Commissioner Kleppner's Draft Chapter on Consumption Taxes

Chapter ?: Consumption Taxes in Vermont

"From the point of view of government policymakers, a good tax raises a lot of money without causing people to avoid the tax by distorting their spending (or voting) behavior. By that measure, a sales tax is a very good tax indeed: a body of research shows that, overall, sales-tax rates are not noticeable enough to consumers to make them change their behavior." – KelloggInsight, "How Do People Respond to Sales Tax Increases," 2017.

Introduction

Consumption taxes are an important source of revenue in all 50 states and DC. Even states with no sales tax, like New Hampshire, tax some services and impose excise taxes. In Vermont, consumption taxes take the form of the Sales & Use Tax, the Meals & Rooms Tax, and Excise Taxes. For a variety of reasons, both economic theory and tax policy theory approve of consumption taxes. As with the Vermont tax system overall, our goal is to make consumption taxes more fair, more sustainable, and simpler.

This commission heard no testimony on the Rooms & Meals tax, or on Vermont's regime of excise taxes, and our own review of these two taxes found no meaningful instances of unfairness, unsustainability, or complexity, so we make no recommendations regarding those taxes, and focus our work on consumption taxes on Vermont's Sales & Use tax.

For the most part, the sales tax applies only to private consumption – purchases made by the federal, state, and local governments are exempt. However, purchases made for individuals using federal dollars, as when a Medicare patient buys a piece of medical equipment and Medicare pays for it, are eligible for the sales tax. Purchases made *by* tax-exempt non-profits are generally exempt, but when a consumer purchases something *from* a tax-exempt non-profit, it is generally taxable.

Tax theory discourages the application of a sales tax to business inputs, with purchases at wholesale being the most prominent example. The reason for this is straightforward. If you apply a 6% sales tax at both wholesale and retail to an item that would have cost $100 at retail, the state collects $9.36 in tax, but the consumer pays an additional $12.36. Everyone is better off if the state simply has a 9.36% sales tax at the consumer level, and no sales tax on the wholesale purchase.

Here's how it works for a company whose business model requires it to achieve 50% margins.

- In a state without taxes, the company purchases a product at wholesale for $50 and sells it to the consumer for $100.
- If we apply Vermont's 6% sales tax to the consumer purchase, the company buys it for $50, sells it for that same retail price of $100, and the consumer pays $106, including the $6 in tax.
- If we apply the 6% sales tax to both transactions, the company pays $53 for the product at wholesale, and sells it for a retail price of $106 (to maintain their 50% margin target). Then we apply the 6% sales tax to that, and the consumer pays $112.36.

Breaking down the $112.36 that the consumer paid, we see that $50 is the wholesale cost, $53 is the retailer's margin, and $9.36 is tax. Note that of that $9.36 in tax, $3 is tax at the wholesale level that got passed on to the consumer, another $6.18 is the tax the consumer pays on the underlying $103 of wholesale price plus retail margin, and 18 cents is the 6% consumer tax on the 6% wholesale tax, yielding an effective consumer tax rate of 9.09% ($9.36/$103), and an increased cost to the consumer of $12.36 compared to the taxless transaction. As noted above, the state ends up collection $9.36 more, but the consumer ends up paying $12.36 more.

This effect ("pyramiding"), is roundly discouraged by tax theory. It is more efficient for all parties for the state to simply levy a 9.36% sales tax at the consumer level, and exempt the wholesale purchase. The state ends up with the same revenue; the consumer pays $3 less; the wholesaler is relieved entirely of the administrative burden of collecting and remitting sales tax; and retailer is relieved of the burden of paying sales tax on their purchases, and can sell their wares to consumers at a slightly lower price.

Vermont's current 6% sales tax exempts some categories of goods and most categories of sales. We now examine the reasons for those exemptions, and we will explore opportunities to make Vermont's sales tax more fair, more sustainable, and simpler by expanding the base while at the same time exempting business inputs.

Why Are There Exemptions to the Sales Tax in Vermont?

There are hundreds of categories of goods and services in our current economy, and states have made very different choices about which ones to tax. Vermont currently taxes consumer purchases of most goods, with notable exceptions for necessities like groceries, clothing, home heating, and medical products, and exempts most sales of business inputs. Vermont currently taxes about 40 of the 260 or so services that are taxed by at least one other state (See Appendix 1).

There are six main reasons that some categories of goods and services are exempt in Vermont:

1. To protect low-income Vermonters from the financial burden of paying a tax on necessities, like groceries, clothing, home heating, and health care.
2. To encourage community goods, like education and newspapers. Health care falls into this category as well.
3. Since the sales tax was originally just on goods, many services, like limousine rental and tuxedo rental, are exempt simply because they've always been exempt. Health care also fall into this category.
4. Some categories are exempt because the sales tax is deemed too hard or too complicated to collect, either for the seller or for the Tax Department or both. Health care is probably the only category to fall into all of these first four categories.
5. To avoid taxing business inputs.
6. Some categories are so small that the costs to collect the tax are greater than the revenue from the tax. This includes "casual sales," one-time events like yard sales.

This leads to five big questions:

1. Are sales tax exemptions an efficient way to protect low-income Vermonters?
2. Are sales tax exemptions an effective way to promote community goods?
3. If the answer to either question is no, are there better ways to achieve these goals?
4. Does the historic exclusion of services from the sales tax, with the resultant higher tax rate on goods, help or hurt our economy and our tax system, especially as the economy evolves toward more services?
5. Have advances in technology made it viable to include in the sales tax sectors that were previously too complicated to include?

Are Sales Tax Exemptions an Efficient Way to Protect Low-Income Vermonters?

For purposes of this report, we define low-income Vermonters as those living in households with income of less than 200% of the federal poverty level. By that definition, about 28% of Vermonters are low-income. (See Appendix 2).

Health care, groceries, home energy, education, clothing, and car repair services account for about 90% of the private consumer spending that is currently exempt from the sales tax in Vermont (See Appendix 3). Health care is the most complicated case, so we will briefly defer that topic, and start with groceries.

Per the National Institutes of Health[1], the price elasticity of groceries is around -0.59, which means a 6% increase in price will lead to a 3.54% decline in demand. Extending Vermont's 6% sales tax to our $2,102.5 million in grocery purchases[2] will cause total sales to decline to $2,030.5 million. According to the US Bureau of Labor Statistics, low-income Vermonters spend about 17.7% of Vermont's total private spend on groceries[3]. That means that right now, by exempting groceries from the 6% sales tax, Vermont is giving up about $121.8 million in sales tax revenue to provide $21.6 million in relief to low-income Vermonters.

If we levied the 6% sales tax on groceries, collected the $121.8 million in taxes, and refunded that $21.6 million in grocery sales tax collected from low-income Vermonters, there would be no harm to low-income Vermonters and that state would have an additional $100 million which it could put toward increased spending and lowering the sales tax rate, in whatever ratio the legislature decided was appropriate.

Vermont currently provides food support to low-income Vermonters through 3SquaresVT and Vermont WIC, which programs could provide the mechanism for rebating low-income Vermonters' grocery sales tax to them.

*"States frequently exempt consumer goods, such as clothing and groceries, but these **blanket exemptions are ineffective ways to lessen the regressive nature of sales taxes**. . . If states are still concerned about the somewhat regressive nature of sales taxes, **several policy options are more effective tools than blanket exemptions**. Grocery tax credits, expanded Earned Income Tax Credits, or an increased standard deduction in an income tax would provide assistance without introducing the same degree of economic distortions."* – TaxFoundation.org (bolding ours)

When we look at the other big categories of private consumer spending that are currently exempt from the sales tax, we find the same pattern. In home energy consumption, the state is foregoing roughly $42 million in revenue[4] to protect low-income Vermonters from an $8.5 million expense. Vermont already has a mechanism for providing support to low-income Vermonters' residential energy purchases in the Low-Income Heating Assistance Program (LIHEAP). If we extend the sales tax to residential energy, it seems as though the state could collect the $42 million in tax revenue, and distribute $8.5 million back

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[1] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2804646/

[2] Vermont Tax Expenditures 2019 Biennial Report, 2019.

[3] https://www.bls.gov/cex/2019/aggregate/decile.pdf -- state-level data not available, assumes Vermont mirrors national data.

[4] Vermont Tax Expenditures 2019 Biennial Report, 2019.

to low-income Vermonters through the LIHEAP program, and end up with $33.5 million per year for either increasing spending or decreasing the rates.

Low-income Vermonters spend about 14.7% of the total private dollars spend on education[5], so again, the state is foregoing $37.6 million in revenue to protect low-income Vermonters from $5.5 million in sales tax burden. Clothing and automobile repair follow the same pattern.

Because health care is meaningfully more complicated than any other sector or category, we will examine it in a separate section below.

In general, we conclude that exempting broad categories of necessities is not an efficient way to protect low-income Vermonters from the financial burden of paying a sales tax on necessities.

Are Sales Tax Exemptions an Effective Way to Promote Community Goods?

"A body of research shows that, overall, sales-tax rates are not noticeable enough to consumers to make them change their behavior. In other words, we tend to adopt an attitude of "it is what it is" about sales tax—even when the rates go up—and just get on with the business of purchasing what we need." – KelloggInsight, "How Do People Respond to Sales Tax Increases," 2017.

What is true of rates going up is equally true of rates doing down. A 6% sales tax is not enough to discourage consumer behavior, and exemption from a 6% sales tax is not enough encourage consumer behavior. A 60% tax, on the other hand, such as the excise tax we levy on cigarettes, does change consumer behavior in the intended manner – it reduces smoking, especially among young people.

The list of community goods that we try to encourage with sales tax exemptions includes two big items: health care and education. As noted above, we will examine health care separately.

Education in this context includes only private spending on education – private payments for K12 and private payments for college. Total private education spending in Vermont in 2019 was $984.6 billion.[6] Low-income Vermonters spent about 14.7% of that.[7] There are several important barriers for low-income Vermonters to accessing education:

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[5] https://www.bls.gov/cex/2019/aggregate/decile.pdf -- state-level data not available, assumes Vermont mirrors national data.

[6] Bureau of Economic Analysis, https://apps.bea.gov/iTable/iTable.cfm?reqid=70&step=1&isuri=1&acrdn=4#reqid=70&step=1&isuri=1

[7] Consumer Expenditure Survey, Table 1110, "Deciles of income before taxes: Annual expenditure means, shares, standard errors, and coefficients of variation," 2019. https://www.bls.gov/cex/tables.htm#annual

"Higher education in Vermont—for both two and four-year colleges—consistently ranks as the most expensive in the nation, while simultaneously offering the lowest state funding, according to a 2019 report from the College Board[8] *. . . For the 80% of CCV students who are enrolled part-time, supporting students outside of the classroom is a major issue. . . The lack of access to a car or daycare for their child can really derail a great student from completing their classes."*
-- Burlingtonfreepress.com 1/20/2020

In light of these issues, the presence or absence of a sales tax would not appear to be a significant factor in accessing education. Expanding higher education in Vermont might be better achieved through larger-scale subsidies or refunds of the tuition, combined with services like transportation, remote learning, and childcare for students for whom those things are a barrier.

There are a number of smaller categories of community goods that are exempt from sales tax in Vermont as well: newspapers; admission to school sporting events; membership services from environmental, human rights, social, civic, and business organizations; sports instruction; other amusement and recreation industries.

We do not in any way dispute that these things are good for the community. We also do not believe that a sales tax exemption is an effective way to support, encourage, or expand them, and that exempting them creates complexity, unfairness, and instability in our tax system that outweigh the extremely limited benefit they provide.

We conclude that exempting community goods from the sales tax is not an effective way to expand them.

Does the exclusion of services from the sales tax still make sense?

The General Assembly concludes that structural deficiencies in Vermont's current revenue and budgeting structure, combined with a change in the State economy from an economy based on goods to an economy based on services, requires and examination and rethinking of Vermont's current sales tax base. – Sales Tax on Services Study, VT Dept of Taxes, 2015.

Per the study cited above, services were initially excluded from the sales tax in the 1930s because goods "constituted a large portion of household consumption, wealthier people bought more of them,

[8] https://research.collegeboard.org/pdf/trends-college-pricing-2019-full-report.pdf

and they were easier to quantify. Also, it was widely believed at that time that taxing a service would be like taxing the jobs associated with that service, and jobs were already scarce in that era."

As we have noted, the exclusion of any service puts Vermonters who don't happen to use that service at an economic disadvantage, and it puts individuals and companies who happen to produce something that is taxable at a disadvantage.

In addition to the issues of fairness that this raises, exempting any categories from the sales tax makes the revenue source less stable and less sustainable, and makes the tax system more complicated.

We conclude that there is no good reason for a categorical exemption of services from the sales tax, and there are affirmative good reasons for including them.

Health care and the Sales Tax

In Vermont, health care is generally exempt from the sales tax. This includes medical goods, like medications and medical equipment; medical services, like visits to the doctor's office and hospital stays; and medications, both prescription and over-the-counter.

Four states (Delaware, Hawai'i, New Mexico, and Washington State) currently apply a sales tax to physicians' work, and thirty-seven states, including neighboring Massachusetts, impose the sales tax on non-prescription drugs (See Appendix 1).

The Effect of Taxing Health Care on Low-Income Vermonters

Currently, low-income Vermonters are insulated from the cost of health care in a number of ways. For those living below 133% of the federal poverty level, the Medicaid program provides access to health care with very little in the way of out-of-pocket costs. For those between 133% and 200% of the federal poverty level, the ACA provides meaningful subsidies for insurance premiums and caps on out-of-pocket spending. The state also supports low-income Vermonters with Dr. Dynosaur (kids and pregnant women), long-term care assistance, and prescription drug assistance.[9]

We believe that these mechanisms could be adapted to ensure that low-income Vermonters do not experience any increase in their costs for health care due to a sales tax.

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[9] https://info.healthconnect.vermont.gov/Medicaid, https://www.greenmountaincare.org/ , https://www.greenmountaincare.org/health-plans/long-term-care

The Provider Tax

Although Vermont has exempted most health care expenses from the sales tax, the state does tax health care services through a provider tax on seven of the 19 federal classes of health care services (See Appendix 3).

One big policy decision related to applying a sales tax to health care is the relationship between the provider tax, which produced $158.3 million in 2016 tax revenue[10], and the sales tax.

A complication of the provider tax is that it brings in Federal tax dollars. Vermont uses provider tax dollars to fund part of its Medicaid expenses, which triggers the release of federal funds. These dollars cannot make up more than 25% of the state's Medicaid expenditures, and with $158 million in provider tax revenue, Vermont is pretty close to that 25% level[11]. It is unclear whether replacing the provider tax with a sales tax on health care, and using sales tax dollars for the state's Medicaid expenditures, would trigger the same federal support. If not, we recommend keeping the provider tax, and looking only at Options 2 and 3 below.

The choices for the interplay of the provider tax and a sales tax

1. Replace the provider tax with a sales tax. A 6% sales tax on patient health care spending would raise about $386.2 million[12], of which about $66.0 million would come from low-income Vermonters. If we rebate that full $66.0 million, that leaves $320.2 million in health care sales tax revenue to the state, so netted out against the elimination of the provider tax, this would raise $162.2 million in new revenue for the state, to either spend or reduce the tax rate. This option makes sense if we see the provider tax as a tax on a business input. This is a viable option only if doing so would not result in a reduction of federal Medicaid dollars.
2. Keep the provider tax on the current set of payers, and levy the sales tax on only those health care services that do not pay a provider tax. At 6%, this would raise $206.7 million, of which about $35.3 million would come from low-income Vermonters. With a full rebate to low-income Vermonters, this would net the state about $171.4 million in new revenue, to either spend or use to reduce the tax rate. This option makes sense if we see the provider tax as the equivalent of a sales tax, but chose to keep it due to the federal dollars it brings in.

[10] "Provider Taxes Overview," Langweil & Carbee, JFO, January 26, 2017

[11] Ibid.

[12] "The Economic Incidence of Health Care Spending in Vermont," RAND, 2015. https://www.rand.org/content/dam/rand/pubs/research_reports/RR900/RR901/RAND_RR901.pdf

3. Levy the sales tax on all consumer-level health care goods and services in addition to the provider tax. This would raise $386.2 million, and with a full rebate of the $66.0 million that would come from low-income Vermonters, the net gain to the state of new revenue would be $320.2 million, to either spend or reduce the tax rate.

We believe that conceptually, the provider tax is most like a corporate income tax, and therefore applying the sales tax to consumer purchases of health care from sectors subject to the provider tax will not lead to pyramiding or the other ills that arise from applying a sales tax to a business input.

We are therefore foregoing over $386.2 million in revenue to protect low-income Vermonters from $66 million in sales tax expense. In the end, we come to the same conclusion about health care that we did about the other exempt categories of necessities: **exempting health care is not an efficient way to protect low-income Vermonters from the cost of a sales tax on health care.**

Does Exempting Health Care from the Sales Tax Increase Vermonter's Access?

As far as maintaining the exemption to expand access to health care as a public good, Rand analysis of the available data[13] suggests that the price elasticity of demand for health care is -.17. This means that a 2.9% tax on health care goods and services, even if it were passed on entirely to the consumer, would result in a reduction of health care utilization of less than one half of one percent. That study also finds that consumption of health care varies minimally based on in income, probably due to programs like expanded Medicaid and other state-level programs to provide health care access to low-income households.

Is Health Care Too Complicated to Subject to the Sales Tax?

One of the main complexities in our health care system is just how many parties are involved in paying for Vermonters' health care:

- The federal government through Medicaid, Medicare, Tri-care, subsidies provided by the ACA, and the federal government's portion of federal employees' health care expenses.
- Patients and the parents of patients up to age 26, through premiums, deductibles, co-pays, co-insurance, and payments for non-covered medical expenses.
- Organizations that provide health insurance to their employees and their employees' families, through premiums and contributions to HSA-like mechanisms for reimbursing employee out-of-pocket expenses

[13] "The Elasticity of Demand for Health Care," RAND, 2005)

- The state government through the state portion of Medicaid; state programs to assist low-income Vermonters with health care costs; and the state's portion of state employees' health care expenses.
- Local governments, including local school systems through the local governments' part of insurance premiums and out-of-pocket health care costs for town employees and teachers and other school system employees.
- Hospitals who are required by federal law to provide emergency health care to all, regardless of ability to pay. To recoup these outlays, the hospitals inflate their charges to private insurance companies. To cover those increases, private insurance companies do two things: inflate the premiums that organizations and individuals pay them; and reduce coverage by increasing patients' out-of-pocket expenses.

However, as noted above, even when the federal or state governments are paying, if they are paying for goods or services for an individual, those transactions are eligible for a sales tax. As providers already bill patients and all the other payers, and as the other payers already bill patients, we do not foresee particular complexity in collecting or remitting the sales tax on health care transactions.

Since we believe a sales tax can be applied to health care without harming low-income Vermonters, and without limiting Vermonters' access to health care, and without undue complexity, and since we see meaningful benefits for Vermonters in terms of a lower sales tax rate and a simpler and more fair tax system, and since we see benefits to the state government in terms of a more stable and sustainable revenue stream and a simpler tax code, we recommend including all consumer health care transactions in the sales tax.

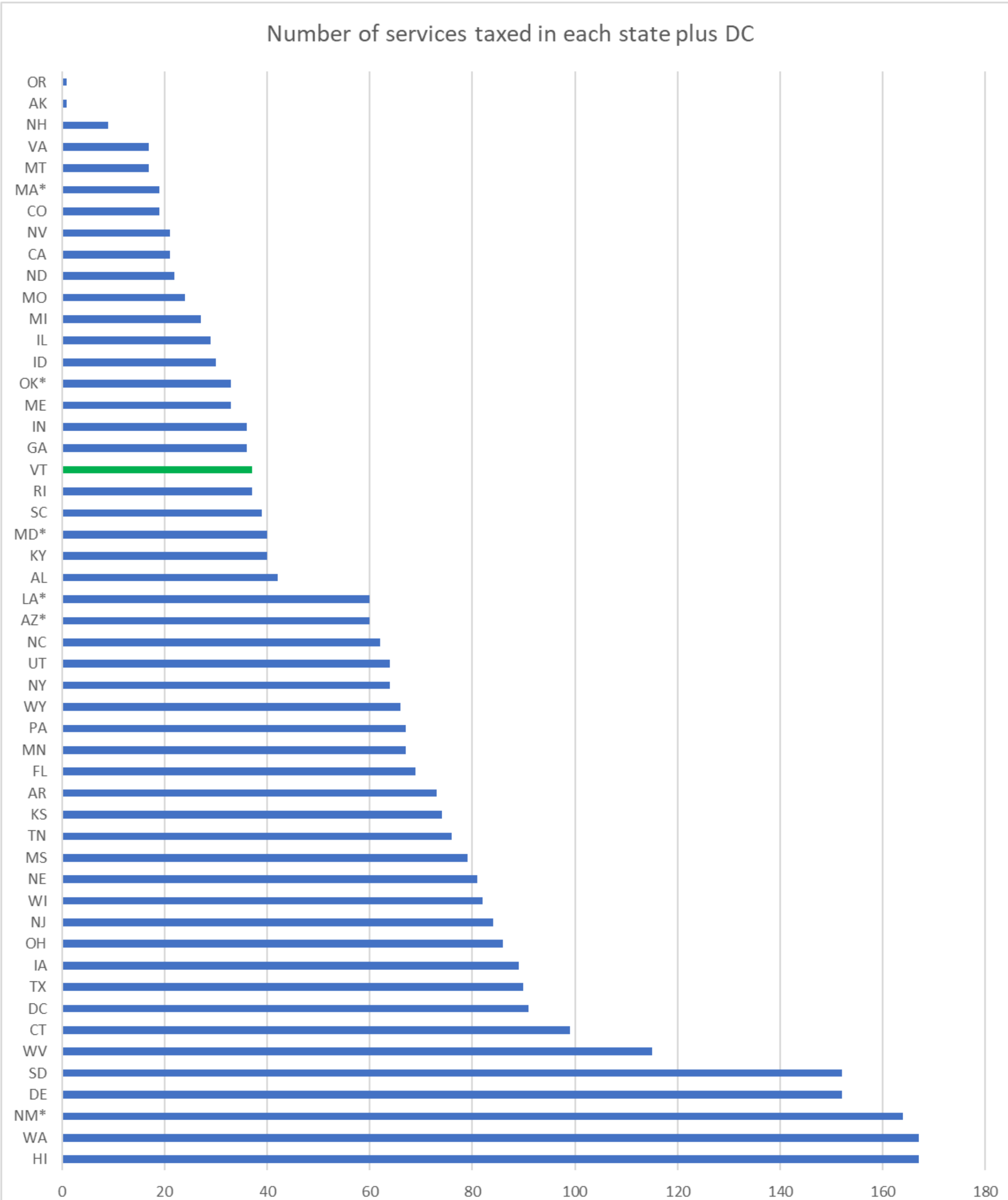
Further Considerations on Expanding the Sales Tax Base

Meaningful (sales tax) base broadening (is) a worthwhile endeavor, as base expansion allows for greater tax neutrality and revenue stability, and can be paired with more targeted relief for low-income households. – TaxFoundation.org

We conclude that there are no good reasons to exempt any categories of goods and services from the sales tax. We further note that there are some affirmative reasons to include as many categories as possible.

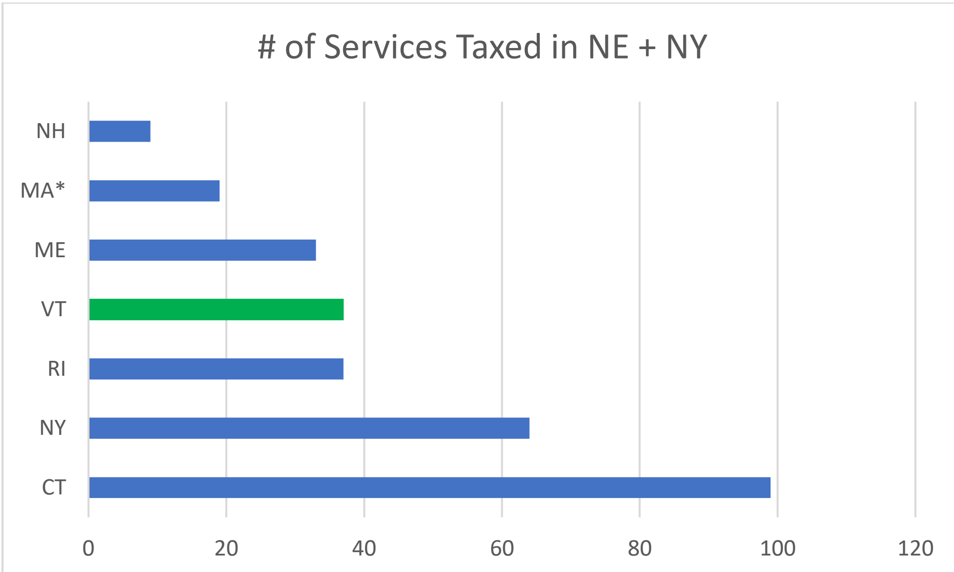
Historically, the sales tax has been applied mostly to goods purchased in person, and as the economy evolves toward more services and more online transactions, it is important to the goals of fairness and sustainability that the tax structure shift with it.

By some measures, Vermont has a fairly narrow sales tax base. If we look just at the number of services Vermont taxes, we see that we're on the lower end of the spectrum.



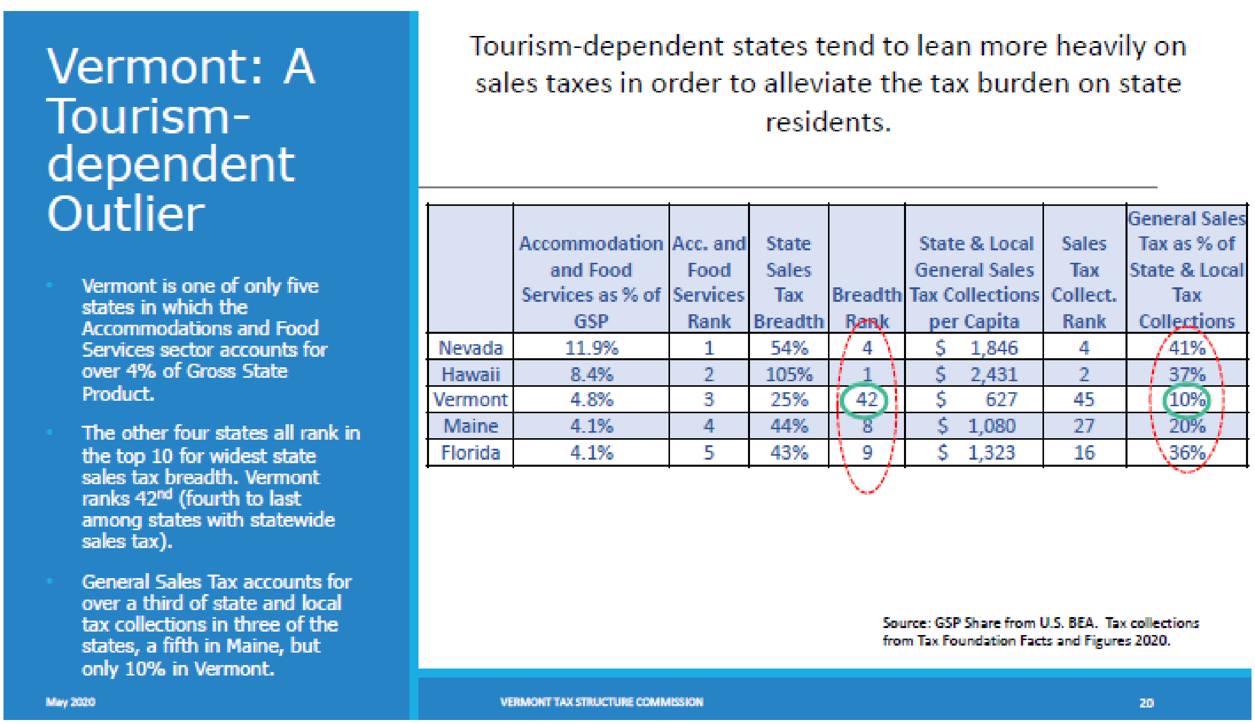
From VT Dept of Taxes, updated with 2017 data from the FTA study

If we take the same look at New York and New England, we see that Vermont is middle of the pack.



From VT Dept of Taxes, updated with 2017 data from the FTA study

Among the top five states in terms of tourism as a percent of the total state economy, Vermont has by far the narrowest sales tax base and collects the least in terms of sales tax as a percent of total state and local government revenue.



	Accommodation and Food Services as % of GSP	Acc. and Food Services Rank	State Sales Tax Breadth	Breadth Rank	State & Local General Sales Tax Collections per Capita	Sales Tax Collect. Rank	General Sales Tax as % of State & Local Tax Collections
Nevada	11.9%	1	54%	4	$ 1,846	4	41%
Hawaii	8.4%	2	105%	1	$ 2,431	2	37%
Vermont	4.8%	3	25%	42	$ 627	45	10%
Maine	4.1%	4	44%	8	$ 1,080	27	20%
Florida	4.1%	5	43%	9	$ 1,323	16	36%

Similarly, among the top five states in terms of retail as a % of the total state economy, Vermont has by far the narrowest sales tax base and collects the least in terms of sales tax as a percent of total state and local government revenue.

Vermont: An Outlier Among States with Large Retail Trade

- Vermont is one of only five states in which Retail Trade accounts for over 8% of Gross State Product.
- General Sales Tax accounts for 20-46% of state and local tax collections in the other four states, but only 10% in Vermont

Likewise, states with economies dependent on retail trade tend to lean more heavily on sales taxes for state revenue.

	Retail Trade as % of GSP	Retail Rank	State Sales Tax Breadth	Breadth Rank	State & Local General Sales Tax Collections per Capita	Sales Collections Rank	General Sales Tax as % of State & Local Tax Collections
Washington	9.0%	1	39%	16	$2,476	1	46%
Maine	8.8%	2	44%	8	$1,080	27	20%
Mississippi	8.7%	3	46%	6	$1,180	20	32%
Idaho	8.3%	4	40%	14	$ 984	33	26%
Vermont	8.2%	5	25%	42	$ 627	45	10%

Source: GSP Share from U.S. BEA. Tax collections from Tax Foundation Facts and Figures 2020.`

Tax theory suggests that as a general rule, a broad base is better than a narrow base. There are at least three reasons for this:

1. The broader the base, the more stable and sustainable the tax revenue, as any particular category or industry makes up a smaller part of the tax base, and growth or decline in that category or industry has a smaller effect on overall tax revenue, and more chance of being offset by a different industry moving in the opposite direction.
2. A narrow tax base implies judgements and discretionary choices about what should or should not be exempt. Sometimes intentionally, sometimes inadvertently, these choices necessarily advantage some consumers over others, and advantage some businesses and non-profits over others, calling the fairness of these taxes into question, regardless of the nobility of their goals.
3. The broader the base, the more choices policy makers have for the mix of increasing revenue and decreasing tax rates.

The Vermont tax code has some odd inconsistencies: for instance, we deem transportation a necessity, so we exempt automobile repair services, but we tax the purchase of automobiles. We exempt the purchase of home heating, but tax the purchase of the home.

With our sixty or so exemptions from the sales tax, we also have issues of unfairness and complexity. We usually think of tax fairness from the point of view of the person paying the tax, and from that point of view, our patchwork of taxable and non-taxable purchases inadvertently favors people who happen to consume more of the non-taxables and handicaps people who happen to consume more taxables. It is also valuable to look at fairness from the point of view of the people producing the goods: it is unfair to tax the work of people whose labor creates goods, but not to tax the work of people whose work produces services.

By trying to use the sales tax as a tool to encourage community goods, and exemptions from the sales tax for necessities as a tool to protect low-income Vermonters, we put ourselves in the position of having to decide what's necessary, and what's good, and what's not. Food is a necessity; is soda? Is candy? Do we really want to start making judgements about what's necessary? Clothing is necessary; is a $50 hat? A $500 pair of boots? Whatever we decide is necessary will necessarily be subjective and somewhat arbitrary, and distortive. Taxing clothing above $150, for instance, will cause some consumers to buy the $149 dress they like a little less, and not get the $151 dress they like more.

We also put our state revenue at risk, as the economy can evolve away from taxable categories, like gasoline, and toward untaxed categories, like home electricity used to charge an electric car.

We note that the Blue Ribbon Tax Commission, in Recommendationss 2A and 2B, recommended expanding the sales tax to include "all consumer-purchased services with limited exceptions for certain health and education services and business-to-business service transactions," and all consumer purchases of goods, "retaining only the exemptions for food and prescription drugs." As we have seen, we see no compelling reason to exempt health care, education, or food.

Because we find no compelling reason to exempt any form of consumer activity from the Vermont sales tax, and in view of the advantages for fairness, simplicity, and sustainability, we recommend that Vermont's sales tax base be expanded to include all consumer purchases of goods and services, and to exclude all business inputs (see Appendix 2).

If We Expand the Tax Base, What Should We Do with the Money?

When you expand the base, you have to decide how much of the additional revenue you are going to spend, how much you are going to rebate to low-income Vermonters, and how much you are going to put toward lowering the tax rate.

In approximate numbers, if we apply the sales tax to all consumer-level purchases, assuming that we apply the sales tax to health care in addition to the provider tax:

1A. With the current 6% sales tax, allowing for unitary price elasticity, and making no accommodation to protect low-income Vermonters, we would add $675.4 million in sales tax revenue to the current sales tax revenue of $389.3 million.

1B. With the same assumptions, but rebating to low-income Vermonters the full among collected from them, the sales tax will raise an additional $565.0 million.

2A. If we choose to make this change revenue neutral, and use the broadening of the tax base to reduce the tax rate, making no accommodation for low-income Vermonters, we can lower the rate to 2.1%.

2B. In the revenue-neutral scenario, if we hold low-income Vermonters harmless, we will lower the sales tax rate to 2.4%.

We have reviewed the suggestion that a 2.1% sales tax on necessities would not cause any significant harm to low-income Vermonters, due to programs already in place and due to inelasticity of demand. On balance, we believe that ensuring the well-being of all Vermonters is so important that we should exercise an abundance of caution, and we therefore do not recommend adding a tax to any category without an affirmative way to keep low-income Vermonters whole.

If we expand the sales tax to all consumer purchases, and we ensure that low-income Vermonters will not bear any new financial burden, the last question we examine in this section is how much of the additional revenue we allocate to new spending, and how much we allocate to lowering the sales tax rate.

There are significant unmet needs in Vermont toward which additional revenue could be allocated.

There are also significant benefits to a meaningful lowering of the Vermont sales tax rate:

- Vermonters pay a low, uniform sales tax rate, making things more fair for all Vermonters, and reducing the distortions in economic behavior created by a higher rate imposed inconsistently.
- If we hold low-income Vermonters harmless, they will be better off, as they will not bear any increased costs for things that are currently not taxed, and, as with all Vermonters, the tax they pay on things that are currently taxed will go down.

- Vermont businesses benefit from fairer system that treats every business's output the same. Vermont businesses also benefit from a simpler tax code. We do note that the administrative burden on businesses not currently charging sales tax will increase, and the many businesses who provide services to consumers and to other businesses will have the burden of keeping their sales to consumers (taxable) separate from their sales to other businesses (not taxable). We note that one of us works at a small manufacturing company that sells both to consumers and to other businesses, and does not have any difficulty in charging sales tax to consumers and exempting sales to other businesses.
- The Vermont government benefits from a more stable and sustainable Vermont tax base, and a simpler tax code that is easier to administer.
- The Vermont economy benefits from an increased competitive advantage on sales tax relative to New York (4%) and Massachusetts (6.25%) and an advantage relative every other state with a sales tax except Delaware, and a decreased competitive disadvantage relative to New Hampshire and the other non-sales-tax states.

We therefore recommend that the revenue from expanding Vermont's sales tax base be used first to hold low-income Vermonters harmless, and that most of the remainder be used to lower the sales tax rate, with the smallest part used to fund additional spending. Specifically, we recommend applying a 2.9% sales tax to all consumer purchases of goods and services, creating mechanisms to make this change neutral for low-income Vermonters, and adding the additional $75 million to Vermont State revenue.

We would suggest that it is much easier to expand the base to include everything than it is to expand the base to include almost everything. If there is a single exception, there will be pressure from industries/companies/sectors and their lobbyists to give them an exemption as well. This is misguided, since as we've noted, a sales tax exemption does not encourage any significant amount of additional activity, but, as we all know, sometimes people are misguided.

This change will make the sales tax more fair, more sustainable, and simpler; it will do no harm to low-income Vermonters; and it will make Vermont's sales tax tied with Colorado for the second-lowest sales tax among the 45 sales-tax states.

Appendix 1: See spreadsheet "Appendix 1"

Appendix 2: See spreadsheet "Appendix 2"

Appendix 3: 2018 % of Vermont Population Living Under 200% of the Federal Poverty Line

Vermont County or State	Population Under 200% FPL (All Ages)	Population (All Ages)	Percent of Population Under 200% FPL (All Ages)	Reliability
Addison County	7714	34003	22.69	5.1496
Bennington County	10776	34482	31.25	5.7352
Caledonia County	9934	29294	33.91	5.4338
Chittenden County	38157	152414	25.04	3.5722
Essex County	2368	6197	38.21	6.7272
Franklin County	10571	48544	21.78	6.2217
Grand Isle County	1291	6922	18.65	8.7827
Lamoille County	7941	24668	32.19	5.8676
Orange County	8237	28364	29.04	4.5401
Orleans County	9576	26061	36.74	4.0753
Rutland County	16182	57156	28.31	4.0785
Washington County	15008	56211	26.7	4.559
Windham County	13390	41529	32.24	4.5053
Windsor County	14968	54489	27.47	4.7154
Vermont	166113	600334	27.67	1.4365
United States	100490740	314943184	31.91	0.1548

Source: https://vermontinsights.org/population-all-ages-living-in-households-under-the-200-federal-poverty-level-in-vermont/

Appendix 4: Vermont's Provider Tax

Of the 19 Federal Classes of Health Care Services,	
Vermont Levies a Provider Tax on	**Vermont Does Not Levy a Provider Tax on**
Inpatient hospital services	Physicians' services
Outpatient hospital services	Ambulatory service centers
Nursing facility services	Nursing services
Emergency ambulance services	Podiatric services
Services of intermediate care facilities	Dental services
Home health care services	Services of managed care organizations
Outpatient prescription drugs	Laboratory and x-ray services
	Therapist services
	Psychological services
	Optometric services
	Chiropractic services
	Other health care items/services for which the state has enacted a licensing or certification fee

Source: "Provider Taxes Overview," Langweil & Carbee, JFO and OLC, January 26, 2017

Health care subject to provider tax	2017 rate	2017 tax	2017 implied revenue
Hospitals	6%	$142,286,414	$2,371,440,233
Nursing Homes	6%	$15,039,003	$250,650,050
Home Health	3.63%	$4,793,713	$132,058,209
Intermediate Care Facilities	5.90%	$73,708	$1,249,288
Pharmacy	*	$780,000	$514,800,000
Ambulance	3.30%	$1,200,000	$36,363,636
Total			$3,306,561,417

*10 cents/script at BCBSVT's average of $66/prescription

Source: "Provider Taxes Overview," Langweil & Carbee, JFO and OLC, January 26, 2017

Appendix 5: Incidence of Health Care Spending in Vermont

Table 4.1. Nominal Incidence of Total Spending on Health by Vermont Residents, 2012 and 2017

	Spending Amount (Millions)	
	2012	**2017**
Employer market	**$1,690**	**$2,034**
Employee premium contributions	$395	$478
Retiree premium contributions	$12	$18
Vermont employer premium contributions for Vermont residents	$1,188	$1,431
<50 workers	$284	$287
50–99 workers	$65	$76
100–499 workers	$205	$248
500+ workers	$634	$820
Out-of-state employer premium contributions for Vermont residents	$95	$107
Medicare	**$1,074**	**$1,440**
Federal Medicare spending	$873	$1,166
Medicare premium contributions	$189	$256
Medicare supplemental policies	$12	$18
Medicaid/CHIP/VHAP	**$1,246**	**$1,661**
Federal Medicaid spending	$717	$1,033
State Medicaid spending	$518	$623
Medicaid premium contributions	$11	$4
Non-group/Catamount/Exchange	**$85**	**$359**
Individual market premium contributions	$58	$221
Federal private insurance subsidies	$15	$127
State private insurance subsidies	$11	$10
Out-of-pocket	**$720**	**$944**
Insured	$686	$937
Uninsured	$34	$7
Other	**$270**	**$373**
Federal military spending	$55	$62
TRICARE premium contributions	$1	$1
Other federal spending	$138	$214
Other state spending	$76	$96
TOTAL	**$5,084**	**$6,810**

NOTES: Other federal and state spending includes DVHA appropriations, disproportionate share hospital (DSH) payments, and non-Medicaid health-related appropriations. Medicaid premium contributions are VHAP and CHIP premiums. Individual market premium contributions are non-group, Catamount, and Exchange premiums minus premium assistance tax credits.

Source: RAND, "The Economic Incidence of Health Care Spending in Vermont," 2015.

https://www.rand.org/content/dam/rand/pubs/research_reports/RR900/RR901/RAND_RR901.pdf

Appendix 6: Vermont Sales Tax Expenditures

Expenditures and Estimates from 2019 Report	FY 2016 estimated	FY 2017 estimated	FY 2020 estimated	Estimated 2020 sales
Sales of food	117,260,000	117,030,000	126,150,000	$2,102,500,000
Medical products	60,730,000	64,300,000	75,500,000	$1,258,333,333
Energy purchases for a residence	37,800,000	39,920,000	42,150,000	$702,500,000
Clothing and footwear	28,000,000	28,800,000	30,200,000	$503,333,333
Agricultural inputs	18,560,000	18,900,000	20,380,000	$339,666,667
Veterinary supplies	3,890,000	4,230,000	5,020,000	$83,666,667
Energy purchases for farming	4,230,000	4,310,000	4,640,000	$77,333,333
Agricultural machinery/equipment	2,490,000	2,510,000	2,640,000	$44,000,000
Admission to nonprofit museums	2,400,000	2,400,000	2,600,000	$43,333,333
Newspapers	2,940,000	2,820,000	2,390,000	$39,833,333
Fuels for railroads/off-road uses	1,990,000	2,240,000	2,310,000	$38,500,000
Property in net metering system	2,790,000	1,430,000	2,290,000	$38,166,667
Funeral charges	1,900,000	1,900,000	2,000,000	$33,333,333
Rentals of washing facilities	1,100,000	1,100,000	1,200,000	$20,000,000
Sales of films to movie theaters	800,000	800,000	900,000	$15,000,000
Sales of mobile homes/modular housing	200,000	200,000	300,000	$5,000,000
Railroad rolling stock/depreciable parts	200,000	200,000	200,000	$3,333,333
TOTAL	**287,280,000**	**293,090,000**	**320,870,000**	
Total consumer			**$281,290,000**	
Total consumer goods				$234,540,000
Total consumer services				$46,750,000