




Subsidy Reform in Vermont

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Introduction

In the fall of 2010 a group of UVM Graduate students in Public Administration and some upper level undergraduates took on the daunting task of reviewing and analyzing subsidies in Vermont. The purpose of this exercise was to determine which subsidies are detrimental or "perverse", meaning they have predominantly negative economic or environmental consequences. We were fortunate to have the work of the Blue Ribbon Tax Commission proceeding at the same time, and were able to take advantage of information from this effort. We are also grateful to numerous guest speakers listed in the acknowledgements. All errors are our own.

We defined topics for review into three categories: tax expenditures (tax breaks), appropriations, and missing fees. Since we have published previous reports on missing fees from rent for use of common assets, and potential green taxes, we focused mainly on tax expenditures and direct appropriations. Given the limited time and manpower it was difficult to do justice to this topic. Information is very hard to come by on subsidies. Our efforts surely fell short in the attempt to analyze appropriations. We achieved a more comprehensive review of Tax Expenditures. Within these categories we focused on natural resources, education and income taxes, property taxes, transportation, income taxes, energy, agriculture, and sales taxes.

Principles for Deficit Reduction

In this time of fiscal constraint a review of subsidies is warranted. Nobel Prize economist Joseph Stiglitz has provided a list of guidelines for deficit reduction. These are worth listing here as they cover many principles we have suggested in our recent reports. Numbers 3, 4, 6, and 7 are pertinent to our discussion of subsidy reform.

1. Public investments that increase tax revenues by more than enough to pay back the principle plus interest reduce long-run deficits.

2. It is better to tax bad things (like pollution) than good things (like work).

3. Economic sustainability requires environmental sustainability. The polluter pay principle—making polluters pay for the costs they impose on others—is good both for efficiency and for equity.

4. Eliminating corporate welfare is good both for efficiency and for equity.

5. Given the increases in inequality and poverty and given the inequitable nature of the 2001 and 2003 tax cuts, the incidence of any tax increases should be progressive, and there should be no increases in the tax burden on the poorest Americans.

6. Eliminating give-aways of public-owned assets is an efficient and fair way of reducing deficits.

7. Eliminating distortions in tax and expenditure policies —with appropriate compensatory policies for lower and middle income Americans—can be an efficient way of reducing the deficits. Even if overall such tax expenditures are regressive, given the dire straits that so many poor and middle class Americans are in, eliminating those tax expenditures without appropriate compensation (e.g. in the reduction in tax rates on lower and middle income Americans) would be wrong. The full paper can be found at: http://www.rooseveltinstitute.org/new-roosevelt/principles-and-guidelines-deficit-reduction-joseph-stiglitz-proposes-alternative-plan

Definition of Subsidies

Subsidies are defined as monetary assistance given by government to a group or a person to support an activity that is in the best interest of the public, perhaps economically and for society. Subsidies can be direct payments or the relief of costs such as tax relief. Subsidies can make resources less expensive to produce or cheaper to consumers than their true economic costs (Myers, 5) There are both direct and indirect subsidies, narrow and broad subsidies. Direct or narrow subsidies involve direct monetary transfer of funds. Indirect subsidies include both monetary and non-monetary transfers, such as the examples of using an automobile and the impact on the environment of air pollution, road building, and resource depletion. Subsidies also occur when tax structures are manipulated by government to assist the firms that will benefit. With regard to taxes or resource pricing, it is the public that pays for the subsidy (Template, p.142). With regard to pollution, the externalized costs include impacts to people, property, and the environment.

Definition of Perverse Subsidies

A perverse subsidy is a net loss to public welfare with private interests benefiting and public interest losing (Template, p.143). It is very difficult to measure the effect of indirect subsidies. What is considered a perverse subsidy for one person may be a positive subsidy for another. The issue of equity is critical in subsidy support; some subsidies benefit the poor and some benefit the rich. For example: a subsidy of public transportation assists the poor in being able to afford public transportation; some subsidies for agricultural products support wealthy farm owners (Myers, p11)

The definition of a perverse subsidy according to Myers and Kent in their book, *Perverse Subsidies: How Tax Dollars Can Undercut the Environment and the Economy,* is that it must be adverse both economically and environmentally. Many subsidies begin as a positive subsidy, but over time become perverse. It is very difficult to remove existing subsidies since parties that are benefiting do not want to lose their benefit. Subsidies can affect various groups differently. For example, according to Bob Parson, extension agricultural economist at UVM, subsidies to keep grain prices high by paying farmers not to grow grain benefits farmers in the western states; however, the high cost of grain hurts the dairy farmers in the northeast who depend heavily on grain for their herds' nutrition. As John McGlaughry pointed out in his guest lecture, there are always groups of citizens with economic issues that need assistance due to various hardships. The question becomes how is poverty defined and who decides the value of the subsidies and the groups to receive them?

Myers and Kent in their book cite four major solutions to the problems of human well-being and environmental degradation in the Rio plus 20 era:

1. New Indicators

First is the need for a new indicator to guide our economic development, replacing GDP with an accounting system that is corrected for environmental losses and other externalities. They recommend a Net National Product, Index of Net Sustainable Welfare, or Genuine Progress Indicator (GPI). The Gund Institute has done numerous GPI studies in Vermont and elsewhere which can be found at: http://www.uvm.edu/giee/?Page=genuine/index.html

2. Charge True Costs

Second is the need to include external costs in the price of products with "green" or Pigouvian Taxes. For example, the price of coal generated electricity does not include the cost of mining accidents or black lung disease, mine tailings, and ash disposal, emissions of SO_2, Nox, CO_2, mercury, radon, or particulates. When we say that coal power is "cheap", we ignore indirect costs because they are not included in the price. 80% of the mercury in Lake Champlain is from Midwest coal plants. This distorts the price signal and allows over-consumption of polluting products. You can find our Gund Green tax page at: http://www.uvm.edu/giee/?Page=research/greentax/greentax.html

3. Eco-Technologies

Third is the need to expand eco-technologies such as renewable energy, industrial ecology, eco-design, etc. You can find more information about Eco-design at: http://www.uvm.edu/giee/?Page=certificate-program/ecologicaldesign/index.html&SM=certificate-program/certificate-program_menu.html

4. Abolish Perverse Subsidies

Finally Myers recommends abolishing "perverse subsidies", which are adverse for the environment and the economy. Worldwide Myers estimates "perverse subsidies" at nearly $1950 billion per year:

Sector	Billions per year
Agriculture	$510
Fossil fuels/nuclear energy	$300
Road Transportation	$780
Water	$230
Fisheries	$25
Forests	$92
Total	**$1937**

Myers and Kent claim perverse subsidies increase taxes, inflate governments budgetary deficits, send false signals to investment markets, suppress innovation and technical change, foster inefficiency rather than productivity, drive up prices such as food, benefit the rich over the poor, and promote consumption rather than conservation of resources. For example, they estimate perverse subsidies for road transportation in the US as follows:

	Billions
Oil and car industries	$15
Road Building and infrastructure	$135
Free parking	$150
Congestion	$100
Accidents, injuries and death	$110
Military Safeguards	$25
Environmental pollution	$160
Total	**$695**

Green Scissors

The Green Scissors Campaign is a joint effort of Friends of the Earth and Taxpayers for Common Sense, that researches fiscally and environmentally wasteful spending at the national and state level. The 2010 Green Scissors report details over $200 billion in wasteful subsidies in the United States. These perverse subsidies include:

	Billions
Oil and Gas	$31.2
Coal	$19.2
Nuclear	$46.4
Agriculture	$27.9
Biofuels	$48.4
Wasteful water Projects	$5.9
Highway Projects	$17.3
Public Lands	$9.8
Total	**$206.1**

Full report at: http://www.greenscissors.com/. Green Scissors also documents waste at the state level in various states that can be found at: http://www.greenscissors.com/publications/index.htm

SubsidyScope

The Pew Charitable Trusts have a federal subsidy project entitled subsidyscope which can be found at: http://subsidyscope.org/ Subsidy Scope identifies four categories of subsidy programs:

1. **Direct Expenditures**, including direct transfers of money, goods or services, such as cash grants or the donation of government surplus. (This does not include contracts for goods and services that are covered in a separate category below.)

2. **Tax Expenditures**, which lower the taxes certain parties pay the federal government by allowing special tax exemptions, deductions or credits.

3. **Risk Transfers**, which convey financial risk to the federal government through insurance agreements, loans, loan guarantees and similar instruments.

4. **Government contracts** for which the government pays more than fair market value for a good or service or provides a preference for certain types of businesses. For instance, the federal procurement system includes preferences for alternative fuel vehicles, and minority owned businesses.

Subsidyscope points out "unfortunately, most subsidy programs remain largely hidden. Often housed in euphemistically named offices or tucked away in subparts of complicated laws, many subsidies are so narrowly tailored that they are not typically known outside a particular sector or industry. The relative obscurity of many subsidies, despite their deep and broad reach into the economy, makes it difficult to weigh them against other government priorities." They also point out "Tax expenditures have increasingly grown in popularity because at least two important characteristics of the tax code favor it as a method of delivering subsidies. First, unlike many direct expenditures, tax expenditures do not have to be renewed through the budget process every year. Second, they appeal to politicians who may want to both confer benefits on a certain constituency and, at the same time, campaign on a platform of lower taxes. In this report we will focus on direct expenditures and tax expenditures, and touch briefly on risk transfers."

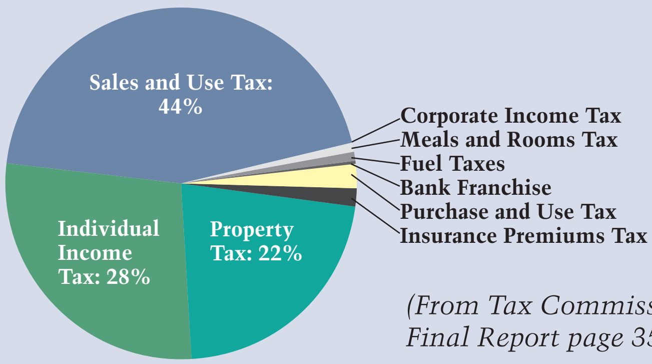
Current Vermont Subsidies

Tax Expenditures

Tax Expenditures

(Tax breaks, exemptions, credits, deductions, etc.)

Personal and Corporate; Sales; Property
Grand Total 2012
Projected Tax Exemptions:
$1,279,670,500
(*Vermont Tax Expenditures 2011 Biennial Report,* p. 95)



(From Tax Commission Final Report page 35)

Before explaining our findings on tax expenditures it is worth including the recommendations of the Blue Ribbon Tax Commission because they bear repeating:

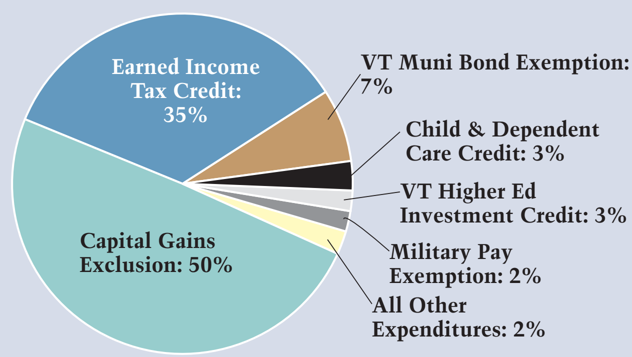
Recommendation 3: Enhance Scrutiny Of Tax Expenditures

- **3A: Develop a legislative intent for each tax expenditure.**
- **3B: Report the foregone revenue value of each tax expenditure biennially in the tax expenditure budget and refine the capacity to evaluate these values.**
- **3C: Sunset all tax expenditures that remain in the tax code in a multi-year cycle so that the Legislature evaluates and affirms these policy choices and require a sunset for new tax expenditures as a matter of good, transparent public policy.**
- **3D: Require an evaluation of the valuation of tax exempt properties on the grand list, particularly those that qualify for the public, pious, and charitable exemption from the property tax. Any such mandate ought to be accompanied by a sufficient appropriation from the Legislature to avoid levying an unfunded mandate on local officials.**

The Joint Fiscal Office 2011 report states, "There are 24 state tax expenditures which may be taken against the individual income tax. The benefits are relatively widespread with almost one-quarter of all income tax filers receiving at least one type of tax preference. Of the approximately 365,000 returns filed in tax year 2009, there were over 87,000 returns claiming at least one tax

Personal and Corporate Tax Exemptions

FY 2009 Vermont Tax Expenditures Biennial Report



Source: JFO Vermont Tax Expenditures 2011 Biennial Report

Tax Source	Unit of tax	Annual Revenue (Millions)
Expand Income Tax Base		
Eliminate Capital Gains Exemption	*Apply ordinary rates*	18.1
Eliminate Charitable Contributions Deduction	*Apply ordinary rates*	9.3
Eliminate Mortgage Interest Deduction	*Apply ordinary rates*	23.0
Eliminate Muni Bond Income Exemption	*Apply ordinary rates*	5.0
Eliminate Real Estate Tax Deduction	*Apply ordinary rates*	14.2
Total		**69.6**

Joint Fiscal Office Potential Revenue Sources and Options (http://www.leg.state.vt.us/jfo/fiscal_facts.aspx)

expenditure. A number of taxpayers receive more than one benefit. From the list of tax expenditures, only three account for 96% of all foregone personal income tax revenue, with the remaining 31 credits accounting for 4% of the foregone revenue.

The highest levels of participation occurred in both extremes of the income spectrum. This is predominantly because of the Earned Income Tax Credit in the lower income groups and the Capital Gains exclusion and Vermont Municipal Bond exemption among higher income taxpayers. Three of the other tax expenditures—the Child and Dependent Care Credit, Military Pay Exemption, and the Vermont Higher Education Investment Tax Credit—have relatively high utilization rates (over 1,000 claimants). More details of personal income tax expenditures are contained in the summaries on the following pages.

The Joint Fiscal Office offers the options for raising revenue by elimination of some tax expenditures for personal income tax in the table above.

Discussion

The original income tax in 1913 had an exemption of $4000, which is the equivalent of $92,000 today. Some tax analysts and historians say the purpose was to capture unearned income, while leaving earned income untaxed. Most people did not pay income taxes at that time. In the current federal tax structure unearned income from capital gains is taxed at 15%, while earned income is taxed up to 35%. This system is currently under debate regarding the fairness of taxing unearned income less than earned income. Warren Buffet has made an issue of this by pointing out that his tax rate is lower than his secretary. Lower taxes on real estate and financial speculation can be considered as a subsidy to those activities.

Personal Income Expenditures

Tara Bartlik

As it stands now there are 64 exemptions against income tax. Of all the personal exemptions, the Capital Gains exemption, Earned Income credit and VT municipal bond exemption account for 96% of loss, all other exemptions only accounting for 4%. Because of this, we will narrow our focus to these three exemptions. The smallest of these larger expenditures is the exemption on income from Vermont municipal bonds. Income from interest on state and local government obligations is added to taxable income, but is exempt (this plays into the complex structural nature of the VT tax system that the Blue Ribbon commission addressed). Although this adjustment accounts for only 5% of forgone revenue, it is still larger than all the other smaller exemptions combined. It had a value of approximately $4.5 million in 2009 and benefits 7,370 Vermonters.

Municipal bonds

Municipal bonds are used to finance public works and other public goods, so it is legitimate to consider tax free status for them as a way to encourage investment in these bonds. However, since they benefit mostly wealthy investors it is also reasonable to consider if this is a regressive tax, providing a tax exemption from unearned income, not given to earned income. If the income from Muni bonds was not tax exempt, presumably interest rates would have to be higher, and it would be more difficulty to finance these bonds. The competing interests of a regressive tax break vs. the benefits of facilitating sales of municipal bonds should be evaluated.

EITC

The next sizable exemption is the Earned Income Tax Credit which accounts for 23% of forgone revenue, cost $21.4 million in 2009 and benefits 37,630 Vermonters. This aims to assist low-income workers by reducing the tax they owe by 32% of the federal credit for earned income, even paying refunds. This amount was increased in 2000 from 25%. Qualifications for this are carried forward from federal tax prescriptions and depend on income, size of household and number of dependents. Analysis of the reduction in other human services needed due to the EITC should be carried out to determine if it has a positive return. EITC may have benefits from less dependency on state services well.

Capital Gains

The largest exemption, capital gains, is mainly from the sale of investments. It accounts for 68% of foregone revenue in the 2009 report and 50% in 2011, a total of $61 million in 2008 and $31 million in 2009, and benefits 48,840 Vermonters. In federal tax code, this income is treated preferentially to earned (productive) income by allowing filers to exclude 40% from taxable income, so that they only pay taxes on 60% of their gain. From 1960 to 2000, Vermont was "piggy-backed" from the Federal system, meaning all facets of federal code were transferred to Vermont. Since then, Vermont has started restructuring personal income tax and has changed laws regarding capital gains several times.

In 2008, Vermont veered from this tax structure, dropping the exemption down to a flat excludable rate of $5,000 in the hopes of stopping the preferential treatment of unearned income. In 2008, lawmakers decided to repeal that change, going back to the 40% exemption for "income from the sale of assets held by the taxpayer from more than three years, except for any real estate or portion of real estate used by the taxpayer as a primary or non-primary residence, depreciable personal property other than farm property and standing timber, and stocks or bonds publicly traded or traded on an exchange or any other financial instruments." This change will not go into effect until 2011, therefore we are unable to see the effects of this change on revenue or market behavior as of yet.

The intent is to reinstate the incentive to invest extra capital in productive new ventures, which will theoretically contribute to the economic vitality of the state, without incentivizing speculation. The ideal situation is to bolster growth of enterprise so that the expenditure pays for itself, both in state revenue generated and in business development. According to former state Auditor candidate Doug Hoffer, this exemption provides a $17 million tax reduction to Vermont residents making over $100,000, and $4 million to those with income over $1 million. To our knowledge there has been no comprehensive study by the state auditor of business development and employment due to the capital gains tax exemption, as there has been with the Economic Advancement Tax Incentive (EATI) and Vermont Emplyment Growth Incentive (VEGI) programs, which are far smaller. If we are going to provide a $30-60 million tax exemption for capital gains it is reasonable to expect an analysis of the return on investment of this exemption by the state. At a minimum a list of claimed capital gains could determine if these are mostly productive or speculative investments. The exclusion of securities and real estate gains from the program is a good first step to exclude speculation, which contributes nothing to the productive economy.

Mortgage Interest Deduction

The Joint Fiscal Office lists the mortgage interest deduction as one option for increasing revenues by $23 million in FY2009. Mortgage interest is claimed on federal taxes by those who itemize deductions, and is also used in Vermont. One of the issues with mortgage interest deduction is equity for renters. At the federal level there is no equivalent deduction for renters, which provides an economic advantage to homeowners. Home ownership is subsidized, while renting is not. The mortgage interest deduction does not exist in Canada. It is arguable that the mortgage interest deduction is actually a subsidy to banks, because it allows homeowners to afford a larger monthly mortgage payment if much of it is deductible in early years of a mortgage.

Renters Rebate Credit

Note that the renters rebate credit total was not found in the tax expenditure report for 2009 or 2011 either in income tax expenditures or in property tax expenditures.

It is listed in appropriations under General Education in 2008 for $7.6 million, and under General government from 2009-2011 and amounts to $8.3 million in 2011. The renters' rebate credit is for renters earning up to $47,000 per year. The maximum rebate is $8000. Annual rental payments are multiplied by 21%, and then a maximum of 5% of income is allowed for rent. Amounts above that are rebated by the renter's credit. With an annual salary of $40,000 and monthly rent of $950 per month, the credit amounts to $394. Consider a homeowner with identical income paying a $950 monthly mortgage. The first few years of a mortgage the payment is mostly interest. Let's assume $900 is interest. Annual interest amounts to $10,800. Assume an effective tax rate of 15% on $40,000. 15% of 10,800 is $1620 saved. There is a wide discrepancy between the mortgage interest deduction and the renter rebate credit. The first income tax in the US in the 1860's allowed deduction of mortgage interest or rent on an equal basis. Homeownership is certainly a laudable goal for society. Should one class of citizens be privileged with respect to another to further this goal? This discrepancy should be evaluated.

Corporate Tax Expenditures

Seven exemptions exist for both corporate and individual income tax, which fall under the Economic Advancement Tax Incentive (EATI), and now VEGI. Although this accounts for less than 4% percentage of the tax exemption, the unified purpose of the incentives is noteworthy. Income tax credits are based on payroll increases, research and workforce development expenditures, or capital expenditures in facility and machinery or equipment and sales of product shipped out of state. The program also includes sales tax exemptions and property tax reductions. This bundle of credits changed to VEGI in 2007. Their goal is three-part: to create quality jobs, close the gap between Vermont and average national wages and maintain/enhance quality of life in Vermont. Those wishing to claim credits must first be authorized by the Vermont Economic Progress Council (VEPC). VEPC considers whether or not the desired effects from the credits are viable or likely without such credits, the net effects on Vermont's economy (costs versus revenue) and whether or not the applicant and their project complies with predetermined guidelines. Past auditor studies of EATI were not encouraging. Let's hope VEGI does better.

Although not directly lumped under income tax, the bank franchise tax exemption does affect corporate income for banks, as it reduces the tax obligation for their average monthly deposits held. This includes a total of six expenditures, amounting to $2.7 million in forgone revenue. This set of exemptions includes the Vermont Higher Education Savings plans and state-chartered Credit Unions, Bank-Franchise tax credits comprised of affordable housing, downtown and village center programs, Vermont seed capital funds, and charitable housing credits.

In order to simplify filing and processing procedures, due to the complexity of their revenue stream, insurance companies doing business in the state are taxed on premiums and assessments written. This is standardized by the National Association of Insurance Commissioners, but disregards annuity considerations. There are three Vermont credits that an insurance company can claim: Affordable Housing, Vermont Seed Capital Fund, and Downtown and Village Center. The Affordable Housing Credit was the only one that contributed to foregone revenue and is reported to have cost the state $154,000.

There also exist three exemptions from the Premiums Tax: the aforementioned Annuity Considerations Exemption which totals $9.4 million; the Fraternal Societies exemption which is under $100,000; and the Hospitals and Medical Service Organizations exemption, which accounts for the largest percent of forgone insurance tax revenue at $10.6 million in 2009. It is worth asking if for-profit hospitals and medical service organizations should be tax exempt. When is the last time your local for-profit hospital or MSO doctor gave you a break on the bill?

Summary of Income Tax Expenditure Recommendations

Exempt earned income from taxation and impose financial speculation taxes on unearned income from securities, currency, and real estate speculation. Impose taxes on throughput to replace taxes on value added. Alternatively:

1. **Equalize taxation between earned and unearned income. Impose financial speculation taxes on unearned income from securities, currency, and real estate speculation.**
2. **Evaluate the benefits of municipal bond exemption vs. the costs.**
3. **Analyze EITC vs reduction in other services needed to determine if it has a positive return. $21 million in 2009.**
4. **Analyze job creation and other claimed benefits of capital gains exemption to determine if this investment by the state has a positive return or is just a giveaway to wealthy speculators. $30-60 million.**
5. **Evaluate discrepancy between homeowner interest deduction and renter rebate credit. Either equalize them or eliminate them. Possible saving $23 million plus renters rebate credit. Possible cost if equalized.**
6. **Continue Auditor scrutiny of E.A.T.I. and V.E.G.I.**
7. **Reconsider the insurance premium tax exemption for profit-making hospitals and medical service organizations. Possible saving up to $10.7 million.**

Sales Tax Expenditures

Ecological-Economic Analysis of the Sales Tax

Goods are produced with inputs of energy, resources, labor and capital equipment. A tax on goods (sales tax) taxes all these inputs in their proportion in the product, and reduces demand for them all by increasing their cost. A tax on services taxes labor directly, and reduces the use of labor. Some services such as a legal office for instance, rely on office space, computers, and paper. Or a hair salon for example uses office space, chairs, equipment, shampoos and supplies. But the biggest portion is the cost of professional fees for service. Therefore a tax on services has the biggest impact on the cost of services, and thereby reduces their use. A tax on energy and resources taxes these items directly and conserves energy and resources.

We are currently facing one of the worst unemployment crises in modern history. Taxing services is a direct tax on labor, which will make labor more expensive and reduce employment. Do we want to reduce employment at a time when unemployment is at an all time high? Rather than equalize taxes on goods and services by adding a tax on services, we could eliminate the tax on goods. In order to level the playing field between brick and mortar stores and online retailers, instead of going after Internet sales (an impossible task) we should eliminate the sales tax on brick and mortar stores.

Let's ask ourselves what we want. Do we want less jobs and less capital investment? Then why would we tax services or goods? Do we want less depletion, pollution, and energy use? If so, then shouldn't we tax these items more? Therefore a tax on resource use, energy, and pollution is preferable to a tax on goods or services, and provides the incentive we want. This policy rewards efficient resource use, and substitutes labor and capital for resources instead of destroying jobs and investment. Commission member Schubart of the Blue Ribbon Tax Commission supported a tax on extraction of non-renewable resources.

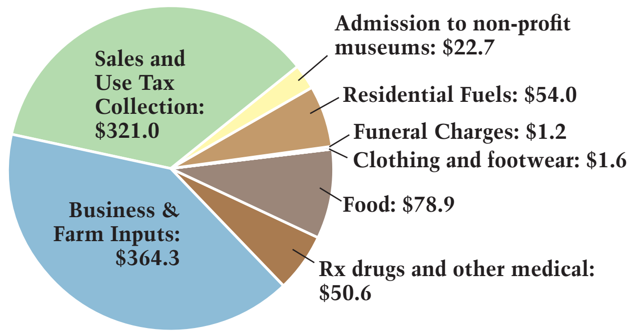
For purposes of this study we will separate agricultural and manufacturing inputs as they have some different characteristics with respect to subsidy considerations.

The most striking thing about the Sales Tax in Vermont is the fact that items exempt from the tax far exceed the tax collected. According to the 2011 Tax Expenditure report, $568.3 million in Sales and Use Tax revenue was not collected in 2008 due to various tax exemptions. Compare this with the tax actually collected in 2008 of $333 million. This becomes more understandable when you consider the $364.3 million Michael Costa has aggregated as all the farm and business inputs. These are presumably intermediate goods, which are not taxed in order to prevent double taxing of the final product. Costa's chart highlights some possibilities, but was not meant as an official recommendation, which can be found in the Blue Ribbon Tax Commission report. For purposes of this study we will separate agricultural and manufacturing inputs as they have some different characteristics with respect to subsidy considerations.

Medical Products

The JFO Expenditure report lists $41.5 million in sales tax exemptions for medical products in 2009, and Michael Costa's estimate including prescription drugs was $50.6 million in 2010. In accord with the Medical Insurance Premium tax exemption we could question if profit-making medical service providers deserve a tax exemption.

Tax Year 2010 Sales Tax Collected and Tax Expenditure Revenue Foregone
In $Millions



Source: Michael Costa, Director, Blue Ribbon Tax Commission

Sales Tax Expenditures

Taxing Consumption: What Is Consumption And What Are You Taxing?

Input — **Item Taxed**

Sales Tax

Energy → Goods
Resources → Goods
Labor → Goods
Capital → Goods

Results
- Goods cost more
- Reduced demand for goods resulting from elasticity of demand
- Reduced use of labor/less jobs
- Capital diverted elsewhere
- Some reduction in energy and resource use

Tax on Services

Energy
Resources
Labor $\xrightarrow{\text{(mostly)}}$ **Services**
Capital

Results
- Services more expensive
- Reduced use of labor/less jobs!
- Biggest impact on jobs because most of the tax falls on labor!

Throughput Tax

Energy → **Energy and Resources**
Resources → **Energy and Resources**
Labor
Capital

Results
- Energy and resources more expensive
- Energy and resources conserved
- Industry more efficient
- If combined with reduction in taxes on sales, income, and investment in production: ***More Jobs, More Investment***

Joint Fiscal Office Potential Revenue Sources and Options 2010

Sales Tax	Change	Annual Revenue (Millions)
Expand Sales Tax Base		
Clothing & Footwear	*Include in Sales Tax Base*	27.3
Tax Clothing > $110	*Include in Sales Tax Base*	2.2
Soft Drinks	*Include in Sales Tax Base*	3.5
Candy	*Include in Sales Tax Base*	2.5
Lottery and Break-open Tickets	*Include in Sales Tax Base*	N/A
Apply Sales Tax to Services:	*Include in Sales Tax Base*	282.1

Source: http://www.leg.state.vt.us/jfo/fiscal_facts.aspx

Agricultural Input

Zari Sadri

The subsidies that exist in Vermont, especially in the agricultural sector, can be extremely perverse. While we seek to support the agricultural economy, and sustain the agrarian landscape of the state, we are sustaining unintended consequences of pollution, runoff, and streambed erosion. Vermont currently exempts farm inputs from the 6% sales tax that most other goods in the state are subject to, which amounts to $20.1 million in 2009. This includes an exemption for chemical fertilizers and pesticides, and organic inputs. Farm runoff of phosphorus and nitrogen in the state has lead to a dire nutrient balance problem in the state's rivers, streams, and lakes that has cost the state over $50 million dollars in attempts to remedy through the Clean and Clear program (Clean and Clear Report 2009). In effect, by subsidizing farm inputs, using taxpayer money to fix the negative externalities as a result of the subsidy, and exempting the final product (food) from any tax whatsoever, agricultural polluters, and farmers with poor management practices are receiving a triple subsidy.

The sales tax exemption for agricultural inputs that have negative environmental impacts should be eliminated. The state could raise enough money to cover the costs of its Clean and Clear program, and reduce the inherent subsidy to farms that are having a detrimental effect on the state's waterways. Organic inputs should be exempt from sales tax, while imposing the 6% sales tax on farm inputs contributing to water pollution. The farmers practicing sustainable agriculture can receive a subsidy for not using excess nutrients, and can also receive funding and grant money from the Clean and Clear agricultural grants for nutrient and manure management programs. Farmers that are raising our food in a sustainable way should be given a break, cutting costs for the consumer, and making local food more competitive in markets around the state.

Manufacturers, Material and Equipment

At $308 million in 2009 this is by far the largest tax exemption. As previously stated we believe it is better to tax throughput than value added. Vermont is one of 11 states that don't collect any severance taxes or royalties on natural resource extraction. See: http://www.ncsl.org/default.aspx?tabid=12674. Resource taxes along with land use and pollution taxes comprise taxes on throughput. Manufacturing inputs are intermediate goods that may be taxed again as an end product both on sales and business income. An alternative might be to evaluate which inputs are raw materials and which are value-added products consisting of labor, capital, energy, and resource inputs. The energy and resource inputs should be taxed with the capital and labor portion exempt. This could be done at every level of the manufacturing process and convert the sales tax to a throughput tax.

Rentals of Coin-Operated Washing Facilities

Eliminate the sales tax exemption for rental of rentals of coin-operated washing facilities for personal use, including car washes ($1.2 million). Paying facilities to wastefully consume Vermont's natural aquifers impacts the state's water security. The price of consuming natural resources should be born on the shoulders of the consumers and users in either user fees or taxes. This tax exemption is a perverse subsidy that does not provide the accurate price signals to limit its harm.

Fuel Purchases for a Residence or Manufacturing

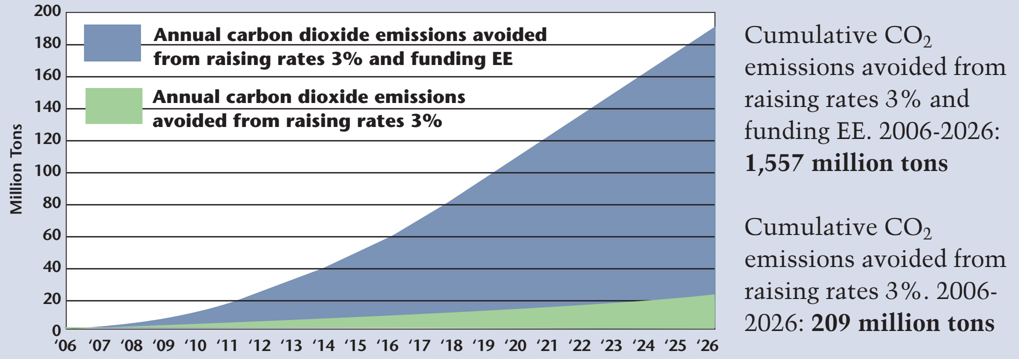
There are currently tax credits for homes and manufacturing enterprises that consume electricity, fuel oil, natural gas, propane, and other fuels. Residences were credited $44.3 million for the use a fuel in 2008 according to the Public Service Board. That same report estimated that manufacturers were granted $15.8 million in similar credits. In the case of residences the statute dates back to the oil crisis of 1977, for manufacturing the date was 1993. The truth about these expenditures is that they may just be old laws that haven't been reevaluated in such a long time that giving them out has become the status quo. The nature of these subsidies put them in direct competition with subsidies that seek to reduce or minimize wasteful fuel consumption. While there is an argument to be made for the individuals that claim residential credit, other programs such as LIHEAP and low-income weatherization exist to help the seriously hampered individuals and households. These programs should have increased funding in lieu of the fuels credit.

Here is what the Blue Ribbon Tax Commission said about the residential fuels sales tax exemption:

"…Let's assume that the legislative intent of exempting residential fuels is to ensure that low-income residents pay the lowest possible price for heating fuel. If so, several issues emerge.

Efficiency Programs Can Save Seven Times More Carbon Per Consumer Dollar Than Carbon Taxes or Prices

Annual CO_2 emissions saved by increasing rates 3% and increasing rates 3% to fund energy efficiency (Ohio example)



Assumptions: *Electricity use increases by 1.7% per year; retail electric sales increase by 3%; price elasticity is -0.25 (-0.75 for a 3% increase), distributed over five years; carbon dioxide emissions are 0.915 tons per MWh in Ohio; cost of EE is \$.03 per KWh; average EE measure life is 12 years. Source: Dave Farnsworth, Regulatory Assistance Project*

1) The tax expenditure is duplicative: Vermont administers the Low-Income Heating Assistance Program (LIHEAP), which will allocate $15.1 million helping Vermonters of modest means with heating fuel this winter.

2) The tax expenditure is not targeted or means tested: The tax expenditure for residential fuel is available to all Vermonters regardless of income level. This drives up the cost of the expenditure without furthering the policy's goal.

3) The tax expenditure may contradict other policy choices: Vermont is investing in green policies, but this tax expenditure subsidizes fossil fuels by more than $50 million."

LIHEAP is a $4.51 billion federal program designed to help families with low income cope with the increasing cost of energy for basic needs, such as: heating oil, natural gas (for cooking and heating), and electrical consumption. For the fiscal year 2010 the federal government allocated $25.6 million to the state of Vermont. However this is just one of the many examples of where Vermont relies on the federal government for assistance, which helps to underscore the stark reality of Vermont's reliance on federal assistance to cope with rising fuel prices. Subsidizing fuel is not a sustainable solution to rising fuel prices.

The diagram above shows that efficiency programs have seven times the impact compared with increasing fuel prices on fuel consumption. This suggests that increasing fuel prices alone are not as effective as the principle of combining taxing energy with investing in efficiency. Sales taxes from fuels should be invested in efficiency and weatherization. Currently we are doing the opposite by exemption of residential fossil fuels. These fuel subsidies are a perfect example of a perverse subsidy.

Clothing and Footwear

In 1999, the legislature made the decision to exempt sales tax on all clothing valued at under $110 and footwear. Since then, Vermont has joined the Streamlined Sales Tax Agreement and in 2007 the language was changed to read all clothing and footwear will be exempt from state sales tax and any local option tax, effectively giving no means testing to a subsidy that becomes perverse when the intent and beneficiary of the original legislation are considered, and how this impacts emissions and extraction of natural resources. This new agreement also impacts some 76 cities and towns who currently are eligible for the local option tax and may undermine their ability to raise local revenue which becomes an issue of Local v State v Federal (JFO).

Three other states carry this same exemption with different thresholds; Connecticut has an exemption on all clothing less than $50, in New York they use the $110 cap, and in Massachusetts the threshold is set at $175 (JFO, 2007). According to the JFO, exempting clothing purchases below $110 would only generate an additional $2.2 million.

This sales tax exemption is not means tested and therefore propagating the perversity of this subsidy that allows everyone to benefit from this exemption. There is already alternative infrastructure in place – i.e. the EBT card distributed with the 3 squares program that could better target those who need the subsidy which could save the state $27.3 million dollars. At a minimum the exemption should be returned to the first $110.

Meals and Rooms Taxes

The late Senator Russell Long famously stated, "Don't tax me; don't tax thee; tax that fellow behind the tree." Since meals and rooms taxes largely out of state visitors, this tax remains very popular.

Summary of Sales Tax Expenditure Recommendations

1. **Replace sales taxes, value-added taxes, or proposed tax on services with taxes on throughput: depletion, land use, pollution.**
2. **Support the taxation of soft drinks, bottled water, and candy. ($6 million plus bottled water)**
3. **Eliminate tax exemption for medical services and prescription drugs for profit-making companies ($50.6 million). Put tax upstream to avoid pass-through to consumer.**
4. **Eliminate exemption for environmentally harmful agricultural inputs. (Up to $20.1 Million)**
5. **Energy and resource manufacturing inputs could be taxed with the capital and labor portion exempt. This could be done at every level of the manufacturing process and convert the sales tax to a throughput tax.**
6. **Eliminate the sales tax exemption for rental of rentals of coin-operated washing facilities for personal use, including car washes ($1.2 million).**
7. **Eliminate the residential fuels exemption ($44.3 million). Substitute additional investments in efficiency and weatherization funds.**
8. **Eliminate manufacturing fuel exemption ($15.9 million in 2008)**
9. **Return to clothing and footwear exemption of $110 or consider replacing exemption with direct means-tested payments ($2.2-27.3 million)**

Motor Fuel and Purchase and Use Exemptions

Gasoline tax

The tax on gasoline is 19 cents plus 1 cent for the petroleum clean-up fund for a total of 20 cents per gallon. As gasoline approaches and exceeds $4.00 per gallon, a 6% sales tax would amount to 24¢. The crossover point where a 6% sales tax on gasoline equals 20¢ is $3.33/gallon. A sales tax would provide a tax proportional to the price of fuel, rather than a fixed price per gallon. Estimates of external costs of gasoline range from $4.60/gallon - $14.14/gallon including federal tax subsidies for the oil industry, government program subsidies for oil, protection costs involved in oil shipments and motor vehicle services, environmental, health, and social costs, and other externalities (International Center for Technology Assessment, p.34). A tax rate below $4.60/gallon could be considered a perverse subsidy for gasoline.

Diesel Fuel Tax and Transportation Infrastructure Bond (TIB) Fund Diesel Fuel Assessment

23 V.S.A. §3003 imposes on the sale of diesel fuel (1) A tax of $0.25 per gallon, (2) A petroleum distributor license fee of $0.01 per gallon which is deposited in the petroleum clean up fund and (3) A transportation infrastructure bond (TIB) fund assessment of $0.03 per gallon. This analysis treats exemptions from the tax, fee and assessment as all being tax expenditures and herein the term "tax" is all-inclusive. As specified in 23 V.S.A. §3003(d)(1), the following uses are exempted from the diesel fuel tax, the license fee and TIB assessment:

- Off road uses for agricultural purposes
- Use by a vehicle registered as a farm truck
- Off road uses by any vehicle
- Uses by state or municipal entities (including school districts, fire districts)
- Use by a non-profit public transit agency

Diesel fuel purchases by government entities and public transit agencies are excluded from this analysis.

FY 2011 Report lists a tax expenditure of $9.7 million in 2009 and 10.8 million in 2010 for diesel fuel. The exemption of the 3c TIB assessment is understandable since these vehicles are off-road and do not generally use road infrastructure. They do use the same fuel stations so contributed equally to the petroleum tank leakage that was prevalent prior to the use of corrosion free tanks, so should contribute 1c to the clean-up fund. Why should they be exempt from the 25c per gallon tax? This exemption was instituted in 1982 and its time has passed. There is no reason to exempt any use of fossil fuels from fees or taxes. We should be doing everything we can to develop alternative fuels, and become independent of petroleum. 29c per gallon doesn't come close to covering the external costs of petroleum use. Petroleum should be subject to depletion and pollution fees. 29c per gallon is a bargain compared to the true costs of petroleum fuels. Subsidizing any use of diesel fuel, even off-road use should be eliminated.

Summary of Motor Fuel Expenditure Recommendations

1. **Change gasoline tax to 6% instead of fixed amount.**
2. **Add external cost to cost of gasoline: $4.60/gallon**
3. **Add 1¢/gallon petroleum tank leakage fee to all exempt users**
4. **Add 25¢/gallon tax to all exempt users**

Property Tax

Ecological-Economic Analysis

Public investments such as education spending raise land (location) values. Therefore it is legitimate for governments to recover this through value recapture. Value recapture is accomplished by taxing land values exclusive of buildings and other improvements. If we separate land and building values from the Vermont Grand list we find that approximately 2/3 of the assessed value is in buildings and 1/3 in land. Since property taxes comprise about 35% of in-state revenue that means that 2/3 of property taxes or 24% of all state taxes fall on buildings. It is worth considering if this negative incentive structure is worth keeping in a state where there is a severe lack of affordable housing, a large gap between income and housing costs, as well as a lack of construction or renovation currently.

From 1970-2000 Vermont real estate appreciated approximately 7% per year. From 2000-2008 the increase was about 20% per year. Taxing land values at the average combined municipal and statewide total of about 2.5% therefore amounts to a subsidy for land speculators. The land gains tax enacted in 1973 addresses this problem somewhat, and is a very good attempt to reduce speculation. We have advocated a pilot project of land value taxation in St. Albans, Newport and Rutland Downtowns to demonstrate the principle. Land value taxes also reduce sprawl by reducing land held out of use for speculation, and result in densification and infill.

Land value taxes are considered the least distortionary taxes by economists due to the fact that the supply is fixed and therefore completely unaffected by the tax. A tax on land values recovers economic rent, or the unearned return to land without taxing any productive inputs to the economy. The shift of property taxes to a split rate with higher rate on land than buildings, or exempting buildings altogether should be investigated.

Property Tax Expenditures

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Use Value Appraisal (Current Use)

The Use Value Appraisal (Current Use) program was passed in 1978 to preserve working agricultural and forestland in Vermont, with the first year of distribution of taxes in 1980. The goal of this subsidy is to keep the land in production and tax property on its value as an agricultural or forestland, not as land speculated for development. To qualify, the property must be at least 25 acres without the homestead (the household is typically two acres), and it must be used for either farming or forestry. Farming income must average at least $2000 for one of the last two years or three of the last five years, and $75/acre for each acre over 25, with a minimum requirement of $5000. A farmer must also earn at least 50% of his/her gross annual income from farming. The land can have croplands, orchards, Christmas trees, hay, vegetables, sugarbush (tapped 3 out of the last 5 years), pasture land (one animal unit for every three acres-five goats, five sheep, one horse, one cow are all equal to one unit.)

For land to be eligible for forestland, it must be 25 acres without the homestead and have a long term Forest Management Plan and managed for timber. Land must be capable of providing 20 cubic feet per acre per year or it cannot exceed 20% of the Current Use Appraisal.

Development is defined as new buildings, roads, other structures, mining, excavation, creation of two or more parcels, and cutting of timber beyond what is specified in the forest management plan.

Tax Savings for Land Owners Enrolled

In 2008, property owners saved $44.6 million in taxes; in 2007, they saved $39.6 million. The combined enrolled land represents 34.5% of the total land area of the state. (2010 Annual Report, Prop Valuation and Review, page 13.) There have been years when the program was prorated at 80% (1992) down to 59% (1996). (page 14).

Tax Year	Parcels	Owners	Ag Acres	Forest Acres	Total Acres
2005	13,640	10,807	510,645	1,482,437	1,993,082
2006	14,061	11,195	515,422	1,521,506	2,036,928
2007	14,640	11,721	521,381	1,564,321	2,085,702
2008	15,047	12,078	524,835	1,594,324	2,119,159
2009	15,641	12,570	534,275	1,654,295	2,188,570

(2010 Annual Report, Division of Property Valuation and Taxation, pg 14)

Tax Year	Municipal Tax Savings	Education Tax Savings	Total Savings to Others
2005	$8,078,698	$24,901,872	$32,980,570
2006	$8,871,412	$27,125,217	$35,996,629
2007	$9,728,409	$29,797,654	$39,526,063
2008	$10,712,418	$33,913,934	$44,626,352
2009	$11,584,784	$37,386,555	$48,971.339

(2010 Annual Report, Division of Property Valuation and Taxation, pg 14)

Land Use Change Tax (LUCT)

This tax is charged to property owners who do not follow their forest management plan or decide to develop their land. In 2008, the tax amounted to $654,924 on 32896 acres (UVA Manual, page 5). This tax is prorated to the towns and the tax is 20% of the fair market value for land enrolled less than 10 years; 10% for lands enrolled more than 10 years. A proposal to reform the Land Use Change Tax (the "Development Penalty") H.485 was passed in 2010, but vetoed by Governor Douglas. The penalty for conversion of current use property is inadequate and should rightfully be addressed again by

the legislature.

Land Gains Tax

This tax is on the gain from the sale of land that has been held for less than 6 years, and is paid by the seller. The tax is not imposed if the land is part of the first ten acres beneath or contiguous to the seller's principle residence (VT Dept. of Taxes). This tax was enacted in 1973 intending to limit land speculation. However, if the buyer is going to occupy the remainder of the land as a primary resident within one year, or the buyer will build a primary residence within two years, then there is no tax. In addition, if the property is exempt from federal Capital Gains ($250,000 for a single person, $500,000 for a married couple), then the 10-acre limit does not come into play. There is also a builder's exemption which allows a house to be started within one year, finished within two years, and sold as a primary residence within three years. Builders should not be exempt, since many builders are in essence land speculators. Size restrictions should be reviewed and possibly eliminated and most exemptions eliminated. Speculation takes place on all property, not just parcels over 10 acres. Taxing unearned income is always preferable to taxing earned income.

Property Tax Adjustment (Income Sensitivity)

The largest property tax expenditure is the property tax adjustment or "income sensitivity" adjustment for the statewide education tax, amounting to a reduction of $115.3 million in 2008 and $135.8 million in 2009. In 2010, 65% of Vermonters paid property tax based on income, resulting in $142 million less in taxes (vttransparency.org). One recommendation is to lower the qualifying income to $60,000. This would add close to 50,000 people to the number of taxpayers paying the full property tax, while still protecting lower income Vermonters. An advantage of this is the understanding that increasing school budgets will increase the tax; this consequence is buffered to many Vermonters due to the current income adjustment for property tax. Vermont residents would understand better that voting to spend more per equalized pupil means higher property taxes. When more than 65% of Vermonters are receiving tax reductions for property tax, this might be a signal that the education costs are too high. It is time to look at reducing the number of school districts in the state to help share costs.

Commercial property owners do not receive any income sensitivity adjustments to their property tax bill. They pay the full rate on their property values. Therefore, commercial property owners are subsidizing residential property owners who receive income sensitivity on their education tax. According to conversations with commercial property owners this burden is increasing annually.

Public, Pious, and Charitable Property

Along with traditional non-profits, churches, and government buildings, other property exempt from property taxes includes cemeteries, electrical utilities, humane societies, railroad property, college fraternities and sororities. The Tax Commission said, "It is not clear to the Commission why property tax exemptions function like a light switch, turning either on or off. The ability to pay property taxes is typically not an all or nothing proposition. Yet, large non-profits and wealthy colleges are exempted the same as clapboard churches and community non-profits. Therefore, the Legislature ought to consider sliding scale property taxes for various classes of exempt properties." Large organizations who make use of city services sometimes pay PILOTs (Payment in Lieu of Taxes) for services provided such a police, fire, roads, parks, libraries, etc. This serves more like a user fee than a tax. Perhaps PILOTs could be formalized for organizations that use a large amount of government services. Property owned by tax-exempt organizations is not exempt from rising land values due to government services. Another approach is for government to capture the increase in land values (not including buildings) at the time of sale, similar to the land gains tax.

Summary of Property Tax Expenditure Recommendations

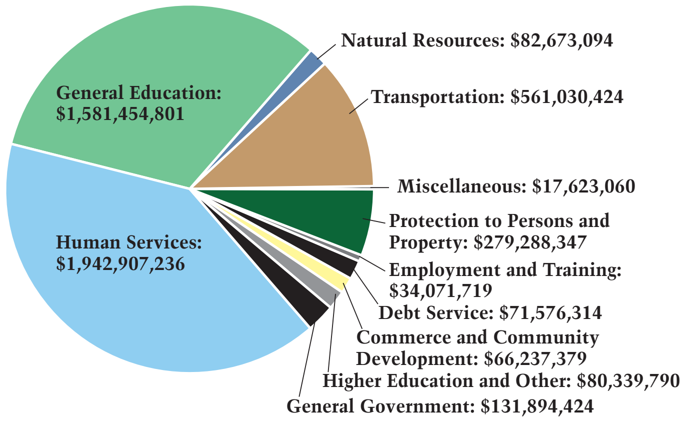
1. **Revisit the land use change tax.**
2. **Land Gains tax: Eliminate exemption for builders, since many builders are in essence land speculators. Size restrictions should be reviewed and possibly eliminated and most exemptions eliminated.**
3. **Lower qualifying income on income sensitivity to $60,000.**
4. **Establish PILOTs for wealthy non-profits which use government services.**
5. **Capture increases in land values when exempt property is sold through value-recapture.**

Appropriations

	2007	2008	2009	2010	2011
Appropriation - Source of Funds					
General Fund	1,135,434,409	1,175,261,448	1,186,741,398	1,088,278,019	1,140,777,015
Transportation Fund & TIB Fund	231,652,322	230,880,340	217,486,853	226,071,499	235,252,835
Education Fund	1,044,702,597	979,049,933	1,033,106,775	1,074,322,578	1,073,757,132
Federal Funds	1,310,711,536	1,307,676,072	1,337,780,948	1,456,100,724	1,571,009,62
Federal ARRA Funds	0	0	0	373,350,323	322,346,442
Special Funds	370,213,016	442,075,343	444,836,342	431,747,707	446,794,329
Fish & Wildlife Fund	12,481,014	13,850,694	15,385,501	16,355,474	17,113,525
TOTAL	**$4,105,194,894**	**$4,148,793,830**	**$4,235,337,817**	**4,666,226,324**	**4,807,050,899**
Appropriation Expense Category					
General Government	61,471,886	70,702,996	88,789,991	90,399,551	91,329,613
Protection to Persons & Property	223,963,015	226,985,787	237,178,217	277,892,849	274,315,718
Human Services	1,557,361,842	1,658,816,478	1,705,626,311	1,873,039,775	1,942,897,236
Department of Labor	25,928,284	26,313,514	26,296,354	36,095,298	34,071,719
General K-12 Education	1,497,427,757	1,451,258,582	1,495,954,874	1,534,021,583	1,545,259,281
Higher Education	80,955,103	83,783,621	80,364,162	80,356,723	80,339,790
Natural Resources	77,847,177	81,270,268	81,512,053	82,304,483	82,673,194
Commerce & Community Development	55,075,125	57,287,451	54,782,148	64,512,251	65,423,962
Transportation	434,066,665	397,542,849	383,455,304	540,598,489	558,579,539
Debt Service	69,130,821	69,420,026	71,459,051	71,980,942	71,576,314
Other	21,967,219	25,412,258	10,558,000	15,024,380	60,584,533
TOTAL	**$4,105,194,894**	**$4,148,793,830**	**$4,235,976,465**	**$4,666,226,324**	**4,807,050,899**

Source: Joint Fiscal Office, Fiscal Facts 2008-2011

Appropriations
Total 2011 = $4,849,096,588



Source: Vermont Transparency-Public Assets and Ethan Allen Institutes

Transportation

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When looking at the overall appropriations and source of funds, one thing that jumps out is the huge discrepancy between transportation fund spending and revenue. In 2011 the transportation fund took in $235.3 million and spent $558.6 million. Other sources subsidized transportation by $323.3 million. When it comes to user fees related to transportation, residents of Vermont are not keeping pace with increasing expenditures in the transportation fund.

Transportation-related spending is on the rise nationwide. According to SubsidyScope (2010), $400 is the average amount spent per household in 2008 on transportation-related subsidies. The organization, funded in part by the Pew Charitable Trust estimates that $42 billion was spent in direct expenditures in 2008 (SubsidyScope.org, 2010).

Vermont does not differ from this trend of increasing transportation spending. Vermont's current transportation budget more than doubles the FY1998 budget with an increase in spending of $319.5 million since then (JFO, 2007). This is important because we now understand the impacts of vehicles to the atmosphere. This type of spending becomes perverse when we consider the impacts these allocation decisions have on both our natural environment and the state of the economy that pays an ever-increasing amount toward road maintenance and general road and infrastructure improvements here in Vermont.

The U.S. emits more carbon per-capita than any other nation in the world. In 2000, the U.S. emitted 5.6 tons of carbon per-capita, 5 tons per-capita more than China. The U.S. emits more carbon per-capita than India, China, the United Kingdom, Japan and Germany combined (Myers, 2003). Since 1977, American's increased the number of one-way trips to 4.3, up from 2.9. During the same span, American's increased their daily driving from an average of 42 kilometers per day to 62 (Kent, 2001). Myers explains that two-fifths of the cost of road building and related services come from revenues unrelated to transportation and that it would cost 22 cents per gallon of gasoline to internalize this perverse subsidy (Kent, 2001).

Broad Subsidies apply when the cost of an activity is borne not entirely by the source of the activity but by some other agent who may not directly and unequivocally benefit from the activity (Kent, 2001). In order to address broad subsidies, users that contribute to environmental externalities should bear the full cost of the program used to provide those services. These externalities include acid rain in one region created by the sulfur dioxide emissions from a neighboring region; automobile emissions cannot be attributed to any particular agent since many parties are involved.

Impact of Perverse Subsidies

Perverse subsidies have a negative effect because they pay for doing bads. For example, subsidies to the oil and car industries impact spending behaviors by making large vehicle purchases more attractive. The SUV exemption from the gas guzzler tax, which would run as high as $7,700 for one of the larger cars, encourages the purchase of such vehicles, even though they are one-third less fuel efficient and up to five times more polluting than conventional cars (Kent, 2001). The problems of road congestion, accidents, injuries and deaths, and environmental degradation are all directly associated with the increased spending on both automobiles and the roads they drive on.

The 2010 legislative session approved a spending bill of $561 million on transportation – mainly automobile infrastructure – the largest allocation in Vermont's history. This represents an increase of $120 million in spending over the 2009 VT transportation bill of $441 million (Representatives, 2010). Each year, a greater number of automobiles hit the road contributing to the harm that is adversely affecting the economic and environmental realms. The number of vehicles on the road has increased in every year since the first Model T Ford came out and since then, the increase has also resulted in the expansion of impervious surfaces used for driving and parking.

According to publications put out by the Joint Fiscal Office, 33.6% of the entire transportation budget is spent on either paving or maintenance costs of highways. The FY2010 budget identifies 5 major categories for spending: administration & finance & planning, facilities, alternate modes, highway infrastructure, and town programs. The top category is highway infrastructure representing $377.7 million dollars or 68.7% of the entire budget. Paving and maintenance represent the largest two appropriations in the transportation budget at $118 million and $66 million respectively. Comparatively, the proportion spent in the same two categories was only 30.5% in the FY2009 budget. Spending on rail, public transit, and programs that decrease dependence or use of fossil fuel dependent automobiles went up over the FY2009 budget by $13.6 million. However, this may be misleading, as much of this increase can be associated with the American Recovery and Reinvestment Act (ARRA) Funds.

Notably, Vermont was the recipient of $117.2 million in funds from the American Recovery and Reinvestment Act of 2009. This amount represents 21.3% of the entire transportation budget with nearly all of it going toward the highway infrastructure program. 85% of the Vermont appropriation of ARRA funds in this category can be lumped into 3 categories: $84.7 million went to paving, $9.4 million went toward the town bridges program, and $6.2 million went to bridge maintenance.

Of the $6.5 million increase in public transit spending, $3.9 million came from ARRA funds to public transit. The ARRA funds of $3.9 million represent nearly two-thirds of the increased spending, leaving a net increase of $2.6 million. This is slightly misleading however. If comparing the amount of spending from the transportation fund – that is the amount generated by Vermont user fees, the amount of spending has actually decreased by $350 thousand. Pedestrian and bike facilities spending also increased in FY2010 by $1.3 million with 94.6% ($1.2 million) of that increase being funded from ARRA Funds. Park and ride program saw an increase of $2.2 million with all but $250k of that coming from federal funding in the same years. Spending on rail also increased from $13 million in FY2009 to $16.6 in FY2010. Federal government spending in this category rose $2.1 million dollars and represented roughly 58% of the $3.6 million increase.

The fiscal year 2011 budget outlines an increased spending of transportation funds in areas that encourages more vehicles on the roads and a decline in areas that would be beneficial. Areas like public transit, pedestrian and bike facilities, park and ride programs, and multi-modal facilities all have seen less and less state funding from the transportation fund while spending on automobile infrastructure accounts for nearly 69% of the entire transportation budget. Lack of spending on public transportation is clearly a demonstration of our priorities in the state. Until the ARRA money came, spending has decreased in areas that provide either alternatives or reductions in automobile reliance.

With regards to transportation in 2009, of the three modes of transportation: aviation, rail, and automobile; and of the $317.3 million spent on infrastructure, 4.3% or $13.7 million went toward the rail related programs. Comparatively, roughly 66% of the $317.3 million dollars or $210.2 million was spent on automobile-related infrastructure for FY2009 (VAOT, 2008).

Not all decisions are detrimental to environmental quality; Vermont is making attempts to address the impact of perverse appropriations. The legislature has proposed a plug-in hybrid tax credit (S.234), and a Hybrid Tax holiday bill (S.206), and a Hybrid and fuel-efficient vehicle Purchase and Use Tax Exemption. Fuel-efficient vehicles are defined as vehicles that meet or exceed 30 mpg. The hybrid bill directs the state natural resources agency to publish a list of qualifying hybrid vehicles for the tax holiday. But again this encourages the purchase of additional vehicles to be added to the current highway structure.

Summary

Spending on infrastructure that encourages the use of personal automobiles is a perverse use of taxpayers' money, especially when the funds collected from user fees go toward increasing the capacity for harmful uses such as the expansion of highways in the state of Vermont. The Vermont Agency of Transportation received the approval of a $561 million dollar transportation program budget and is willing to take the additional $40 million (7%) and spend it on expanding the state highway system (VAOT, 2008). Two new exits are being considered for development of I-89 promising the delivery of less congestion and greater throughput. But I am not convinced that this is not just a myopic solution to a larger systemic issue, as history has shown time and again that rapid development occurs wherever roads are built and do so at a faster rate near and around interstate exits.

Looking ahead will show that the larger issue is the increasing proportion of impervious surfaces dedicated to parking and driving in a relationship with the footprints of actual buildings they are associated to. This examination shows that while both have increased, the amount of surface land dedicated to parked unused vehicles is far outpacing the increase in actual building footprints. Continually, the increasing amount of total impervious surfaces is infringing upon non-impervious surfaces, such as space available for walking, parks, hiking and other leisurely activities associated with public spaces. To steal a quote from Robert F. Kennedy, the increasing sprawl of automobile transportation related infrastructure infringes upon "that which makes life worthwhile." (University of Kansas, Lawrence, Kansas, March 18, 1968.) This is a great partner with the saying, tax bads not goods, and tax what you take, not what you make. The expansion of impervious surfaces reduces the capacity for the land to be productively used as a new business, home ownership, affordable homes, a new sports field, a nature preserve for wildlife habitat and education. An example around Vermont is the development of Williston's Maple Tree Place, where the surface is nearly all paved, a discouragement to anyone who wants to walk from one store to another, unfriendly to families, and of course a perverse development that used public funds to take from a potentially productive land.

Transportation spending is on the rise and is negatively impacting the livelihoods of Vermont citizens. The top three issues I have with this adverse spending are: (1) roads in Vermont serve their purpose, "you can get there from here," why do we need more roads? (2) there is a lack of available data on actual spending in a way that is readily available and easily viewable for the lay person, and finally, (3) the lack of attention in making "that which makes life worthwhile" the highest of priority and metric used to make decisions.

Transportation Recommendations

1) **Use true cost accounting for deriving purchase and use taxes** *(no data available)*
   The cost of administering the Department of Motor Vehicles and the Department of Transportation should be born on the shoulders of the people who contribute to the pollution and degradation that come from driving on highway infrastructure. Ideas such as increasing the tax rate for 2nd, 3rd, and 4th vehicles is an example of how to account for the share of funding and to target those responsible.

2) **Use user fee's to fund 100% of highway infrastructure construction and maintenance.** *(Neutral)*
   The idea that funds deriving from sources other than user fee's means that the when they are solely used to increase the capacity of automobile transportation, they become perverse because they cause environmental harm. Regarding transportation improvement projects, such locations like Howard County in Maryland have written into their Master Plan, "Until all non-capacity expansion actions to improve safety have been considered, capacity expansion should not be undertaken. Projects that will improve safety without expanding capacity should receive priority over projects that will expand capacity."

3) **Eliminate wasteful highway projects from the Transportation Plan** *(no data available)*
   Reduce our dependence on automobiles for transportation. Seek alternatives to building new I-89 exits in

South Burlington and the construction of the circumferential highway that do nothing to address user reliance on single mode transportation, and the increasing cost of construction and maintenance when the state is facing a budget gap for the next fiscal year.

Resources:

Board, S. S. T. G. (2010). Vermont Taxability Matrix 2010 Retrieved October 20, 2010, 2010, from http://www.streamlinedsalestax.org/uploads/downloads/State%20Compliance/Vermont/2010/ Vermont%20Taxability%20Matrix%202010%20_Revised%2010_12_10.pdf

Committee, J. F. (2010). Fi$cal Fact$. Montpelier: Retrieved from www.leg.state.vt.us/jfo. Google. (2010). Timeline Retrieved September 29, 2010, from http://www.google.com/search?q=vermont+sales+tax+history&hl=en&prmd=iv&tbs=tl:1&tbo=u&ei=RW7QTIqKGsH38Aa9neyLBw&sa=X&oi=timeline_result&ct=title&resnum=11&ved=0CEgQ5wIwCg

JFO, J. F. O. (2009). H.438 FY10 transportation budget. Retrieved from http://www.leg.state.vt.us/jfo/Transportation.htm.

Kent, N. M. a. J. (2001). Perverse Subsidies: How tax dollars can undercut the environment and the economy: Island Press. Klein, S. (2010). State of Vermont Comparative Debt. Retrieved from http://www.leg.state.vt.us/jfo/Issue%20Briefs%20&%20Memos/State%20of%20Vermont%20Comparative%20Debt.pdf.

Madsen, T. (2004). Greening the Budget: 11 Ideas for Protecting the Environment and Easing Maryland's Fiscal Crisis, from http://www.greenscissors.com/gsmd.pdf

Management, D. o. F. (2010). Department of Finance & Management Retrieved September 30, 2010, from http://finance.vermont.gov/

OAS, O. o. A. S. (2010). Office of Administrative Services Retrieved September 25, 2010, from http://www.osec.doc.gov/oas/trans2.htm

Office, J. F. Local Option Taxes and Streamlined Sales & Use Tax conformity. Issue Brief Retrieved September 25, 2010, 2010, from http://www.leg.state.vt.us/jfo/reports/Local%20Option%20Taxes%20&%20Streamlined.pdf

Office, J. F. (2007). 2007 Vermont Tax Study. Retrieved from http://www.leg.state.vt.us/jfo/Reports/2007-01%20Vermont%20Tax%20Study%20-%20Volume%201.pdf http://www.leg.state.vt.us/jfo/Reports/2007-10%20Vermont%20Tax%20Study%20-%20Volume%202.pdf.

Representatives, V. H. o. (2010). Transporation Retrieved September 15, 2010, from http://www.leg.state.vt.us/jfo/Transportation.htm

Resources, M. s. L. (2010). Michie's Legal Resources Retrieved September 30, 2010, from http://www.michie.com/vermont/lpext.dll?f=templates&fn=main-h.htm&cp=vtcode

Taxes, V. D. o. (2008). State Information for Streamlined Sales Tax Participation: Vermont. Retrieved from http://www.state.vt.us/tax/pdf.word.excel/business/vtstatespecs.pdf.

Taxes, V. D. o. (2010). 2009 Vermont Tax Expenditure Report. Retrieved from http://www.state.vt.us/tax/pdf.word.excel/statistics/2009/2009%20Vermont%20Tax%20Expenditure%20Report%20REVISED%201-22-09.pdf.

USASpending.gov. (2010). USASpending.gov Retrieved September 24, 2010, from http://www.usaspending.gov/ VAOT, V. A. o. T. (2008). Vermont Agency of Transportation Homepage Retrieved September 21, 2010, from http://www.aot.state.vt.us/EIS/CCCH_History.htm

Energy and Human Resources

Mark McMillan

Tax Exemptions and Credits

The current state of Vermont energy subsidies reflects a strong reliance on the federal government for grants from large-scale national programs. Vermont benefits from several programs that have been instituted due to the United States Federal Government stimulus plan, otherwise known as the *American Recovery and Reinvestment Act of 2009* (ARRA).

One such example of Vermont's reliance on the federal government is the Low Income Home Energy Assistance Program (LIHEAP). LIHEAP is a $4.51 billion federal program designed to help families with low income cope with the increasing cost of energy for basic needs, such as: heating oil, natural gas (for cooking and heating), and electrical consumption. The subsidy comes in the form of a tax credit that low-income individuals apply for. For the fiscal year 2010 the federal government allocated $25.6 million to the state of Vermont[1]. However this is just one of the many examples of where Vermont relies on the federal government for assistance, which helps to underscore the stark reality of Vermont's reliance on federal assistance to cope with rising fuel prices.

The current state of electricity consumption in Vermont is a mixed bag. While Vermont has been increasing its renewable energy portfolio year over year, it still relies heavily on two big energy system providers for more than two-thirds of its electricity. "Nearly two-thirds of our current electricity requirements are met through major power contracts for generation with Hydro-Quebec and Vermont Yankee" (VDPS, 2008)[2].

As of August 23, 2010, the Vermont Clean Energy Development Fund has earmarked $7 million towards solar tax credits (CEDF, August 2010)[3]. The Vermont Public Service Board accepted applications from individuals or corporations that were already claiming the credit at the federal level. The Department of Public Service estimates that $9.4 million (V.S.A. § 5930z)[4] will be awarded for this particular tax credit after the legislature has cleared the tax expenditures for the other $2.4 million.

Another part of making renewable energy possible is Vermont House Resolution 781, which allows for several types of renewable energy options to be constructed at 2.2 MW or less, yet will be applied for net metering, the standard offer and solicitation of the Solar Energy Tax credit (where solar energy applications are accepted by the Public Service Board).

The city of Vernon has a strange tax-expenditure. For residents of the City of Vernon, home to the only nuclear reactor in the state (Vermont Yankee), the educational tax is rated at three quarters the appraised land value. While there is mention in the statutes of the state legislature for this it is not clear whether Entergy, the corporation owning and operating Vermont Yankee, is currently paying the other fourth of the educational tax for Vernon, nor whether this deal will become null and void should the nuclear power plant shut down at the scheduled 2012 deadline.

There are currently tax credits for homes, industry, and commercial enterprises that consume fossil fuels. Residences were credited $44.3 million for the use of a fuel in 2008 according to the Public Service Board[5]. That same report estimated that manufacturers were granted $15.8 million in similar credits. In the case of residences the statute dates back to the oil crisis of 1977, the manufacturing was 1993. The truth about these expenditures is that they may just be old laws that haven't been reevaluated in such a long time that giving them out has become the status quo.

There are good arguments against subsidies. Many people would argue that subsidies are in conflict with the free market. Subsidies inherently skew economic forces by giving public money to private sectors to encourage growth that would not have happened in a free market. As has been mentioned earlier in the book many special interest groups lobby for these subsidies. As subsidies constitute real money for these interest groups and corporations they seek out the help of lobbyists. These special interests, lobbyists, and advocates of the "free market" constitute real obstacles to subsidy reform.

Appropriations

The current situation for appropriations in the state of Vermont is more than a little confusing. In this portion of our study I looked at the appropriations for the Human Services and fuel energy costs sharing programs, such as the Low Income Home Energy Assistance Program (LIHEAP), that exist therein. To start I feel it is important to explain my understanding of the situation.

Health and Human Services is the largest budgetary constraint on all appropriations for the fiscal year to 2010. The annual report from the Vermont Joint Fiscal Office suggested that Human Services would cost over $3 billion (JFO, 201012), of which only one-eighth comes from the General fund. Of the over $400 million from the general fund almost all of it goes directly towards departmental administration.

Over one third of the entire appropriation comes in the form of direct federal subsidy. Though the number is present in the Joint Fiscal Offices report it would seem that this number is a lump sum after several different federal subsidies were added. The number is likely just based on receipts of such investment from the federal government. This study has considered the $1 Billion federal investment into human services for the state of Vermont as a gift horse therefore it has not been a concern to look into its mouth.

While trying to understand the Human Services budget as a whole one might be inclined to peruse the legislation for the appropriations of Fiscal Year (FY) 2010 – or – FY10. In the bill passed by both the Vermont State House and Senate (H.441, 200913) in 2009 for FY10 there are few opportunities to get revenue for these programs. I note this because our interest is one of finding fat in a budgetary sense, but Human Services seems to be where the rubber meets the pavement. Many of the large programs are sacred cows of budgetary politics and/or these programs are funded by something else.

Most of the special appropriations for large, one-time projects can be associated with Federal Stimulus money or in-kind payment from similar federal agencies. Such is the case with the LIHEAP program mentioned earlier. The majority of money spent on LIHEAP here in Vermont is federally allocated or arrives annually from departmental transfers. Take the following line from the FY10 legislative appropriation:

"The commissioner of finance and management shall transfer $2,550,000 from the home weatherization assistance trust fund to the home heating fuel assistance fund to the extent that federal LIHEAP or similar federal funds are not available" (H.441, 2009, p. 188).

Regarding departmental transfers, it seems to be generally understood that these transfers will be effected every year and from the same sources for the same reasons. The reason being that certain departments require its fully allotted budget for the year in case the needs for its services arise. But when these agencies don't offer the services they provide they return the excess money to the budgetary process instead of into funds that are held in escrow for future public budgeting. From a certain point of view this might seem necessary, especially inside same agencies or departments, but it seems as if the convention permeates the budgetary process, calling into question the numbers used and suggesting the need for frequent and ubiquitous audits. The end result is a budgetary loophole used to expedite monetary leveraging to offer more flexible services; instead it is becoming a budgetary convention. A convention that calls into question the validity of any numbers produced in this numbers game.

ARRA also had some effect on this budgetary process. The stimulus money has been used to "Invest one-time ARRA funds thoughtfully to minimize unsustainable recurring costs in the future" (H.441, 2009, p. 203). While the $40 million was added to parts of the Department of Health and Human Services' budget they were all spent on shovel ready projects and administrative costs of running them.

The largest and most often used direct revenue the Department of Health and Human Services uses is that of the Tobacco fund. The tobacco fund is a sin tax on the sale of tobacco products in the state. It makes up more than $40 million in revenue for the health and human services budget. The legislation (H.441, 2009) uses this money to fill out any areas of agencies that are not otherwise covered for the services they offer. Many line items call the tobacco fund by name and might solicit as little as $5 for certain fees against agency accounts. The appropriations of this fund aren't always small, on the contrary. Several are for items in excess of $200,000. The point being, if you really need money in HHS you will likely solicit this slush fund. In this case the positive effects of less smoking are decidedly moot. More smoke means more services.

To consider subsidizing heating fuels as part of health and wellbeing for low income individuals seems like a stroke of genius to me. LIHEAP would be a great program if it weren't so geared to continuing the low-income household reliance on cheap fossil fuels. There are efforts to help in terms of efficiency and innovation; projects such as the weatherization upgrades or for installing zero emission renewable energies with government subsidies. But as the example of the LIHEAP weatherization emergency budget transfers points out, there seems to be barely enough money to go around.

Recommendations

1. **Eliminate the tax credits for the residential, commercial, and industrial use of fossil fuels. Use half for deficit reduction, one quarter to supplement LIHEAP, and one quarter for weatherization. ($22.1 million)**
2. **Review the annual increase in the HHS Budget. It may be time for HHS to make cuts on a general budgetary scale now so fewer service are cut overall in the coming years.**
3. **Legislation for better record keeping and appropriation and expenditure tracking for state departments and agencies. This recommendation comes from the undue frustration and maddening process of finding numbers and knowing their credibility.**

Footnotes:

1 United States Department of Health and Human Services. Low Income Home Energy Assistance Program. 2010. http://www.acf.hhs.gov/programs/ocs/liheap/funding/fy10/fy_gross_net.html

2 Vermont Comprehensive Energy Plan 2009, Vermont Department of Public Service, May 2008.

3 Clean Energy Development Board Establishes Rules for the VT Business Solar Tax Credit Certification Program, Clean Energy Development Board. 23 August 2010, http://publicservice.vermont.gov/energy/ee_files/cedf/CEDF_SolarTaxCredit_announcement.pdf

4 Solar Energy Tax Credit, 32 V.S.A. § 5930z. Solar energy tax credit, Enacted 1 October 2009.

5 Vermont Tax Expenditures 2009 Biennial Report, Vermont Senate and House of Representative Appropriations Committees; Joint Fiscal Office; Department of Taxation; et al. January 15, 2009

Additional Resources:

- United States Department of Energy. www.energy.gov
- Solar Energies Technology Newsletter, July 2009. United States Department of Energy.
- Pew Research Center. www.pewresearch.org
- Waxman-Markey Summary Final 7.31, www.pewresearch.com
- The Cato Institute. www.cato.org
- Handbook for Policy Makers, 7th Edition. www.cato.org
- Legislative Joint Fiscal Office Annual Report, 2010. http://www.leg.state.vt.us/jfo/
- House Bill 441 as passed by House and Senate, 2009

Energy-Risk Transfers

According to Pew's SubsidyScope, risk transfers are defined as mechanisms which convey financial risk to the government (and the public) through insurance agreements, loans, loan guarantees and similar instruments. One noteworthy risk transfer in Vermont is the national government's insurance policy for nuclear power plants including Vermont Yankee, called the Price-Anderson Act. Price-Anderson sets the maximum insurance pool for nuclear power plants at $12.6 billion. The industry is not required to pay any amount above that, and they are granted immunity from liability. Victims of a nuclear accident are prohibited from filing for damages from an accident. Compare the $12.6 billion limit with the expected cost of the Fukushima Daichi accident in Japan of an identical GE Mark I reactor, which is expected to reach at least $200 billion (Arnie Gunderson, personal conversation May 29, 2011). Damage from the Chernobyl accident is estimated at $500 billion so far (Sherman, M.D., and Aleksey V. Yablokov, 2011). A 1982 Sandia lab study estimated damages from a US nuclear accident would be $750 billion in 2008 dollars. Vermont should require nuclear plant operators to purchase adequate insurance for the risk.

Another case of risk shifting deals with the storage of nuclear fuel. The US national government made a commitment to the nuclear energy industry to dispose of spent fuel from nuclear power plants. Since this commitment has never been fulfilled, nuclear plants have been forced to store spent fuel in onsite fuel storage pools, which unlike the reactors, do not have containment vessels surrounding them. When these pools fill up, spent fuel is then stored in dry casks onsite. This amounts to a transfer of risk from the federal government to the states and to people living in the vicinity of nuclear power plants. As we have seen from the Fukushima disaster, this is no idle threat. Evidence indicates the spent fuel pool on reactor number three exploded like a cannon sending nuclear debris more than 2 km away, and atomizing plutonium and uranium into dust which then circulated worldwide on air currents. The Vermont Yankee nuclear power plant contains spent fuel at three times the density of the spent fuel pool at Fukushima, and has no containment. Another risk transfer is the risk of hydrogen explosion which demolished several of the reactor buildings at Fukushima due to the reaction of uncooled zirconium with steam. VY is the same GE Mark I reactor design as the Fukushima plant, subject to cooling failures.

Water and the Agency of Natural Resources

Ian Altdorfer

The Environmental Law Institute conducted the report entitled analyzing perverse subsidies in Virginia, Greening the Budget 2005: 6 ways to Save Taxpayer Dollars and Protect the Environment in the Commonwealth of Virginia. The report estimates a possible $30 million saved biennially by tackling sprawl-related costs. The commonwealth can potentially save $56 million annually if it requires waste management facilities to pay the full cost of its practice. Lastly, an annual savings of $8.4 million can be made through eliminating water and waste subsidies. This issue addresses the fact that Virginia fees imposed to waste water treatment facilities do not fully cover the costs. It is estimated that the fees only cover 35% of the true cost.

For the purpose of this report, Vermont subsidies will be broken into the three following categories: tax expenditures, direct subsidies, and missing fees. One major example of tax expenditures is the Clean and Clear Program. The clean and Clear Program was established in 2003, the state funded $57 million and the federal government spent $68.9 million for clean and clear programs. At each level (federal or state) the clean and clear program differentiates the funded project as either an Agricultural Project or a Natural Resources project. In the State natural Resources sector, the three most funded projects over the last seven years have been have been the following: River management ($9.9 million), Storm water ($4.8 million) and Wastewater Discharges ($4.5 million). The three most prominent programs administered under the State Agriculture section are the following: Agricultural Best Management Practices-ABMP ($11 million), Nutrient Management Planning-ICM ($3.9 million), and Conservation Reserve Enhancement program-CREP ($2.5 million) (Clean and Clear Plan 2010c). Many of the Clean and Clear Programs are benefiting the state's water quality, but many of these subsidies have been established in order to combat other subsidies that are harming state water quality. A further analysis will follow.

In addition the organization of the Agency of Natural Resource's Environmental Conservation section primarily draws on three different funds. The most prominent fund is the Special Fund and contributes $18 million of the $38.4 million to Environmental Conservation (Resource (d) 2010). The special fund revenues include, among other sources, sales of services, fees, and interest and premiums on investments. The Special Fund contributes $134.5 million to Government Operations, Human Services, General Education, Employment training, and other programs. In addition Environmental Conservation (EC) spends $6.9 million from the General Fund. As it stands the EC fund depends on the accumulation of fees, permits, and interest in order to fund its project. The Fish And Wildlife Section is able to exist almost entirely through its own revenue generated. Nearly ¾ of the Environmental Conservation Fund is dependent on communal funds. Consequently, non-involved parties and taxpayers are subsidizing the cost of those that are filing permits.

A second type of subsidy is a direct subsidy. Forest Parks and Recreation contributes close to $700,000 to maintenance of snowmobile trails, and just over $300,000 toward the maintenance of ATV trails on private lands. In FY2009 there was an appropriation of $313,900 and $670,903 spent on maintenance of ATV and snowmobile trails respectively (Resource C 2010). Both of these expenditures are directly creating noise pollution, air pollution, water pollution, and soil erosion. As this sport grows in popularity, the cost of remediating the impacts of this activity will begin to overcome the revenue generated through licensing and fees.

A third type subsidy in Vermont is a missing fee. The major missing fee was storm water discharge permits. Beginning on November 19, 2009 ANR began to issue General permit 3-9030. Any storm water discharges to Bartlett, Centennial, Englesby, Morehouse, and Potash brook watersheds that are "not already NPDES municipal separate storm sewer site (MS4), another NPDES permit covering storm water discharges, or has been issued a state storm water discharge permit resulting in no net contribution to the receiving water." (ANR, 2009) will be required to file a 3-9030 General Permit. According to Anthony N.L. Iarrapino, attorney for ACIA, there is not data on these permits yet. This type of permit is the first of its kind and is currently being reviewed by ANR. The state already funds $4.9 million towards storm water programs. This amount would be the least amount of money saved through implementing this permitting program in other cities in the state.

Recommendations.

1. **Firstly, in order to effectively address water quality issues in Vermont, the excess amount of nutrients in our water source must be addressed. The Clean and Clear Program is fighting agricultural subsidies with environmental conservation subsidies. Under Section II of Vermont's Fertilizer and Lime Regulations, all fertilizers and lime entering into the state are required to be inspected (ANR FM2010) At this stage of distribution, I recommend adding a fee to the registration. All of the funds generated through this fee will be collected and distributed to all of the farms registered through ANR of Dept of health. Each farm will receive a dividend check in the mail at the end of each growing season. The Agency of Agriculture would capture the names of firms that sell poultry, dairy, or beef. The Dept of Health will have the names of the farms that sell product to restaurants. The intention of this policy would be to create an incentive to use less fertilizer. The farms that use less fertilizer will reap the benefits of the farmer that are paying the cost of the fee. Some farms will be paying a cost of the phosphorus but not the entire cost because they will receive a dividend check in the mail. Up to $20.1 million (from sales tax expenditures above).**

2. **I would also recommend not subsidizing ATV and snowmobile usage. Funding of ATV and snowmobile trails is a direct subsidy that decreases water and air quality in more pristine places in the state. Although it is a minor cost, it is a cost nonetheless that taxpayers should not cover. $313,900 + $670,903 = $984,803.**

3. **Thirdly the storm water discharge permits should be expanded to the cities of St. Albans and Brattleboro, and other cities. Up to $4.9 million.**

4. **Lastly the Environmental Conservation Sector of ANR should depend less on communal funding source and more on fund generated from permits and fees. Each of these recommendations will reduce the environmental and financial costs on taxpayers.**

Work Cited

Agency of NBatural Resources, 2009. Fact Sheet: National Pollutant Discharge Elimination system (NPDES) General Permit 3-9030 for DEsignatd Discharges to Bartlett, Centennial, Englesby, Morehouse, and Potash Brook Watershed Retrieved 10-20-10. From: http://www.qanr.wtate.vt.us/dec/waterq/stormwater/docs/swimpariedwatersheds/sw_rda_factsheet_FINAL.pdf

Clean And Clear Plan (2010c). Celan and Clear Action Plan – State And Federal funding Summary. Retrieved 10-20-10 from email with Ms. Julie Moore.

Myers, N. and Kent J. (1997_ Perversse Subsidies, Winniped, International institute for Sustainable Development.

Resources, T.A. o. N. (2010a) Fiscal year 2011 Budget Department Program Profile: Fish and Wildlife. F.a. wildlife.sxls. Montpelier Vermont, Vermont's Agency of natural Resources.

Resources, T.A. o. N. (2010a) Fiscal year 2011 Budget Department Program Profile. A.C. Office.xls. Montpelier Vermont, Vermont's Agency of Natural Resources.

Resources, T.A. o. N. (2010a) Fiscal year 2011 Budget Department Program Profile. Environmental Conservation. e.conservation.xls. Montpelier Vermont, Vermont's Agency of Natural Resources.

Resources, T.A. o. N. (2010a) Fiscal year 2011 Budget Department Program Profile. Forests, Parks, And Recreation. f.p.a. rec.xlxs. Montpelier Vermont, Vermont's Agency of Natural Resources.

The Agency of Agriculture, F.M. (2010). Feed, Seed, and FERtilizer Regulation". REtreieved 12-15-10 from: http:// www.vermontagriculture.com/ARMES/pidfeedseedfert.htm

Vermont, T.S.o. (1995). "Vermont's Revenue Sources, History and Comparatives." Retrieved 12-05-2010 from: http://www. Leg.state.vt.us/reports/tax/vol1-03.htm

Natural Resources: Giveaways of Public-Owned Assets

Extraction Taxes

The Tax Commission declined to make a recommendation on extraction taxes. Commission member Schubart advocated for the initiation of an extraction tax for all natural resources that cannot be restored by man, including stone, aquifer, oil, gas, coal, gravel, topsoil, and sand. Wood would not be subject if a reforestation plan is filed and executed within three years. Commission member Hoyt expressed a willingness to explore extraction taxes; however, she expressed concern that the broader environmental and land management issues that these taxes would raise were beyond the scope of the Commission's work and resources. Commission member Sayre declined to support a change in the current extraction tax policy. As already mentioned Vermont is one of only 11 states that collects no royalties or severance taxes for its mineral resources. This is a giveaway of publicly owned assets to mining companies.

Agriculture

Tyler Scherr

According to the Environmental working Group database, from 1995-2009 Vermont's federal dairy subsidies totaled in $61 million in the form of "Milk Income Loss Contract payments". From the years 1995-2009 Vermont received $244 million in agricultural subsidies out of $245 billion nationally. The trend is that the largest farms and cattle ranches received most of the government money. In Vermont 81% of farmers did not collect subsidies, while 10% of the farmers received 65% of all subsidies. The largest farms that already make most of the money benefit from unneeded subsidies while owners of small farms struggle to get by.

Educational Subsidies

Luce Hillman

Overview

Vermont presently has 92,636 students that are in 330 public schools. There are twelve supervisory districts and four union districts for a total of 280 school districts. There were 58 superintendents, 16 assistant superintendents, 316 principles, 136 assistant principles, and 66 business managers (VT Education Salary Report, page 4) Seventy percent of funding for education in Vermont comes from the local property taxes. Local voters approve their local school budget. The legislature sets a base education spending amount per equalized student, which was $8544 in FY2011. Only four school districts met this spending requirement last year; all others spent more than this amount.

Funding for education comes from the following sources:

Funding	Budget in Millions	Percent of Budget
General Fund	296.4	16
Education Fund	1305.5	70
ARRA Transfer	38.7	2
ARRA funds	47.7	2.6
Pension Trust Funds	28.2	1.5
Special funds	15.7	.8
Tobacco Funds	.99	-
Inter Dept. Transfers	-	-
Global Commitment Fund	1.0	.05
Federal Funds	128.7	7
Total	**$1,862.9**	

Source: Joint Fiscal Office, FY 2011 Appropriations

Small School Funding Grants

Small school support grants are grants provide to schools with less than 100 students, or with an average grade size of 20 or fewer students. In FY 2010 the amount given to small schools was $6.9 million, which came from the education fund. This amount is intended to continue for FY 2011. There are 105 schools that currently receive this funding in Vermont or approximately 33% of the schools. These grants should be phased out within three years saving the state $7 million. Small schools already receive a fair transfer of funds based on the state formula for education. Unfortunately, these grants help one third of the schools in Vermont and it will be difficult for the legislature to agree to eliminate this subsidy.

Merger of Schools Districts

Richard Cate, the former Commissioner of Education for the state of Vermont, recommended that the number of school districts in Vermont be revised from 284 to 63 in his 2006 report. Mr. Cate did not calculate the cost savings of this plan (Interview Dec. 13, 2010), but I believe there would be large savings in shared facilities and transportation. Busses would not turn around when reaching a town line, but would pick up students for the entire district. There is presently approximately $16 million in the Education Fund earmarked to assist districts with transportation costs. Superintendents would be responsible to one school board consisting of representatives from each of these towns. There would be more sharing of information and services for special needs students. Mr. Cate's opinion is that the state would see cost savings and improvements in the educational system.

Governor Douglas recommended in his FY 2011 budget that health care premiums for teachers be raised to 20%, which would equal the state employees cost share. This is expected to save $15 million over the next three years (2010 January report, p. 15). A statewide teacher's union contract would also help in reducing legal and arbitration costs for districts when the renegotiate contracts.

Early Education

Prekindergarten education remains voluntary, but school districts are limited to the number of children that can be reported in the Average Daily Membership (ADM). Most school districts claim it lowers their town tax rates after the program has been in effect for two years, due to the mechanism of determining the ADM. If demand exceeds a district capacity, then a non-discriminatory or blind selection process is used. This funding is for all students, regardless of family income. Early education should be offered to all 3-5 year olds in the state, but the cost should be allocated based on income. This is a small item in the overall education budget, but understanding the cost helps to keep costs contained.

Higher Education

The University of Vermont receives $40.8 million from the state of Vermont out of a total budget of $575 million. The University of Vermont has 39.8% Vermont in-state students. Students currently pay 83% of the cost to attend the University, which is one of the least subsidized public universities in the country (Trends in college spending, p. 29). As the tuition continues to rise at UVM there should be some review of UVMs expenditures.

[Editor's note: One issue to review is the number of highly paid administrators at UVM. When President Fogel arrived, there were four administrators making a salary of over $150,000; there are currently forty-four (ISO, April, 2010). There are also bonuses paid to the administrators for doing their job; it is difficult to determine the value of these bonuses, but they should not be allowed during a recession.]

Vermont State Colleges (VSC) receive $23.1 million annually. The VSC was formed in 1961 and is composed of five colleges, Castleton State, Johnson State, Lyndon State, and Vermont technical College, and since 1970 Community College of Vermont. Over 80% of VSC graduates remain in Vermont to work. Of the 2009 enrollment, 84% are Vermonters, of which 52% being the first generation of their family going to college. Approximately 75% of VSC students require financial aid (Trends in college spending, p. 473). State funding accounts for less than 25% of VSC operating costs (Trends in college spending, p. 475). Student tuition and fees account for 75% of the VSC budgets.

In order to offer an advantage to Vermont students to attend UVM or VSC, grants to VSAC could be increased.

Summary of Education Recommendations

- **Eliminate small school grant funding-$6.9 million.**
- **Merger of school districts from 284 to 63-unknown: reduction of $16 million transportation costs.**
- **Income based early education funding-unknown.**
- **Review executive salaries at UVM-unknown.**

Report Summary

This report addresses subsidies contained in tax exemptions, risk transfers, giveaways of public assets, and some appropriations in transportation, energy and water resources, and education. We were unable to delve as deeply as necessary into departmental appropriations. A much more thorough investigation of subsidies contained within the appropriations of each department of Vermont government would be very useful and warranted in this time of budgetary constraints.

Government economic analysis often considers environmental, land, and resource concerns as just a small element in the overall economic picture. Evidence of this is the fact that the Blue Ribbon Tax Commission didn't include natural resource taxes in their analysis. This is despite the fact that they are already 25% of Vermont state taxes (land, energy, waste, pollution). We ignore the fact that the entire human economy runs on resources, land, and energy. Human labor and capital is applied on land to natural resources using energy. The end products are useful goods and services and waste. This is the essence of throughput, which comprises everything we do. By taxing value added by labor and capital, and subsidizing depletion, land use, and waste, we create perverse subsidies that are not good for the environment or for the economy. We hope the state will review these recommendations and begin to eliminate perverse subsidies in Vermont, and implement the philosophy of "taxing bads, not goods".

References

2010 Annual Report, Division of Property Valuation and Review, Montpelier, January 2010.

2010 Census, Demographic Profiles. http://2010.census.gov/2010census/

2010 Vermont Forest Resources Plan

Agency of Commerce and Community Development: State of Vermont. Web. 06 Dec. 2010. http://www.dca.state.vt.us/

Bloomberg Business Week, The French Lesson In Health Care, http://www.businessweek.com/magazine/content/07_28/b4042070.htm

Blue Ribbon Tax Structure Commission. Final Report, 13 January, 2011.

Brighton, Deborah. *Forest Stewardship Incentive Programs: How can we invest more landowners?* Final Report: Northeastern States Research Cooperative-Theme 1. Vermont Family Forests, June 25, 2007

Brock, Randolph D. Economic Advancement Tax Incentives Program (Eati). The Vermont Department Of Taxes and The Vermont Economic Progress Council. December 29, 2006.

Committee on Ways and Means. Tax Expensditure budget bill. Draft january 26, 2010.

Cook, Ken and Wiles, Richard. Non-profit Organization. The Environmental Working Group. Web. http://www.ewg.org/>.

Current Use Task Force Report. "A Report on Options for Improving the Effectiveness, Efficiency and Fairness of Use Value Appraisal and Reducing Expenditures or Increasing Revenues by at least $1.6 million in FY 2011." September 8, 2009. Authors: Pat Blodgett, Vt Woodlands Association; Darby Bradley and Carl Powden, Vermont Land Trust; Jamey Fidel, Vermont Natural Resources Council; Jackie Folsom, Vermont Farm Bureau; Bob Klein, Vermont Nature Conservancy; Brian Moyer, Rural Vermont; Jim Shallow, Audubon Vermont.

Daniels, Thomas L. and Lapping, Mark B. The Vermont Land Gains Tax, Experience with It Provides a Useful Lesson in the Design of Modern Land Policy. *American Journal of Economics and Sociology, Inc.,* Vol. 45, No.4,Oct 1996. Pp. 441-455.

Daniels, Thomas L. The Purchase of Development Rights-Preserving Agricultural Land and Open Space, 1991, Vol. 57. pg 421-421. *Journal of the American Planning Association.*

Department of Finance and Management. *Comprehensive Annual Financial Report.* June 30, 2009

Department of Finance and mangement. Statewide Payments, 2010.

Department of Finance and mangement. State of Vermont Payments by Agency/Department, Quarter Ending 6/30/2010

Douglas, James H. Governor of Vermont, *Report: Fiscal Year 2011 Executive Budget Recommendations,* January 19, 2010. (55 pages)

Farnsworth, David. *Electric Sector Cap-and-Trade 2011: A RGGI Update.* Regulatory Assistance Project. March 16, 2011 powerpoint presentation.

Friends of the Earth, Taxpayers for Common Sense, Environment America and Public Citizen. Green Scissors Report 2010, More Than $200 Billion in Cuts to Wasteful and Environmentally Harmful Spending

Friends of the Earth, Taxpayers for Common Sense, Environment America and PublicCitizen. State Reports for Virginia, Texas, California, Maryland, District of Columbia. http://www.greenscissors.com/publications/index.htm

http://www.ratical.org/radiation/Chernobyl/CCofC25YL.html

International Center for Technology Assessment. *The Real Price of Gasoline, An Analysis of the hidden External Costs Consumers Pay to Fuel Their Automobiles.* Washington, DC, Joint fiscal Office. Fiscal 2011 Appropriations.

Joint Fiscal Office. Vermont's Health Care System. Updated January 2009, http://www.leg.state.vt.us/jfo/Healthcare/Vermont%20Health%20Care%20System%20-%201-2009%20update.pdf

Kavet, Rockler & Associates, LLC, January 2011 Economic Review and Revenue Forecast Update. Williamstown, Vermont 05679-9003 U.S.A. January 14, 2011

Latulip, Christine. How to avoid capital gains and land gains taxes when selling investment real estate in Vermont. www.section1031.com

Lumina Foundation for Education. *Trends in College Spending, A Report of the Delta Cost Project,* page 29, figure 11.

Myers, Norman, and Kent, Jennifer. *Perverse Subsidies: How Tax Dollars Can Undercut the Environment and the Economy.* Washington, DC: Island, 2001. Print.

Myers, Norman, *Perverse Subsidies And Other Institutional Roadblocks On The Way To Sustainable Development.* Ppt April, 2003.

National Center for Education Statistiscs. www.nced.ed.gov

National Conference of State Legislatures, NCSL Fiscal Brief: How State Tax Policy Responds To Economic Recessions

Newburn, David, et al. Economics and Land-Use Change in Prioritizing Land Conservation, *Conservation Biology*, 2005, 1411-1420. November 1998.

OECD. Subsidy Reform and Sustainable Development. http://www.oecd.org/document/26/0,3343,en_2649_37425_38516570_1_1_1_1,00.html

Peace and Justice Center. Phase 9 Vermont Job Gap Study. January, 2006.

Sherman, Janette D. M.D., and Yablokov, Alexey V. Ph.D, *Chernobyl: Consequences of the catastrophe 25 years later.* San Francisco Bay View April 27, 2011

State of Vermont Dept. of Banking, Insurance, Securities and Health Care Administration, Memorandum, Three Year forcast of VT Health Care Expenditurs 2008-2012. http://www.leg.state.vt.us/reports/2010ExternalReports/252617.pdf

SubsidyScope, Government Subsidies, Revealing the Hidden budget, Pew Economic Policy Group, Tax Foundation, Testimony Before the Vermont Ways and Means Committee

The Department of Finance & Management, *Unified Economic Development Budget Report* 2010. March 15, 2010

U.S. Census Bureau. Current Population Survey, 2006 to 2009 Annual Social and Economic Supplements. Rep. U.S. Census Bureau, 30 Sept. 2009. Web. 28 Oct. 2010. <http://www.vermontbiz.com/news/september/vermonts-two-year-household-income-decline-second-worst-nation>.

United States Department of Agriculture. Economic Research Service. Web. http://www.ers.usda.gov/statefacts/VT.HTM

Vermont Department of Education. Report: Vermont Teacher/Staff Full Time Equivalent (FTE) and Salary Report, 2009-2010,

Vermont Department of Forests, Parks, and Recreation. http://www.anr.state.vt.us/env99/vtforest.html

Vermont Department of Taxes Technical Bulletin, TB-34, Issued January 16, 2007

Vermont Department of Taxes. Tax Expenditure Reports. http://www.state.vt.us/tax/expenditurereports.shtml

Vermont Dept. of Education. *Guide for implementing Prekindergarten Education in Accordance with Vermont's Act 62,* February 2009,

Vermont Dept. of Education. *Preparing Vermont Learners for Success, Today and Beyond,* FY 2011 Budget Recommendations, February 2010, http://education.vermont.gov/new/pdfdoc/pubs/budget_book_11/educ_sbe_budget_book_11_complete.pdf

Vermont Economy Newsletter, June 2010

Vermont Land Trust (www.vlt.org/land-stewardship/for-owners-of-conserved-land/185)

Vermont Land Trust. *Tax Incentives for Conservation Easement Donations Extended Through 2009: A Guide for Vermont Landowners,* http://www.northfield-vt-conservation.org/NorthfieldConservation/TaxIncentives.pdf

Vermont Legislative Joint Fiscal Office. Vermont Fiscal Facts, 2008-2011, www.leg.state.vt.us/jfo

Vermont Legislative Joint Fiscal Office. Vermont Tax Expenditures, 2009 Biennial Report, January 15, 2009.

Vermont Legislative Joint Fiscal Office. Vermont Tax Expenditures, 2011 Biennial Report, January 15, 2011.

Vermont Real Estate Today, Vermont Property Owners Report, July 2010. http://www.vermontrealestatetoday.com/newsletter/vtrealestatetaxes.html#Land Gains

Vermont Senate. S.88 Health Care Refomers Provision. http://hcr.vermont.gov/sites/hcr/files/Act_128__S_88__AS_PASSED__2_.pdf

Vermont State Government. Fiscal 2011 Appropriations. Rep. Montpelier, 2010.

Vermont State Government. Statewide Payment Reports. Rep. Department of Finance & Management Agency of Administration, 30 June 2010. Web. 20 Nov. 2010. <http://finance.vermont.gov/reports_and_publications/Statewide_Payments>.

Vermont Tax Department, Three Year Comparison of Receipts by Tax Type. 2008 Beinnial Report.

Vermont State & Private Forestry Fact Sheet, Investment in State's Cooperative Programs: www.na.fs.fed.us/ra/factsheets/vt_std.pdf

Vt Transparency.org. Financing Education in Vermont, . http://www.vttransparency.org/index.cfm?section=all&pg=Education_Finance

WCAX, Timber company loses current use designation, http://www.wcax.com/Global/story.asp?S=12829608

Wise, Timothy A. Agriculture Dumping under NAFTA: Estimating the Costs of U.S. Agricultural Policies to Mexican Producers. GDAE Working Paper No. 09-08 December 2009

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