



FISCAL RESEARCH CENTER

REVENUE ESTIMATES FOR ELIMINATING SALES TAX EXEMPTIONS AND ADDING SERVICES TO THE SALES TAX BASE

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FRC Report No. 170
October 2007



ANDREW YOUNG SCHOOL
OF POLICY STUDIES

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Table of Contents

I.	Introduction	1
A.	Summary	2
II.	Revenue Estimates for the Elimination of Current Exemptions.....	4
III.	Revenue Estimates from Sales Tax on Services.....	8
A.	Revenue Estimates Using Consumer Expenditure Survey	9
B.	Revenue Estimates Using Economic Census Data	12
IV.	Sales Tax Revenue Estimation Using National Income and Product Accounts.....	16
V.	Summary.....	20
	Bibliography	21
	Appendix A: Estimated Revenue Loss from Food for Home Consumption	23
	Appendix B: Services Taxed in Hawaii	26
	Appendix C: Details of Revenue Estimation Procedures Using Consumer Expenditure Survey.....	28
	Appendix Tables	34

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

I. Introduction

Over the past few years there have been calls to remove at least some of the current sales tax exemptions, and for many years economists from across the country have argued that services should be added to the sales tax base. A broad-based sales tax represents good tax policy since it would mean that all individuals would tend to be treated the same. Such proposals have been raised in Georgia over the years, most recently by the Speaker of the Georgia House of Representatives. The Speaker's proposal, known as the GREAT Plan for Georgia,¹ calls for the elimination of all state and local property taxes in Georgia and the replacement of the resulting loss of local revenue through a state grant program. The increased sales tax revenue from expanding the sales tax base would be used to fund the grant program.

In this report we provide estimates of the potential revenue that would be generated from a policy change of eliminating current exemptions and adding services to the sales tax base. The estimates provided in this report are not a revenue estimate of any current plan, including The GREAT Plan.² Rather, the estimates are our best estimate, at this time, of what revenue might be generated from the elimination of exemptions and adding services to the sales tax base. The report uses the most recent available data to develop these estimates: adjustments were made so that all estimates are reported for fiscal year 2006.

There are numerous caveats concerning these estimates. The exercise requires attempting to estimate the revenue from hundreds of exemptions and services; a more refined analysis will likely generate somewhat different estimates. Furthermore, these are estimates of potential revenue; we are unable to generate estimates of how much of the potential revenue would actually be collected. Thus, while we make every effort to make the estimates as accurate as possible, they should be considered "ball park" estimates.

¹ GREAT stands for Georgia's Repeal of Every Ad-Valorem Tax. The Speaker's original proposal was contained in HR 900, but has been supplanted by the GREAT Plan for Georgia.

² There are few details available regarding the Great Plan, for example, there is no list of exemptions that are proposed to be eliminated or specific services that would be added to the sales tax base. Thus, it is not possible to provide an estimate of the revenue implications.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

A. Summary

Before we present the details, we summarize our findings here. Under what we refer to as Alternative 1, we believe that the state could generate \$3,532.4 million in additional sales tax revenue from eliminating most of the current exemptions. Local sales tax revenue would increase by \$2,046.9 million. However, if the state retained the business-to-business sales tax exemptions and the sales tax exemptions for health care, the additional state revenue would be \$1,316.1 million, and local sales tax revenue would be \$550.9 million. See Section 2 and Table 2 for details.

If the state aggressively taxed services purchased by households, we estimate that the state could generate \$840.4 million in additional revenue, while local sales tax revenue would increase by \$567.2 million. (These are in addition to the revenue from eliminating exemptions.) However, we believe that it is unlikely that health care and tuition at private schools would be taxed. If these two services are not taxed, the additional state sales tax revenue from taxing services would be \$694.6 million and local revenue would be \$468.9 million. See Section 3A and Table 3 for details.

If instead of taxing just household purchases of services, the state taxed services purchased by both businesses and households, we believe that the state would generate about \$2,196.5 million in revenue, while local governments would generate \$1,482.7 million. We think these are the most reasonable estimates, but they are subject to large error, so we report alternative estimates in the report. If the state is not as aggressive in adding services to the base, i.e., it added only those services currently taxed by more than 10 states, we estimate that the additional state revenue would \$980.2 million and the additional local revenue would be \$661.6 million. See Section 3B and Table 5 for details.

These estimates suggest that the state could generate additional sales tax revenue of between \$1,856.1 million and \$5,574.3 million from eliminating exemptions and taxing services, depending upon how aggressive the state was.³ The

³ The revenue estimates from eliminating exemptions include \$154.6 in state revenue and \$104.4 million in local revenue for the exemption of repair service labor. The revenue estimate from taxing services includes an estimate of the repair service labor. Thus, to avoid double counting these amounts are deducted from the revenue estimates from eliminating exemptions before adding that estimate to the estimated revenue from taxing services.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

estimated increase in local sales tax revenue ranges from \$1,253.9 million to \$3,762.7 million.

Section 2 provides alternative revenue estimates of eliminating current sales tax exemptions. Section 3 provides alternative estimates of the possible revenue that could be generated by the inclusion of services in the sales tax base. In Section 3A, we provide estimates, using Consumer Expenditure Survey data, if only household purchases of services are taxed, while in Section 3B we provide estimates, based on Economic Census data, if both households and businesses purchases of services are taxed. In Section 4 we discuss the revenue estimate offered by Arthur Laffer.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

II. Revenue Estimates for the Elimination of Current Exemptions

In this section we discuss the revenues that might be generated by the elimination of current sales tax exemptions. Revenue estimates associated with broadening the sales tax base to include services are discussed in Section 3. The estimated state revenue losses for nearly all of Georgia's major sales tax exemptions have been estimated by Smith and Walker (2006) using data from 2004. Smith and Walker listed every specific exemption listed in the Georgia code and attempted to estimate the revenue loss for each. Theirs' was not a list of exemptions that they thought could or should be eliminated. As they note in their report, there are good reasons for many of these exemptions to exist.

It needs to be pointed out that the procedures used by Smith and Walker to generate their revenue estimates were not as rigorous as what would be done for a fiscal note. The purpose of their exercise was to provide some reasonable estimate of the likely loss of revenue from the exemptions. For example, no adjustment was made for possible reductions in expenditures or increases in out-of-state purchases that would be caused by the imposition of a sales tax on these items. Nonetheless, we use their estimates since they are the only estimates currently available.

To generate estimates for 2006, we adjusted the 2004 values by multiplying the 2004 estimate for each exemption by the growth in total sales tax receipts, except for groceries.⁴ We generated a new revenue estimate for the exemption of food for home consumption (see Appendix A for a discussion of the revenue estimate of the food for home consumption exemption). Two exemptions are no longer applicable, for example the exemption for the construction of the Georgia Aquarium is no longer relevant since the Aquarium has been built. The 2006 state revenue estimates by major exemption category are shown in Table 1; Appendix Table 1 lists all exemptions within each category.

⁴ The state's general sales tax revenue in 2004 was \$4.902 billion, in 2006 it was \$5.723 billion; the growth was 16.75%

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

TABLE 1. ESTIMATED STATE REVENUE LOSS FROM SALES TAX EXEMPTIONS, BY MAJOR CATEGORIES (IN MILLIONS)

	2004	2006
Household Property and Services	\$2,595.5	\$2,501.6
Health Care	\$509.0	\$594.2
Farming and Fishing	\$49.5	\$57.8
Education	\$98.8	\$115.4
Professional and Business Services	\$135.0	\$157.6
Government and Non-Profit	\$2,330.5	\$2,720.0
Religious Entities	NA	NA
Non-Farm Business	\$4,113.2	\$4,802.1
Miscellaneous	\$9.0	\$8.2
Total	\$9,840.5	\$10,956.8

Source: 2004 values are from Smith and Walker (2006). Values for 2006 are authors' calculations; see text for details.

The website for The GREAT Plan states that the Plan would “maintain exemptions on some: government transactions, agricultural products, raw materials in manufacturing, [and] business to business [transactions].” It goes on to state that all products and all services are to be taxed at the point of final delivery. We take this to mean that the tax would be imposed only on purchases by households, not by businesses. The GREAT Plan contains no further detail. The Speaker has made it clear that it has not been determined which exemptions will be eliminated and which services will be taxed.

We present estimates under four alternative assumptions of what exemptions might be eliminated. The revenue estimates for the four alternatives are presented in Table 2. The Appendix Table 1 shows which specific exemptions are retained for each alternative. We present estimates for state sales tax revenue and for local sales tax revenue. The state sales tax rate is 4 percent; we have calculated that the weighted average of local sales tax rates is 2.7 percent. To the extent that a larger (smaller) share of services than goods are purchased in counties with 2 (3) percent local sales tax rates the weighted sales tax rate on services will be lower (higher) than 2.7 percent. Eliminating the food for home consumption exemption would have little impact on local sales tax revenue since nearly all local option taxes apply to food for home consumption.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

TABLE 2. ESTIMATED ADDITIONAL REVENUE FROM THE ELIMINATION OF SALES TAX EXEMPTIONS, 2006 (IN MILLIONS)

	State Revenue	Local Revenue	Total Revenue
<i>Alternative 1:</i> retains only the exemption for government purchases	\$8,169.4	\$5,176.8	13,346.2
<i>Alternative 2:</i> in addition to Alternative 1, retains exemptions for purchase of raw materials, rent, and credit for trade-ins	3,532.4	2,046.9	5,579.3
<i>Alternative 3:</i> in addition to Alternative 2, retains business-to-business exemptions	1,910.4	952.0	2,862.4
<i>Alternative 4:</i> in addition to Alternative 3, retains health care exemptions	1,316.1	550.9	1,857.0

Note: See Appendix for details.

Alternative 1. For Alternative 1 only the exemptions for purchases by government are retained; all other exemptions are eliminated.

Alternative 2. In addition to retaining the exemptions for government purchases, Alternative 2 adds 3 other exemptions that we believe should not be eliminated. These are:

- Charges for rooms and lodging for stays of more than 90 days. Eliminating this exemption would mean that rent on apartments would be subject to the sales tax. This would lead to a large inequity between renters and home owners.
- Credit allowance for trade-ins on property. This exemption allows a car dealer, for example, to exclude the value of a trade-in in determining the sales tax. If this exemption was eliminated, dealers could simply reduce the trade-in value to \$1 and reduce the sale price of the new car so that the net price to the buyer is the same as if the buyer was getting the full trade-in value. Thus, eliminating this exemption would not likely generate any additional revenue.
- Sale of raw materials used in manufacturing. As far as we know, every state has this exemption as part of its sales tax structure. To remove this exemption would likely result in a substantial loss of manufacturing in the state.

Alternative 3. In addition to the exemptions retained under Alternative 2, Alternative 3 retains all exemptions that we identify as business-to-business, including exemptions for farming and fishing.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Alternative 4. In addition to the exemptions retained under Alternative 3, Alternative 4 assumes that exemptions for health care are retained. As best we can determine, no state currently imposes a sales tax on purchases of most health care items such as purchases by hospitals.

Among the exemptions that would be eliminated under all of the alternatives are:

- Most exemptions for goods and services sold primarily to households, including food for home consumption;
- Education exemptions, including sales of lunches in public schools, sales to private schools, and sales of tickets to athletic events;
- Professional and business services exemptions, including sales by parent-teacher organizations and labor charges on repair services;
- All exemptions for non-profits, such as sales to non-profit blood banks, and for religious entities, for example, sales for fund raising activities;
- Sales tax holidays.

Table 2 contains the estimates for each of the four alternatives of the revenue that would be generated from eliminating the specified sales tax exemptions. As noted above, we do not know which exemptions will be proposed for elimination or which exemptions the General Assembly would actually eliminate. However, there are very important reasons for retaining the exemptions listed in Alternative 2 and thus, these exemptions are likely to remain. There are also strong economic arguments for retaining the exemptions listed in Alternative 3, in particular the argument that a retail sales tax should avoid taxing business-to-business purchases.

One of the exemptions that would be eliminated under all alternatives is the fee for services rendered by repair people. But, this service is also included in the revenue estimates for adding services, presented below. Thus, in order to avoid double counting, it is necessary to reduce the revenue estimate from eliminating exemptions by \$154.6 million for state revenue and \$104.4 million for local revenue when combining the revenue estimate from eliminating exemptions and the revenue estimate from adding services.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

III. Revenue Estimates from Sales Tax on Services

As noted above, there have been repeated calls for adding services to the sales tax base. The GREAT Plan is the latest proposal for extending sales taxes to services. Only a few services, for example photocopying and printing and tuxedo rentals, are currently subject to sales tax in Georgia. Legal, medical, accounting, and banking services are among those not taxed. (Appendix B contains a list of services that are taxed in Hawaii under its gross receipts tax. It is not clear whether all of these services could be taxed under a retail sales tax.) What specific services will be or could be included in the sales tax base is not known, and so we develop revenue estimates for a very broad array of services.

There is no way to estimate with precision the revenue that may be generated from a sales tax on services in Georgia. There are no historical data on taxation of services and there is very little information on actual sales detailed enough to support good estimation. It is commonly believed that a sizable amount of the taxes on services is not collected, but we have no way of determining how much evasion there would be.

Several states have undertaken studies of potential revenue increases from a sales tax on services. There are estimates for Florida and Nebraska of the revenue that would be generated from taxation of all services. Florida estimated that a sales tax on all services would have increased total sales tax revenue by 34 percent and Nebraska estimated a sales tax increase of 16.9 percent (reported in Fox and Murray, 1988). Fox and Murray (1988) estimated that in 1982, if Georgia expanded its sales tax base to include a very broad array of services, it would have increased its sales tax revenue by 30.39 percent. In general, according to Due and Mikesell (1994), we can expect revenue from taxation of services to be less than half the revenue produced by sales taxation of tangible goods. An increase of 30 percent of the current (2006) sales tax revenue would generate \$1.72 billion in state sales tax revenue and another \$1.16 billion in local sales tax revenue.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Because of the difficulty of defining services for sales tax purposes,⁵ since there is no history of sales taxes on services in Georgia, and because there is no truly suitable database from which to work, two different databases were used to develop estimates of sales tax revenue from taxing services. The first method uses the Consumer Expenditure Survey. These data provide a revenue estimate only for the services purchased by households. The second method uses data from the Economic Census produced by the U.S. Bureau of the Census. The limitations with each data set are noted below.

A. Revenue Estimates Using Consumer Expenditure Survey

The first approach to estimating revenue from taxing services uses individual household data from the 2005 Consumer Expenditure Interview Survey conducted by the U.S. Census Bureau. The Consumer Expenditure Interview Survey asks households how much money they have spent in the past three months on a vast number of consumption items. The Interview Survey collects data on up to 95 percent of total household expenditures. We use consumer expenditures as reported in the Interview Survey for the Southern region of the U.S. to estimate total consumer expenditures on services in Georgia. We then apply the 4 percent state sales tax rate plus a 2.7 percent average local sales tax rate to estimate the potential revenue gain from taxing consumer services in Georgia. Using data on consumer expenditures explicitly assumes that services consumed by businesses will not be taxed. Therefore, to the extent that services consumed by businesses are taxed, actual revenues would exceed the estimates reported here.

This approach provides revenue estimates for taxing most consumer services but not all. Estimates were unavailable for some consumer services because the CES does not provide enough information to produce reliable estimates for some services. This is the case, for example, with services related to buying and selling a home such as realtor services, property surveys, title searches, appraisals, and home inspections. Therefore, for consumer services related to real estate transactions, we estimated the

⁵ Matthews (2007) provides a discussion of administrative issues associated with taxing services, including issues of definition.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

potential sales tax revenue using data provided by the National Association of Realtors; see Appendix C for a full discussion of how this was done. Additionally, we do not provide revenue estimates for payments for services that are provided by government or quasi-governmental institutions, which we do not believe would be included among the services that would actually be taxed. Such services include public education, mass transit, lottery tickets, and water and sewer service. We also do not provide estimates of some other consumer services such as housing services (rent on apartments), insurance (premiums are already taxed via the insurance premium tax), and interest and other finance charges.

Some consumer expenditure items in the Interview Survey were not easily classified as an untaxed service that could be taxed. For some expenditure items, for example, automobile repairs, a portion of the expense is already taxed but the full expense is not taxed. In such cases, we took one of two approaches to produce revenue estimates. The first approach involves adjusting reported expenditures to net out the part of the expenditure that is already taxed. The second approach is to leave the expenditure estimates for a given service as is, but recognize that they likely overstate the potential revenue increase of fully taxing the service because a portion of the expense is already taxed, a portion of the expense would not be subject to the tax (government provided services), or collecting sales taxes on the expenditure would be difficult. In Appendix C we discuss the specific adjustments made to various expenditure items. Appendix C also briefly discusses expenditure items that were left as is but likely overstate the potential revenue gain.

Expenditures on consumer services in Georgia for calendar year 2006 were computed by calculating the average household expenditure on a consumer service for the Southern region of the U.S. in the 2005 Consumer Expenditure Interview Survey, adjusting for inflation from 2005 to 2006, and multiplying by the number of households in Georgia in 2006.

It is important to note that it may be difficult to collect sales taxes on several of these services, including babysitting, lawn services provided by a neighborhood teenager, online dating, and others. Furthermore, imposing a tax on all of these services will cause individuals to purchase some of the services out-of-state,

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

particularly those services that can be provided by mail or the internet. For example, a will can be drawn by an attorney in another state. And, while the individual would be obligated to pay a use tax on the purchase of the will, it is very unlikely that the individual would pay it. Likewise travel services would be hard to tax; for example, purchase of a ticket for a cruise can easily be made from an out-of-state vendor. Thus, we believe that the revenue estimate is an upper bound estimate.

Table 3 provides revenue estimates by service category for state and local government sales taxes from taxing specific services in Georgia for calendar year 2006. Estimated revenue for specific services is shown in Appendix Table 2. Table 3 suggests that taxing nearly all services consumed by households would potentially generate \$1,407.6 million, \$840.4 million to the state and \$567.2 to local governments.

TABLE 3. REVENUE ESTIMATES FROM TAXING HOUSEHOLD SERVICES, 2006 (IN MILLIONS)

Service Category	State Revenue	Local Revenue	Total
Residential Real Estate Transaction	\$92.0	\$62.1	\$154.1
Household Utilities and Related Expenses	114.2	77.1	191.2
Construction, Repairs, and Maintenance of Real Property	185.3	125.1	310.4
Other Household Services	44.8	30.2	75.0
Clothing Services	1.5	1.0	2.4
Vehicle Maintenance, Repairs, and Equipment Installation	51.7	34.9	86.6
Other Vehicle Related Expenses	8.0	5.4	13.5
Health Care Services	92.2	62.2	154.4
Education and Childcare	86.8	58.6	145.4
Membership Fees	18.8	12.7	31.5
Transportation and Travel	35.1	23.7	58.7
Miscellaneous	110.0	74.2	184.2
<i>Total</i>	<i>\$840.4</i>	<i>\$567.2</i>	<i>\$1,407.6</i>

There are services listed in Appendix Table 2 that are unlikely to be taxed. For example, health care services (with a total revenue estimate of \$154.3 million) are not taxed by any state. Tuition at private schools (with a total revenue estimate of \$89.7 million) is unlikely to be taxed. If these two services are excluded from the tax

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

base, the revenue estimates for state revenue is \$694.8 million and for local revenue is \$468.9 million, for a total of \$1,163.6 million.

B. Revenue Estimates Using Economic Census Data

The second method relies on information on gross receipts from the latest available Economic Census (U.S. Census Bureau, 2002). The Federation of Tax Administrators (Federation of Tax Administrators, 2004), produces a list of services that are taxed by at least one state.⁶ Appendix Table 3 lists the 177 services and the number of states that tax each service. We used this list, excluding those services that Georgia already taxes, as the basis for our revenue estimates. These revenue estimates include purchases by businesses as well as households.

For each service we used gross receipts of businesses in each of the industries that provide the identified services. Data are not available for each of individual services. In most cases we either used other data to estimate gross receipts or combined services to match the Economic Census categories. For construction services we used payroll rather than gross receipts. Because the reported gross receipts includes the receipts of both prime contractor and subcontractors, and because the prime contractors' receipts will include receipts that are paid to subcontractors, gross receipts reported in the Economic Census will overstate the taxable sales for contractors. In addition, materials purchased by contractors are already taxed. Thus, we used total payroll for construction services; we increased payroll by 20 percent to account for overhead charges. Since repair parts are currently taxed, only the tax on labor for repair services would be new revenue. To account for this we took 61 percent of the gross receipts as being the labor component.⁷

The 2002 values of gross receipts were adjusted for population growth and inflation to arrive at 2006 values of gross receipts. Table 4 shows the gross receipts by service classification, for those services that are not currently taxed in Georgia.

⁶ Both the Federation of Tax Administrators and the Census Bureau identify service types by NAICS code; relatively good connections can be established between the two data sources.

⁷ The 61 percent was based on several years of invoices obtained from a local business.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

TABLE 4. GROSS RECEIPTS BY SERVICE CATEGORY, 2006 (IN MILLIONS)

Business Type	Gross Receipts
Agricultural Services	\$1,863.9
Industrial and Mining Services	147.5
Construction	9,381.0
Transportation Services	1,673.1
Storage	1,183.5
Utility	1,246.1
Finance, Insurance and Real Estate	10,154.6
Personal Services	1,602.4
Business Services	15,826.7
Computer	4,787.9
Automotive Services	630.0
Admissions & Amusements	2,491.3
Professional Services	25,285.5
Leases and Rentals	51.8
Fabrication, Installation and Repair Services	2,122.7
<i>Total</i>	<i>\$78,448.1</i>

Census data affects this estimate in contrary ways: 1) the Census reports receipts of Georgia businesses regardless of where actual transactions occurred, leading to a potential over estimate as services purchased out-of-state will be included in the data but would not be taxed; 2) services used here but purchased out-of-state are not included leading to a potential underestimate; 3) the Census does not report revenues for some industries, such as depository banks and insurance companies (which are not generally taxed), leading to a potential under estimate (addressed in part by our own estimates); and 4) the Census data include purchases by businesses and governments that may be exempt in the same way that purchases of tangible goods are exempt.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

It is not feasible to determine to whom these services were provided. Government would purchase part of these services. We assume that government purchases of services would be exempt. In 2006, government consumption was 19.1 percent of gross domestic product. We reduced the gross receipts by 19.1 percent to account for sales to government.

Some of these sales would have been made to out-of-state buyers. These purchases would not be subject to the sales tax. On the other hand, purchases by Georgia businesses and households from out-of-state vendors would be subject to the use tax. For professional services, not all receipts are taxed. For example, if an attorney retains a consultant, the consultant services would be taxed separately, but the attorney would exclude the cost of the consultant in determining the amount of the sales tax that he should collect. Two states, New Mexico and South Dakota, report gross receipts and taxable receipts by industry. Both states extensively tax services. New Mexico reports that sales tax is not levied on about 40 percent of gross receipts on services, while South Dakota reports that its sales tax is not levied on about 70 percent of a service firms' gross receipts. These differences between total gross receipts and taxable gross receipts include sales made to government.

Many of the services listed in Appendix Table 3 are subject to the sales tax in just a few states. For example, medical services are taxed in only 4 states, and then not all medical services are taxed. And, not all states tax all services. Given this, we also estimated revenue if only those services that are taxed in more than ten other states are added to Georgia's sales tax base.

Table 5 presents the revenue estimates. If we make no adjustment to the value of gross receipts other than to reduce it for estimated government purchases, we estimate that if all of the services were added to the sales tax base, the sales tax revenue would have produced an estimated additional \$2,538.0 million in state revenue and \$1,713.1 million in local revenue. If only those services taxed in more than 10 states were taxed, the estimated additional revenue would be \$1,132.5 million in state revenue and \$764.4 million in local revenue.

We also consider an adjustment for other differences between reported gross receipts and what might be actually taxed. We use the estimates from New Mexico

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

TABLE 5. ESTIMATED REVENUE FROM TAXING HOUSEHOLD AND BUSINESS SERVICES, 2006 (IN MILLIONS)

	-----Any Service Taxed Elsewhere-----		
	State	Local	Total
No adjustment other than for government purchases	\$2,538.0	\$1,713.1	\$4,251.1
30% not subject to sales tax	2,196.5	1,482.7	3,679.2
60% not subject to sales tax	1,255.2	847.2	2,102.4
	-----Only if Taxed in > 10 States-----		
	State	Local	Total
No adjustment other than for government purchases	\$1,132.5	\$764.4	\$1,896.9
30% not subject to sales tax	980.2	661.6	1,641.8
60% not subject to sales tax	560.1	378.1	938.2

Authors' calculations based on Economic Census.

and South Dakota, but reduce each by 10 percentage points to be conservative. Thus, if we assume that 30 percent of gross receipts would not be taxable, our revenue estimate from taxing services is \$2,196.5 million for the state and \$1,482.7 million for local governments.

The services included in Table 5 do not include most health care services such as hospitals, physicians, and nursing homes since these are not taxed in other states. Using gross receipts for health care service providers, and noting that 48.8 percent of health care services are financed by the government, we estimated the sales tax revenue from taxing health care services. State revenue would increase by an estimated \$647.3 million and local revenue by \$436.9 million.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

IV. Sales Tax Revenue Estimation Using National Income and Product Accounts⁸

Arthur Laffer has estimated the potential revenue from a retail sales tax imposed on the sale of final goods. In other words, such a sales tax would not tax business-to-business purchases in Georgia. The estimates presented below are the total for state and local sales tax revenue. About 60 percent of sales tax revenue would be collected by the state's 4 percent sales tax and 40 percent by local governments' local sales taxes. Gross Domestic Product (GDP) for the state of Georgia is the starting point of this estimate and is a measure of the final output in Georgia, also called value added. GDP can be measured by either adding the payments to the factors of production, i.e., wages, interest, rents, and profits, or by summing the final purchases of consumers, businesses, and government.

In 2006, state GDP was \$379.6 billion. State GDP is calculated by summing payments to factors of production for each industry and government.

Not all of the state GDP is likely to be subject to the retail sales tax. Laffer assumes that government purchases are to be exempt, which is what is commonly assumed. Thus, it is necessary to deduct the final purchases of government from state GDP. Laffer subtracts the \$48.9 billion reported for the government sector in the state GDP from the \$379.6 billion to arrive at the retail sales tax base of \$330.7 billion.

However, the government component of state GDP does not measure final purchases of government. Rather, it measures essentially wages paid by government. National GDP data breaks out GDP by personal consumption purchases, gross private domestic investment (in physical structures and equipment), net exports, and government consumption expenditures and gross investment. It is government consumption that should be deducted to eliminate purchases by government. At the national level, government consumption was 19.1 percent of national GDP (NIPA Table 1.1.5). We do not have state estimates of government consumption as a share of GDP. (Note that the \$48.9 billion that Laffer counts as government is 12.9 percent

⁸ We wish to thank Donald Ratajczak and Roger Tutterow for reviewing this section.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

of \$379.6 billion.) If we assume that 19.1 percent of Georgia’s GDP is government expenditures, we have government purchases in Georgia of \$72.5 billion. Subtracting this from state GDP yields an estimated retail sales tax base of \$307.1 billion.

It is not possible to determine whether the 19.1 percent figure is appropriate for Georgia. As an alternative, we excluded only 50 percent of Federal military expenditures and calculated the resulting government expenditures as a percent of GDP. The resulting percentage is 16.9 percent. This suggests government purchases in Georgia of \$64.2 billion.

In addition to government purchases, GDP includes consumption of rental housing. It also includes an estimate of the rental value of owner occupied housing—the rent that home owners would expect to pay if their own-occupied home were rented. We assume that the retail sales tax will not be applied to rental housing nor to the rental value of owner occupied housing. The values of these for Georgia are not available. For the nation, they are 9.5 percent of GDP (NIPA Table 2.5.5).⁹ Applying this percentage to Georgia’s GDP yields an estimated value of \$36.1 billion for housing rental services in Georgia.

GDP includes the purchase of new equipment and new buildings by businesses, and new housing by consumers. It also includes an adjustment for changes in inventory. Purchases of equipment and software by businesses and changes in inventory are 7.9 percent of national GDP. This suggests that for Georgia, equipment, software and inventory change amount to \$30.0 billion. We assume that these business-to-business purchases are exempt.

Subtracting the revised estimate for government and the value of housing services from state GDP yields a value of the retail sales tax base of between \$271.0 billion and \$279.3 billion. Further subtracting the purchase of equipment and software and the adjustment for changes in inventory, yields a retail sales tax base of \$241.0 billion to \$249.3 billion.

Applying the combined state and local sales tax rate of 6.7 percent to the estimated base yields an estimate of sales tax revenue of between \$16.1 billion and

⁹ The “other” category of housing is not included in calculating the 9.5 percent

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

\$16.7 billion for 2006. Subtracting actual state and local sales tax revenue for 2006 of \$9.6 billion, yields an estimated net new revenue of between \$6.5 billion to \$7.1 billion.

This revenue estimate assumes that the following categories of purchases would be taxed; we provide estimates of the sales tax revenue from each of these categories by taking the share of national GDP and multiplying that by state GDP.

- Purchases of new structures by businesses [\$0.8 billion] (Note that the materials used in constructing new nonresidential structures are currently taxed, but the labor services are not.)
- Purchases of new housing [\$1.5 billion] (Note that the materials used in constructing new housing are currently taxed, but the labor services are not.)
- Household expenditures on higher education, including tuition at private schools and room and board at all schools. [\$0.3 billion]
- Health care [\$3.7 billion] (Note this health care includes over the counter drugs.)

If we assume that 90 percent of the health care expenditures are not subject to the sales tax, the estimated additional sales tax revenue is between \$3.1 billion and \$3.8 billion. This amount is close to the estimate of additional revenue if the current exemptions in Alternative 4 are retained (total of \$1.9 billion) and household services are taxed (total of \$1.4 billion), a total of \$3.3 billion.

In addition to the adjustment made above, state GDP includes net exports. To account for sales tax on the sales of imports, we calculated that imports of consumer goods are 3.3 percent of national GDP (NIPA Table 4.2.5) and then applied that percentage to Georgia's state GDP. The estimated sales tax revenue from imports is \$0.9 billion.

State GDP does not include sales of used goods, some of which would be taxed. The sale of used cars would probably be the largest item that would be subject to the sales tax. The Economic Census reports sales by used cars dealers of \$1.6 billion in 2002 in Georgia. Increasing this for price increases and population growth yields an estimated sales tax revenue of \$0.13 billion.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

These revenue estimates ignore the behavioral effect that taxing services and currently exempted goods might have on purchases of these services and goods. For example, the increase in the effective price will result in some reduction in consumption. In addition, there will be an increase in purchases of these goods and services from out of state. Furthermore, these estimates assume that the state will be able to fully tax all of the services. However, experience in other states suggests that it may not be feasible to tax some of these services or be able to collect the full tax on these services.

While the state GDP is probably an accurate estimate of the value of production in the state, we are not particularly confident that these data should be used to estimate the revenue from a retail sales tax. We are aware that academics have used these data to discuss issues associated with sales taxes, we are not confident that they are the data that can be used to accurately estimate retail sales tax revenue.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

V. Summary

In this report we present alternative estimates of the additional revenue that could be generated by eliminating current sales tax exemptions and taxing services. The revenue that could be generated depends on how aggressive the state wants to be in eliminating sales tax exemptions and adding services. No one knows what the General Assembly might decide to do, so it is not possible to produce one estimate, and thus we present a range of estimates.

As a benchmark, one might consider a sales tax that continued to exempt most business-to-business sales and that taxed purchases of services by households other than health services and education services, but not business purchases of services. Our estimates suggest that this alternative would generate an additional \$2,605.2 million in state sales tax revenue and \$1,420.9 million in local government sales tax revenue, or a total of \$4,026.1 million. This would be a sales tax that applied mostly to consumers.

If services provided to business were included, the revenue estimate would increase to \$4,106.9 million for the state government and to \$2,434.7 million for the local governments, for a total of \$6,541.6 million. (This estimate assumes that 30 percent of gross receipts would not find their way into the tax net, e.g., because the purchases are made by a government.) To generate more than \$6.5 billion in additional sales tax revenue would require the state to be much more aggressive than other states appear to be in dealing with exemptions and adding services.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Bibliography

- Due, J. F., & Mikesell, J. L. (1994). *Sales Taxation: State and Local Structure and Administration* (2nd ed.). Washington, D.C.: The Urban Institute Press.
- Federation of Tax Administrators (2004). "Sales Taxation of Services: Updated 2004." Retrieved 6/21/2007, from <http://www.taxadmin.org/fta/pub/services/services.html>.
- Fox, W. F., & Murray, M. (1988). "Economic Effects of Taxing Services." *National Tax Journal* 41(1): 19-36.
- Georgia Department of Community Affairs. (2005). *2005 Report of Local Government Finances*. Atlanta.
- Grace, M. (2006). *An Examination of Georgia's Premium Tax*. Atlanta: Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University.
- Kaiser Family Foundation (2006). "Trends and Indicators in the Changing Health Care Marketplace." 02/08/06. Retrieved 08/02/07, from <http://www.kff.org/insurance/7031/print-sec1.cfm>.
- Mahoney, R. (2007). "Tax Reform Plan Gets New Look." *Atlanta Business Chronicle*. May 25-31.
- Matthews, J. W. (2007). *Potential Impact of the Great Plan on Georgia's Tax Administration*. Atlanta: Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University.
- National Coalition on Health Care (2007). "Facts on Health Care Costs." Retrieved 08/02/07, from <http://www.nchc.org/facts/2007%20updates/cost.pdf>.
- Sjoquist, D. L. (2007). *A Description of the Proposed Comprehensive Revision of Georgia's Tax Structure: HR 900*. Atlanta: Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University.
- Sjoquist, D. L., Matthews, J. W., & Smith, W. J. (2004). *An Initial Evaluation of a Proposed Statewide Education Sales Tax*. Atlanta: Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University.
- Smith, W. J., & Walker, M. B. (2006). *Revenue Losses From Exemptions of Goods From the Georgia Sales and Use Tax*. Atlanta: Fiscal Research Center, Andrew Young School of Policy Studies, Georgia State University.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

U.S. Census Bureau (2002). "Economic Census." Retrieved 6/29/2007, from http://www.census.gov/econ/census02/guide/02EC_GA.HTM.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Appendix A. Estimated Revenue Loss from Food for Home Consumption

In a Fiscal Research Center report done in 1997, the authors estimated the expected sales tax revenue loss from the exemption for food for home consumption. The authors' method was to take the reported food for home consumption for the nation, as reported by the Bureau of Economic Analysis (BEA) in the National Income and Product Accounts, and allocate a portion of that to Georgia based on Georgia's share of U.S. personal income. That method has been used since then to estimate the revenue loss from the food for home consumption exemption. For 2006, this method yields an estimated revenue loss of \$722 million.

Since there now seems to be interest in eliminating that exemption, the FRC has been trying to update that estimate. Based on our current analysis using additional and more recent data and alternative estimation procedures, we believe that estimate is too high. There are five other ways of estimating the revenue loss from this exemption.

1. The Bureau of Labor Statistics conducts an annual Survey of Consumer Expenditures (CES). Households are asked to maintain a diary of all of their purchases. We used the national household average for food for home consumption for 2004, adjusted for price increases, and the number of households in Georgia to generate the revenue estimate. This procedure yields an estimated revenue loss for 2006 of \$478 million.
2. The Census Bureau conducts an Economic Census every five years. The Census reports receipts of grocery stores for each state. The most recent year is 2002. We used grocery stores receipts in Georgia, adjusted for price increases and population growth, to generate the revenue estimate. This procedure yields an estimated revenue loss for 2006 of \$593 million.
3. We compared the actual sales tax receipts in the year in which the exemption was being implemented to the predicted sales tax revenue based on the trend in sales tax revenue from 1992 through 1996. The deviation from trend was adjusted for inflation and population increase. This procedure yields an estimated revenue loss for 2006 of between \$504 million and \$650 million.
4. Nearly all local option sales taxes apply to food for home consumption. Thus, the difference between the revenue from the local option sales taxes

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

(adjusted for the tax rate) and the state sales tax should reflect the loss of revenue from the exemption. For various reasons, including the timing of sales taxes allocations to local governments, one cannot simply compare reported state revenue and local government allocations for a given 12-month period. However, the Department of Revenue provided data that tracks the allocation of each dollar of sales tax revenue collected to each specific sales tax (state tax, LOST, SPLOST, etc.) Using these data, we find that for FY 2005, the difference between revenue collected by the state sales tax and the LOST multiplied by four to make it tax rate equivalent was \$451.3 million. For FY 2006, the difference was \$679.5 million. In 2006, the Department of Revenue changed its electronic reporting system so that the FY 2006 figure is probably not a good measure of purchases of food for home consumption. Increasing the FY 2005 estimate by the increase in personal income (or by the increase in prices and population), yields a FY 2006 estimate of \$476.7 million. Increasing it by the increase in state sales tax collections, yields an estimate of \$491.1 million.

5. There are two counties, DeKalb and Rockdale that have both an ESPLOST and a HOST. Food for home consumption is exempt from the HOST but not the ESPLOST. The difference in the revenue from these two local taxes should reflect the tax revenue on food for home consumption. The difference is about 8.6 percent. Applying the 8.6 percent to actual state sales tax revenue for 2006 yields an estimate of the revenue loss from the exemption of \$494 million.

The estimate based on BEA is on the high end of the estimates. The estimate based on the CES is subject to reporting errors of unknown direction and magnitude. Based on what might be expected to be a weekly average grocery bill (less than \$100 for a family of four), the CES data seems to underreport food for home consumption. The CES also misses purchases of food for home consumption by non-residents. Grocery receipts from the Economic Census include purchases of non-food-for-home consumption items, for example, beer, wine, cleaning products, etc. Thus, this estimate is probably too large. However, purchases of food for home consumption are made at places besides grocery stores. The estimate based on a comparison of actual revenue and predicted revenue assumes that the deviation from the trend is due solely to the introduction of the exemption. The estimate based on comparing state sales tax revenue to local sales tax revenue should produce a good estimate. However, it may be that the value for FY 2006 is the more appropriate estimate.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Given that DeKalb and Rockdale counties have higher than average per capita income, and that eating out increases with income, 8.6 percent is probably a low estimate of the likely increase in the sales tax base if the food for home consumption exemption was eliminated. However, it is a very small sample.

Based on these estimates, we believe that the revenue loss from the food for home consumption exemption on 2006 is in the neighborhood of \$500 million. We assume that this will increase at the rate of inflation and population growth, or 5.6 percent per year. Thus, for FY 2007 the revenue estimate is \$528 million, and for FY 2008, the estimate is \$558 million.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Appendix B: Services Taxed in Hawaii

Accounting and bookkeeping	Fishing and hunting guide services
Admission to cultural events	Food storage
Admission to professional sports events	Funeral services
Advertising agency fees	Fur storage
Architects	Garments service (altering & repairing)
Armored car services	Gift and package wrapping service
Attorneys	Health clubs, tanning parlors, reducing salons
Auto service, except repairs, incl. painting & lube	Horse boarding and training (not race horses)
Automotive road service and towing services	Household goods storage
Automotive rust proofing & undercoating	Information services
Automotive storage	Installation charges
Automotive washing and waxing	Insurance services
Bail bond fees	Interior design and decorating
Barber shops and beauty parlors	Interstate air courier
Billiard parlors	Intrastate transportation of persons
Bowling alleys	Investment counseling
Cable TV services	Labor charges on repairs delivered under warranty
Carpentry, painting, plumbing and similar trades	Land surveying
Carpet and upholstery cleaning	Landscaping services (including lawn care)
Chartered flights (with pilot)	Laundry and dry cleaning services, coin-op
Check & debt collection	Laundry and dry cleaning services, non-coin op
Coin operated video games	Limousine service (with driver)
Cold storage	Loan broker fees
Commercial art and graphic design	Lobbying and consulting
Commercial linen supply	Local transit (intra-city) buses
Construction contractors	Mainframe computer access and processing services
Construction service (grading, excavating, etc.)	Maintenance and janitorial services
Courier service	Marina service (docking, storage, cleaning, repair, towing)
Credit information, credit bureaus	Marketing
Custom fabrication labor	Massage services
Custom meat slaughtering, cutting and wrapping	Medical test laboratories
Custom processing (on customer's property)	Membership fees in private clubs
Data processing services	Mini-storage
Dating services	Nursing services out-of-hospital
Debt counseling	Parking lots & garages
Dentists	Personal instruction (dance, golf, tennis. etc.)
Diaper service	Pet grooming
Direct Satellite TV	Photo finishing
Employment agencies	Photocopying services
Engineers	Physicians
Exterminating (includes termite services)	Pinball and other mechanical amusements

Appendix B continues next page....

**Revenue Estimates for Eliminating Sales Tax Exemptions
and Adding Services to the Sales Tax Base**

Appendix B (continued): Services Taxed in Hawaii

Printing	Swimming pool cleaning & maintenance
Private investigation (detective) services	Tax return preparation
Process server fees	Taxi operations
Property sales agents (real estate or personal)	Taxidermy
Public relations, management consulting	Telemarketing services on contract
Real estate management fees (rental agents)	Telephone answering service
Real estate title abstract services	Temporary help agencies
Repair labor	Test laboratories (excluding medical)
Sales of advertising time or space	Tickertape reporting (financial reporting)
Secretarial and court reporting services	Tire recapping and repairing
Security services	Trailer parks – overnight
Seismograph & geophysical services	Travel agent services
Service charges of banking institutions	Tuxedo rental
Service contracts sold at the time of sale	Typesetting service; plate making for the print trade
Shoe repair	Veterinary services (both large and small animal)
Sign construction and installation	Water softening and conditioning
Software – custom programs	Water well drilling
Software – modifications to canned program	Welding labor (fabrication and repair)
Soil prep., custom baling, other ag. services	Window cleaning

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Appendix C. Details of Revenue Estimation Procedures Using Consumer Expenditure Survey

Residential Real Estate Transaction Services

Estimates for consumer expenditures on real estate transaction services were not available using the CES, so we use data from the National Association of Realtors (NAR) instead. According to the NAR, there were 248,800 sales of existing homes in Georgia in 2006. The NAR reports the median sales price for U.S. regions and major metropolitan areas, but not for states. The median sales price of single-family homes was \$183,700 for the South and \$171,800 for the Atlanta metropolitan area. We use sales prices in Atlanta because we expect them to more closely correspond to sales prices for Georgia as a whole than do sales prices for the Southern region. Of course, sales prices in Georgia outside of the Atlanta area are likely lower than those in the Atlanta area, but we make no adjustment for this. We next estimate the total value of existing home sales by multiplying the number of sales in Georgia by the median sales price in the Atlanta metropolitan area, which equals \$42.7 billion. We then multiply this number by 80 percent to adjust for the fact that some home sales do not use a real estate agent, which yields \$34.2 billion. We then multiply by 6 percent as an estimate of the percentage of the sales price that is paid in agent fees, which yields \$2.1 billion. This gives us our estimate of consumer expenditures for commissions and fees to real estate agents. We also realize there are other potentially taxable consumer services related to buying and selling property such as property surveys, title searches, appraisals, and home inspections. However, it is not clear how we should estimate these consumer expenditures. As a first approximation, we assume the average combined expenditure on these services for each home sale is \$1,000. Multiplying \$1,000 by the number of home sales yields a consumer expenditures estimate for these services of \$248.8 million.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Expenditures That Were Adjusted

Long Distance Phone Service

The CES reports expenditures on residential telephone service, which consists of local service and long distance service. However, the CES does not allow us to separate the expenditures between the two. Therefore, consumer expenses on residential phone service as reported by the CES require adjustment to net out the portion of local service that is already taxed. We do so by using the Statistical Abstract of the United States: 2007 produced by the U.S. Census Bureau to determine the percentage of telephone company revenues that come from local service and long distance service respectively. According to the Statistical Abstract, long distance revenues are 37.13 percent of combined local and long distance revenues. Therefore we multiplied expenditure for residential phone services as reported in the CES by 37.13 percent to obtain our estimate of consumer expenditures on long distance telephone service.

Construction, Repairs, and Maintenance of Real Property

Expenditures on construction in the CES refer to payments to builders and contractors by households for the purpose of construction, but does not include houses built and sold to consumers at retail. Therefore, potential revenues from taxing houses built and sold at retail are not presented in this report. We do, however, present revenue estimates for taxing many services related to the construction, repair, and maintenance of property. Expenditures as reported by the CES require adjustment to account for the fact that materials and supplies that go into the construction and maintenance process are already subject to the sales tax in Georgia. In estimating the potential revenue gain, we therefore want to net out the portion that is already taxed. We do so by using the Statistical Abstract of the United States: 2007 to estimate the percentage of construction value that is “added” by construction firms. Value added is simply total construction receipts minus the costs of materials and supplies. In other words, value added corresponds to the portion of construction receipts that is not currently taxed in Georgia. According to the

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Statistical Abstract, value added represents 64.49 percent of total construction activity. Therefore, we multiply construction and repair expenditures as reported by the CES by 64.49 percent to estimate the amount of expenditures that are not currently taxed but could be in order to provide an estimate of the increase in revenues that would result from taxing construction, repairs, and maintenance of property.

Vehicle Maintenance, Repairs, and Equipment Installation

Under current law vehicle parts and equipment are subject to the sales tax, but the value of labor in vehicle maintenance, repair, and equipment installation is not taxed if itemized by the service provider. The CES reports consumer expenditures on these items but does not separate expenditures into separate parts and labor components. Therefore we must adjust expenditures on these items to net out the cost of parts. We do so by estimating that 61 percent of auto maintenance, service, and repair expenses are attributed to charges for labor. (This is based on a local business's records over several years.) We therefore multiply auto maintenance, service and repair expenditures reported in the CES by 61 percent to estimate the amount of these expenditures that is not currently taxed.

Auto Repair Service Policies

Auto service policies were treated in the same manner as vehicle maintenance and repairs.

Tuition at Private Colleges and Universities

The CES reports consumer expenditures on tuition at colleges and universities but does not specify if the tuition was paid to private or public institutions. However, we assume that tuition paid to public colleges and universities will not be taxed, so we need to adjust consumer expenditures on tuition to eliminate the component that goes to public institutions of higher education. We do so by using Digest of Education Statistics, 2006 produced by the National Center for

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Education Statistics to estimate the percentage of tuition charges that go to public and private colleges and universities. According to the Digest, private institutions levy 60.91 percent of tuition charges of all colleges and universities. Therefore, we multiply expenditures on tuition for higher education as reported in the CES by 60.91 percent in order to net out tuition payments to public colleges and universities.

Other School Expenses at Private Colleges and Universities

The CES reports consumer expenditures on miscellaneous school expenses (other than tuition, books, housing, and board) at colleges and universities, but this is a broad category that likely includes both goods and services. Furthermore, this category again includes expenses at public and private institutions. We have no reliable way of knowing how much of these other expenses are already taxed or how much would be subject to broadening of the sales tax base to include services. Therefore, the only adjustment we make is to multiply consumer expenditures as reported by the CES by 60.91 percent in order to net out the percent of other expenses that occur at public institutions as is done with tuition. However, this likely overstates the potential revenue gains from taxing miscellaneous services at private colleges and universities.

Expenditures That Were Not Adjusted

Other School Expenses at Private Elementary and High Schools and Other Non-Public Schools

Again other school expenses likely include goods and services, but we cannot reliably separate the various components. Therefore, we make no adjustment to these expenditure items, but recognize that the revenue estimates reported likely overstate the actual revenue increases from taxing the service component of these other school expenses.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

Travel by Ship During Trips and Vacations

Our estimates are based on the Southern regional average for consumer expenditures, but some items are likely to be less important in Georgia than in other states. Such is likely the case with travel by ship. However, we made no adjustment for this expenditure item.

Funerals, Burials and Cremations

The CES reports consumer expenditures on funerals, burials, and cremations but does not allow us to separate the portion that is goods from the portion that is services. However, we make no adjustment for the goods that are already taxed in this category, so the revenue estimates provided are likely overestimates.

Condo, Co-Op, and Homeowner's Association Fees

Condo, co-op, and homeowner's association fees would not be taxed in themselves but the services they are used to purchase would be taxed. Consumer expenditures on these fees are therefore used as a proxy for the actual services. These services include lawn maintenance, landscaping, pool cleaning and maintenance, and management fees among other things. However, some of these fees go to pay for things that are already taxed such as electricity or things that would not be subject to the sales tax such as property tax payments and water usage. However, we make no adjustment for this, therefore the revenues estimates reported likely overestimate the actual revenue gain from taxing these services.

Garbage and Trash Pick-up

Garbage and trash pick-up is provided publicly in some jurisdictions, but privately in others. We expect that trash pick-up by local governments would not be subject to the sales tax but pick-up by private companies would be subject to the sales tax. However, we do not adjust consumer expenditures on trash pick-up for the portion that is provided by local governments. Therefore, the revenue estimates

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

provided likely overstate the actual revenue increase from taxing private garbage pick-up.

Health Care Services

Health care services in the CES are for consumer expenditures net of reimbursements. Therefore, payments by insurance providers (including Medicare and Medicaid) for health care services are not included as part of the sales tax base in these estimates. The state might wish to tax payments by private insurance providers, but the CES does not allow us to estimate the amount of revenue that would be obtained from doing so.

APPENDIX TABLE 1. SALES TAX EXEMPTIONS

	2004	2006	Alt 1	Alt 2	Alt 3	Alt 4
<i>A. Exemptions for property and services sold primarily to households</i>						
Sale of lottery tickets	\$116,893,287	\$136,470,886				
Charges for rooms and lodging, more than 90 days	\$347,078,144	\$405,207,715		X	X	X
Sale of water through water lines	\$45,648,458	\$53,293,783				
Sale of foods, etc with food stamps and WIC vouchers	Inc. Food for Home Cons.					
Personal property brought into Georgia	\$214,320,539	\$250,215,513				
Casual sales of personal property	NA					
Credit allowances for trade-ins on property	\$862,363,505	\$1,006,794,439		X	X	X
Charges for public transportation	\$6,000,000	\$7,004,896				
Sale of vehicles to handicapped veterans	NA					
Charges for long distance telephone services	\$120,559,021	\$140,750,567				
Sale of food for home consumption	\$881,000,000	\$500,000,000				
Sales of sod grass	\$1,600,000	\$1,867,972				
<i>Subtotal: Household Property and Services</i>	<i>\$2,595,462,953</i>	<i>\$2,501,605,770</i>				
<i>B. Exemptions related to health care</i>						
Purchase of medical equipment with Medicare and Medicaid	\$8,429,959	\$9,841,831				X
Sale of prescription drugs and durable medical devices	\$226,579,627	\$264,527,786				X
Sales to hospitals	\$55,311,208	\$64,574,876				X
Sales to non-profit hospitals and nursing homes	\$210,775,298	\$246,076,506				X
Sales of certain equipment used by diabetics	\$2,000,000	\$2,334,965				X
Sales to non-profits serving the mentally retarded	\$200,000	\$233,497				X
Sales of certain durable medical equip. and prosthetic devices	\$5,700,000	\$6,654,651				X
<i>Subtotal: Health Care</i>	<i>\$508,996,091</i>	<i>\$594,244,111</i>				

Appendix Table 1 continues next page...

APPENDIX TABLE 1 (CONTINUED). SALES TAX EXEMPTIONS

	2004	2006	Alt 1	Alt 2	Alt 3	Alt 4
<i>C. Exemptions related to farming and fishing</i>						
Sale of raw materials used in farming and ranching	\$33,962,392	\$39,650,504			X	X
Sale of machinery used in farming and ranching	\$11,153,133	\$13,021,089			X	X
Sale of equipment used in harvesting lumber	\$1,600,000	\$1,867,972			X	X
Sale of sugar to the keepers of honeybees	NA				X	X
Sale of farm animals for breeding purposes	NA				X	X
Sale of fuel used in heating structures used in poultry raising	NA				X	X
Sale of bait for shrimpers	NA				X	X
Sales of agricultural machinery	\$480,000	\$560,392			X	X
Sales of water conservation machinery	\$0				X	X
Sales to ag. commodities commission	NA				X	X
Sales of LPG used for horticultural purposes	\$284,000	\$331,565			X	X
Sales of certain dyed diesel fuels	\$100,000	\$116,748			X	X
Certain sales of LPG and other fuels	\$450,000	\$525,367			X	X
Certain sales of electricity	\$1,500,000	\$1,751,224			X	X
<i>Subtotal: Farming and Fishing</i>	<i>\$49,529,524</i>	<i>\$57,824,862</i>				
<i>D. Exemptions related to education</i>						
Sale of school lunches in public schools	\$7,529,319	\$8,790,349	X	X	X	X
Sale of school lunches in private schools	\$955,764	\$1,115,838				
Sales to private elementary and secondary schools	\$25,694,647	\$29,998,055				
Sales to the University System of Georgia	\$54,240,000	\$63,324,259	X	X	X	X
Sales to private colleges and universities	\$8,328,138	\$9,722,957				

Appendix Table 1 continues next page...

APPENDIX TABLE 1 (CONTINUED). SALES TAX EXEMPTIONS

	2004	2006	Alt 1	Alt 2	Alt 3	Alt 4
<i>D. Exemptions related to education (cont.)</i>						
Sales of tickets to school athletic and other events	\$2,100,000	\$2,451,714				
<i>Subtotal: Education</i>	<i>\$98,847,868</i>	<i>\$115,403,172</i>				
<i>E. Professional and business services</i>						
Sales by parent-teacher organizations	\$2,538,000	\$2,963,071				
Professional, insurance or personal service transactions	NA					
Fees for services rendered by repair people	\$132,453,105	\$154,636,703				
<i>Subtotal: Professional and Business Services</i>	<i>\$134,991,105</i>	<i>\$157,599,774</i>				
<i>F. Exemptions for government agencies and nonprofit organizations</i>						
Sales to federal, state and local governments	\$1,915,081,354	\$2,235,824,274	X	X	X	X
Property furnished by governments to contractors for government work	\$410,675,279	\$479,456,267	X	X	X	X
Sales to non-profit orphan homes	NA					
Sales to non-profit blood banks	NA					
Sales by the Rock Eagle 4-H Center	NA					
Sales by schools for extra-curricular activities	NA					
Sales to consular officials	NA					
Sale of components used in military craft	NA					
Exemption for Daughters of the American Revolution	NA					
Exempt for sales by Girl Scouts, sales printed advertisement inserts, and certain funeral service expenses	\$1,750,000	\$2,043,095				
Exemption for library non-profits, wheelchair sales, gas sales	\$2,236,000	\$2,610,491				
Exempt for urban transit system fares and certain sales of art	NA					

Appendix Table 1 continues next page...

APPENDIX TABLE 1 (CONTINUED). SALES TAX EXEMPTIONS

	2004	2006	Alt 1	Alt 2	Alt 3	Alt 4
<i>F. Exemptions for government agencies and nonprofit organizations (cont.)</i>						
Exemption for authority building a coliseum	\$750,000	\$0				
<i>Subtotal: Government and Non-Profit</i>	<i>\$2,330,492,633</i>	<i>\$2,719,934,127</i>				
<i>G. Exemptions related to religious entities</i>						
Sales of religious papers owned by religious entities	NA					
Sales by religious entities in fund raising activities	NA					
Sales of books recognized as holy scripture	NA					
Certain sales of pipe organs and steeple bells	NA					
<i>Subtotal: Religious Entities</i>	<i>NA</i>	<i>NA</i>				
<i>H. Exemptions related to non-farm business</i>						
Sale to electricity when it is the major input used in manufacturing	\$600,000	\$700,490			X	X
Sale of property manufactured for export	\$630,889,353	\$736,552,380			X	X
Sale of machinery used in manufacturing	\$85,321,190	\$99,611,010			X	X
Sale of raw materials used in manufacturing	\$2,762,416,524	\$3,225,073,392		X	X	X
Sale of paper stock manufactured for export	NA					
Sale of property resulting from business reorganization	NA					
Sale of vehicles used in interstate commerce	NA				X	X
Sale of material handling equipment used in warehouses	\$2,600,000	\$3,035,455			X	X
Sale of machinery for remanufacturing aircraft engines	NA				X	X
Sale of machinery used to reduce pollution	\$10,400,000	\$12,141,820			X	X
Use of cargo containers for international shipping	\$200,000	\$233,497			X	X

Appendix Table 1 continues next page...

APPENDIX TABLE 1 (CONTINUED). SALES TAX EXEMPTIONS

	2004	2006	Alt 1	Alt 2	Alt 3	Alt 4
<i>H. Exemptions related to non-farm business (cont.)</i>						
Sale of fuel and supplies to ships used in commerce	NA				X	X
Transportation charges for interstate and intrastate commerce	\$574,581,414	\$670,813,838			X	X
Gross revenues from coin-operated amusement machines	\$2,200,000	\$2,568,462				
Compensation allowed to vendors for collecting tax	NA					
Rental of films when admission is charged	\$4,170,000	\$4,868,403				
Exemption for clean rooms	\$150,000	\$175,122			X	X
Sales of machinery used in re-manufacturing of aircraft engines and parts	\$250,000	\$291,871			X	X
Sales of replacement parts for machinery	\$19,800,000	\$23,116,157			X	X
Certain sales or leases computer equipment	\$15,000,000	\$17,512,240			X	X
Film production and digital broadcasting	\$4,600,000	\$5,370,420				
<i>Subtotal: Non-Farm Business</i>	<i>\$4,113,178,481</i>	<i>\$4,802,064,555</i>				
<i>I. Miscellaneous exemptions</i>						
Sale of motor vehicles to non-residents that are taken out of state	NA					
Sale of art and artifacts displayed in public museums	NA					
Excise tax for motor fuel if billed separately	NA					
Sale of funeral merchandise when purchased from Georgia Crime Victims Emergency	NA					
Sales tax holiday	\$7,000,000	\$8,172,379				
Exemption for the GA Aquarium	\$2,000,000	\$0				
<i>Subtotal: Miscellaneous</i>	<i>\$9,000,000</i>	<i>\$8,172,379</i>				
<i>Total</i>	<i>\$9,840,498,655</i>	<i>\$10,956,848,749</i>				

Source: 2004 values are from Smith and Walker (2006). Values for 2006 are authors' calculations; see text for details. NA: Estimate was not made.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 2. REVENUE ESTIMATES FROM TAXING SERVICES, 2006

Consumer Service	Consumer Expenditures	Estimated State and Local Revenue
<i>Residential Real Estate Transaction Services</i>		
Real estate agent commissions and fees	\$2,051,704,320	\$137,464,189
Other selling and buying costs	\$248,800,000	\$16,669,600
<i>Subtotal</i>	<i>\$2,300,504,320</i>	<i>\$154,133,789</i>
<i>Household Utilities and Related Expenses</i>		
Residential telephone expense for long distance service	\$873,807,059	\$58,545,073
Telephone expense for pager/beeper service	\$4,649,196	\$311,496
Garbage and trash pick-up	\$292,981,888	\$19,629,786
Water softening	\$9,151,186	\$613,129
Septic cleaning	\$19,736,209	\$1,322,326
Cable TV, satellite services or community antenna	\$1,263,452,351	\$84,651,307
Internet service	\$390,580,766	\$26,168,911
<i>Subtotal</i>	<i>\$2,854,358,654</i>	<i>\$191,242,030</i>
<i>Construction, Repairs, and Maintenance of Real Property</i>		
Dwellings under construction	\$1,068,035,340	\$71,558,368
Building an addition to house or new structure	\$563,125,924	\$37,729,437
Finishing a basement or an attic or enclosing a porch	\$41,392,090	\$2,773,270
Remodeling one or more rooms in the house	\$446,275,460	\$29,900,456
Landscaping the ground or planting new shrubs or trees	\$189,526,170	\$12,698,253
Building outdoor patios, walks, fences, and pools	\$211,792,972	\$14,190,129
Repairing outdoor patios, walks, fences, driveways, or pools	\$64,814,282	\$4,342,557
Inside painting or papering	\$89,131,713	\$5,971,825
Outside painting	\$56,295,354	\$3,771,789
Plastering or paneling	\$6,756,699	\$452,699
Plumbing or water heating installations and repairs	\$99,335,247	\$6,655,462
Electrical work	\$42,042,107	\$2,816,821
Heating or air-conditioning jobs	\$281,990,874	\$18,893,389
Flooring repair or replacement	\$156,866,313	\$10,510,043
Insulation	\$2,110,540	\$141,406
Roofing, gutters, or downspouts	\$257,005,546	\$17,219,372
Siding	\$28,559,813	\$1,913,507
Installation, repair, and replacement of windows, doors, etc.	\$111,960,438	\$7,501,349
Masonry, brick or stucco work	\$9,544,754	\$639,498
Other construction, improvements and repairs	\$906,403,825	\$60,729,056
<i>Subtotal</i>	<i>\$4,632,965,462</i>	<i>\$310,408,686</i>

Appendix Table 2 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 2 (CONTINUED). REVENUE ESTIMATES FROM TAXING SERVICES, 2006

Consumer Service	Consumer Expenditures	Estimated State and Local Revenue
<i>Other Household Services</i>		
Installation charges for appliances	\$9,616,003	\$644,272
Household appliance and equipment repair	\$85,068,783	\$5,699,608
Household appliance and equipment service contracts	\$57,002,689	\$3,819,180
Termite or pest control	\$98,275,508	\$6,584,459
Home security system service fees	\$43,475,842	\$2,912,881
Gardening or lawn care services	\$210,648,204	\$14,113,430
Housekeeping services	\$147,480,904	\$9,881,221
Other home services and small repair jobs around the house	\$46,875,639	\$3,140,668
Condo, co-op, and homeowner's association fees	\$421,686,204	\$28,252,976
<i>Subtotal</i>	<i>\$1,120,129,778</i>	<i>\$75,048,695</i>
 <i>Clothing Services</i>		
Repair, alteration, and tailoring for clothing and accessories	\$19,085,094	\$1,278,701
Shoe repair and other shoe services	\$4,311,181	\$288,849
Watch or jewelry repair	\$10,375,457	\$695,156
Clothing storage	\$2,745,198	\$183,928
<i>Subtotal</i>	<i>\$36,516,931</i>	<i>\$2,446,634</i>
 <i>Vehicle Maintenance, Repairs, and Equipment Installation</i>		
Oil change, lubrication, and oil filter	\$156,214,997	\$10,466,405
Motor tune-up	\$103,463,335	\$6,932,043
Brake work	\$109,593,403	\$7,342,758
Battery purchase and installation	\$19,210,559	\$1,287,107
Tire purchases and mounting	\$212,500,412	\$14,237,528
Tire repair	\$6,258,848	\$419,343
Front end alignment, wheel balancing, and wheel rotation	\$27,542,677	\$1,845,359
Steering or front end work	\$34,296,138	\$2,297,841
Electrical system work	\$49,435,650	\$3,312,189
Engine repair or replacement	\$142,851,718	\$9,571,065
Air conditioning work	\$42,042,443	\$2,816,844
Engine cooling system work	\$41,979,059	\$2,812,597
Exhaust system work	\$14,310,393	\$958,796
Clutch or transmission work	\$104,716,916	\$7,016,033
Body work and painting	\$66,526,776	\$4,457,294
Shock absorber replacement	\$13,601,649	\$911,310
Drive shaft or rear-end work	\$17,624,634	\$1,180,850

Appendix Table 2 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 2 (CONTINUED). REVENUE ESTIMATES FROM TAXING SERVICES, 2006

Consumer Service	Consumer Expenditures	Estimated State and Local Revenue
<i>Vehicle Maintenance, Repairs, and Equipment Installation (cont.)</i>		
Video equipment and installation	\$12,686,683	\$850,008
Audio equipment and installation	\$9,069,334	\$607,645
Vehicle accessories and customization	\$21,385,150	\$1,432,805
Vehicle cleaning services and cleaning supplies	\$8,985,959	\$602,059
Other vehicle services, parts, and equipment	\$78,429,684	\$5,254,789
<i>Subtotal</i>	<i>\$1,292,726,416</i>	<i>\$86,612,670</i>
<i>Other Vehicle Related Expenses</i>		
Vehicle inspection	\$33,301,774	\$2,231,219
Parking including metered	\$55,939,070	\$3,747,918
Towing charges	\$14,101,706	\$944,814
Docking and landing fees for boats and planes	\$25,408,254	\$1,702,353
Auto repair service policies	\$28,795,857	\$1,929,322
Automobile service clubs	\$43,240,286	\$2,897,099
<i>Subtotal</i>	<i>\$200,786,946</i>	<i>\$13,452,725</i>
<i>Health Care Services</i>		
Eye examinations, treatment, or surgery	\$131,443,562	\$8,806,719
Dental care	\$802,796,198	\$53,787,345
Hospital room and hospital services	\$430,237,447	\$28,825,909
Services by medical professionals other than physician	\$161,658,035	\$10,831,088
Physician services	\$565,688,168	\$37,901,107
Lab tests and x-rays	\$143,390,994	\$9,607,197
Care in convalescent or nursing home	\$16,059,691	\$1,075,999
Other medical care	\$43,420,545	\$2,909,177
Purchase of supportive or convalescent equipment	\$9,220,556	\$617,777
<i>Subtotal</i>	<i>\$2,303,915,196</i>	<i>\$154,362,318</i>
<i>Education and Childcare</i>		
Recreational lessons or other instructions	\$155,364,853	\$10,409,445
Private school bus	\$14,618,591	\$979,446
Tuition at private colleges and universities	\$887,187,828	\$59,441,584
Tuition at private elementary and high schools	\$362,404,784	\$24,281,121
Tuition at other schools (other than public)	\$90,149,466	\$6,040,014
Other school expenses at private colleges and universities	\$22,638,615	\$1,516,787
Other school expenses at private elementary and high schools	\$41,440,134	\$2,776,489

Appendix Table 2 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 2 (CONTINUED). REVENUE ESTIMATES FROM TAXING SERVICES, 2006

Consumer Service	Consumer Expenditures	Estimated State and Local Revenue
<i>Education and Childcare (cont.)</i>		
Other school expenses at other schools (other than public)	\$30,455,473	\$2,040,517
Nursery school, preschool, and child day care expenses	\$447,379,321	\$29,974,415
Babysitting, nanny, or child care in your home	\$72,823,664	\$4,879,185
Babysitting, nanny, or child care in someone else's home	\$46,368,472	\$3,106,688
<i>Subtotal</i>	<i>\$2,170,831,200</i>	<i>\$145,445,690</i>
<i>Membership Fees</i>		
Golf courses, country clubs, and other social organizations	\$261,540,365	\$17,523,204
Civic, service, or fraternal organizations	\$15,488,771	\$1,037,748
Credit card membership fees	\$6,424,531	\$430,444
Health clubs, swimming pools, fitness and weight loss centers	\$160,521,978	\$10,754,973
Shopping club membership such as Costco and Sam's	\$21,468,066	\$1,438,360
Global positioning services (GPS), such as OnStar	\$4,393,655	\$294,375
Direct or online dating services	\$377,913	\$25,320
<i>Subtotal</i>	<i>\$470,215,278</i>	<i>\$31,504,424</i>
<i>Transportation and Travel</i>		
Travel by airplane during trips and vacations	\$739,218,677	\$49,527,651
Travel by train during trips and vacations	\$46,666,699	\$3,126,669
Travel by ship during trips and vacations	\$90,718,452	\$6,078,136
<i>Subtotal</i>	<i>\$876,603,828</i>	<i>\$58,732,456</i>
<i>Miscellaneous</i>		
Funerals, burials and cremations	\$244,601,418	\$16,388,295
Purchase or upkeep of cemetery lots or vaults	\$59,690,441	\$3,999,260
Services of lawyers or other legal professionals	\$325,662,888	\$21,819,413
Accounting fees	\$176,033,507	\$11,794,245
Safe deposit box rental	\$14,290,186	\$957,442
Charges for checking accounts or other banking services	\$71,610,603	\$4,797,910
Haircuts, styling, and other related services	\$973,022,200	\$65,192,487
Laundry and dry cleaners	\$346,513,608	\$23,216,412
Care for disabled or elderly persons in the home	\$38,950,722	\$2,609,698
Adult day care centers	\$2,190,118	\$146,738
Veterinarian expenses for pets	\$256,098,825	\$17,158,621
Pet services	\$73,176,592	\$4,902,832

Appendix Table 2 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 2. REVENUE ESTIMATES FROM TAXING SERVICES, 2006

Consumer Service	Consumer Expenditures	Estimated State and Local Revenue
<i>Miscellaneous (cont.)</i>		
Moving, storage and freight express	\$109,391,630	\$7,329,239
Professional photography fees	\$58,117,064	\$3,893,843
<i>Subtotal</i>	<i>\$2,749,349,802</i>	<i>\$184,206,437</i>
<i>Total</i>	<i>\$42,017,807,621</i>	<i>\$1,407,596,555</i>

Source: Authors' calculations based on data from 2006 Consumer Expenditure Survey, U.S. Bureau of Labor Statistics.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 3. SERVICES TAXED BY OTHER STATES

Services	Number of States Taxing the Service
<i>Agricultural Services</i>	
Soil prep., custom baling, other ag. services	4
Veterinary services (both large and small animal)	5
Horse boarding and training (not race horses)	6
Pet grooming	18
Landscaping services (including lawn care)	20
<i>Industrial and Mining Services</i>	
Metal, non-metal and coal mining services	6
Seismograph & geophysical services	6
Oil Field Services	10
Typesetting service; platemaking for the print trade	20
<i>Construction</i>	
Gross income of construction contractors	12
Carpentry, painting, plumbing and similar trades.	13
Construction service (grading, excavating, etc.)	11
Water well drilling	10
<i>Transportation Services</i>	
Income from intrastate transportation of persons	11
Local transit (intra-city) buses	5
Income from taxi operations	8
Intrastate courier service	6
Interstate air courier (billed in-state)	1
<i>Storage</i>	
Automotive storage	19
Food storage	9
Fur storage	16
Household goods storage	13
Mini -storage	13
Cold storage	13
Marina Service (docking, storage, cleaning, repair)	18
Marine towing service (incl. tugboats)	8
Travel agent services	3
Packing and crating	10

Appendix Table 3 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 3 (CONTINUED). SERVICES TAXED BY OTHER STATES

Services	Number of States Taxing the Service
<i>Utility Service - Industrial Use</i>	
Intrastate telephone & telegraph	44
Interstate telephone & telegraph	26
Cellular telephone services	40
Electricity	37
Water	18
Natural gas	37
Other fuel (including heating oil)	38
Sewer and refuse, industrial	14
<i>Utility Service - Residential Use</i>	
Intrastate telephone & telegraph	41
Interstate telephone & telegraph	26
Cellular telephone services	43
Electricity	24
Water	12
Natural gas	22
Other fuel (including heating oil)	23
Sewer and refuse, residential	10
<i>Finance, Insurance and Real Estate</i>	
Service charges of banking institutions	3
Insurance services	6
Investment counseling	6
Loan broker fees	4
Property sales agents (real estate or personal)	5
Real estate management fees (rental agents)	5
Real estate title abstract services	5
Tickertape reporting (financial reporting)	8
<i>Personal Services</i>	
Barber shops and beauty parlors	7
Carpet and upholstery cleaning	18
Dating services	8
Debt counseling	7
Diaper service	23
Income from funeral services	14

Appendix Table 3 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 3 (CONTINUED). SERVICES TAXED BY OTHER STATES

Services	Number of States Taxing the Service
<i>Personal Services (cont.)</i>	
Fishing and hunting guide services	10
Garment services (altering & repairing)	19
Gift and package wrapping service	21
Health clubs, tanning parlors, reducing salons	21
Laundry and dry cleaning services, coin-op	6
Laundry and dry cleaning services, non-coin op	23
Massage services	10
900 Number services	29
Personal instruction (dance, golf, tennis, etc.)	6
Shoe repair	20
Swimming pool cleaning & maintenance	17
Tax return preparation	6
Tuxedo rental	39
Water softening and conditioning	13
<i>Business Services</i>	
Sales of advertising time or space:	
Billboards	5
Radio & television, national advertising	2
Radio & television, local advertising	4
Newspaper	4
Magazine	5
Advertising agency fees (not ad placement)	11
Armored car services	15
Bail bond fees	4
Check & debt collection	8
Commercial art and graphic design	21
Commercial linen supply	32
Credit information, credit bureaus	12
Employment agencies	10
Interior design and decorating	9
Maintenance and janitorial services	19
Lobbying and consulting	7
Marketing	6
Packing and crating	9
Exterminating (includes termite services)	20

Appendix Table 3 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 3 (CONTINUED). SERVICES TAXED BY OTHER STATES

Services	Number of States Taxing the Service
<i>Business Services (cont.)</i>	
Photocopying services	43
Photo finishing	44
Printing	45
Private investigation (detective) services	14
Process server fees	6
Public relations, management consulting	7
Secretarial and court reporting services	8
Security services	16
Sign construction and installation	29
Telemarketing services on contract	6
Telephone answering service	19
Temporary help agencies	11
Test laboratories (excluding medical)	8
Tire recapping and repairing	28
Window cleaning	18
<i>Computer:</i>	
Software - package or canned program	47
Software - modifications to canned program	30
Software - custom programs - material	25
Software - custom programs - professional services	14
Internet Service Providers-Dialup	11
Internet Service Providers-DSL or other broadband	15
Information services	12
Data processing services	9
Mainframe computer access and processing services	11
<i>Automotive Services</i>	
Automotive washing and waxing	21
Automotive road service and towing services	18
Auto service. except repairs, incl. painting & lube	24
Parking lots & garages	20
Automotive rustproofing & undercoating	26

Appendix Table 3 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 3 (CONTINUED). SERVICES TAXED BY OTHER STATES

Services	Number of States Taxing the Service
<i>Admissions & Amusements</i>	
Pari-Mutuel racing events.	28
Amusement park admission & rides	37
Billiard parlors	27
Bowling alleys	27
Cable TV services	25
Direct Satellite TV	22
Circuses and fairs -- admission and games	34
Coin operated video games	18
Admission to school and college sports events	22
Membership fees in private clubs	23
Admission to cultural events	33
Pinball and other mechanical amusements	19
Admission to professional sports events	37
Rental of films and tapes by theaters	8
Rental of video tapes for home viewing	45
<i>Professional Services</i>	
Accounting and bookkeeping	5
Architects	5
Attorneys	5
Dentists	4
Engineers	5
Land surveying	7
Medical test laboratories	4
Nursing services out-of-hospital	4
Physicians	4
<i>Leases and Rentals</i>	
Personal property, short term (generally)	45
Personal property, long term (generally)	45
Bulldozers, draglines and const. mach., short term	45
Bulldozers, draglines and const. mach., long term	45
Rental of hand tools to licensed contractors	45
Short term automobile rental	48
Long term automobile lease	38
Limousine service (with driver)	14

Appendix Table 3 continues next page...

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

APPENDIX TABLE 3 (CONTINUED). SERVICES TAXED BY OTHER STATES

Services	Number of States Taxing the Service
<i>Leases and Rentals (cont.)</i>	
Aircraft rental to individual pilots, short term	40
Aircraft rental to individual pilots, long term	39
Chartered flights (with pilot)	11
Hotels, motels, lodging houses	50
Trailer parks - overnight	29
<i>Fabrication, Installation and Repair Services</i>	
Custom fabrication labor	38
Repair material, generally	47
Repair labor, generally	24
Labor charges on repair of aircraft	19
Labor charges - repairs to interstate vessels	12
Labor charges - repairs to intrastate vessels	19
Labor - repairs to commercial fishing vessels	15
Labor charges on repairs to railroad rolling stock	11
Labor charges on repairs to motor vehicles	22
Labor on radio/TV repairs; other electronic equip.	24
Labor charges - repairs other tangible property	24
Labor - repairs or remodeling of real property	14
Labor charges on repairs delivered under warranty	7
Service contracts sold at the time of sale of TPP	30
Installation charges by persons selling property	23
Installation charges - other than seller of goods	18
Custom processing (on customer's property)	26
Custom meat slaughtering, cutting and wrapping	12
Taxidermy	27
Welding labor (fabrication and repair)	31

Source: Federation of Tax Administrators. http://www.taxadmin.org/FTA/pub/services/online/service_state.taf?_function=list, accessed August 20, 2007.

Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

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Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

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Revenue Estimates for Eliminating Sales Tax Exemptions and Adding Services to the Sales Tax Base

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