

Working Paper Series

STATE REVENUE Projections to 2010

By

Holley Hewitt Ulbrich, Ph.D.

October 23, 1997

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**STATE REVENUE
Projections to 2010**

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**Holley Hewitt Ulbrich, Ph.D.
Alumni Professor of Economics Emeritus
Senior Fellow, Strom Thurmond Institute
Clemson University**

Working Paper 1

**in a five-paper series on
Fiscal Sustainability of the South Carolina
Revenue and Expenditure System
1997-2010**

**Strom Thurmond Institute of Government and Public Affairs
Clemson, University
Clemson, South Carolina**

October 23, 1997

The main report and five working papers can be found on the Institute's Web page at
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Strom Thurmond Institute of Government and Public Affairs
Clemson University
Box 345203
Clemson, South Carolina 29634-5203
Telephone: 864.656.4700 Fax: 864.656.4780

ACKNOWLEDGMENTS

The author thanks these organizations for providing assistance in collecting information for this working paper:

S.C. State Budget and Control Board
S.C. Department of Revenue

Funds for this project came from an unrestricted gift from James C. Self.

The contributions of the following staff of the Strom Thurmond Institute of Government and Public Affairs are also gratefully acknowledged: Ellen Saltzman for research assistance and editing, Ada Louise Steirer for mechanical editing and production, David Shideler for research assistance, and Kathy Skinner for word processing assistance.

STATE REVENUE: PROJECTIONS TO 2010

A state's tax system or more generally its revenue system, which includes fees and other revenue as well as taxes, has to serve multiple purposes.

The goals of tax policy are typically to provide a fair, efficient and predictable means of financing government expenditure. To achieve these multiple objectives, policy makers choose a mix of taxes. Separately, each tax has its own characteristics of fairness, efficiency, and predictability. Together, the properties of each tax and the interactions between the taxes determine the character of the tax system.¹

The tax system has to apportion the burden of supporting government services fairly among citizens. It also offers incentives for businesses and individuals to do certain socially desirable things like create jobs or to refrain from doing certain undesirable things like drinking alcohol. But the primary function of a tax system is to generate enough revenue to provide the desired level of public services for its citizens: a quality public school system for kindergarten through college, adequate infrastructure, law enforcement, safe drinking water, solid waste disposal, and other functions and services that may be deemed necessary. A revenue system that generates less revenue or more than what is needed to sustain that level of service should be redesigned.

For these reasons, revenue projections must address two key questions: How much revenue is enough and how fast should revenue grow? Answering these questions will answer others, such as: how will the revenue system work over time? Will it generate an acceptable level of revenue for the demands of the next ten or fifteen years? Will revenue grow faster or more slowly than demand for services? These are the kinds of questions that this report is designed to address.

This report addressed these questions by developing revenue projections to fiscal year 2009-10 for South Carolina's general fund. The general fund consists of state own-source revenue. Revenue from federal sources is excluded from the general fund. See appendix 1 for a brief discussion of federal revenue.

How Much Revenue is Enough?

There is no good method to determine how much revenue a state needs in order to meet its citizens' legitimate demands for publicly provided goods and services. For example, the question of whether the fiscal year 1996-97 general fund revenue of \$4.6 billion is too much, not enough, or just right for South Carolina is a challenging one to answer. One could attempt to

¹ William M. Gentry and Helen F. Ladd, "State Tax Structure and Multiple Policy Objectives," *National Tax Journal* 47 (December 1994): 747.

answer that question by looking at how revenue in South Carolina, relative to the state's income and population, compares to revenue in other states, particularly neighboring states like North Carolina, Georgia, Alabama, and Tennessee. Alternatively, one could compare what South Carolina spends on important public services to spending in other states (Table 1). Spending in South Carolina is more centralized than in many other states, which makes South Carolina's state-only per capita revenue and expenditure levels appear to be high by regional standards. Because different states divide responsibility between the state and local governments in different ways, the combined state and local revenue and spending figures are more meaningful for purposes of comparison.

South Carolina's combined state and local revenue and expenditures per capita are below the national average and very close to regional norms. Combined revenue per capita is within a few dollars of the neighboring states of Georgia and North Carolina. Combined spending per capita is higher than the regional average, but education spending is well within the range of nearby states. These comparisons suggest that the state has settled on an acceptable revenue level.

How Fast Should Revenue Grow?

Once a state settles on a revenue level that appears to balance the public's desire for services with its reluctance to pay taxes, there are ways to determine how fast revenue should grow. When a revenue system is in place, it is possible to project revenue and anticipate changes in expenditure needs within an acceptable degree of accuracy. These projections help to deter-

Table 1
Revenue and Expenditures, 1993-94
South Carolina and Neighboring States

	US	SC	GA	NC	TN	AL
Population, 7/1/94 est. in millions	260	3.7	7.1	7.1	5.2	4.2
Per Capita Income (thousands)	\$22.0	\$17.9	\$20.6	\$19.9	\$20.0	\$18.3
Per Capita State Revenue	\$3,233	\$3,075	\$2,589	\$2,977	\$2,459	\$2,751
Per Capita State & Local Revenue	\$5,144	\$4,525	\$4,550	\$4,485	\$4,600	\$4,186
Per Capita State Spending	\$2,977	\$3,065	\$2,385	\$2,634	\$2,307	\$2,565
Per Capita State & Local Spending	\$4,856	\$4,469	\$4,242	\$4,131	\$4,324	\$4,084
Per Pupil Spending K-12 (1992-93)	\$5,594	\$4,624	\$4,686	\$4,763	\$3,993	\$3,761

• State and local government finances and population estimates: US, Dept. of Commerce, Bureau of the Census, *State & Local Government Finances by Level of Government: 1993-94*, at URL

"<http://www.census.gov/govs/estimate/>".

• Personal income: US, Dept. of Commerce, Bureau of Economic Analysis, "Comprehensive Revision of State Personal Income, 1969-1995," *Survey of Current Business*, 76 (October 1996), pp. 60, 63.

• Education finance: US, Dept. of Education, Office of Educational Research and Improvement, National Center for Education Statistics, *Digest of Education Statistics 1995*, NCES 95-029 (1995), p. 164.

mine whether revenue or spending will be in balance at some future date and whether one is likely to grow faster than the other.

At a minimum, public revenue needs to keep pace with the growth of population and inflation so that the *real* (inflation-adjusted) per capita level of services can be maintained. From 1984-85 to 1994-95 (Table 2) just over 1 percent revenue growth per year was needed to keep pace with population growth alone, about 3 percent revenue growth per year to keep pace with inflation alone, and just over 4 percent revenue growth per year to keep pace with population growth combined with inflation. If revenue is growing at no less than the combined growth rate of population and inflation, then real revenue per person will remain constant. If revenue grows faster than inflation and population, then some improvements in services can also be provided.

In addition, public demand for services puts upward pressure on revenue growth. As private incomes rise, people desire an increased quality and variety of public services which keep pace with growth of their private income and consumption. They expect better police and fire protection for their more expensive possessions, better roads for their finer cars, more public recreation facilities for their increased leisure time, a better education for their children. If this demand for services continues to grow, public revenue will have to grow at about the same rate as personal income in order to accommodate not only population growth and inflation but also

Table 2
Growth Factors, 1985-1995

	US Total	US Annual Average	SC Total	SC Annual Average
Population Growth	10.44%	1.00%	11.20%	1.07%
Inflation (GDP deflator)	34.21%	2.99%	34.21%	2.99%
Population Growth & Inflation	48.22%	4.01%	49.25%	4.08%
Personal Income Growth	77.92%	5.93%	88.61%	6.55%
Real Personal Income Growth	25.62%	2.31%	33.17%	2.91%
Per Capita Personal Income Growth	61.12%	4.89%	69.63%	5.43%
Real Per Capita Income Growth	13.76%	1.30%	19.76%	1.82%

- Consumer Price Index used to compute real personal income.
- Changes in the GDP Price Deflator for State and Local Government Expenditures used as a proxy for inflation in governmental sector.
- Population and Consumer Price Index: US, Dept. of Commerce, Bureau of the Census, *Statistical Abstract of the United States 1996*, 116th ed. (Washington, DC: Government Printing Office, 1996), pp. 28, 483.
- Personal income: US, Dept. of Commerce, Bureau of Economic Analysis, "Comprehensive Revision of State Personal Income, 1969-1995," *Survey of Current Business*, 76 (October 1996), pp. 60, 63.
- GDP deflator for State and Local Government Expenditures: US, President, *Economic Report of the President* (Washington, DC: Government Printing Office, February 1997), p. 305.

any real increase in demand for public services. From 1985-86 to 1995-96, general fund revenue grew at a rate of 4.8 percent per year—a little faster than needed to keep pace with population and inflation, but less than the state’s 6.5 percent personal income growth rate.

Alternatively, one can focus on expenditure growth. With this approach, revenue requirements are determined by the spending growth needed to fulfill past legislative commitments, maintain existing services, and address the specific needs of groups that may be growing at different rates than the overall state population. This method would develop a spending target and then determine how rapidly revenue would have to grow in order to meet that target. This method is closer to the budget process used in most states including South Carolina. This report projects state general fund revenue independently of projected spending.

Tax Bases and Tax Revenue

Projecting revenue is always difficult because of unforeseeable changes that can occur. It is particularly difficult to project changes in revenue that result from changes in tax structure or rates because a change in the tax rate will affect the tax base. High tax rates on anything— income, wealth, retail purchases, alcohol, tobacco, gasoline, property, tourist accommodations— will depress the amount of income earned, wealth accumulated, retail goods sold, alcohol consumed, and so on. In other words, higher tax rates will reduce the tax base.

Elasticity

The relationship between the tax base and the tax rate is captured by the economic concept of *elasticity*. Elasticity measures the percentage change in one quantity (such as taxable sales or property value) in response to a percentage change in another quantity (such as price or tax rate). When tax rates go up, they normally generate more revenue. However, the increase in revenue is usually less than proportional to the increase in the tax rate. This effect occurs for two reasons.

First, when taxes go up buyers have to give up a larger share of their income to make the same purchase, so they cut back some on purchases to compensate. They may forgo electric door locks or a bigger engine on a car, build a slightly smaller house, or cut back on purchases of food or clothing. Second, people substitute. If some items are taxed more heavily than others, they switch to items with less tax. If some states have lower tax rates than others, they switch to other states. This response to a tax increase may include shopping in Georgia if the sales tax is lower, living in Florida because there is no income tax, or relocating to an unincorporated area or a low-tax jurisdiction to hold down the property tax burden.

When taxes are reduced, there are opposite kinds of effects. Legislating new exemptions and exclusions from the income or sales tax will reduce the tax base relative to personal income. These changes will reduce the amount of revenue from the tax in the immediate future, but the effects of exemptions and exclusions on the growth of revenue over time can be difficult to project. In many cases, a new exemption will not only cause an immediate reduction in the level of revenue but it will also slow the growth of the base as more people take advantage of the

exemption. For example, the proposed expanded income tax exemption of a portion of income for people over age 65 will make South Carolina more attractive to retirees and will increase the loss of potential revenue over time as more retirees move to the state than may have moved otherwise. Such delayed responses make the long-term effects of policy changes harder to project than the immediate effects.

Tax Base Elasticity

Assuming that the current tax structure remains unchanged, the revenue that can be generated from a particular source depends on the growth of income and how the tax base grows with income. The most commonly used measure of growth in the tax base is called *tax base elasticity*, which is simply the percentage change in the tax base resulting from a one percent increase in income. Income is usually measured as either state personal income or gross state product. Personal income is a useful indicator of both ability to pay taxes and demand for public services because it captures three important measures: growth in population, inflation, and growth in real per capita income.

Measures of Elasticity

The values of the income elasticities for various kinds of taxes are the most important single factor in projecting revenue (Table 3). Small differences in elasticities can result in large differences in projections over the thirteen-year period examined in this report. The national income elasticities were calculated by economic researchers who develop national profiles of state tax bases and their growth over time as state personal income increases. While these national elasticity figures are provided for comparison purposes, they were not used for revenue projections

Table 3
Elasticities of South Carolina State Tax Bases
With Respect To Personal Income

Tax Base	National^a	SC Budget and Control Board	South Carolina 1986-1997 (historical)^b	Infrastructure Study (estimated)
Individual Income Tax	1.215	1.1	1.051	1.006
Corporate Income Tax	0.670	N/A	0.35	1.01
Retail Sales Tax	0.660	0.9	0.817	1.006
Alcoholic Beverages	0.254	N/A	0.19	N/A

N/A = not available.

^a National elasticity estimates for personal income tax, corporate income tax, retail sales tax, motor fuels, and alcoholic beverages are taken from: Russell S. Sobel and Randall G. Holcombe, "Measuring the Growth and Variability of Tax Bases over the Business Cycle," *National Tax Journal* XLVIV (December 1996), pp. 535-552.

^b South Carolina historical elasticities are calculated from actual tax data for 1985-86 to 1996-97, a period when there were relatively few changes in the structure of these taxes

because the average tax bases do not correspond very closely to the South Carolina tax structure.

The state's chief economist at the South Carolina State Budget and Control Board has projected a revenue growth rate of 5.1 percent per year through 2004-05.² This growth rate is based on the state's tax structure prior to the 1997 legislative session. It is also based on the assumption that personal income will grow at a rate of 5.5 percent per year, of which 3.8 percent is inflation and 1.7 percent is real growth.³

The Budget and Control Board uses an income elasticity for forecasting purposes equal to 1.1 for the individual income tax and 0.9 for the retail sales tax. These figures mean that a 1 percent increase in personal income will result in a 1.1 percent increase in individual income tax revenue and a 0.9 percent increase in retail sales tax revenue. (Elasticities for corporate income and alcoholic beverages taxes were not provided.)

Values for individual tax base elasticities for South Carolina can also be calculated using historical data on revenue and income growth. From 1985-86 to 1994-95, the only South Carolina tax whose base was more sensitive to growth in income than in the nation as a whole was the retail sales tax. For the other three taxes—individual income, corporate income, and alcoholic beverages—South Carolina's revenue grew more slowly than the national average when personal income grew. Lower-than-average income elasticities for these other three taxes reflect a relatively flat income tax, taxes on alcohol expressed in terms of physical volume rather than as a percentage of price, and the use of corporate income tax breaks as a business incentive tool.

Using these data, the weighted average historical income elasticity was calculated for the four taxes as 0.758. These four taxes accounted for 85 percent of all recurring state revenue in 1996-97. This elasticity figure means that a 10 percent increase in personal income (from growth in population, inflation, and real income combined) would result in a 7.6 percent increase in combined revenue from these taxes.

A final source of elasticity measures is the *South Carolina Infrastructure Study*, released in May 1997.⁴ The authors of the infrastructure study do not use elasticities directly in their revenue projections, but they do assume certain growth rates for each major revenue source. These growth rates, adjusted for inflation, are 1.1 percent per year for sales and individual income taxes and 1.5 percent per year for corporate income tax. Because the Budget and Control Board projects 1.7 percent per year growth in real personal income and the infrastructure study assumes annual state population growth of 1.2 percent, it is possible to calculate the implied elasticities contained in the study's revenue projection (Table 3).

² Historical summaries, state general fund revenue and expenditure projections, and associated assumptions used in official state projections were provided by the State Budget and Control Board.

³ This ratio of general revenue growth to personal income growth is just a little higher than the ratio used nationally by the National Conference of State Legislatures: 0.927 vs. 0.902. See National Conference of State Legislatures, *State Budget Actions 1996* (Washington, DC: NCSL, November 1996).

⁴ *South Carolina Infrastructure Study*, prepared by Rutgers University, Wilbur Smith & Associates, Siemon, Larsen & Marsh, and Sandstone Environmental Associates, Inc. for the South Carolina Advisory Commission on Intergovernmental Relations (Columbia, SC: SCACIR, May 1997), p. 171.

Revenue Projections Based on Total Revenue

As a first step in projecting the overall level of general fund revenue in 2009-2010, two projections of total revenue in 1996-97 were made using the Budget and Control Board's growth rate and historical elasticities (Table 4). Then the infrastructure study's revenue projection for 2009-10 was adjusted to allow comparison with the two other methods.

The first revenue projection was based on the Budget and Control Board's projections through 2004-05. The Budget and Control Board projections are fairly optimistic in terms of elasticities and expected personal income growth. Because these projections were developed in 1996, they do not fully reflect the impact of recent legislation or actual 1996-97 revenue. In adapting and extending these projections, the Budget and Control Board's projected revenue for 1996-97 revenue was replaced with actual 1996-97 data now available; then revenue was projected to 2009-10 using the same overall growth rate that was implicit in its projections. This method yielded estimated 2009-10 revenue of \$8.3 billion.

The second revenue projection was based on historical elasticities. The weighted average elasticity of the individual income tax, corporate income tax, retail sales tax, and the two taxes on alcoholic beverages is 0.758, based on actual data from 1990 to 1997. This same revenue elasticity was then applied to the remaining 15 percent of state revenue. The historical elasticity method resulted in a more conservative projection of \$7.8 billion for general fund revenue in 2009-10.

The most optimistic total revenue projection, which extends to 2009-10 and beyond, is found in the recent *South Carolina Infrastructure Study*. The study's projection for 2009-10, when converted to current dollars, came to \$8.7 billion. However, the underlying elasticities and income assumptions in the study may be too optimistic, and the study does not take adequate account of recent changes in the tax structure.

Projecting Revenue Based on Revenue Components

The general fund revenue projections in Table 4 provide a useful base line. However, within each tax base are factors that may reduce or increase the overall projection. For this reason,

Table 4
Projected General Fund Revenue, 2009-10
Total Revenue Projection Methods
(in millions of dollars)

Method	Revenue Projection
BCB Growth Rate	\$8,334
Historical Elasticities	\$7,801
South Carolina Infrastructure Study	\$8,700

South Carolina's major general fund revenue sources were considered separately for purposes of projection.

Revenue from the individual income tax, corporate income tax, and sales tax, which supplied 82 percent of the state's general fund revenue in 1996-97, was projected separately to 2009-10. For the individual income tax, two revenue projections were developed, one using the historical elasticity and the other using the Budget and Control Board's elasticity. Then these two projections were adjusted for the expected revenue loss from business tax incentives and income tax exclusions for the elderly, yielding a range for individual income tax revenue in 2009-10 of \$3.67 billion to \$3.97 billion, depending on which projection was used. A single projection of the corporate income tax based on the Budget and Control Board's growth rate yielded revenue of \$207 million in 2009-10 after adjustments for business tax incentives and income tax exclusions. A similar procedure for the sales tax resulted in projected revenue of \$3.04 billion. The remaining 18 percent of general fund revenue from many small revenue sources was projected using Budget and Control Board growth rates.

The South Carolina Personal Income Tax

South Carolina has had a personal income tax since 1922. The tax is mildly progressive, reaching a top rate of 7 percent at a relatively modest income level of \$10,600. Beginning in 1985, the tax base was linked closely to the federal definition of taxable income, so that the tax base changes as the federal income tax code changes (with a few exceptions). Because exemptions and the standard deduction are indexed for inflation, the South Carolina tax base is also partially indexed for inflation.

South Carolina does offer a few targeted benefits in addition to those in the federal tax code. A double exemption for children under age 6 is being phased in starting in 1995. Retirees receiving pensions can elect a \$3,000 per year pension exclusion at the time they retire or a \$10,000 per year pension exclusion starting at age 65. (Those over 65 also receive the additional exemption provided for in the federal tax code.) Beginning in 1996, the General Assembly created a general \$10,000 income exclusion for persons over 65. This exclusion rose to \$11,500 in 1997; however, the pension credit must be offset against this sum. Social Security benefits are not taxed regardless of other income. For a retired person in the 7 percent state tax bracket with a combined pension and Social Security income of at least \$40,000, the combined value of these benefits is over \$2,000 in tax savings.

The South Carolina personal income tax accounted for over \$1.9 billion or 42 percent of state recurring revenue in 1996-97. Per capita personal income taxes were \$523. In 1992 (the most recent available year for rankings), South Carolina ranked twenty-ninth among the 41 states with broad-based personal income taxes in per capita revenue from this source. The state also ranked twenty-second in personal income tax as a percent of income.⁵ From 1990-91 to 1996-97, revenue from the income tax grew at an average of 5.7 percent per year (not adjusted for inflation). In comparison, personal income, which approximately corresponds to the revenue

⁵ US, Advisory Commission on Intergovernmental Relations, *Significant Features of Fiscal Federalism 1994, Volume 2: Revenues and Expenditures* (Washington, DC: Government Printing Office, 1994), p. 187.

base of the income tax, grew from \$53.9 billion to \$69.8 billion between calendar years 1990 and 1995, a growth rate of 5.3 percent per year.⁶

Because the structure of the state income tax has changed very little since it was linked to federal taxable income in 1985, the growth rate of income tax revenue reflects the yield of a stable tax. Over the longer period from 1985-86 to 1995-96, the average growth rate of individual income tax revenue was 7.2 percent per year.

Income Tax Revenue Projections. The projected average annual growth rate of personal income tax revenue from 1996-97 to 2004-05 is 6.1 percent, according to the state's chief economist. This rate is a little faster than that for the last five years but less than the average for the ten-year period from 1985-86 to 1995-96. Before adjustments for economic development incentives, retiree exemptions, and property tax relief, however, the projected growth rate is 6.8 percent per year, which is close to the 6.55 percent rate of growth of personal income over the past ten years. The Budget and Control Board's 6.1 percent growth rate would yield personal income tax revenue of \$4.17 billion in 2009-10 with no other adjustments or policy changes. The more conservative projections based on 5.5 percent income growth and elasticity, calculated from 1990 to 1997, are preferred (Table 5).

Tax Breaks for the Elderly. Another factor that can affect the state's income tax revenue is tax breaks for people over age 65. Preliminary estimates suggest that about 16 percent of the state's

Table 5
Projected Income Tax Revenue, 2009-10
(in millions of dollars)

Method	Projected Revenue Before Adjustment	After Loss From Business Incentives^a
Individual Income Tax^b		
BCB Growth Rate	\$4,130	\$3,967
Historical Elasticities and Income Growth	\$3,838	\$3,675
Corporate Income Tax		
BCB Growth Rate	\$292	\$207
Range of Estimates for Personal and Corporate Income Tax combined		\$3,882 to \$4,422

^a See *Business Incentives: Projected Fiscal Costs*, working paper 4 in this series.

^b Projections include estimated revenue loss from the \$11,500 elderly income exclusion.

⁶ US, Dept. of Commerce, Bureau of Economic Analysis, "Comprehensive Revision of State Personal Income, 1969-95," *Survey of Current Business* 76 (October 1996), p. 60.

population will be over age 65 in 2010, compared to 12 percent in 1995.⁷ The growth of the elderly population is important because of their special tax status. Recent changes in that tax status may make the state more attractive to retirees and increase the percentage over age 65 to more than 16 percent.

Prior to the 1996-97 legislative session, the retiree income exemption consisted of two parts. The first part was a pension exclusion of \$3,000 per year for those under age 65 or \$10,000 for those who waited to claim the exemption at age 65. (Social Security benefits are also not taxed by the state; at the federal level, 85 percent of these benefits are taxed for individuals above a certain income level.) The second part of the retiree exemption was a general exclusion of \$10,000, from which any pension exclusion would have to be subtracted. Thus, an individual aged 65 or older could have an income of more than \$30,000 (including average Social Security benefits and allowing for two personal exemptions and a standard deduction) without having a South Carolina income tax liability. For a retired couple, both over age 65 and both receiving pensions and Social Security, the figure rises to almost \$60,000.

In 1997, the governor proposed raising the general retiree income exclusion to \$50,000. The legislature did not agree, but it did raise the exclusion previously approved in 1996 from \$10,000 to \$11,500 for 1997 and beyond. The Budget and Control Board estimates that the cost of that \$1,500 increase alone would be \$2.7 million per year, without any allowance for growth in the elderly population or in their incomes. It was estimated that the cost of the two existing income exclusions together would have been \$17.4 million in 1996-97 and would grow to \$30.8 million in 2004-05. Projecting these estimates for the existing tax breaks plus the new one gives a 2009-10 cost of \$44 million per year in tax breaks for the elderly if no additional tax breaks are created. The revenue projections in Table 5 are adjusted for this income exclusion.

The governor's proposal is likely to surface again in future sessions of the General Assembly. The cost of such an additional tax break is difficult to determine because the majority of senior citizens in South Carolina have gross incomes under \$50,000. An even larger share have taxable incomes under \$50,000 after exempting Social Security, allowing for double personal exemptions, and taking itemized or standard deductions.⁸

Corporate Income Tax

The corporate income tax in South Carolina is a relatively modest source of income. In 1996-97, it generated \$220 million or about 5 percent of all recurring revenue. Because the jobs tax credits will start in 1997, the Budget and Control Board projects essentially no growth in corporate income tax revenue until 2001-02. The Budget and Control Board also expects the jobs tax

⁷ Campbell, Paul R., 1996, *Population Projections for States by Age, Sex, Race, and Hispanic Origin: 1995 to 2025*, U.S. Bureau of the Census, Population Division, PPL-47. "Table 4. Projections of the Population, by Age and Sex, for Regions, Divisions, and States: 1995 to 2025 - Series A (Preferred Series)."

⁸ If the average 65+ household of two persons had a gross income equal to the state average of \$35,000, of which \$10,000 was derived from Social Security, and took the standard deduction, then the taxable income before the exclusion would be well under \$11,500 and the increased exemption would have no effect for that household.

credit to cost \$7.3 million in revenue in 1996-97, increasing to \$23.5 million in 2000-2001 and remaining at that level thereafter.

The Budget and Control Board's no-growth revenue projection marks a sharp departure from the pattern of the recent past. Corporate income tax revenue showed particularly rapid growth in 1993-94 and 1994-95 and had average annual growth over the 1990-91 to 1996-97 period of 7.5 percent per year. Over the longer period from 1985-86 to 1996-97, corporate income tax revenue grew at an annual average rate of 1.6 percent, considerably less than the rate of growth of personal income. After 2000-01, the Budget and Control Board estimates an annual growth rate of 2.2 percent. Projected to 2009-10, the corporate income tax is expected to yield \$292 million in revenue or about 3 percent of all recurring revenue (Table 5).

Corporate income tax revenue is reduced by the state's business tax incentives. Corporate income tax revenue losses from business tax incentives are estimated to be \$85.3 million in 2009-10. In contrast, the Budget and Control Board's estimates show these costs leveling off at \$25 million through 2004-05, that group's farthest projection date (Table 5).

Retail Sales Tax

South Carolina adopted a retail sales tax in 1951. This tax is quite broad-based as far as tangible goods are concerned. It includes food (exempt in 27 of the 45 states with retail sales taxes) and business purchases, but most services are exempt. Hotel and motel rentals and dry cleaning services are among the few services taxed in South Carolina.

South Carolina's tax rate of 5 percent is the most common state retail tax rate, shared by thirteen other states in 1995. Seventeen states and the District of Columbia use higher rates ranging up to 7 percent. Fourteen states have lower rates, and five have no retail sales tax.

Eight states raised their sales tax rates during the early 1990s in order to provide enough revenue, many of them in response to the 1990-92 recession. South Carolina, however, has held the state retail sales tax rate at 5 percent since 1985. Two states, Connecticut and New Jersey, reduced their sales tax rates in recent years, but Connecticut linked that reduction to imposition of a first-time income tax. Michigan increased its sales tax rate from 4 percent to 6 percent in order to fund property tax relief. Other states have broadened the base by eliminating exemptions or taxing more services. There is a clear national preference for the sales tax over the income and property taxes that has resulted in a change in the tax mix in other states as well as in South Carolina, where the local sales tax has been used to provide property tax relief.

In 1996-97, South Carolina collected \$1.6 billion in retail sales taxes or 35 percent of all state recurring revenue. Personal income and retail sales taxes together accounted for more than three-quarters of all state revenue. Per capita sales taxes were \$438. In 1992, South Carolina ranked thirty-fifth among the states in per capita retail sales taxes and twenty-sixth in sales taxes as a percentage of personal income. The last major change in the state sales tax was the rate increase from 4 percent to 5 percent in 1984. The local option sales tax was authorized in 1990 at a rate of 1 percent and to date has been adopted in 25 of the state's 46 counties.⁹

⁹ Local option sales taxes are discussed in *Local Revenue*, working paper 2 in this series by Holley H. Ulbrich.

The income elasticity for the sales tax is always lower than for the individual income tax because as income rises, spending on items subject to sales tax declines. Higher income individuals are more likely to save or to spend more on services not subject to tax. Income elasticity of sales tax revenue is determined by what happens to the base of the sales tax as income rises.

Richard Dye and Theresa McGuire¹⁰ have estimated this growth rate for various alternative specifications of the tax base, that is, which purchases were taxable and which were exempt. The growth rate of a tax base for a retail sales tax like South Carolina's, which taxes most tangible goods (including food) but exempts most services, averaged only about 1.93 percent per year from 1968 to 1986. This kind of base shows the lowest growth rate of any of the retail sales tax bases analyzed. (Other bases excluded food, and/or included more utilities, business services, or consumer services. However, including food gives a larger tax base than many structures that tax more services but exclude food.)

Over the period from 1985-86 to 1996-97, sales tax revenue growth in South Carolina averaged 5.9 percent per year while personal income rose 7.2 percent per year. This growth took place during a period where there were no substantive changes to either the rate or the base of the sales tax. The Budget and Control Board estimates that annual growth in sales tax revenue will average 4.95 percent through 2004-05. Projecting 1996-97 revenue to 2009-10 using this growth rate yields retail sales tax revenue of \$3.04 billion (Table 6).

Policy Issues. At present, no major proposals for change are under serious consideration for the sales tax that would affect the amount of revenue it generates, but some proposals casually discussed in the past could raise or lower revenue. There is some interest in removing or redesigning the present \$300 sales tax cap on automobiles and boats, which would generate somewhat more revenue, especially as a partial offset to proposed elimination of property taxes on motor vehicles. If the cap had been eliminated, it would have generated an estimated \$97 million in additional state sales tax revenue in 1996-97.

Table 6
Projected Retail Sales Tax Revenue, 2009-10
(in millions of dollars)

Method	Revenue Projection
Continued Growth at Current Rate (Base Line)	\$3,036
Plus Elimination of Cap on Autos	\$3,374
Plus Elimination of Sales Tax on Food	\$2,731
Plus Elimination of Cap on Autos and Sales Tax on Food	\$3,069

¹⁰ Richard F. Dye and Theresa J. McGuire, "Expanding the Sales Tax Base: Implications for Growth and Stability," in *Sales Taxation: Critical Issues in Policy and Administration*, William F. Fox, ed. (Westport, CT: Praeger, 1992).

The average income elasticity of demand for automobiles is 2.1,¹¹ so the projected increase in personal income between 1997 and 2010 would suggest an impressive revenue gain in 2009-10 of \$355 million from this higher income level. However, a higher sales tax would probably reduce that growth because of the higher total purchase price including tax. If the cap were removed, the price of a car would increase by 6 percent less \$300 (assuming all counties adopt the local sales tax).

The average price elasticity of demand for automobiles has been estimated at -0.8.¹² If the average (new and used) car price was \$12,000, the increased tax would reduce sales volume by 4.4 percent in the initial year and would reduce projected additional revenue in 2009-10 from \$355 million to \$338 million.

A sales tax exemption on food is also proposed from time to time as a way to make the sales tax less regressive. Both Georgia and Louisiana have just joined the other 27 states exempting food from the sales tax. However, such relief is costly in terms of both revenue and administration. According to the Budget and Control Board, full exemption would reduce revenue by an estimated \$206 million in 1997-98. Assuming that food purchases continue to grow at a rate that is only 60 percent of the growth rate for overall purchases, the cost of a full food tax exemption is estimated to be \$305 million by 2009-10.¹³ Because of the high cost, past proposals for an exemption have always phased it in over a period of several years.

A net revenue gain of about \$33 million would occur. If these two changes in the sales tax were enacted—the elimination of the tax cap on automobiles and boats increasing revenue and the removal of the sales tax from food decreasing revenue. It should be noted, however, that these two changes would have other effects as well. Both changes would reduce the regressivity of the sales tax structure by putting a larger share of the cost on middle and upper income families and less on the poor. Exempting food would also increase the complexity of the sales tax, making it more expensive for the state to collect and for retailers to comply.

Other Developments Affecting Sales Tax Revenue. Although the sales tax continues to be the most popular or at least the most acceptable tax nationally and in South Carolina, there are some clouds on the horizon. One major threat to sales tax revenue is the change in patterns of consumption from tangible goods toward services, few of which are taxed. Some states have broadened the base of their sales taxes to include more services, notably New Mexico, Hawaii, and South Dakota.

Services are difficult and expensive to tax because of the large number of small establishments providing recreational, educational, travel and personal services. However, the mix of consumption has tilted heavily toward services over the last three decades. In 1967, services accounted for 46 percent of personal consumption expenditures; by 1994, that share had risen to

¹¹ Robert F. Bordley and James B. McDonald, "Estimating Aggregate Automotive Income Elasticities From the Population Income-Share Elasticity," *Journal of Business & Economic Statistics* 11 (April 1993), p. 214.

¹² Dean A. Worcester, Jr., "On Monopoly Losses: Comment," *American Economic Review* (December 1975), p. 1016, cited in Ryan C. Amacher and Holley H. Ulbrich, *Economic Principles & Policies*, 6th ed., (Cincinnati, OH: South-Western College Publishing, 1995), p. 482.

¹³ Calculated from data provided in Dye and McGuire, "Expanding the Sales Tax Base."

57 percent.¹⁴ Failure to tax this component of consumption means that growth of sales tax revenue will continue to lag behind growth of personal income by increasing amounts in the future.

Mail order sales are another source of revenue loss because of the difficulty of enforcing the tax collection on out-of-state firms. A related source of revenue loss are sales on the Internet, which is just beginning to function effectively as a method of marketing goods and services. Neither of these threats are easily quantified because the amount of unreported sales is difficult to determine.

Other State Revenue Sources

The remaining 18 percent of 1996-97 state general fund revenue comes from a variety of sources. Selective sales taxes on beer, wine, and distilled liquor generated about 3 percent of state revenue and were growing at an average rate of only 0.8 percent per year from 1991 to 1996-97 (1.5 percent per year from 1986 to 1996-97). Most of these taxes are levied in dollars per physical unit, so unlike revenue from general sales taxes, revenue does not grow with increases in the price of beer, wine and distilled liquor. The Budget and Control Board projects that this revenue source will grow at a rate of 1.6 percent per year through 2004-05. Extending actual 1996-97 revenue at this growth rate to 2009-10 gives projected revenue from all alcoholic beverage taxes of \$153 million per year or less than 2 percent of the total.

Among other revenue sources, the largest category is a group called fees and charges. Fees and charges are difficult to project because they are very diverse and subject to frequent changes. Some fees and charges go into the general fund, while others (such as tuition at public colleges) go directly to a specific agency's budget. It is worth noting that South Carolina collects an above-average share of revenue from fees and charges (13.3 percent) compared to a national average of 8.7 percent in 1992.¹⁵

Because these miscellaneous revenue sources are so diverse, in this study they were forecast as an extension of 1996-97 actual state revenue at Budget and Control Board growth rates through 2009-10. Including excise taxes, alcoholic beverage taxes, fees and charges, casual sales, and miscellaneous items, this category was projected to grow at an annual rate of 1.03 percent per year, from \$686 million in 1996-97 to \$930 million in 2009-10.

Projected State General Fund Revenue by Components

Adding together projections of individual tax components gives yet another forecast of the state's total revenue in 2009-10 (Table 7). This projection, which ranges from \$7.85 billion to \$8.14 billion depending on the method used to project individual income tax revenue, is lower than two of the three projections based on total revenue. Projecting revenue by components allows separate treatment of major revenue sources and also incorporates better estimates of the revenue cost of business tax incentives.

¹⁴ *Economic Report of the President*, February 1996, p. 280.

¹⁵ US, ACIR, *Significant Features of Fiscal Federalism 1994*, Volume 2, p. 190.

Table 7
Projected General Fund Revenue, 2009-10
Revenue Components Method
(in millions of dollars)

Components	Revenue Projection
Individual Income Tax ^a	\$3,675 to 3,967 ^b
Corporate Income Tax ^a	\$207
Sales Tax	\$3,036
Other Revenue Sources	\$930
Total^c	\$7,848 to \$8,140

^aIncludes estimate of revenue loss due to business tax incentives and the \$11,500 retiree income exclusion.

^bLower figure based on historical elasticities; higher based on Budget & Control Board's growth rate.

^cDetail may not sum to totals due to rounding.

Summary

As is apparent from the various state revenue projections presented in this paper, revenue projections can vary widely depending on the underlying assumptions about population growth, income growth, and policy changes. For this reason, several revenue projections rather than a single projection were developed (Table 8, Appendix 2).

Of the estimates presented in this report, more credibility is placed on the projections derived from historical elasticities and revenue components. These projections are based on recent past revenue experience and incorporate information specific to each of the component taxes. In addition, the projection based on revenue components reflects recent changes in business tax incentives. It is believed that a general fund revenue projection in the range of \$7.8 to \$7.85 billion in 2009-10 provides a reasonable foundation for planning purposes.

Table 8
Alternative General Fund Revenue Projections, 2009-10
(in millions of dollars)

Method	Revenue Projection
BCB Growth Rates	\$8,334
South Carolina Infrastructure Study	\$8,700
Historical Elasticities	\$7,801
Sum of Revenue Components	\$7,848 to \$8,140

Note: 1996-97 actual revenue equals \$4,587 million.

Appendix 1

Federal Aid

Since the end of federal general revenue sharing to states in 1982, federal aid to states has been earmarked for particular programs and services and is accounted for outside the general fund budget. Therefore, this report focuses exclusively on state-generated revenue. A few remarks on the impact of federal aid on the state budget are warranted, however.

In 1995-96, South Carolina received \$8.1 billion in federal aid, not including direct payments to individuals such as Social Security and veterans' benefits. Between 1983-84 and 1995-96, federal grants to state and local government in South Carolina grew at an average annual rate of 4.3 percent, a little faster than the national average of 4.1 percent. These funds were spread among a number of programs, of which Medicaid was by far the largest (\$1.5 billion) and fastest growing (13 percent per year). Other major federal programs were the Highway Trust Fund, the Child Nutrition Program, and Aid to Families with Dependent Children. In real terms, federal aid to state and local governments nationwide has remained nearly level since the mid-1980s. In South Carolina, although federal aid in real dollar terms has increased slowly, federal aid per capita has declined as population growth has exceeded growth in federal aid.¹⁶ The demise of general revenue sharing, focus on targeted grant funds, and declining aid per capita has increased budget pressures on state and local governments.

The impact of federal aid on state revenue and spending is difficult to predict because it depends on the type of grants provided, the programs they support, and the likelihood of continued funding. Some grants substitute for funds the state would otherwise have to spend, so the loss of these funds would have a negative impact on the state's overall fiscal picture. An example of this type of federal grant is disaster aid. Other grants may induce the state to increase spending in ways it would not have chosen without the inducement of the grant; the loss of these grants might actually improve the state's fiscal situation. Matching grants are one example.

¹⁶ US, Dept. of Commerce, Bureau of the Census, *Federal Expenditures by State for Fiscal Year [1984-96]*, (Washington, DC: Government Printing Office, assorted years), Table 2, Table 4. Population from U.S. Bureau of the Census, various sources.

Appendix 2
South Carolina Revenue Projections , 1997-98 to 2009-10
(in millions of dollars)

	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10
Revenue by Projection Method													
BCB Growth Rate	\$4,803.0	\$5,028.7	\$5,265.0	\$5,512.5	\$5,771.5	\$6,042.8	\$6,326.7	\$6,624.1	\$6,935.4	\$7,261.3	\$7,602.6	\$7,959.9	\$8,333.9
Historical Elasticities	4,778.6	4,977.9	5,185.4	5,401.6	5,626.7	5,861.3	6,105.7	6,360.2	6,625.4	6,901.6	7,189.3	7,489.1	7,801.3
Sum of Revenue Components ^a	4,735.2	4,930.2	5,130.4	5,345.9	5,572.1	5,809.8	6,059.4	6,321.8	6,597.4	6,887.1	7,191.5	7,511.5	7,847.8

^a Adjusted for projected revenue losses from business tax incentives and income tax exclusions. Individual income tax component projection based on historical elasticities.