

Potential Sources of New Revenue for Rutherford County

**Business and Economic Research Center
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Introduction

Rutherford County is between a rock and a hard place: the county has added more population in the past two years than have four *states*;¹ school enrollment continues to increase rapidly, with future annual increases expected in the range of 4 percent to 5 percent; additional capital expenditures required by schools are large; state-shared taxes were cut this year with more cuts likely in the future; the costs of providing existing levels of service are rising; taxes that grow most rapidly flow to the state instead of to the county; property owners are increasingly unhappy about larger property tax bills; and developers feel that the benefits of growth are under-appreciated.

What This Study Does

This study examines potential sources of new revenue for Rutherford County. A number of options are considered; we believe these options are the most promising alternatives in terms of revenue potential and the ability to implement. This study does not make recommendations about which of the options to choose. We make no judgments about growth—whether it does or should pay for new schools and other capital improvements. We merely provide options for the question, “How can we diversify our sources of revenue and at the same time generate funds sufficient for rapidly growing demand for public services?”

The study first briefly outlines the demand for public services in Rutherford County, with overviews of expenditure patterns and current sources of revenue. The study then turns to an analysis of several potential sources of new revenue.

¹ Rutherford County added more population than did Vermont, Montana, South Dakota, and Wyoming from 2000 to 2002.

Summary of Findings

- The outlook is beginning to improve:
 - Local option sales tax revenue is on the rebound;
 - Climbing mortgage rates will eventually reduce the growth of demand for new housing;
- Diversity of revenue sources is desirable because sales tax revenues fluctuate, requiring periodic spending cuts or property tax increases, or both.
- Substantial revenues can be generated by many of the options discussed below.
- All of the options will raise costs for businesses and reduce disposable incomes for households.
- Few of the options are easy to implement.

Demand for County Government Services

Rapid population growth increases the demand for public services including education, streets and roads, law enforcement, parks and recreation, water, storm drainage, and so on. The growth of education demand is closely linked with population increases in Rutherford County. Combined average daily attendance (ADA) for public schools in Rutherford County (including Murfreesboro city schools and Rutherford County schools) increased from 25,761 in 1996 to 31,069 in 2002, a gain of 20.6 percent.² Population increased by 23.5 percent during the same period for Rutherford County.

Average daily attendance in Tennessee public schools is not rising nearly as quickly as population. Tennessee ADA increased 28,677, a gain of just 3.5 percent from 1996 to 2002, much slower than the 7.0 percent increase in the state's population. Remarkably, 18.5 percent of the total state increase in ADA during the period occurred in Rutherford County, even though the county comprises just 3.7 percent of the state's school attendance.

² Figures obtained online from the Tennessee Department of Education:
<http://www.state.tn.us/education/mreport.htm>.

Expenditures by Rutherford County

The growth of county expenditures is driven both by rising demand for services and rising costs of providing those services. During the five-year period 1997-2002, operating expenditures increased at an annual average rate of 8.0 percent, driven by increasing school attendance, increased spending for law enforcement, and rising payroll and benefits expenses. Increases in the local option sales tax, the wheel tax, and the development tax boosted revenue in 2001 but local tax revenue slowed considerably thereafter due, in part, to the lingering effects of the economic slowdown on household and business expenditures.

Structure of Expenditures

Major responsibilities for Rutherford County government include education, public safety, courts and the administration of justice, roads and bridges, and health and welfare.

By far the largest component of county government spending is education, accounting for 62.9 percent of recurring expenditures in fiscal year 2002. In all, approximately nine of every ten dollars spent (excluding capital expenditures) are in the largest five categories: education, debt service, public safety, health and welfare, and highway and bridge maintenance (Table 1).

Table 1: Rutherford County Expenditures by Category for Fiscal Year 2002 (Thousand \$)

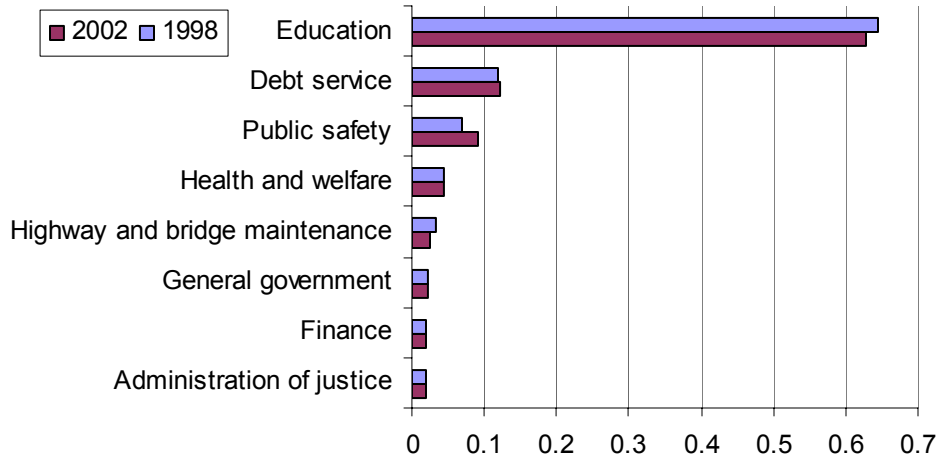
Education	138,682
Debt service	26,607
Public safety	19,927
Health and welfare	9,504
Highway and bridge maintenance	5,555
General government	4,647
Finance	4,393
Administration of justice	4,267
All other	6,991
Total	220,573

Source: Comprehensive Annual Financial Report, Rutherford County, for the year ended June 30, 2002.

The distribution of expenditures shifted somewhat from 1998 to 2002, particularly regarding education and public safety; the share of total recurring spending for education dropped from 64.3 percent to 62.9 percent, while the share for public safety increased from 7.0 percent to 9.0 percent. The increase in public safety's share of expenditures can be attributed to additional revenue generated by the wheel tax increase in 2001. The percentage of expenditures for debt service increased somewhat from 2000 (10.89

percent) to 2002 (12.06 percent) but still is not substantially different from the percentages that prevailed from 1996 to 1999.

Figure 1: Distribution of Expenditures by Major Category, Rutherford County, 1998 and 2002



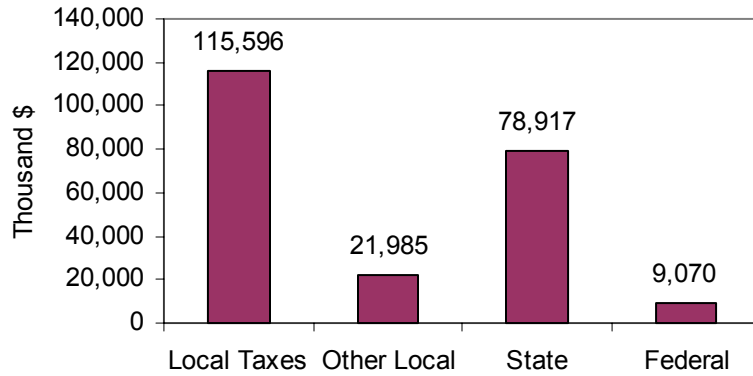
According to the Tennessee Department of Education, operating expenditures per average daily attendance (ADA) by the Rutherford County schools were \$5,748 in 2002, approximately 91 percent of the state average of \$6,349 per ADA. Spending per ADA grew 32 percent from 1996 to 2002 for Rutherford County, compared with the statewide increase of 34 percent during the same period.

Current Sources of Revenue for Rutherford County

Revenues available to the county consist of local tax revenues, other local revenues, revenues from the state, and federal revenues (Figure 2). Local taxes produce more than half of the county's revenue, about 51.2 percent in fiscal year 2002. The share of local taxes in total revenue is growing, with the 2002 percentage up from an average of 48.3 percent from 1997 to 2000. Increases in tax rates for the local option sales tax, wheel tax, and development tax along with slower growth of state revenues combined to boost the share of local taxes in total revenue. Revenue from the state fell from 38.2 percent of total revenues in 1997 to 35.0 percent in 2002.

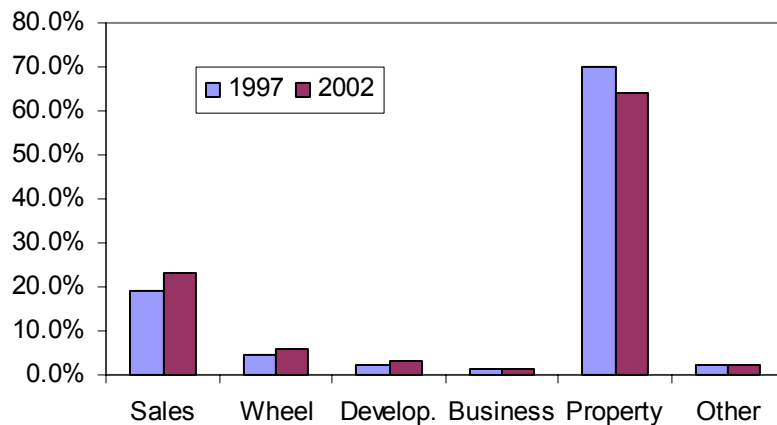
Other local revenues include receipts from licenses and permits, fines and forfeitures, charges for services, and other local sources. About nine of ten dollars of state revenue in 2002 were designated for education, mostly through the Basic Education Program (BEP) formula. The rest of state revenues consist of state-shared tax revenues and other state funds.

Figure 2: Revenue Sources for Rutherford County
Fiscal Year 2002



Major local tax sources include the property tax, the local option sales tax, the wheel tax, and the development tax. The property tax generated \$74.3 million for Rutherford County in fiscal year 2002, comprising 64.3 percent of total local tax revenue (Figure 3). The local option sales tax produced \$26.8 million in 2002, 23.2 percent of local tax revenue. Smaller but significant amounts were generated by the wheel tax (\$6.6 million), development tax (\$3.9 million), business tax (\$1.4 million), and other local taxes (\$2.6 million).

Figure 3: Shares of Local Tax Revenue
Rutherford County, 1997 and 2002

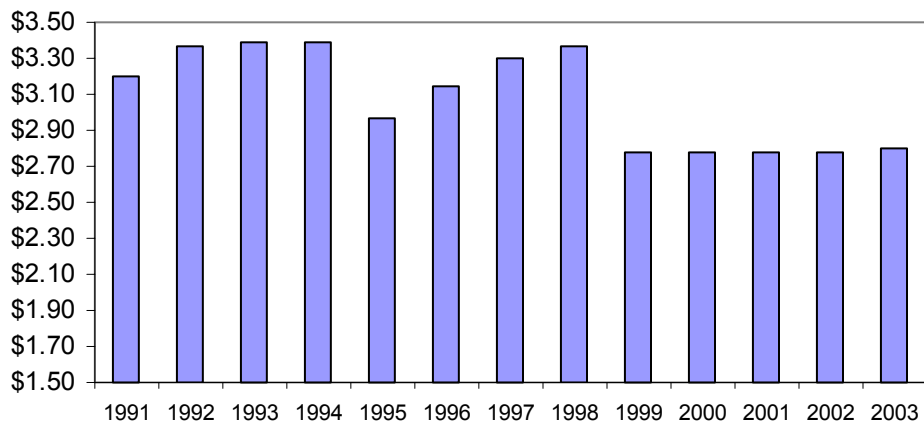


Shares of local tax revenues have shifted over the past few years. Property tax revenues declined from 70.2 percent of local taxes in 1997 to 64.3 percent in 2002, while the shares of the local option sales tax, wheel tax, and development tax all increased (Figure 3).

Property Tax

The current property tax rate of \$2.80 per hundred dollars of assessed valuation is unchanged from fiscal year 2003 but higher than the 2002 tax rate of 2.78 dollars per hundred. The current property tax rate is significantly lower than the rates that prevailed throughout the 1990s (Figure 4).

Figure 4: Property Tax Rates for Rutherford County (per hundred dollars of assessed valuation)



Rapid population growth can increase the demand for housing faster than supply can respond, causing property values to rise and assessments to increase over time.

Rutherford County evaluates property tax assessments on all property once every four years. Property that is sold or has been improved is reassessed concurrently.

Rutherford County's property tax rate is one of the lowest in the eight-county metro area (Figure 5). The total property tax rate, including both county and city property tax rate offers a somewhat different picture. Figure 6 shows the total property tax rate including county, city, and special school district for the largest city within each of the counties of the Nashville MSA. Nashville's total rate is slightly higher than Murfreesboro, with

Franklin (including the special school district) ranking third highest among the largest cities.

Figure 5: Property Tax Rates for Nashville MSA Counties, Fiscal Year 2003

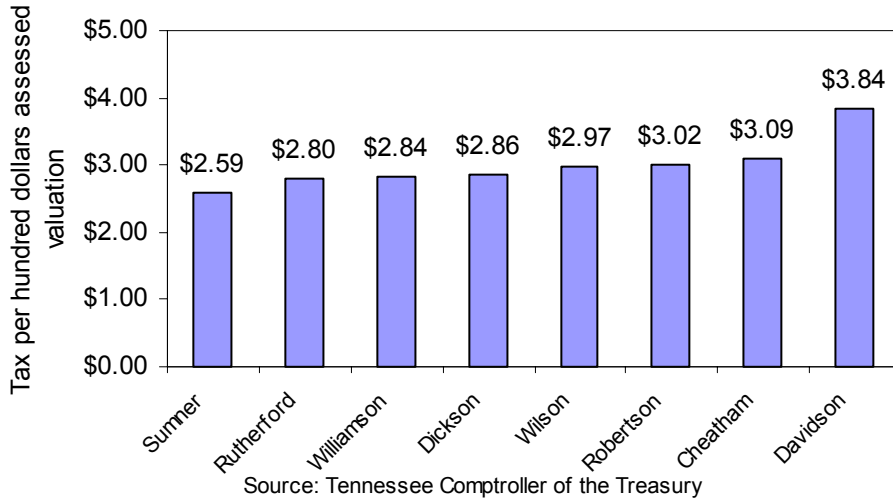
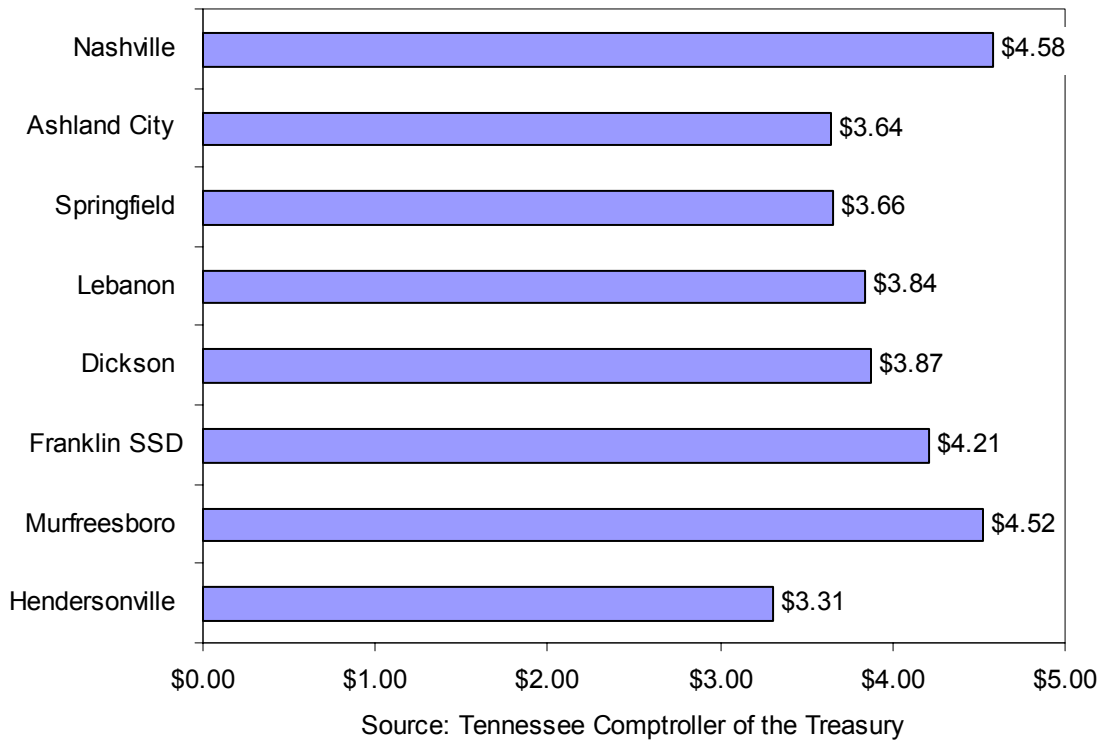


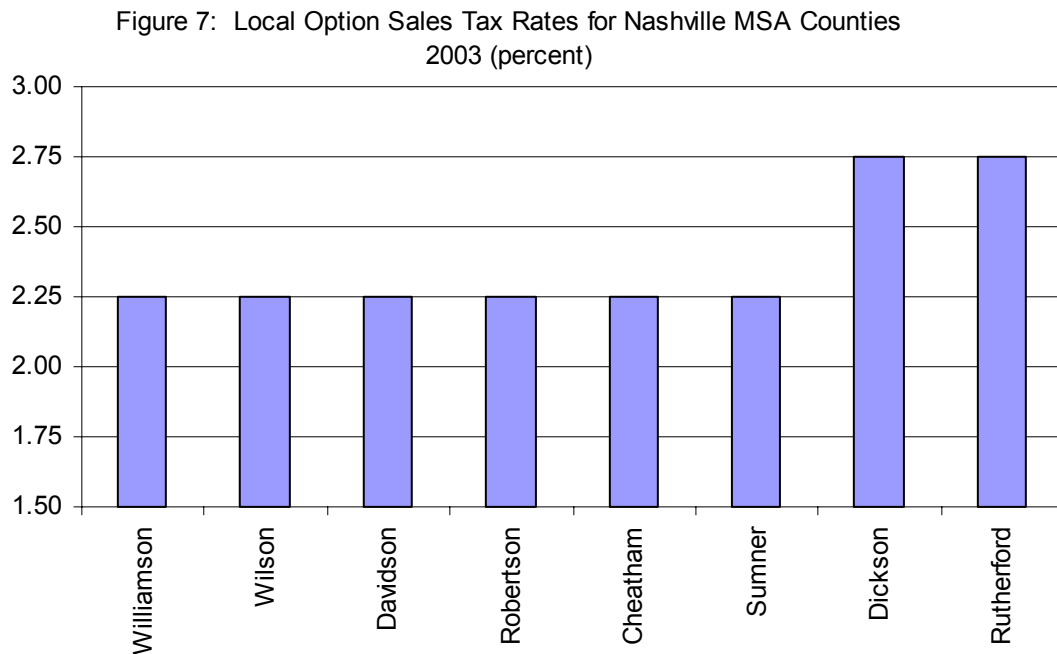
Figure 6: Total Property Tax Rates for Largest City in Each County, Nashville MSA, Fiscal Year 2003



Local Option Sales Tax

The current local option sales tax rate for Rutherford County is at the maximum allowed by Tennessee law at 2.75 percent. The local sales tax rate last changed in fiscal year 2000 when the rate increased from 2.25 percent. In 2002 the state sales tax rate was increased from 6 percent to 7 percent with food items exempted from the increase. The total sales tax rate for Rutherford County now stands at 9.75 percent, one of the highest sales tax rates in the nation. According to the Federation of Tax Administrators, in only three other states (Alabama, Arkansas, and Oklahoma) is the combined state and local sales tax rate more than 9.75 percent for at least one jurisdiction.³

Among the eight counties of the Nashville MSA, Dickson and Rutherford have the highest local option sales tax rates. The remaining counties all share the same local option sales tax rate of 2.25 percent (Figure 7).



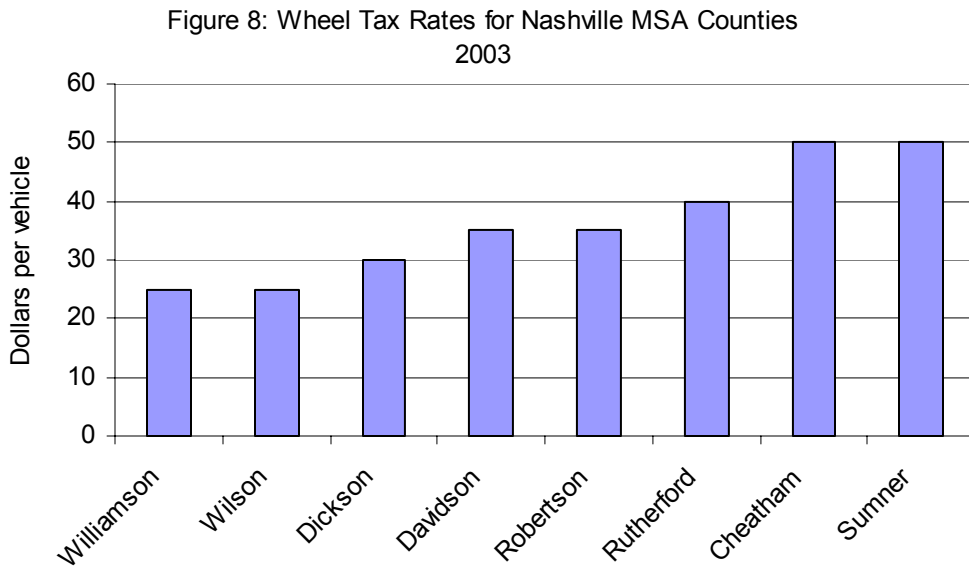
³ “Comparison of State and Local Retail Sales Taxes,” Federation of Tax Administrators, January 2003, available online at http://www.taxadmin.org/fta/rate/sl_sales.html.

Retail centers in Davidson County and Williamson County offer stiff competition for Rutherford County retailers. The county’s relatively high sales tax rate places Rutherford County retailers at a competitive disadvantage with retailers in other nearby counties.

Across Tennessee the local option sales tax rate varies considerably, ranging from 1.50 percent to 2.75 percent. The largest number of counties (39) charge 2.25 percent while the next most prevalent rate is 2.75 percent charged by 26 counties, including Rutherford County.⁴ Fifteen counties charge 2.50 percent and 10 counties charge 2.00 percent. Only five counties charge 1.75 percent or less.

Wheel Tax

Increased from \$25 beginning in fiscal year 2001, the Rutherford County wheel tax now stands at \$40 per vehicle per year. Among the eight counties in the Nashville MSA, only Cheatham and Sumner have higher wheel tax rates (Figure 8).



Summary of Rutherford County Taxes

Rutherford County’s local option sales tax rate is higher than the average county in Tennessee, ranking in the top 27 percent, and higher than all but one county in the Nashville metropolitan area (MSA). The county wheel tax is higher than all but two

⁴ As of fiscal year 2002.

MSA counties and higher than most other counties in Tennessee. The property tax rate is lower than most other counties in the MSA. A summary of current rates is shown in Table 2. The development tax will be discussed below in more detail, as well as the local option sales tax.

Property Tax*	Local Option Sales Tax	Development Tax**	Wheel Tax***	Hotel / Motel Tax
\$2.80	2.75%	\$1,500	\$40	2.5%

*per hundred dollars assessed value
 **per new housing unit
 ***per vehicle

Spending and Revenue in the Future

In this section we construct an illustration, or scenario, that examines potential future paths for expenditures and revenues. We start with assumptions about the growth of expenditures and the growth of revenues and examine the difference between the two for the next five years. It is important to emphasize that the scenario is *not* a prediction of what will occur; we merely discuss one possible path for future expenditures and revenues.

Total expenditures increased at an average annual rate of 6.8 percent from 2000 to 2002, a period of slow growth for the Midstate economy. Over the longer-term period 1993 to 2002 total expenditures grew more rapidly, rising at an 8.1 percent average annual rate. For the purposes of this scenario we assume that total expenditures continue to grow at the 2000-2002 average rate for the five-year period 2002-2007. Beginning with total expenditures of \$220,573,000 in 2002 and applying 6.8 percent annual growth results in total expenditures of \$306,347,000 in 2007, an increase of 38.9 percent. By contrast, total expenditures rose 46.9 percent during the previous five-year period 1997-2002.⁵

As for revenue, we must make assumptions regarding growth from the major sources: local, state, and federal. We assume rather optimistically that state revenue received by

⁵ Data for Rutherford County expenditures and revenues may be found in Table 10.

the county for schools and other purposes grows an average of 5.3 percent per year and federal revenue grows 10.0 percent annually, maintaining recent rates of growth.

For locally-generated revenue we examine three sources: 1) the property tax, 2) all other taxes including local option sales tax, the development tax, the wheel tax, and the business tax, and 3) all other local revenue. Excluding property taxes, the local tax base grew by an average of 8.7 percent annually from 1997 to 2002, and other local revenue increased at an annual rate of 3.7 percent; we assume revenue growth continues at these rates for the 2002-2007 period.

We assume the property tax rate is kept constant during this period. Property tax collections due grow, however, due to improvements from construction. All properties were reassessed in 1998 with the new values showing on the property tax rolls for 1999. The total value of assessed property rose an average of 5.9 percent annually from 1999 to 2002; we assume this rate of growth continues during the period 2002-2007.

Using these assumptions results in revenue growth of 35.1 percent over the 2002-2007 period, not enough to keep pace with the 38.9 percent growth of anticipated expenditures. Either anticipated spending will have to be cut or revenue increased, or some combination of the two. This result relies on relatively very favorable assumptions concerning the growth of state and federal revenue; future cuts in state revenue will widen the gap between revenues and anticipated expenditures.

Potential Sources of New Revenue

The most promising sources of additional revenue for Rutherford County are those that generate significant revenue within the present framework of state and local taxes. These revenue sources include modifications of taxes currently collected by the county and existing state taxes that are collected at the county level. The administrative framework is currently in place for these revenue sources. Potential sources of additional revenue examined in this study include:

- **Local option sales tax base,**
- **Local gasoline tax,**
- **Local realty transfer tax and mortgage tax,**
- **Business tax,**
- **Development tax,**
- **Adequate facilities tax, and**
- **Impact fees.**

Economic Effects of New Taxes and Fees

When considering new or increased taxes or fees, we typically focus on the potential for revenue collection. We should also keep in mind the effects that taxes and fees exert on market price and output. Elementary economics tells us that a new tax or fee raises the price paid by consumers, lowers the price received by producers, and reduces the size of the market.

Consumers react to a higher tax for an item as an increase in price. And when price increases, quantity demanded falls. If demand is especially sensitive to a price increase, then quantity demanded could decline so much so as to offset the tax increase, causing tax revenue to remain unchanged or even fall. An increase in taxes is viewed by producers as an increase in cost, lowering the price received for new products. A lower price means that the producer will offer less output on the market.

Local Option Sales Tax

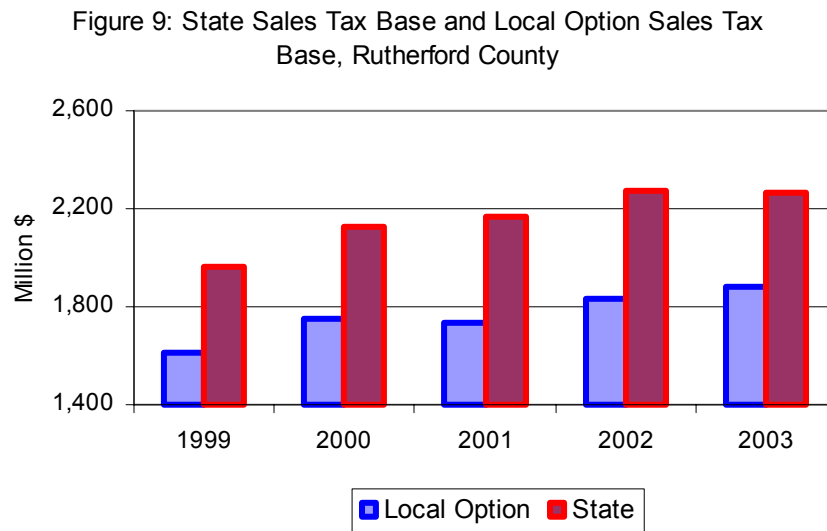
The sales tax base is the dollar volume of expenditures upon which the sales tax is computed. Two important differences exist between the state sales tax base and the local option sales tax base. The first difference is the single article cap: state law limits local option sales tax collections to the first \$1,600 of value for a single item. Local option sales tax collections are effectively limited to $\$1,600 \times 2.75\% = \44 for an item that sells for \$1,600 or more.

The potential for generating additional tax revenue by increasing the single article cap did not go unnoticed by the state government. The General Assembly in 2002 raised the single item cap on the local option sales tax from \$1,600 to \$3,200 and applied a tax rate

of 2.75 percent. The new revenue was designated for use by the state government, not the local governments. Doubling the single article cap generated a significant amount of revenue for the state treasury: from October 2002 through September 2003, an additional \$44.3 million in sales tax revenue was raised for the state; \$1.376 million was collected in Rutherford County alone.⁶

The second major difference between the state sales tax base and the local option sales tax base is tax on the sales of energy to commercial and industrial users.

The state sales tax base is substantially larger than the local option sales tax base. This study estimates that the difference between the state base and the local base averages about \$398 million. Figure 9 shows the tax base for both the state sales tax and the local option sales tax for Rutherford County.



A study by the Tennessee Advisory Commission on Intergovernmental Relations (TACIR) estimates that if the single article cap were lifted, most (about 69 percent) of the additional local option sales tax revenue would be due from automobile dealers, with

⁶ Figures provided by the Tennessee Department of Revenue.

much smaller amounts from auto repair shops, business services, and wholesale trade in durable goods.⁷

As part of a national sales tax simplification effort called the Streamlined Sales and Use Tax Agreement, Tennessee will remove the single article cap on the local option sales tax from some items effective January 1, 2006.⁸ The current single article cap for goods such as autos, boats, planes, and mobile or manufactured homes will continue to remain in effect. The law may well be revised during the next two years, so potential new revenues must be considered tentative.

The revenue impact of lifting the single article cap on some items can be demonstrated with an example. The sale of a plasma television priced at \$3,000 in Rutherford County currently brings in \$44 dollars of local option sales tax revenue. After January 1, 2006, the sale of the same item will generate $\$3,000 * 2.75\% = \82.50 in local option sales tax revenue, assuming the price of the item is unchanged at \$3,000.

Recent Revenue Growth

Local option sales tax collections for Rutherford County have bounced back greatly in the early months of fiscal year 2003. According to the Tennessee Department of Revenue, local option collections improved 10.3 percent from July through October compared with the same period of 2002, an increase of \$1.8 million compared with an increase of just \$0.6 million for the same months from 2001 to 2002. Local option sales tax revenue is shared between the county government and the city governments with the schools receiving half the revenue and the other half distributed based on the site of collection.

⁷ "The Local Option Sales Tax in Tennessee," Tennessee Advisory Commission on Intergovernmental Relations, June 2002.

⁸ "Public Chapter 357: A Law to Conform Tennessee's Sales and Use Tax Laws to the Streamlined Sales and Use Tax Agreement," Tennessee Department of Revenue.

Local Gasoline Tax

The tax on gasoline is a major source of revenue for Tennessee state government, generating \$598.7 million in fiscal year 2003, 7.9 percent of state government tax revenue. Tennessee's 20 cent per gallon tax ranks lower than the median of the 50 states and the District of Columbia for fiscal year 2003.⁹

Although Tennessee local governments do not collect a local tax on gasoline,¹⁰ local governments do receive a share of the proceeds of the state gasoline tax. A portion of state gasoline tax collections is distributed to local governments according to a complicated formula; proceeds to county governments are approximately 7 cents per gallon out of the 20 cents per gallon collected. The distribution formula, however, is weighted against large and rapidly growing counties such as Rutherford County. According to the University of Tennessee County Technical Assistance Service, Rutherford County received 1.7 percent of all gasoline taxes distributed to the counties during fiscal year 1999.¹¹ By comparison, Rutherford County's share of Tennessee population and total personal income were both 3.1 percent for 1999. Assuming that gasoline consumption is proportional to population, Rutherford County's share of state gasoline tax collections is much higher than the share the county receives in state shared taxes.

Revenue Potential of a Local Tax on Gasoline

A small tax on gasoline in Rutherford County could generate a substantial amount of revenue. In order to estimate potential revenue, an estimate of gallons sold in Rutherford County is needed; total taxable gallons for Tennessee are estimated, then Rutherford County's share is estimated. State total gallons subject to the tax are equal to total gasoline tax collections divided by the gasoline tax rate, resulting in total taxable gasoline consumption of nearly 3 billion gallons for the state in fiscal year 2003:

⁹ Fuel Taxes: A State by State Comparison, Washington State Department of Transportation, June 2003.

¹⁰ Gasoline retailers and wholesalers do pay the business tax, a gross receipts tax (discussed below).

¹¹ Summary of Importance of State Shared Revenues to Counties: Rutherford County, University of Tennessee Technical Assistance Center for Counties, 1999.

$$\begin{aligned} \text{Tennessee taxable sales of gasoline} &= \$598.7 \text{ million} / \$0.20 \text{ per gallon} \\ &= 2,993.6 \text{ million gallons.} \end{aligned}$$

Next, we make the reasonable assumption that local gasoline consumption is proportional to population size; counties with large populations consume proportionally more gasoline than counties with small populations. The latest Census Bureau population estimates show 194,934 residents for Rutherford County and 5,797,289 for Tennessee as of July 1, 2002. Rutherford County's share of Tennessee population for 2002 is 3.36 percent. Gasoline consumption in Rutherford County is estimated by multiplying Rutherford County's share of population by the number of gallons of gasoline sold in Tennessee for fiscal year 2003:

$$\begin{aligned} \text{Rutherford County gasoline sales} &= 2,993.6 \text{ million gallons} \times 3.36 \text{ percent} \\ &= 100.6 \text{ million gallons.} \end{aligned}$$

A tax rate of 1 cent per gallon would generate up to \$1 million per year for Rutherford County, as shown in Table 3 for fiscal years 2002 and 2003.

Table 3: Estimated Gasoline Sales and Potential Gasoline Tax Revenue for Rutherford County

Fiscal Year	Estimated Gallons Sold (Million)	Maximum Potential Local Gasoline Tax Revenue @ 1 cent (Million)
2002	97.3	\$0.97
2003	100.6	\$1.01

We emphasize that the figures are *maximum* potential revenues; actual revenues could be lower than the estimate for two reasons: 1) a gasoline tax could reduce the total amount of gasoline purchased as consumers react to the higher price, and 2) a local gasoline tax levied only in Rutherford County will create an incentive for motorists, especially commuters, to shift some of their gasoline purchases to other nearby counties. The magnitude of sales lost to Rutherford County because of a local gasoline tax is not certain, but some impact will likely occur.

A key to minimizing the impact on the Rutherford County gasoline market making the tax rate very low; too high a tax will cause a loss of spending for gasoline to nearby counties. This is especially important for motorists who commute from Rutherford County to Davidson County for work, or who commute to MTSU from residences elsewhere in Middle Tennessee. Too high a tax could cause sales declines for Rutherford County gasoline retailers located near the county line, such as in north Rutherford County.

Since gasoline prices fluctuate substantially from one week to the next, a 1 cent per gallon tax may have little impact on the Rutherford County gasoline market. Price data obtained from the Energy Information Administration, U.S. Department of Energy, for the Lower Atlantic and Gulf Coast states show that gasoline prices can easily fluctuate one and one-half to two and one-half cents per gallon per week. The penny per gallon tax is well within the range of typical week-to-week price fluctuations.

**Table 4: Average Weekly Fluctuation of
Retail Gasoline Prices
(absolute value of change in cents per gallon)**

Year	Lower Atlantic	Gulf Coast
2001	2.54	2.55
2002	1.61	1.41
2003	2.20	2.09

Source: U.S. Energy Information Administration and BEREC.

Tennessee law currently allows local governments to levy a gasoline tax of up to one penny per gallon (T.C.A. 67-3-1010) but the proceeds of the tax must be directed to local public transportation systems; the law will require revision in order to use the revenue for other purposes. According to a TACIR study, no county or city has authorized a local gasoline tax.¹²

¹² *Miscellaneous Local Taxes and Fees*, The Local Government Finance Series, Volume III, Tennessee Advisory Commission on Intergovernmental Relations, August 2002, p. 22.

Prevalence of Local Taxes on Gasoline

The local gasoline tax is authorized by state law in a number of states including Alabama, Florida, Illinois, Virginia, New York, California, Nevada, and Oregon. Many local governments in Alabama, Florida, and Oregon have local gasoline taxes in place (Table 5). Georgia is considering raising the state’s very low gasoline tax rate from 12 cents per gallon by 6 cents to 10 cents per gallon in order to raise additional funds to deal with longstanding traffic congestion problems. A local option gasoline tax is also under consideration.¹³ A bill that would authorize a local gasoline tax was introduced in the South Carolina legislature during the 2001-2002 session that would allow a local tax of up to 5 cents per gallon with the proceeds applied to local road construction and maintenance needs.¹⁴

Table 5: Examples of Local Gasoline Taxes

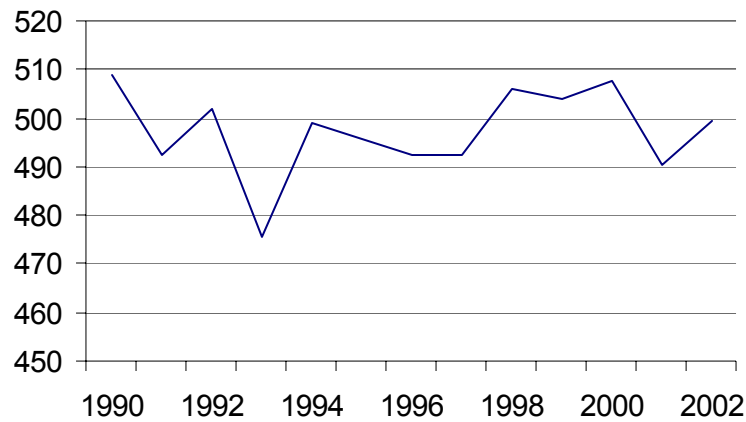
<u>State</u>	<u>Federal Tax</u>	<u>State Tax</u>	<u>Local Tax</u>
Oregon	18.4 cents	24 cents	City and county rates range from 1 cent per gallon to 3 cents per gallon.
Alabama	18.4 cents	16 cents	County taxes range from 1 cent to 3 cents per gallon. City taxes range from 1.5 cents to 4 cents per gallon

Growth of taxable gasoline sales in Tennessee keeps pace with population growth, but just barely. Figure 10 shows that gasoline consumption per capita during the past 12 years fluctuates somewhat within a range of 490 gallons per capita to 510 gallons. A local gasoline tax could help provide additional stability to the local tax base but would not grow any faster than population.

¹³ *MaconTelegraph.com*, November 19, 2003.

¹⁴ General Bill 2024.

Figure 10 : Gallons of Taxable Gasoline per Capita, Tennessee



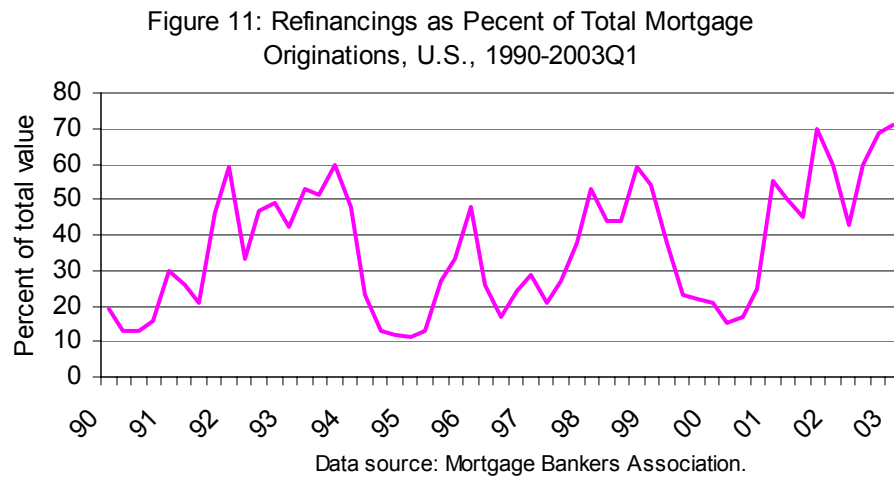
Implementation

State law would need to be revised to use local gasoline tax revenue for purposes other than public transportation needs. Current law calls for collection of the tax by the Tennessee Department of Revenue with proceeds submitted to the county, less a transactions fee. Gasoline retailers located near the Davidson County line may lose sales, and businesses dependent on vehicle transportation will experience increased operating costs due to the tax. However, the gasoline tax would provide an opportunity to capture more revenue from commuters traveling to Rutherford County if they choose to purchase gasoline in the county.

Real Estate Transfer Tax and Mortgage Tax

The transfer of real estate from one owner to another is taxed by Tennessee state government, as is the act of recording mortgages and deeds of trust (Tennessee code, Title 67, Part 4, Chapter 4). The realty transfer tax rate is 37 cents per one hundred dollars of the sales price, while the mortgage recording tax is 11.5 cents per one hundred dollars of mortgage indebtedness, with an exemption for the first \$2,000 of indebtedness. Both taxes are collected by the county clerk with proceeds remitted to the state treasury less a transactions fee.

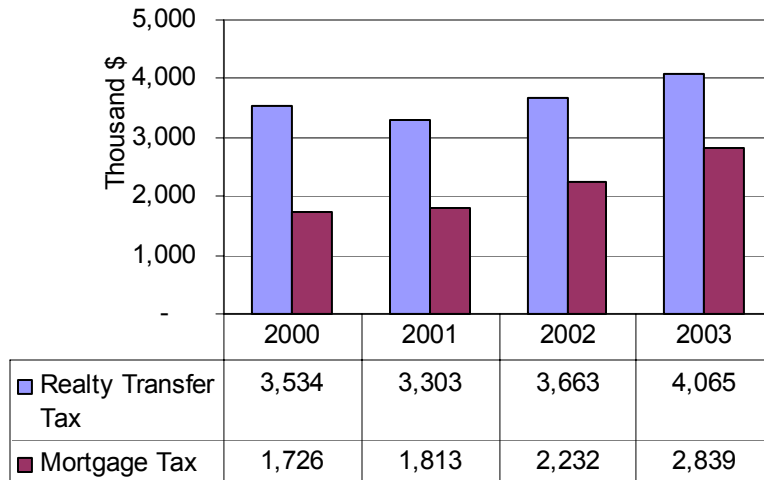
According to figures obtained from the Mortgage Bankers Association, more than half the dollar volume of mortgage originations were refinances of existing mortgages.¹⁵ As mortgage rates fall, the mix of the mortgage tax base shifts more heavily toward refinance (Figure 11).



In fiscal year 2003 collections by the state realty transfer tax were \$87.3 million and \$61.5 million for the mortgage tax. The amount collected in Rutherford County was substantial: \$4.065 million for the realty transfer tax and \$2.839 million for the mortgage transfer tax (Figure 12). Realty transfer tax collections fell somewhat in 2001 but rose by 10.9 percent in 2002 and 11.0 percent in 2003. Mortgage tax collections increased slightly in 2001, then experienced two years of very rapid growth, increasing by 23.1 percent in 2002 and 27.2 percent in 2003. From 2000 to 2003, realty transfer taxes collected in Rutherford County increased by 15.0 percent and mortgage tax collections grew by 64.4 percent.

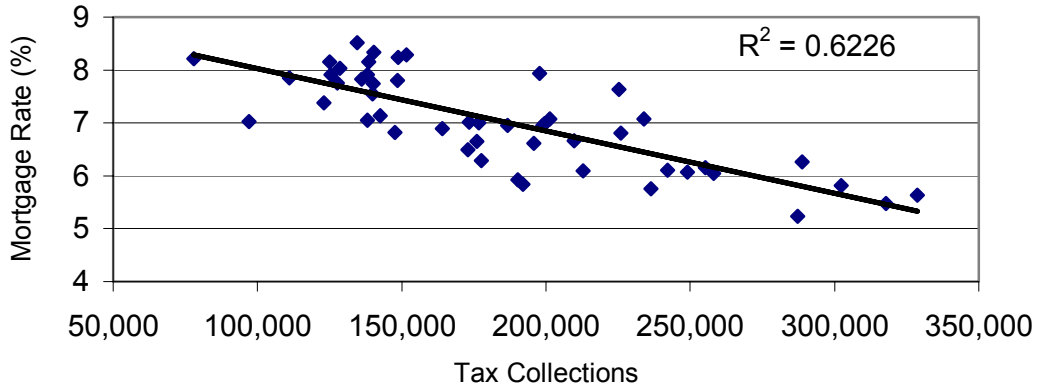
¹⁵ www.mortgagebankers.org

Figure 12: State Realty Transfer Tax and Mortgage Tax Collections in Rutherford County, Fiscal Years 2000-2003



A number of factors contribute to the very rapid growth of collections from these taxes, including the rate of population in-migration and the average value of property sold or mortgaged. A very important, if not the most important, factor is the mortgage interest rate. Figure 13 shows the relationship between the mortgage rate for conventional 30-year mortgages and monthly mortgage tax collections for Rutherford County. The mortgage rate is a national average rate compiled by the Federal Home Loan Mortgage Corporation. While local rates may differ from these national rates, local mortgage rates and national average mortgage rates are very likely to move in the same direction over time. The figure shows that local mortgage tax collections are sensitive to the mortgage rate; a decrease of one percentage point in the mortgage rate could create a large increase in the volume of mortgages and a large increase in mortgage tax collections. The reverse is also true, however; a sharp increase in the mortgage rate could cause mortgage tax collections to fall.

Figure 13: Monthly State Mortgage Tax Collections in Rutherford County and the Monthly U.S. Mortgage Rate, May 1999-September 2003



A few states including Delaware, Pennsylvania, Massachusetts, and California allow a local realty transfer tax (Table 6). The Tennessee legislature considered a local option realty transfer tax in 2001, but the proposal failed.¹⁶

Table 6: Examples of Local Realty Transfer Taxes

<u>State</u>	<u>Details</u>
Pennsylvania	Typically 1% shared between schools and the local township.
Delaware	State rate of 3% of value is shared with local governments. Can be used for capital and operating costs of public safety services, economic development programs, public works services, capital projects and improvements, infrastructure projects and improvements and debt reduction.
California	County rates are \$0.55 per \$500 of value.

Sources: website search.

Potential revenue for Rutherford County is substantial. A county tax of 5 cents per one hundred dollars of sales price would have generated as much as \$493,700 in county tax revenue during fiscal year 2003, while a mortgage tax of 2 cents per one hundred dollars

¹⁶ “House Finance Committee narrowly approves realty transfer tax bill,” *Oak Ridger Online*, May 2, 2001.

could have produced as much as \$549,300. Future potential revenues will depend on mortgage rates and the pace of new housing construction.

Implementation

An advantage of realty transfer and mortgage taxes is that they treat existing homes and new homes on an equal basis; existing housing does not gain an advantage from higher market prices that may be induced by a development tax or an impact fee. Higher taxes on real estate purchases could price some households out of the local market and reduce potential profits for builders, real estate agents, and other private businesses involved in building construction and real estate transactions.

Business Tax

The business tax is a tax on the privilege of engaging in business in the county. It applies only to certain types of private establishments such as retailing, wholesaling, and construction. The tax consists of two components; the first component is a minimum tax of \$15 per year for all qualifying businesses. The second component is a percentage of business revenues depending on the type of business activity.

The application of the business tax is complex; Tennessee law provides for various rates, exemptions, and deductions depending on the type of business and type of activity. Sales of goods or services to customers outside the state, for example, are exempt from the tax. Also, contractors may deduct amounts paid to subcontractors for the purpose of determining taxable revenues. Payments for certain types of taxes also are deductible.

A number of businesses are specifically exempted from the business tax, including:

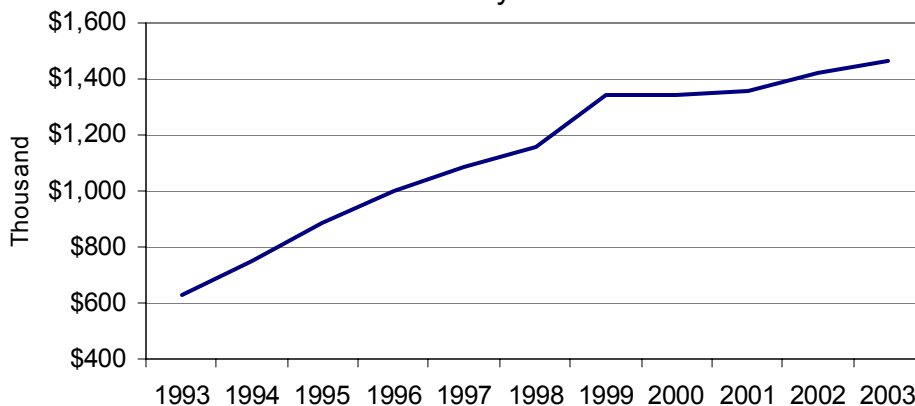
- Manufacturers subject to property tax,
- Medical, dental, and allied health care services (except dentures),
- Legal services,
- Educational services,
- Accounting, auditing, and bookkeeping services,
- Public utilities,

Financial services including banking and insurance,
Veterinary services, and
Architecture, engineering, and surveying services.¹⁷

The county government submits 15 percent of the proceeds of the business tax to the Tennessee Commissioner of Revenue with the county retaining the remainder. Tax rates range from a low of one-twentieth of one percent to one-tenth of one percent depending on the classification of the business.

Business tax collections received by Rutherford County grew rapidly in the 1990s, leveling out in 1999 and 2001 (Figure 14). The state raised business tax rates by 50 percent effective September 1, 2002, with resulting tax revenues allocated to the state general fund. Through October of 2003 the state has raised \$3.9 million from the increase in the business tax rates.¹⁸

Figure 14: Business Tax Collections for Rutherford County

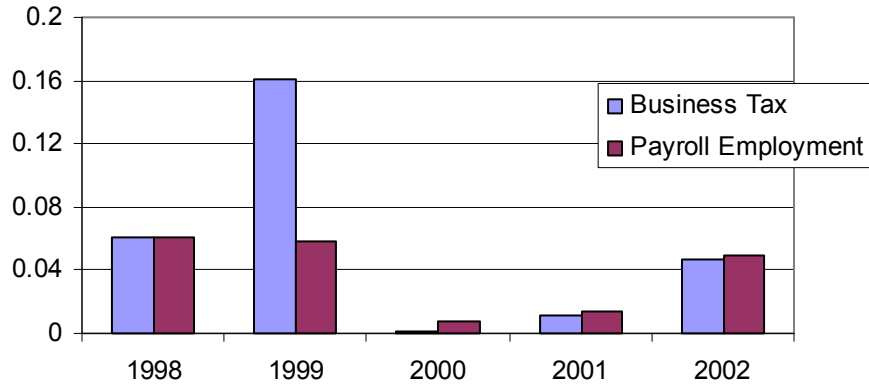


Business tax collections fluctuate but appear to track growth relatively well. Figure 15 shows that, with the exception of 1999, the annual growth rate of business tax collections for Rutherford County closely paralleled the growth of payroll employment.

¹⁷ Business Tax Guide, Tennessee Department of Revenue, August 2003.

¹⁸ Tennessee Department of Revenue, Comparative Statement of Collected Revenues, October 2003.

Figure 15: Business Tax Collections and Employment
Rutherford County (pct. change from previous year)



Potential Revenue

Removing exemptions for businesses currently not subject to the tax has the potential for increasing the business tax base. As an illustration we focus on the ambulatory health care industry including physicians, dentists, outpatient care centers, home health care services, and other health care practitioners. Excluded from this example are hospitals, community care facilities and nursing homes, and childcare services. According to the U.S. Census Bureau, employers in the ambulatory care sector in Rutherford County generated revenues of \$157.1 million in 1997. In order to update this figure to 2002, we assume that revenues are proportional to payroll and that the ratio of revenues to payroll is constant over time. For each dollar spent for payroll in 1997, ambulatory care providers in Rutherford County generated about \$2.07 in revenue. According to the U.S. Bureau of Labor Statistics, payroll of private businesses for the ambulatory care health care sector was \$111.9 million in 2002; multiplying this figure by \$2.07 results in an estimate of revenue of \$232.0 million for 2002. Similar revenue estimates were calculated for legal services, accounting and bookkeeping services, and architectural services. Estimates for revenue in 2002 are presented in Table 7.

Table 7: Illustration of Removing Business Tax Exemptions for Certain Sectors, Rutherford County

Sector	Estimated Sales 2002 (Thousand \$)	Percent of Sales in Rutherford County	Potential Business Tax Revenue (Thousand \$)
Ambulatory health care services	232,073	90%	159.8
Legal services	27,881	60%	12.8
Accounting, tax return prep, bookkeeping, & payroll services	8,986	50%	3.4
Architectural, engineering, & related services	24,612	50%	9.4
Total	293,552		185.4

Note: business tax rate is assumed at 0.1% with deductions of 10% for other taxes paid; 15% of proceeds are submitted to the state.

In order to estimate potential business tax collections we must make assumptions about the tax rate, the location of the point of sale, and the value of deductions. First, we assume a tax rate of 0.1 percent for the services shown in Table 7. Next, we assume that the point of sale varies depending on the sector with 90 percent of health care services provided on-site in Rutherford County but lower percentages of legal, accounting, and architectural services transacted in the county. Thus, we assume that a significant portion of these professional services are in effect “exported” to other counties and other states and therefore do not constitute business transactions accomplished in Rutherford County. Finally, we assume a 10 percent deduction for other taxes paid by these businesses. With these assumptions, and noting that 15 percent of the proceeds of the business tax is submitted to the State of Tennessee, removing the business tax exemption from these businesses would have generated approximately \$185,400 in 2002 for use by Rutherford County.

The illustration demonstrates the difficulty and complexity that would result for businesses having to comply with the business tax. Especially thorny is the issue of establishing the location of a transaction that involves professional services. Does the sale of accounting services to a firm in Atlanta constitute a transaction in Rutherford County? Or is it the physical location of the work accomplished that matters: legal, accounting, or architectural work done in Rutherford County is taxed by the county,

regardless of the location of the customer? Obviously, designing and administering the removal of these exemptions from the business tax could be challenging both for the businesses involved and the county officials responsible for implementation.

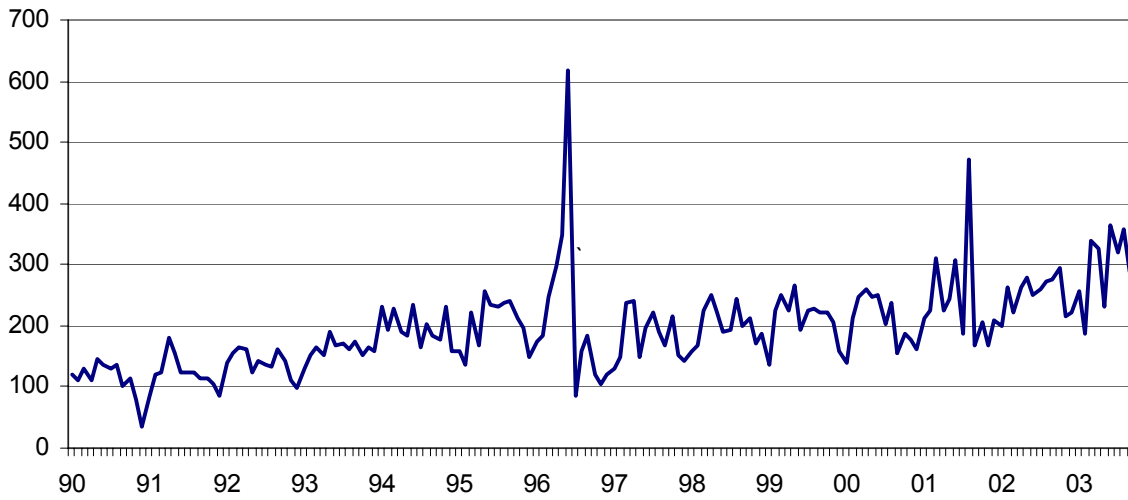
Development Tax

Authorized by private act in 1996, the Rutherford County development tax is a fixed dollar amount per housing unit. Originally established at \$750 per housing unit, the development tax was increased to \$1,500 per housing unit in 2000. Half the development tax is paid when land is subdivided for residential development, with the other half paid when a building permit is issued by the county.¹⁹ In the case of new housing constructed on land where a plat is not required, the entire \$1,500 tax applies.

The trend of single-family building permits in Rutherford County is shown in Figure 16. The effects of the initial development tax in 1996 and the subsequent increase in 2000 are clearly apparent; builders rationally moved forward planned construction before the tax increases in 1996 and 2000. Although the tax probably slowed the rate of growth of construction, little impact on building permits is apparent when comparing activity year over year. During this period both Smyrna and LaVergne introduced impact fees and taxes that also may have acted to slow the growth of housing construction in Rutherford County.

¹⁹ Private Chapter 215 (1996).

Figure 16: Monthly Single-family Building Permits, Rutherford County, 1990-2003



Data source: Census Bureau and Rutherford County.

The development tax generated \$4,429,000 during fiscal year 2003, up 13.9 percent from the previous year. Approximately half the revenue generated by the development tax in 2003 was allocated for debt service payments, with the other half used to purchase new ambulances, new vehicles for the sheriff's department, improvements for county office buildings, and equipment purchases.

Future development tax collections will depend on several factors, not the least of which is the mortgage rate: just as large declines in the mortgage rate from 2000 to 2003 helped to spur new housing construction, increases in the mortgage rate will act to slow the rate of growth of new housing. The current outlook for mortgage rates suggests that rates are very likely to increase gradually over the coming months. The latest forecast by the Mortgage Bankers Association (MBA) shows the 30-year fixed mortgage rate increasing from its present level of 6.0 percent to 6.5 percent by the fourth quarter of 2004 and 6.7 percent in the first quarter of 2005.²⁰ The MBA also predicts a cooling off of the national housing construction market, with housing starts falling by 5 percent from the fourth quarter of 2003 to the fourth quarter of 2004. The demand for housing in Rutherford

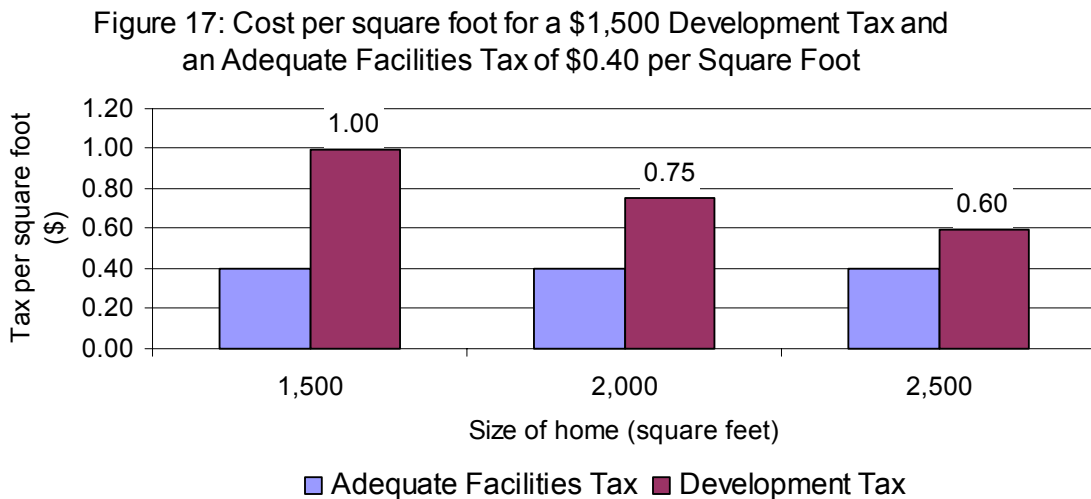
²⁰ MBA Mortgage Finance Forecast, November 19 2003. The MBA mortgage forecast is available online at <http://www.mbaa.org/marketdata/forecasts/mffore1103.pdf>.

County is likely to continue strong despite the upward pressure on the mortgage rate expected for the coming year.

Adequate Facilities Tax

An adequate facilities tax as practiced by local governments in Tennessee is based on square footage of new construction. An adequate facilities tax for Rutherford County was authorized by private act in 1996; the tax was not subsequently implemented by the county. The proposed tax consisted of a maximum levy of 40 cents per square foot for both residential and non-residential development. The distribution of the proceeds would have been 25 cents for school projects, 10 cents for law enforcement, and 5 cents for roads and bridges.²¹

The adequate facilities tax is proportional to the size of the housing unit; a smaller tax for small houses and a larger tax for large houses. By contrast, the development tax is a flat amount for all housing units, large or small. The development tax is a higher proportion of builders' costs for small homes than for large homes, calculated on a square footage basis. Thus, the development tax will have a larger impact on the selling price for smaller homes than for larger homes. Figure 17 shows the impact of the current development tax and a hypothetical adequate facilities tax on new housing construction per square foot of improvement.



²¹ Paying for Growth, p. 12.

Potential revenue from an adequate facilities tax for Rutherford County is substantial. Using single-family homes as an illustration, a tax of 25 cents per square foot would generate \$1,062,000 during a fiscal year, assuming 2,500 single-family units are authorized and the average size of a unit is 1,700 square feet. If passed along entirely to the buyer, the 25 cents per square foot tax would add \$425 to the price of a new 1,700-square-foot home.

Impact Fees

Local governments, especially in high-growth areas of the nation, are examining impact fees as a means of paying for capital needs related to population growth. Although in use since the 1920s, impact fees increased in popularity in the 1980s and are relied on heavily today in areas experiencing rapid growth, especially where communities have decided to limit reliance on other sources of revenue such as the property tax and sales tax. As Table 8 shows, a number of states have authorized the use of impact fees by local governments.

Table 8: States That Authorize Impact Fees for Local Governments

Arizona	New Jersey
Arkansas	New Mexico
California	Ohio
Colorado	Oklahoma
Connecticut	Oregon
Florida	South Carolina
Georgia	North Carolina
Idaho	Tennessee
Iowa	Texas
Illinois	Utah
Indiana	Virginia
Kansas	Washington
Kentucky	
Maryland	

Impact fees are used to pay for off-site facilities such as major arterial streets, schools, parks, fire stations, and jail facilities. A new housing development, for example, may require an increase in the capacity of public roads. A road impact fee could be used to pay the cost of adding capacity to the public roads needed to accommodate the additional

traffic from the new development, including new lanes to existing roads or the creation of new roads. A known quantity of traffic is generated by growth and new developments. The demand is quantifiable in terms of the number of trips of a particular distance and can be translated into the number of additional roads that are needed. The cost of a particular development's impact on roads can be calculated by calculating the cost per unit of additional roads resulting in the fee that can be charged.

New developments frequently require the expansion of existing public schools or the construction of new public school facilities. An impact fee could be configured that captures the additional cost of providing adequate school space. School impact fee credits to residential developers could be issued in return for a donation of land or other material contributions if the school district accepts the donation or contribution instead of the fee.

New developments may require additional emergency services facilities. Impact fees could be charged for fire stations or a new or expanded jail if needed.

Local Experience with Impact Fees

The Town of Smyrna instituted impact fees for fire, parks, and roads in December of 1999; rates were initially set at 50 percent of the maximum for residential and commercial development. Rates were raised to 75 percent of the maximum in January 2001, and a fee was adopted for industrial development at 75 percent of the maximum beginning in July of 2001.²² The various impact fees generated approximately \$1 million in revenue for the town during fiscal year 2002. Funds were used for improvements to Chaney Road and Enon Springs Road; for Hilltop Park and Rock Springs Park, and for design and land purchase for a new fire station.²³

The amount of revenue that could be generated by Rutherford County impact fees depends on several factors including the types of facilities that are paid for by the fees,

²² Memorandum from Kevin Rigsby, Smyrna Town Planner, to Rutherford County Executive Nancy Allen, August 5, 2003.

²³ Annual Budget and Capital Improvements Plan, Town of Smyrna, Fiscal Year 2003-2004, p. 86.

the estimated usage of facilities per new housing unit, the capital cost of providing additional units of the facilities, and offsetting contributions from the developer and funding from the state and federal governments. Possible candidates for facilities that could be funded by impact fees include schools, the county jail, and other public facilities.

Implementation Issues

A number of issues must be addressed in the process of establishing an impact fee system. A measure of the quantity of needed improvements must be developed per unit of demand, such as per new student, new housing unit, or new vehicular trip per day, for example. The cost per unit of providing additional facilities must be estimated. Credits or offsets should be allowed for developer improvements that provide benefits external to the new development, such as traffic lights, parkland, or oversized drainage. Costs should relate to demands caused by the new development. Requiring development to shoulder costs related to existing deficiencies or requiring a higher standard for public facilities for new development compared with existing development may not survive legal challenges.²⁴ Courts have held that fees must not exceed the proportional share of costs needed to provide the facility to new development.

Revenues generated by the impact fees must be spent within a reasonable amount of time and benefit the development paying the fees.²⁵ Impact fees collected for one purpose cannot be used for another purpose and cannot be used for current operations expenditures.

In all, impact fees are more complex than a development tax or an adequate facilities tax. The administrative burden for the county will be higher for an impact fee and the proceeds of the fee must be used only for certain capital needs.

²⁴ For example, see “A Practitioner’s Guide to Development Impact Fees,” James C. Nicholas, Arthur C. Nelson, and Julian C. Juergensmeyer, American Planning Association, 1991, pp. 82-97.

²⁵ See “Impact Fee Study prepared for Smyrna, Tennessee,” Duncan Associates, November 1999.

Impact fee calculations take into account costs of new development, but typically do not incorporate certain *benefits* of new development such as the direct and indirect impacts generated by housing construction on local government revenues.²⁶ New housing construction increases the demand for locally purchased building materials and supplies that are subject to the sales tax. In addition, payroll for construction workers is spent in part for sales-taxable food, clothing, entertainment, and so on. Additional local spending occurs when the materials suppliers hire workers and buy materials at wholesale. The multiplier effect generated by new housing construction on local tax collections typically is not taken into consideration by impact fee studies. These revenue benefits should be taken into account, as they would not have occurred without the spending on new housing.

In addition, impact fees (and development taxes and adequate facilities taxes, for that matter) increase existing property values, a spillover benefit for current property owners that is not taken into account in the fee. A new fee or tax on housing construction will increase prices for buyers and these higher prices will spill over from new housing to existing housing, resulting in higher market values for existing homes and capital gains for existing homeowners.²⁷

Comparing Potential Revenue Sources

Table 8 offers a final comparison of the various revenue options discussed above. Any of the options will cause higher tax payments for households and businesses. Most of the options will require legislative authorizations. The business tax would be most difficult to implement, compliance on the part of businesses would be costly, and the tax would generate the smallest amount of new revenue. A gasoline tax is promising if the rate is kept very low. An adequate facilities tax was authorized by private act in 1996; this tax would grow as population grows and generate a smaller burden for low-income home buyers than would a hike in the development tax or new impact fees. Impact fees would

²⁶ For example, see “The Fiscal Impact of New Housing Development in Massachusetts, A Critical Analysis,” Robert Nakosteen and James Palma, University of Massachusetts, February 2003.

²⁷ Both theoretical and empirical evidence exists in the economics literature. See Larry D. Singell and Jane H. Lillydahl, “An Empirical Examination of the Effect of Impact Fees on the Housing Market,” *Land Economics*, Vol. 66, No. 1, February 1990.

generate revenue for new facilities demanded by growth, but some of the *benefits* of growth may not be taken into account. The development tax, adequate facilities tax, and impact fees will raise values for existing property owners, generating a spillover benefits for existing homeowners. We offer no recommendation except to note that diversity of revenue sources is desirable in order to avoid large revenue swings in the future.