seniors. The income levels under each of these tables were chosen because they represent income levels common

across individuals with the filing characteristics. As the distribution by income illustrated in [Figure 2](#) shows, and the difference between median and average income reinforces, incomes are widely dispersed and often grouped around multiple AGI levels even within a given set of filing circumstances.

The tax elements in sample taxpayers in the [Tables 5](#) through [7](#) (see Appendix) are simplified and thus also can be considered to match very few actual taxpayers. For example, for those who are not seniors, [Tables 5](#) through [7](#) assume all income is wage income earned wholly in Michigan. For seniors, taxpayers are assumed to exhibit income levels that make the source of any pension income irrelevant to the results. Despite these simplifications, [Tables 5](#) through [7](#) do provide relevant illustrations of how the changes would affect the liability of taxpayers who are relatively similar to the ones illustrated in those tables.

## **INCREMENTAL CHANGES**

Of the types of tax changes discussed in this analysis, actual legislative proposals generally provide a different level of tax reduction and/or are combined with changes in multiple provisions. As discussed earlier, the Governor's FY 2022-23 budget proposal would have increased the EITC to 20% of the Federal credit (not 33%), Senate Bill 784 and House Bill 4568 of the 2021-2022 legislative session would have increased the personal exemption to \$6,700 (not \$7,100) and lowered the rate to 4.0% (not 4.05%). Some changes in the individual income tax are relatively constant as they change in amount; a refundable child tax credit that increases from \$100 to \$200 will reduce revenue by twice the amount of the revenue reduction at \$100. Other changes, such as increases in the personal exemption or increases in nonrefundable credits, are not proportional. Doubling a nonrefundable child tax credit from \$100 to \$200 will not double the revenue loss because some taxpayers will have their liability eliminated before they reach the full reduction provided by the \$200 credit. For example, a taxpayer with \$150 of tax liability, would reduce revenue by \$100 for a \$100 nonrefundable credit, but only \$150 for a \$200 nonrefundable credit.

[Table 8](#) illustrates the incremental impact for select tax changes considered in this report. In some cases, changes effective on January 1, 2023, would not affect revenue until FY 2023-24 because the provisions would not be claimed until tax year 2023 annual returns were filed in April 2024. The child tax credit and EITC are examples of these provisions. Other changes, such as changes in the personal exemption or the tax rate, would have a partial year effect in FY 2022-23 because of their impact on individual income tax withholding.

Legislation often changes multiple provisions of the tax code and often will seek to affect different population demographics, all while fitting into a desired budget. [Table 8](#) is intended to provide some general magnitudes of how incremental changes that might be included in legislation that affected multiple provisions would each affect revenue. However, some provisions interact with each other. For example, an increase in the personal exemption lowers taxable income and thus would reduce the impact from a reduction in the tax rate. In estimating a bill that simultaneously changed both the personal exemption and the tax rate, the impacts would need to be evaluated together; adding the incremental impact from each change separately would produce an inaccurate estimate.

## **CONCLUSION**

This paper has attempted to analyze the distribution impacts of a variety of tax changes that were proposed in 2022. In order to simplify the analysis, the tax changes were considered separate from each other, although much of the legislation that has been introduced has proposed to change multiple aspects of the tax calculation simultaneously. The analysis also fixed the potential revenue loss at the same amount so that distributional differences would not be distorted by providing different degrees of revenue loss. The analysis considered broad-based tax changes that would affect nearly all taxpayers, as well as several provisions that would affect more narrow groups of taxpayers. However, all of the changes would affect literally hundreds of thousands of taxpayers.

The analysis shows that tax changes that would reduce revenue by equivalent amounts can vary significantly in how the impact of the change is distributed across different income groups. This paper is intended to inform the debate over tax policy by providing a greater understand of how these changes affect different income groups.

## APPENDIX

**Table 1**  
**Distributional Statistics of the Michigan Individual Income Tax**  
(Dollar amounts in millions)

Adjusted Gross Income (AGI) Range	Number of Returns	Share of Total	AGI	Share of Total	Current Law							
					Income Subject to Tax	Share of Total	Taxable Income	Share of Total	Tax After Non- Refundable Credits	Share of Total	Net Liability	Share of Total
Less than or equal to \$10,000	802,993	16.1%	-\$5,488.2	-1.3%	\$2,746.3	1.0%	\$1,084.7	0.4%	\$46.0	0.4%	-\$238.8	-2.5%
\$10,001-\$20,000	623,270	12.5%	9,398.4	2.3%	7,454.5	2.6%	3,998.4	1.6%	169.4	1.6%	-19.0	-0.2%
\$20,001-\$30,000	607,671	12.2%	15,132.2	3.7%	12,393.4	4.3%	7,900.0	3.2%	334.4	3.2%	147.2	1.6%
\$30,001-\$40,000	507,241	10.2%	17,662.3	4.3%	14,870.1	5.2%	10,763.5	4.4%	455.4	4.4%	324.3	3.5%
\$40,001-\$50,000	382,412	7.7%	17,121.2	4.2%	14,160.0	5.0%	10,945.5	4.5%	462.9	4.5%	386.9	4.1%
\$50,001-\$60,000	309,022	6.2%	16,948.0	4.2%	13,779.1	4.8%	11,040.9	4.5%	466.5	4.5%	439.7	4.7%
\$60,001-\$70,000	259,800	5.2%	16,860.6	4.1%	13,568.1	4.8%	11,055.2	4.5%	467.1	4.5%	464.4	4.9%
\$70,001-\$80,000	221,090	4.4%	16,550.4	4.1%	13,355.0	4.7%	10,989.3	4.5%	463.9	4.5%	460.8	4.9%
\$80,001-\$90,000	187,390	3.8%	15,901.2	3.9%	12,933.8	4.5%	10,774.4	4.4%	455.0	4.4%	451.3	4.8%
\$90,001-\$100,000	161,161	3.2%	15,300.6	3.8%	12,550.8	4.4%	10,580.2	4.3%	446.6	4.3%	444.3	4.7%
\$100,001-\$110,000	140,021	2.8%	14,679.5	3.6%	12,076.4	4.2%	10,311.4	4.2%	435.2	4.2%	432.4	4.6%
\$110,001-\$120,000	115,701	2.3%	13,287.2	3.3%	11,060.9	3.9%	9,544.1	3.9%	403.2	3.9%	401.3	4.3%
\$120,001-\$130,000	95,440	1.9%	11,913.0	2.9%	10,136.5	3.5%	8,858.2	3.6%	373.8	3.6%	372.7	4.0%
\$130,001-\$140,000	79,291	1.6%	10,689.4	2.6%	9,087.3	3.2%	7,991.1	3.3%	337.3	3.3%	336.2	3.6%
\$140,001-\$150,000	65,420	1.3%	9,477.2	2.3%	8,158.3	2.9%	7,238.9	3.0%	305.7	3.0%	304.7	3.2%
\$150,001-\$175,000	112,540	2.3%	18,215.8	4.5%	15,681.3	5.5%	14,102.0	5.8%	595.6	5.8%	593.0	6.3%
\$175,001-\$200,000	76,100	1.5%	14,206.1	3.5%	12,405.5	4.3%	11,326.5	4.6%	478.0	4.6%	475.9	5.1%
\$200,001-\$250,000	84,303	1.7%	18,699.5	4.6%	16,291.4	5.7%	15,095.7	6.2%	637.1	6.2%	634.6	6.8%
\$250,001-\$350,000	68,817	1.4%	20,070.6	4.9%	17,226.3	6.0%	16,267.3	6.7%	685.8	6.6%	683.1	7.3%
\$350,001-\$500,000	36,647	0.7%	15,095.1	3.7%	12,552.5	4.4%	12,057.7	4.9%	507.7	4.9%	506.4	5.4%
More than \$500,000	48,770	1.0%	125,020.2	30.7%	43,148.5	15.1%	42,598.9	17.4%	1,788.2	17.3%	1,786.6	19.0%
<b>Total</b>	<b>4,985,100</b>	<b>100.0%</b>	<b>\$406,740.4</b>	<b>100.0%</b>	<b>\$285,636.0</b>	<b>100.0%</b>	<b>\$244,524.1</b>	<b>100.0%</b>	<b>\$10,314.9</b>	<b>100.0%</b>	<b>\$9,388.1</b>	<b>100.0%</b>

Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**Table 2**  
**Distributional Statistics of an Individual Income Tax Rebate**  
(Dollar amounts in millions)

<u>Adjusted Gross Income (AGI) Range</u>	<u>Based on Returns</u>		<u>Based on Taxable Income</u>		<u>Based on Tax After Non-Refundable Credits</u>	
	<u>Amount</u>	<u>Share of Total</u>	<u>Amount</u>	<u>Share of Total</u>	<u>Amount</u>	<u>Share of Total</u>
Less than or equal to \$10,000	\$80.5	16.1%	\$2.2	0.4%	\$2.2	0.4%
\$10,001-\$20,000	62.5	12.5%	8.2	1.6%	8.2	1.6%
\$20,001-\$30,000	60.9	12.2%	16.2	3.2%	16.2	3.2%
\$30,001-\$40,000	50.9	10.2%	22.0	4.4%	22.1	4.4%
\$40,001-\$50,000	38.4	7.7%	22.4	4.5%	22.4	4.5%
\$50,001-\$60,000	31.0	6.2%	22.6	4.5%	22.6	4.5%
\$60,001-\$70,000	26.1	5.2%	22.6	4.5%	22.6	4.5%
\$70,001-\$80,000	22.2	4.4%	22.5	4.5%	22.5	4.5%
\$80,001-\$90,000	18.8	3.8%	22.0	4.4%	22.1	4.4%
\$90,001-\$100,000	16.2	3.2%	21.6	4.3%	21.6	4.3%
\$100,001-\$110,000	14.0	2.8%	21.1	4.2%	21.1	4.2%
\$110,001-\$120,000	11.6	2.3%	19.5	3.9%	19.5	3.9%
\$120,001-\$130,000	9.6	1.9%	18.1	3.6%	18.1	3.6%
\$130,001-\$140,000	8.0	1.6%	16.3	3.3%	16.4	3.3%
\$140,001-\$150,000	6.6	1.3%	14.8	3.0%	14.8	3.0%
\$150,001-\$175,000	11.3	2.3%	28.8	5.8%	28.9	5.8%
\$175,001-\$200,000	7.6	1.5%	23.2	4.6%	23.2	4.6%
\$200,001-\$250,000	8.5	1.7%	30.9	6.2%	30.9	6.2%
\$250,001-\$350,000	6.9	1.4%	33.3	6.7%	33.2	6.6%
\$350,001-\$500,000	3.7	0.7%	24.7	4.9%	24.6	4.9%
More than \$500,000	4.9	1.0%	87.1	17.4%	86.7	17.3%
<b>Total</b>	<b>\$500.0</b>	<b>100.0%</b>	<b>\$500.0</b>	<b>100.0%</b>	<b>\$500.0</b>	<b>100.0%</b>

Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**Table 3**  
**Distributional Statistics of Individual Income Tax Rate and Personal Exemption Changes**  
(Dollar amounts in millions)

<u>Adjusted Gross Income (AGI) Range</u>	<u>Lower Rate to 4.05%</u>		<u>Increase Personal Exemption to \$7,100</u>	
	<u>Amount</u>	<u>Share of Total</u>	<u>Amount</u>	<u>Share of Total</u>
Less than or equal to \$10,000	-\$2.2	0.4%	-\$7.9	1.6%
\$10,001-\$20,000	-8.0	1.6%	-31.0	6.2%
\$20,001-\$30,000	-15.8	3.2%	-50.3	10.1%
\$30,001-\$40,000	-21.5	4.4%	-50.8	10.2%
\$40,001-\$50,000	-21.9	4.5%	-41.0	8.3%
\$50,001-\$60,000	-22.1	4.5%	-35.3	7.1%
\$60,001-\$70,000	-22.1	4.5%	-32.1	6.5%
\$70,001-\$80,000	-22.0	4.5%	-29.9	6.0%
\$80,001-\$90,000	-21.5	4.4%	-27.9	5.6%
\$90,001-\$100,000	-21.1	4.3%	-25.9	5.2%
\$100,001-\$110,000	-20.6	4.2%	-23.2	4.7%
\$110,001-\$120,000	-19.1	3.9%	-20.0	4.0%
\$120,001-\$130,000	-17.7	3.6%	-16.9	3.4%
\$130,001-\$140,000	-16.0	3.3%	-14.5	2.9%
\$140,001-\$150,000	-14.5	3.0%	-12.2	2.5%
\$150,001-\$175,000	-28.2	5.8%	-20.9	4.2%
\$175,001-\$200,000	-22.6	4.6%	-14.4	2.9%
\$200,001-\$250,000	-30.2	6.2%	-15.9	3.2%
\$250,001-\$350,000	-32.5	6.7%	-12.8	2.6%
\$350,001-\$500,000	-24.1	4.9%	-6.6	1.3%
More than \$500,000	-85.1	17.4%	-7.3	1.5%
<b>Total</b>	<b>-\$488.6</b>	<b>100.0%</b>	<b>-\$496.9</b>	<b>100.0%</b>

Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**Table 4**  
**Distributional Statistics of Selected Individual Income Tax Changes**  
(Dollar amounts in millions)

Adjusted Gross Income (AGI) Range	Refundable Child Credit No Income Phase-out		Nonrefundable Child Credit No Income Phase-out		Refundable Child Credit With Income Phase-out		Nonrefundable Child Credit With Income Phase-out		Increase EITC to 33% of Federal Credit		Increase Retirement Exemptions by 350%	
	Amount	Share of Total	Amount	Share of Total	Amount	Share of Total	Amount	Share of Total	Amount	Share of Total	Amount	Share of Total
Less than or equal to \$10,000	-\$21.4	4.3%	-\$0.3	0.1%	-\$26.1	5.2%	-\$0.4	0.1%	-\$45.4	9.1%	-\$0.5	0.1%
\$10,001-\$20,000	-39.2	7.9%	-10.7	2.2%	-47.8	9.6%	-12.0	2.4%	-222.9	44.8%	-0.5	0.1%
\$20,001-\$30,000	-58.6	11.8%	-40.8	8.3%	-71.5	14.3%	-48.3	9.7%	-144.3	29.0%	-2.1	0.4%
\$30,001-\$40,000	-51.3	10.3%	-50.1	10.2%	-62.5	12.5%	-62.1	12.4%	-67.1	13.5%	-4.6	1.0%
\$40,001-\$50,000	-37.6	7.6%	-41.0	8.3%	-45.8	9.2%	-51.9	10.4%	-16.6	3.3%	-7.7	1.6%
\$50,001-\$60,000	-30.8	6.2%	-35.6	7.2%	-37.5	7.5%	-46.3	9.3%	-1.2	0.2%	-11.5	2.5%
\$60,001-\$70,000	-27.7	5.6%	-32.9	6.7%	-33.8	6.8%	-43.5	8.7%	0.0	0.0%	-16.0	3.4%
\$70,001-\$80,000	-26.0	5.2%	-31.7	6.4%	-31.1	6.2%	-41.4	8.3%	0.0	0.0%	-19.0	4.0%
\$80,001-\$90,000	-23.8	4.8%	-29.1	5.9%	-25.2	5.0%	-33.7	6.7%	0.0	0.0%	-22.1	4.7%
\$90,001-\$100,000	-22.1	4.5%	-27.2	5.5%	-23.9	4.8%	-32.2	6.4%	0.0	0.0%	-23.6	5.0%
\$100,001-\$110,000	-19.8	4.0%	-24.5	5.0%	-22.0	4.4%	-30.0	6.0%	0.0	0.0%	-26.0	5.5%
\$110,001-\$120,000	-17.9	3.6%	-22.1	4.5%	-20.2	4.0%	-27.4	5.5%	0.0	0.0%	-25.6	5.5%
\$120,001-\$130,000	-15.2	3.1%	-18.9	3.8%	-17.3	3.5%	-23.6	4.7%	0.0	0.0%	-24.9	5.3%
\$130,001-\$140,000	-13.7	2.8%	-17.0	3.4%	-15.8	3.2%	-21.6	4.3%	0.0	0.0%	-23.2	4.9%
\$140,001-\$150,000	-11.6	2.3%	-14.4	2.9%	-13.5	2.7%	-18.4	3.7%	0.0	0.0%	-21.1	4.5%
\$150,001-\$175,000	-19.9	4.0%	-24.5	5.0%	-5.4	1.1%	-7.3	1.5%	0.0	0.0%	-44.5	9.5%
\$175,001-\$200,000	-13.7	2.8%	-17.0	3.5%	0.0	0.0%	0.0	0.0%	0.0	0.0%	-36.1	7.7%
\$200,001-\$250,000	-15.9	3.2%	-19.6	4.0%	0.0	0.0%	0.0	0.0%	0.0	0.0%	-49.7	10.6%
\$250,001-\$350,000	-13.4	2.7%	-16.2	3.3%	0.0	0.0%	0.0	0.0%	0.0	0.0%	-48.2	10.3%
\$350,001-\$500,000	-7.4	1.5%	-8.8	1.8%	0.0	0.0%	0.0	0.0%	0.0	0.0%	-27.2	5.8%
More than \$500,000	-9.7	2.0%	-10.6	2.2%	0.0	0.0%	0.0	0.0%	0.0	0.0%	-35.2	7.5%
<b>Total</b>	<b>-\$496.7</b>	<b>100.0%</b>	<b>-\$493.1</b>	<b>100.0%</b>	<b>-\$499.4</b>	<b>100.0%</b>	<b>-\$500.3</b>	<b>100.0%</b>	<b>-\$497.6</b>	<b>100.0%</b>	<b>-\$469.3</b>	<b>100.0%</b>

Source: Senate Fiscal Agency Individual Income Tax Model, Based on Tax Year 2020 Data.

**Table 5**

<b>Sample Taxpayers: Single</b>						
<b>Filing Status</b>	<b>Single</b>	<b>Single</b>	<b>Single</b>	<b>Single</b>	<b>Single</b>	<b>Single</b>
Number of Dependents Under Age 19 .....	0	1	2	0	1	2
Total Number of Exemptions.....	1	2	3	1	2	3
Adjusted Gross Income.....	\$35,000	\$35,000	\$35,000	\$50,000	\$50,000	\$50,000
Is Taxpayer Age 67 or older.....	No	No	No	No	No	No
Retirement/Social Security/Pension Income...	0	0	0	0	0	0
Wage Income .....	35,000	35,000	35,000	50,000	50,000	50,000
<b>Current Law</b>						
Taxable Income (tax year 2023 law).....	29,700	24,400	19,100	44,700	39,400	34,100
Income Tax .....	1,262	1,037	812	1,900	1,675	1,449
<b>Change in Liability Under Tax Reduction Options</b>						
<b>Rebates</b>						
Based on Number of Returns .....	(100)	(100)	(100)	(100)	(100)	(100)
Based on Exemptions .....	(56)	(112)	(169)	(56)	(112)	(169)
Based on Taxable Income .....	(2)	(2)	(2)	(4)	(4)	(3)
Based on Tax Liability After						
Nonrefundable Credits .....	(61)	(50)	(39)	(92)	(81)	(70)
Reduce Tax Rate to 4.05% .....	(59)	(49)	(38)	(90)	(79)	(68)
Increase Personal Exemption to \$7,100 ....	(76)	(153)	(230)	(77)	(154)	(229)
<b>Child Credit</b>						
Refundable, No Phase-out.....	-	(205)	(410)	-	(205)	(410)
Non-Refundable, No Phase-out.....	-	(260)	(520)	-	(260)	(520)
Refundable, with Phase-out.....	-	(250)	(500)	-	(250)	(500)
Non-Refundable, with Phase-out .....	-	(350)	(700)	-	(350)	(700)
Increase Earned Income Tax Credit .....	-	(320)	(811)	-	-	(10)
Increase Retirement/Pension Income Deductions .....	-	-	-	-	-	-

**Table 6**

<b>Sample Taxpayers: Married</b>						
<b>Filing Status</b>	<b>Married</b>	<b>Married</b>	<b>Married</b>	<b>Married</b>	<b>Married</b>	<b>Married</b>
Number of Dependents Under Age 19 .....	0	1	2	0	1	2
Total Number of Exemptions.....	2	3	4	2	3	4
Adjusted Gross Income.....	\$50,000	\$50,000	\$50,000	\$120,000	\$120,000	\$120,000
Is Taxpayer Age 67 or older.....	No	No	No	No	No	No
Retirement/Social Security/Pension Income.....	0	0	0	0	0	0
Wage Income .....	50,000	50,000	50,000	120,000	120,000	120,000
<b>Current Law</b>						
Taxable Income (tax year 2023 law) .....	39,400	34,100	28,800	109,400	104,100	98,800
Income Tax .....	1,675	1,449	1,224	4,650	4,424	4,199
<b>Change in Liability Under Tax Reduction Options</b>						
<b>Rebates</b>						
Based on Number of Returns .....	(100)	(100)	(100)	(100)	(100)	(100)
Based on Exemptions .....	(112)	(169)	(225)	(112)	(169)	(225)
Based on Taxable Income .....	(4)	(3)	(2)	(10)	(9)	(8)
Based on Tax Liability After						
Nonrefundable Credits .....	(81)	(70)	(59)	(226)	(215)	(204)
Reduce Tax Rate to 4.05% .....	(79)	(68)	(58)	(219)	(208)	(198)
Increase Personal Exemption to \$7,100	(154)	(229)	(306)	(154)	(229)	(306)
<b>Child Credit</b>						
Refundable, No Phase-out.....	-	(205)	(410)	-	(205)	(410)
Non-Refundable, No Phase-out.....	-	(260)	(520)	-	(260)	(520)
Refundable, with Phase-out.....	-	(250)	(500)	-	(250)	(500)
Non-Refundable, with Phase-out .....	-	(350)	(700)	-	(350)	(700)
Increase Earned Income Tax Credit .....	-	-	(172)	-	-	-
Increase Retirement/Pension Income Deductions .....	-	-	-	-	-	-

**Table 7**

<b>Sample Taxpayers: Seniors</b>						
<b>Filing Status</b>	<b>Single</b>	<b>Single</b>	<b>Single</b>	<b>Married</b>	<b>Married</b>	<b>Married</b>
Number of Dependents Under Age 19 .....	0	0	0	0	0	0
Total Number of Exemptions.....	1	1	1	2	2	2
Adjusted Gross Income.....	\$35,000	\$35,000	\$35,000	\$65,000	\$65,000	\$65,000
Is Taxpayer Age 67 or older.....	Yes	Yes	Yes	Yes	Yes	Yes
Is Taxpayer Born Before 1946 .....	No	No	Yes	No	No	Yes
Retirement/Social Security/Pension Income.....	35,000	25,000	35,000	65,000	50,000	65,000
Wage Income .....	-	10,000	-	-	15,000	-
<b>Current Law</b>						
Taxable Income (tax year 2023 law) .....	15,000	15,000	-	25,000	25,000	-
Income Tax .....	638	638	-	1,063	1,063	-
<b>Change in Liability Under Tax Reduction Options</b>						
<b>Rebates</b>						
Based on Number of Returns .....	(100)	(100)	(100)	(100)	(100)	(100)
Based on Exemptions .....	(56)	(56)	(56)	(112)	(112)	(112)
Based on Taxable Income .....	(2)	(2)	-	(3)	(3)	-
Based on Tax Liability After						
Nonrefundable Credits .....	(31)	(31)	-	(52)	(52)	-
Reduce Tax Rate to 4.05% .....	(31)	(31)	-	(51)	(51)	-
Increase Personal Exemption to \$7,100	-	-	-	-	-	-
<b>Child Credit</b>						
Refundable, No Phase-out.....	-	-	-	-	-	-
Non-Refundable, No Phase-out.....	-	-	-	-	-	-
Refundable, with Phase-out.....	-	-	-	-	-	-
Non-Refundable, with Phase-out.....	-	-	-	-	-	-
Increase Earned Income Tax Credit .....	-	-	-	-	-	-
Increase Retirement/Pension Income						
Deductions .....	(638)	(638)	-	(1,063)	(1,063)	-

**Table 8**

<b>Incremental Impact of Marginal Tax Changes Under the Individual Income Tax</b>				
<b>Change</b>	<b>Increment</b>	<b>Effective Date</b>	<b>Revenue Change (in millions)</b>	
			<b>FY 2022-23</b>	<b>FY 2023-24</b>
Rate*	0.10%	01/01/23	(\$224.1)	(\$336.4)
Personal Exemption	\$100	01/01/23	(22.5)	(30.0)
Child Credit (refundable, no income limits)	50	01/01/23	0.0	(121.1)
Earned Income Tax Credit	1% of Federal Credit	01/01/23	0.0	(18.4)

\*Note: based on the May 2022 Consensus Revenue Estimates.