Fiscal Research Center

Tax Incentive Evaluation: Georgia Sales Tax Exemption for Prescription Drugs, Contact Lenses, and Glasses

Peter S. Bluestone Robert D. Buschman Nicholas I. Warner



Tax Incentive Evaluation: Georgia Sales Tax Exemption for Prescription Drugs, Contact Lenses, and Glasses

Prepared by:

Georgia State University Fiscal Research Center

For:

Georgia Department of Audits and Accounts

November 2022

Authors:

Peter S. Bluestone Robert D. Buschman* Nicholas I. Warner

Fiscal Research Center Andrew Young School of Policy Studies Georgia State University 14 Marietta Street NW Atlanta, Georgia 30303

^{*} Associate director and principal investigator; rbuschman1@gsu.edu

Executive Summary

In 1984, Georgia enacted a state sales tax exemption (hereafter referred to as simply the prescription drug exemption) that excludes prescription drugs, glasses and contacts, and the sale of nonprescription (as well as prescription) insulin from the state's 4-percent sales tax rate as well as local sales taxes, at an average rate of 3.37 percent as of July 1, 2022, according to the Tax Foundation. The purpose of this report is to evaluate the Georgia prescription drug exemption in accordance with the provisions of O.C.G.A. § 28-5-41.1 (2021 Senate Bill 6), in terms of its fiscal and economic impacts, as well as its public benefits.

This report was prepared under contract with the Georgia Department of Audits and Accounts. Program information used in the report was obtained from the Georgia Department of Community Affairs (DCA) and Georgia Department of Revenue (DOR).

The annual cost to the state for the prescription drug exemption is estimated at \$453 million for FY 2021. Based on the academic literature, this full amount is estimated to be captured by consumers as additional disposable income. We use the IMPLAN input-output model to estimate the economic activity this additional household disposable income generates for Georgia. Using these estimates the amount of state and local revenue is estimated as shown in Tables ES1 and ES2, respectively.

As a result of this sales tax exemption, the state's general fund expenditures are implicitly reduced by the amount of the tax expenditure. An alternative use of the funds, in the absence of the exemption, is modeled assuming an increase in state spending by that amount, allocated across the various spending categories based on recent state budgets. Tables ES1 and ES2 show the estimated amount of state and local revenue from this alternative use of funds, the opportunity cost of the exemption. The net fiscal cost to the state, accounting for revenue gains from induced economic activity as well as the tax expenditure and opportunity costs, is estimated at about \$529 million for FY 2023. Table ES2 shows the net local revenue effects on the same basis.

Table ES1. Summary of Prescription Drug Exemption State Fiscal Effects

(\$ millions)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Revenue gains from economic impact	\$33.0	\$34.6	\$36.4	\$38.1	\$40.1
Less:					
Tax expenditure cost	(\$509.2)	(\$534.4)	(\$560.8)	(\$588.5)	(\$618.0)
Alternate-use revenue gains	(\$53.2)	(\$55.8)	(\$58.6)	(\$61.4)	(\$64.5)
Net Fiscal Effects	(\$529.4)	(\$555.6)	(\$583.0)	(\$611.8)	(\$642.5)

Table ES2. Summary of Prescription Drug Exemption Local Fiscal Effects

(\$ millions)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Revenue gains from economic impact	\$13.4	\$14.0	\$14.7	\$15.4	\$16.2
Less:					
Tax expenditure cost	(\$429.0)	(\$450.3)	(\$472.5)	(\$495.8)	(\$520.7)
Alternate-use revenue gains	(\$12.2)	(\$12.8)	(\$13.4)	(\$14.1)	(\$14.8)
Net Fiscal Effects	(\$427.8)	(\$449.1)	(\$471.2)	(\$494.4)	(\$519.3)

The prescription drug tax exemption has several public benefits. First, it helps lower-income households meet a basic need for prescription drugs and other covered items. Second, it reduces the regressively of the sales taxes as it is more burdensome on lower-income households that spend a greater share of their income on prescription drugs than higher-income households. For instance, households with less than \$15,000 in annual income spend, on average, 8 percent of this income on prescription drugs. Comparatively, those making more than \$200,000 annually spend, on average, about 1 percent of this income on prescription drugs.

As is shown in Table ES1, the cost of the prescription drug tax exemption far exceeds the benefits to the state in terms of tax revenue generated. However, unlike other tax preferences targeting economic growth, providing a positive future net revenue effect is not a presumed intent of the prescription drug exemption. The citizens of the state clearly benefit from the exemption through the tax savings on prescription drugs. In addition, the exemption helps to alleviate some of the regressivity of the sales tax. Thus, the exemption on prescription drugs helps to promote equity and improve the economic outlook for lower-income Georgians.

Contents

1.	Introduction	1
2.	Georgia's Prescription Drugs Tax Exemption – History and Overview	1
3.	Tax Expenditure Estimates and Distribution of Direct Costs and Benefits	1
	Tax expenditure costs and distribution across local governments	1
	Distribution of benefits to consumer households	4
4.	Other States' Taxation of Prescription Drugs	5
5.	Literature Review - Incidence of a Tax on Prescription Drugs	6
6.	IMPLAN Economic and Fiscal Impact Analysis	7
	Model Overview	7
	Economic Impact Induced Effects	8
	Alternative-Use Economic Impacts	8
7.	Fiscal Impacts	9
	Foregone revenues	10
	Revenue effects of induced economic impact	10
	Alterative-Use Annual State and Local Tax Revenue	11
	Administrative Costs	11
8.	Conclusion	12
Re	eferences	13
A	ppendix A: State Sales Tax Rates and Food & Drug Exemptions	14
A	ppendix B: Value of Sales Tax Alternative Use – IMPLAN Code Table	15

1. Introduction

In 1984, Georgia enacted a state sales tax exemption for prescription drugs, excluding prescription drugs, glasses and contacts, and the sale of insulin (regardless of prescription) from the state's 4-percent sales tax rate. The purpose of this report is to evaluate the Georgia prescription drug exemption, in accordance with the provisions of O.C.G.A. § 28-5-41.1 (2021 Senate Bill 6), in terms of its fiscal and economic impacts, as well as its public benefits.

This report was prepared under contract with the Georgia Department of Audits and Accounts. Program information used in the report was obtained from the Georgia Department of Community Affairs (DCA) and Georgia Department of Revenue (DOR). The report begins with background on the Georgia prescription drug exemptions, followed by discussion of other state programs, a review of the literature, an IMPLAN analysis of economic and fiscal impacts of the exemption, estimates of the tax expenditure and administrative costs, and an analysis of the public benefits of the program in terms of its presumed goal of improving prescription affordability in Georgia.

2. Georgia's Prescription Drugs Tax Exemption – History and Overview

The 1984 adoption of a sales tax exemption for prescription drugs and glasses in Georgia became effective in 1985. The exemption applies to prescription drugs, glasses and contacts, and the sale of insulin, and it was expanded in 2011 to include wholesale purchases by hospitals as well as durable medical equipment. The exemption does not include drugs available over-the-counter, even with prescription, nor does it include tobacco products. Additionally, municipalities in Georgia are prohibited from imposing a sales tax on prescription drugs, glasses, or contacts.

The credit is applied at retail establishments selling prescription drugs, glasses and contacts. If an item is deemed to qualify for the exemption, no sales tax is collected at the point of sale. Georgia DOR has the authority to audit retail establishments to ensure that only qualified merchandise is being exempted.

The implementation of prescription drug tax exemption may have several motivations, with helping lower- and middle-income households afford necessary medicines as a primary reason. Sales taxes are regressive by nature, as they are more burdensome on lower-income households that spend a greater share of their income on goods that are subject to the tax than higher-income households. Thus, a sales tax exemption on prescription drugs, glasses, and contacts helps to make the sales tax less regressive.

3. Tax Expenditure Estimates and Distribution of Direct Costs and Benefits

Tax expenditure costs and distribution across local governments

The tax expenditure cost of the prescription drug exemption was estimated for the forthcoming Georgia Tax Expenditure Report for FY 2024 as shown in Figure 1 below. These costs are understood in terms of forgone state and local sales tax revenue, meaning the state sales tax base, absent this exemption, would apply to these sales of items and would be expected to generate tax in the amounts shown. As the general rule, when purchases of specific items are exempted from

the state sales tax base they are also exempt from local sales taxes. According to The Tax Foundation, the population-weighted average local sales tax rate in Georgia is 3.37 percent as of July 1, 2022; this rate is used for local tax expenditure estimates.

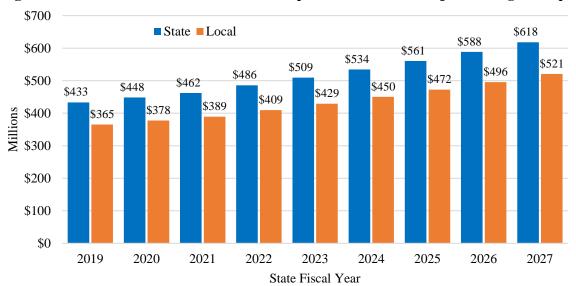


Figure 1. Estimated State and Local Tax Expenditure for Prescription Drug Exemption

These estimates are based on U.S. Centers for Medicare & Medicaid Services (CMS) estimates and forecasts of national expenditures on prescription drugs, broken down by out-of-pocket, private health insurance, Medicare, Medicaid, and other (CMS 2022). CMS also breaks down historical expenditures on drugs and other non-durable medical products by state (CMS 2020). We used the ratio of Georgia to national historical expenditures to estimate Georgia's share of CMS's national forecast of prescription drug expenditures. We used estimated historical and projected national spending on contact lenses (assuming all are prescription) and eye glass purchases (assuming 90 percent are prescription) from Statista to estimate Georgia expenditures on these products, shared down to the state in the same manner as prescription drugs (Statista 2022).

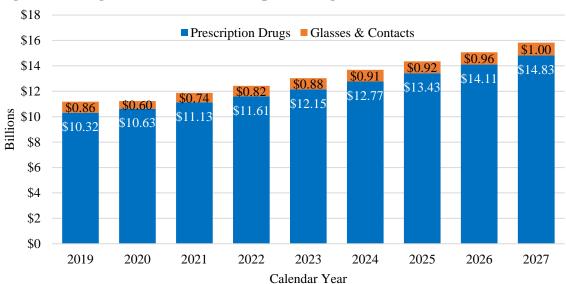


Figure 2. Georgia Purchases of Prescription Drugs, Contact Lenses, and Glasses

The state and local tax expenditure costs of the prescription drug exemption are distributed across Georgia counties based on where consumers make exempt purchases. The map in Figure 3 shows the estimated amounts spent on prescription drugs in Georgia at the county level. To allocate prescription drug spending to counties, we relied on The number of employees working in each county at a pharmacy, NAICS 446110, from the US Census County Business Patterns data was used to share prescription drug spending to counties.

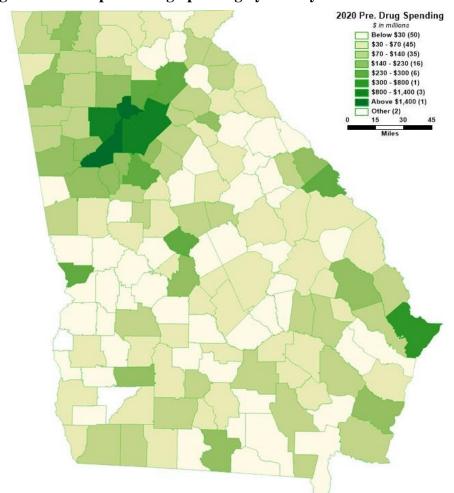


Figure 3. Prescription Drug Spending by County

Source: County Business Patterns for 2020 US Census Data

Distribution of benefits to consumer households

Georgia's prescription drug exemption lowers the cost of covered products by 7.37 percent on average, making necessary medicines and vision correction more affordable for Georgians. As these covered necessities are made less expensive, the savings allow for greater consumption of other goods and services and contribute to the growth of Georgia's economy.

Additionally, sales taxes on medicine are functionally regressive because spending on medicine is similar at all income levels. Flat-rate taxes on consumption, particularly when charged on inelastic or sustaining products like medicines, are regressive taxes because, in practice, lower-income individuals and households tend to spend a larger portion of their incomes on these necessities. If these goods were taxed, these households would bear a larger burden, relative to their incomes, from the taxes on these goods. By contrast, progressive income taxes are designed specifically to charge higher rates as individuals and households earn greater incomes.

Sales tax exemptions on prescription drugs, therefore, increase progressivity in an otherwise regressive tax (Miller 1951). Consumer expenditure data from the Bureau of Labor Statistics (BLS) helps to illustrate this point. Table 1 details the results from the consumer expenditure survey for 2020 for average out-of-pocket expenditures on prescription drugs and premium expenditures for prescription drug coverage for southeastern U.S. consumer units, broken down by income. We include 21.5 percent of health plan premiums, our estimate for prescription drug expenditures that are paid for through the plans rather than directly by the consumer. According to AHIP (2021), a national association of health insurance providers, this is the percentage of private health insurance expenditures associated with prescription drugs. We show that lower-income households would spend higher percentages of their income in taxes on this consumption, if not exempted, compared to higher-income households.

Table 1. Consumer Expenditures on Prescription Drugs,* Exempted Tax, and Implied Effective Tax Rate by Income for Southeastern U.S. Consumers, 2020

	Mean Income	Rx Drugs Paid	Rx Drugs Paid	Implied	Effective Tax Rate
Income	Before Taxes	by Insurer	Out-of-Pocket	Sales Tax	(State)
Less than \$15k	\$7,203	\$340	\$272	\$24.5	0.34%
\$15k to \$29.9k	\$22,192	\$559	\$333	\$35.7	0.16%
\$30k to \$39.9k	\$34,715	\$623	\$515	\$45.5	0.13%
\$40k to \$49.9k	\$44,691	\$650	\$481	\$45.2	0.10%
\$50k to \$69.9k	\$59,466	\$749	\$481	\$49.2	0.08%
\$70k to \$99.9k	\$83,669	\$878	\$481	\$54.4	0.06%
\$100k to \$149.9k	\$120,865	\$1,016	\$509	\$61.0	0.05%
\$150k to \$199.9k	\$171,164	\$1,187	\$885	\$82.9	0.05%
More than \$200k	\$363,725	\$1,625	\$790	\$96.6	0.03%
All Consumer Units	\$78,716	\$772	\$479	\$50.1	0.06%

^{*} Out-of-pocket cost of prescription drugs and the portion of health insurers' premiums that are spent on prescription drugs

Comparing the amount of state sales taxes that would be charged on prescription drugs to income levels shows the progressivity of the exemption, or equivalently the regressivity of sales taxes if not exempted. Households having less than \$15,000 in annual income spent \$612 annually on prescription drugs and drug plan coverage. This represented roughly 8.5 percent of their annual income and a 4-percent tax on that consumption would represent 0.34 percent of their annual income. Comparatively, a 4-percent tax on prescription drugs would represent 0.06 percent of annual income for households making more than \$200,000 annually.

4. Other States' Taxation of Prescription Drugs

To date, every state but one, along with the District of Columbia, exempts prescription drugs from state and local sales taxes. Illinois is the lone state that does tax prescription drugs, although it does so at a reduced rate of 1 percent. There is some variation across states in their treatment of over-the-counter drugs. Table 2 shows sales tax rates and prescription drug exemption status for

state and local sales taxes, as well as treatment of over-the-counter medicines, for Georgia's southeastern neighbors. Appendix A shows the same information for all states.

Table 2. Sales Tax Treatment of Prescription Drugs in Southeastern States

	State Sales	State Tax	Local Tax	
State	Tax Rate	Treatment	Treatment	OTC* Treatment
Georgia	4%	Exempt	Exempt	Taxable
Alabama	4%	Exempt	Exempt	Taxable
Florida	6%	Exempt	Exempt	Exempt
North Carolina	4.75%	Exempt	Exempt	Exempt w/ prescription
South Carolina	6%	Exempt	Exempt	Taxable
Tennessee	7%	Exempt	Exempt	Exempt w/ prescription

^{*} Over-the-counter drugs

5. Literature Review - Incidence of a Tax on Prescription Drugs

Tax incidence is an economic term indicating who ultimately pays a tax. The is relevant for the sales tax exemption on groceries because the incidence of sales tax on food affects who benefits from the exemption. If producers, wholesalers, or retailers were charging higher pretax prices in the presence of the exemption than would be expected without it, households would not be experiencing the full benefit of the exemption. We thus review here the tax incidence literature's findings in this regard.

Economic theory differentiates between the statutory and economic incidence of a tax. The statutory incidence falls on those legally responsible to pay the tax, in this case the businesses remitting the tax to the state. However, depending on the price elasticity of demand for the taxed goods, and the market structure and pricing power of sellers of the goods, the final burden of the tax – the economic incidence – may be shifted to consumers in the form of higher prices (Minnesota DOR). According to Zhao et al, (2022), "Standard welfare theory shows that the tax incidence between consumers and retailers under perfect competition depends on the relative price elasticities of demand and supply with whichever party is less price responsive bearing more of the tax burden (Harberger, 1962). In some instances, tax burdens may even be overshifted, i.e., the retail tax-inclusive price rises by more than the amount of the tax.

Using the theoretical concepts of tax incidence and past empirical studies, we can gain insights into how incidence works in the context of the sales tax exemption on prescription drugs. Due to their necessity, the demand for prescription drugs is highly inelastic for many consumers (Gemmill et al., 2008). Additionally, pharmaceutical companies possess a high degree of pricing power because of patent protections on many prescription drugs (Friedman, 2009). This combination of consumer inelastic demand and the market power of firms strongly suggests that if the sales tax were in place for prescription drugs, the burden would be fully shifted to consumers. Thus, it is consumers who primarily benefit from the exemption on prescription drugs and glasses.

This discussion assumes a traditional market structure, with consumers paying the full price for prescription drugs and glasses. However, many consumers rely on third-party payers (i.e., insurance companies) to cover a substantial amount of the cost of prescription drugs and glasses. If the exemption did not exist, it is unclear whether insurance companies would pass the tax amount onto the consumers as an additional co-pay or whether they would pay the tax but charge consumers higher premiums. Under either scenario, the consumer would bear the economic burden of the tax. Thus, this economic impact analysis assumes consumers are the beneficiaries of the prescription drug exemption.

6. IMPLAN Economic and Fiscal Impact Analysis

In this section, we model both prescription drug economic activity associated with additional household income provided by the tax exemption. Note that this economic activity is only shown as an induced economic impact, as the additional funds flow into the economy from households rather than firms. Results reported here include estimates of employment, wages, value added, and total output associated with the induced economic impact. In addition, as explained further below, we use these economic impact estimates to produce estimates of tax revenue impacts at the state and local levels from this additional household income. All the benefits of the exemption are deemed to flow to the consumer, and thus, the benefits modeled here also are all deemed to flow directly from the full amount of the tax expenditure. The full IMPLAN model is discussed below to explain why only induced effects are used.

Model Overview

To estimate the economic impact of the prescription drug exemption in Georgia, we use IMPLAN, a regional input-output model that is widely used for economic impact analysis. IMPLAN estimates how an initial change in spending or revenue for any industry category works its way through a regional economy, using data on input-output relationships between any industry and its suppliers and customers within or outside the given region—in this case the state of Georgia. IMPLAN also has data on the size of each industry in the economy in terms of revenue and employment at the state and county levels. The model uses sector multipliers to estimate the impact of the initial spending by firms on suppliers of goods and services to the sectors of interest, or on labor. This analysis uses IMPLAN model data for the year 2019, adjusted forward to represent average annual revenues and wages in 2021 dollars. Below is a discussion of the relevant IMPLAN terms used in the report.

Direct effects are the changes that initiate the ripple effects through the economy. For purposes of this analysis, direct effects are increased firm output (revenue) directly attributable to the exemption.

Indirect effects are the economic activity supported by business-to-business purchases in the supply chain for pharmacies. For example, a pharmacy purchases medicines from suppliers who then spend a portion of the money they receive on their own production inputs. This leads to spending by the suppliers of these inputs. This spending continues but progressively diminishes in its in-state impacts due to "leakages," which occur when firms spend money on imports (including imports from other states), taxes, and profits.

Induced effects are economic activity that occurs from households spending labor income earned from the direct and indirect activities. This activity results from household purchases on consumption items such as food, housing, healthcare, and entertainment. The labor income spent to generate these effects does not include taxes, savings, or compensation of nonresidents (commuters) as these leave the local economy (leakage).

Output is the value of production. This includes the value of all final goods and services, as well as all intermediate goods and services used to produce them. IMPLAN measures output as annual firm-level revenues or sales, assuming firms hold no inventory. Estimates of output changes resulting from new economic activity are then used to estimate state and local sales tax revenue.

We also report *value added*, which measures the contribution to state gross domestic product (GDP).

Labor income includes total compensation—wages, benefits, and payroll taxes—for both employees and self-employed individuals. Wage-gain estimates are used to estimate incremental state income tax revenue.

Employment includes full-time, part-time, and temporary jobs, including the self- employed. Job numbers do not represent full-time equivalents, so one individual may hold multiple jobs.

Economic Impact Induced Effects

Table 3 reports the IMPLAN estimates of direct, indirect, and induced impacts for the additional household income provided by the prescription drug exemption of \$851.2 million as estimated for FY 2021. Note again that the direct and indirect impacts are zero as the additional funds initially flow from household spending.

Table 3. Tax Exemption Economic Impact IMPLAN Results

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	0	0	0	0
Indirect Effect	0	0	0	0
Induced Effect	6,266	\$300,611,295	\$577,374,832	\$987,106,459
Total Effect	6,266	\$300,611,295	\$577,374,832	\$987,106,459

Source: IMPLAN and authors' calculations

Alternate-Use Economic Impacts

The economic impacts of the prescription drug exemption estimated above do not account for the opportunity costs of the forgone state revenues, i.e., the economic impacts of alternative uses of the funds expended through the tax credits. SB 6 requires evaluations of tax incentives to include estimates of *net* economic and fiscal impacts, thus requiring consideration of the economic and revenue effects of alternative uses of the revenues that would be available for other purposes in the absence of the exemption.

Alternatives could include other economic incentives, spending on other policy areas across state government, or a reduction in taxes that could also result in direct, indirect, and induced economic effects. However, absent information as to how the General Assembly would otherwise choose to spend foregone revenue, if not on the prescription drug exemption, we estimate the impact of using the revenue to fund an equivalent increase in state government spending in proportion to existing expenditures. That is, we allocated the foregone revenue to industry sectors as direct effects based on the sector shares of spending in the state budget. The two largest categories of spending – education (53 percent) and healthcare (21 percent) – account for about 75 percent of the budget. See Appendix B for more detail on the shares allocated to different government services and the IMPLAN industry codes most closely corresponding to the service categories.

As shown in Table 4 below, if the state and local governments received the forgone revenue associated with the prescription drug exemption and instead spent the money, it could be expected to generate approximately \$1.7 billion in output annually. This estimate includes \$462 million in annual direct state government outlays plus \$389.2 million in local options sales tax outlays, the annual amount of prescription drug exemption, plus the amounts shown for indirect and induced effects resulting from the initial, direct outlays.

Table 4. Summary of Alternate-Use Annual Economic Impacts

Impact Type	Employment	Labor Income	Value Added	Output
Direct Effect	11,633	\$534,920,021	\$568,232,528	\$851,210,007
Indirect Effect	1,540	\$89,453,348	\$156,567,835	\$295,481,892
Induced Effect	3,639	\$175,092,057	\$332,784,645	\$569,767,052
Total Effect	16,812	\$799,465,428	\$1,057,585,008	\$1,716,458,951

Source: IMPLAN and authors' calculations

Comparisons between the prescription drug exemption and alternative use economic impacts should be made cautiously as the exemption offers other public benefits, including economic aid to lower-income households and a reduction of the regressivity of the state sales tax.

7. Fiscal Impacts

A summary of the fiscal impacts of the prescription drug exemption is presented in Table 5 below. Following Table 5, we detail the estimates of the positive revenue effects arising from the induced economic impacts and of the opportunity cost of the tax expenditure, the revenues that could be expected from the alternate use of funds. Administrative costs are also discussed.

Table 5. Prescription Drug Exemption State and Local Fiscal Effects

(\$ millions)	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027
Tax expenditure cost					
State	(\$509.2)	(\$534.4)	(\$560.8)	(\$588.5)	(\$618.0)
Local	(\$429.0)	(\$450.3)	(\$472.5)	(\$495.8)	(\$520.7)
Revenue gains from economic impact					
State	\$33.0	\$34.6	\$36.4	\$38.1	\$40.1
Local	\$13.4	\$14.0	\$14.7	\$15.4	\$16.2
Alternate-use reduction					
State	(\$53.2)	(\$55.8)	(\$58.6)	(\$61.4)	(\$64.5)
Local	(\$12.2)	(\$12.8)	(\$13.4)	(\$14.1)	(\$14.8)
Net fiscal effects					
State	(\$529.4)	(\$555.6)	(\$583.0)	(\$611.8)	(\$642.5)
Local	(\$427.8)	(\$449.1)	(\$471.2)	(\$494.4)	(\$519.3)
Total net fiscal effects	(\$957.2)	(\$1,004.6)	(\$1,054.2)	(\$1,106.2)	(\$1,161.7)

Foregone revenues

Foregone revenues from the prescription drug exemption are the estimated tax expenditures presented in Section 3 above and shown in Table 5.

Revenue effects of induced economic impact

Table 6 shows estimates for state and local tax revenues attributable to economic activity associated with the prescription exemption for the FY 2021 base year. State income tax is estimated using employee compensation generated by IMPLAN. The labor income estimated in the broader consumer-facing economy is comprised mostly service workers, where the average labor income is approximately \$48,000 per job. Based on Georgia DOR tax data, specifically net tax liability relative to adjusted gross income (AGI) for taxpayers with AGI of \$48-85 thousand in tax year (TY) 2020, we assume an average effective tax rate (AETR) under current law of 3.84 percent on labor income estimated above. Resulting income tax revenues are estimated at about \$6.3 million for FY 2021.

IMPLAN reports estimates of sales tax and property tax. However, the model relies on levels of economic activity rather than sales or property tax rates and tax bases. Thus, they are not our preferred estimates. To estimate sales tax revenues, we use the model's estimated incremental output for the various retail sectors and adjust for the taxable portion of sector sales to arrive at estimates of taxable sales. For retail sectors, IMPLAN reports as output only the retail gross margin, not the total sales at retail, so these estimates are grossed up using average gross margin rates from IMPLAN for each retail sector to arrive at estimated sales to which the tax would be applied. The state sales tax is calculated using the state sales tax rate of 4 percent and the local sales tax is calculated using an average local sales tax rate of 3.37 percent, the population-weighted average as of July 2022, according to the Tax Foundation. The state and local sales tax estimates for the base year are also shown in Table 6.

To estimate the additional property tax due to the economic activity associated with the tax exemption, we calculate the ratio of the IMPLAN's estimate of sales tax to our preferred estimate of sales tax above and apply this to IMPLAN's estimate of property tax revenue. This estimate assumes that economic activity that generates IMPLAN's sales tax estimates is like that which generates the property tax, thus this estimate should be treated cautiously.

Finally, about 78 percent of Georgia state tax collections are from personal income and state sales taxes. Georgia collects a host of other taxes that make up the remaining 22 percent, on average. Two taxes make up about half of the 22 percent: corporate income tax and title ad valorem tax (TAVT) on motor vehicles. Table 6 shows the base year estimated revenue from these other taxes assuming a proportional effect such that the 22 percent of total tax revenues hold for the economic activity resulting from the grocery exemption.

Table 6. State and Local Tax Revenues from R_X Exemption Induced Effects, FY 2021

(\$ in Millions)	State tax	Local Tax
GA income tax	\$11.8	\$0.0
Sales tax	\$11.6	\$11.1
Property tax	\$0.0	\$1.0
All other taxes	\$6.6	\$0.0
Total state and local tax estimates	\$29.9	\$12.1

Alterative-Use Annual State and Local Tax Revenue

New tax revenues resulting from the alternate-use case are estimated in an equivalent manner as the prescription drug exemption in the earlier section and are shown in Table 7.

Table 7. Alternate-Use State and Local Tax Revenue, FY 2021

(\$ in Millions)	State tax	Local Tax
GA income tax	\$30.7	\$0.0
Sales tax	\$6.9	\$6.6
Property tax	\$0.0	\$4.5
All other taxes	\$10.6	\$0.0
Total state and local tax estimates	\$48.2	\$11.1

Administrative Costs

The Georgia DOR is responsible for administering the prescription drug exemptions claimed on businesses' sales tax returns and reported negligible administrative costs to administer this exemption. Businesses report taxable and exempt sales separately on their ST-3 sales tax return. Exempt sales are reported as a category, unless otherwise required by law, so there are no additional administrative costs associated with any specific exemption that is included in the reported exempted sales. Additional costs could be associated with auditing this specific exemption, but The Department of Audits has no record of an audit of this specific exemption in the past.

8. Conclusion

In 1984, Georgia enacted a state sales tax exemption for prescription drugs, glasses and contact lenses, and the sale of insulin (regardless of prescription) from the state's 4-percent sales tax rate and local sales taxes, which currently average 3.37 percent. The purpose of this report is to evaluate the Georgia prescription drug exemption, in accordance with the provisions of O.C.G.A. § 28-5-41.1 (2021 Senate Bill 6), in terms of its fiscal and economic impacts as well as its public benefits.

The annual cost to the state and to local governments for the prescription drug exemption is estimated at \$851 million for FY 2021, but assuming based on the academic literature that the tax benefits are captured by consumers as additional household income, we would expect positive economic effects and revenue gains from the resulting household consumption increases, as presented in Sections 6 and 7 above.

If the state did not offer this sales tax exemption, Georgia state and local governments would have the \$851 million available to spend in other ways. An alternate use of the funds is modeled based on recent allocations of state and local revenues to various spending categories. Economic and fiscal effects under this alternate-use scenario are also presented above.

However, net fiscal effects are not the best basis for evaluating the performance of a tax preference the original intent of which was broad public benefit in the form of tax relief to households on spending for a necessity. The prescription drug tax exemption clearly helps households afford the covered necessities as academic research shows that the tax savings are realized by consumers in lower after-tax prices for such goods and not shifted to retailers or producers. In addition, the benefits have the effect of reducing the regressivity of the sales tax because lower-income households spend a greater share of their income on these items than do higher-income households.

References

AHIP. (2021). Where Does Your Health Care Dollar Go? Link: https://www.ahip.org/documents/AHIP_HealthCareDollar-2021.pdf

Centers for Medicare & Medicaid Services. (2022). National Health Expenditure Data. Link: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsProjected

Centers for Medicare & Medicaid Services. (2020). State Health Expenditure Data. Link: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsStateHealthAccountsResidence

Bureau of Labor Statistics, U.S. Department of Labor. (2021). Consumer Expenditure Survey Public Use Tables. Link: https://www.bls.gov/cex/tables.htm

Friedman, J. N. (2009). The incidence of the medicare prescription drug benefit: Using asset prices to assess its impact on drug makers. *Harvard University*.

Gemmill, M. C., Thomson, S., & Mossialos, E. (2008). What impact do prescription drug charges have on efficiency and equity? Evidence from high-income countries. *International journal for equity in health*, 7(1), 1-22.

Harberger, A. C. (1962). The incidence of the corporation income tax. *Journal of Political Economy*, 70(3), 215-240.

Miller, D. C. (1951). Sales-tax progressivity attributable to a food exemption. *National Tax Journal*, 4(2), 148-159.

Minnesota Department of Revenue. (2021). Minnesota Tax Incidence Study: An Analysis of Minnesota's Household and Business Taxes." Link: https://www.revenue.state.mn.us/tax-incidence-studies

Statista. (2022). US Eyewear Market by Type. Link: https://www.statista.com/statistics/1054371/us-eyewear-market-size-by-type/

SafeGraph. (2022). Point of Interest and Cell Phone Pattern Data. Link: https://www.safegraph.com/

Zhao, J., Zheng, Y., & Kaiser, H. M. (2022). The Pass-through of Sales Taxes on Groceries: Evidence from Nielsen Homescan Data. 2022 Agricultural & Applied Economics Association Annual Meeting presentation paper. Link: https://ageconsearch.umn.edu/record/322140/

Appendix A: State Sales Tax Rates and Food & Drug Exemptions

(as of January 1, 2022)	EXEMPTIONS			
•			Prescription	Nonprescription
STATE	Tax Rate (%)	Food (1)	Drugs	Drugs
ALABAMA	4		*	
ALASKA	none			
ARIZONA	5.6	*	*	
ARKANSAS	6.5	0.125% (4)	*	
CALIFORNIA (3)	7.25	*	*	
COLORADO	2.9	*	*	
CONNECTICUT	6.35	*	*	
DELAWARE	none			
FLORIDA	6	*	*	*
GEORGIA	4	* (4)	*	
HAWAII	4		*	
IDAHO	6		*	
ILLINOIS	6.25	1%	1%	1%
INDIANA	7	*	*	
IOWA	6	*	*	
KANSAS	6.5		*	
KENTUCKY	6	*	*	
LOUISIANA	4.45	* (4)	*	
MAINE	5.5	*	*	
MARYLAND	6	*	*	*
MASSACHUSETTS	6.25	*	*	
MICHIGAN	6	*	*	
MINNESOTA	6.875	*	*	*
MISSISSIPPI	7		*	
MISSOURI	4.225	1.225% (4)	*	
MONTANA	none	1.22570 (4)		
NEBRASKA	5.5	*	*	
NEVADA	6.85	*	*	
NEW HAMPSHIRE	none			
NEW JERSEY	6.625	*	*	*
NEW MEXICO	5.125	*	*	
NEW YORK	4	*	*	*
NORTH CAROLINA	4.75	* (4)	*	
NORTH CAROLINA NORTH DAKOTA	5	*	*	
OHIO	5.75	*	*	
OKLAHOMA	4.5		*	
OREGON	none			
PENNSYLVANIA	6	*	*	*
RHODE ISLAND	7	*	*	
SOUTH CAROLINA	6	*	*	
		•	*	
SOUTH DAKOTA TENNESSEE	4.5 7	4% (4)	*	
TEXAS	6.25	4% (4) *	*	*
UTAH		3.0% (5)	*	æ
	6.1 (5) 6	3.0% (3) *	*	*
VERMONT			*	*
VIRGINIA	5.3 (2)	2.5% (2)	*	Ψ
WASHINGTON	6.5	*	*	
WEST VIRGINIA	6		*	
WISCONSIN	5	*	*	
WYOMING	4	*	*	*
DIST. OF COLUMBIA	6	*	*	*

^{* --} indicates exempt from tax, blank indicates subject to general sales tax rate.

Source: Federation of Tax Administrators (2022); compiled by FTA from various sources.

⁽¹⁾ Some states tax food but allow a rebate or income tax credit to compensate poor households. They are HI, ID, KS, OK, and SD.

⁽²⁾ Includes statewide 1.0% tax levied by local governments in Virginia.

⁽³⁾ Tax rate may be adjusted annually according to a formula based on balances in the unappropriated general fund and the school foundation fund.

⁽⁴⁾ Food sales subject to local taxes.

⁽⁵⁾ Includes a statewide 1.25% tax levied by local governments in Utah.

Appendix B: Value of Sales Tax Alternate Use – IMPLAN Code Table

Table B1 shows the approximate breakdown of state and local expenditures into functional areas that either directly correspond or are similar to the specified IMPLAN sectors in terms of the nature of labor and other inputs.

Table B1. Approximate Distribution of State Expenditures

	Share State	IMPLAN	
Category	Spending	codes	IMPLAN Sector Descriptions
Education, PK-12	41.6%	480	Elem. and secondary schools
Education, Post-Sec	15.0%	481	Post-secondary education
Health Care	22.5%	493	Individual and family services
Public Safety, excl Corrections	3.5%	471	Facilities support services
Public Safety, Corrections	4.6%	475	Investigation and security services
Mobile Georgia	7.7%	457	Architectural, engineering, related svcs.
Growing Georgia	1.5%	469	Management of companies and enterprises
General Government	3.6%	469	Management of companies and enterprises

Source: Spending shares based on AFY 2019 and FY 2020 Governor's Budget Report, https://opb.georgia.gov/budget-information/budget-documents/governors-budget-reports

Table B2 shows the approximate breakdown of state and local expenditures into functional areas that either directly correspond or are similar to the specified IMPLAN sectors in terms of the nature of labor and other inputs.

Table B2. Approximate Distribution of Local Sales Tax Expenditures

	Share Local	IMPLAN	
Category	Spending	codes	IMPLAN Sector Descriptions
Education Projects	43.5%	53	Construction of new educational and
			vocational structures
Transportation Projects	28.5%	54	Construction of new highways and streets
General Government	28.0%	469	Management of companies and enterprises

Source: Estimates based on DOR local sales tax collections,

https://dor.georgia.gov/local-government-services/distributions-section