

# Evaluating New Revenue Sources for Counties

*Karl W. Smith*



*The North Carolina Realtors Association opposed the legislation that gave all counties the option of a tax on the sale or the transfer of land.*

Harry Lynch / Raleigh News & Observer

**A**s part of landmark legislation, North Carolina counties now have conditional access to one of two new sources of revenue: a one-quarter-cent increase in the sales tax or a 0.4 percent land transfer tax.

During its 2007 session, the General Assembly approved a comprehensive relief package that will eliminate the entire county share of Medicaid funding for services by 2010. Medicaid is a health services program similar to Medicare. Whereas Medicare is a federal program

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that covers eligible Americans over the age of sixty-five, Medicaid is a shared federal and state

program that covers people who are poor or disabled. About 1.25 million of North Carolina's residents are eligible for Medicaid.<sup>1</sup>

At the time the legislation passed, North Carolina was the only state requiring its counties to contribute a fixed percentage to Medicaid. At one time, most states required counties to cover some part of Medicaid funding, but by 2005 all other states had assumed responsibility for the county portion.

**County revenue choices:  
a one-quarter-cent sales tax or  
a 0.4 percent land transfer tax.**

North Carolina counties still will be responsible for the administrative costs of Medicaid, but after

a multiyear campaign by the counties, the state has agreed to assume all funding for services. To support this transfer of funding liabilities, the state is shifting one-half cent of the county sales tax to the state. By fiscal year 2009–10, the baseline county sales tax rate will be reduced to two cents.

The state, however, has offered the counties the option of adopting one of the two new revenue sources. Counties do not have to adopt either one, but they

may not adopt both. The county commissioners make the decision to adopt one of the new revenue sources after the voters approve an advisory referendum. The referendum may include both tax options. However, if both pass, the county commissioners must choose one. Although the commissioners may not enact either revenue option unless the voters approve it, the county is not required to adopt the new tax if the referendum is successful.

Because the county can adopt only one of the taxes, a careful analysis of the costs and the benefits of each option is prudent. Some features of the sales tax are familiar to all counties, but most county officials have little if any experience with a land transfer tax.

This article examines what the economic implications of the two taxes are and how they compare with each other along six dimensions: short-term revenue projections, long-term revenue projections, revenue stability, tax incidence, the effect on local economic growth, and tax fairness.

### Short-Term Revenue Projections

One way to evaluate the two revenue sources is on the total revenue each will yield in the first year. The most data are available on this criterion, and it affects county budgets most immediately.

Yet even first-year estimates of revenues from a land transfer tax are difficult to obtain because the U.S. housing market is in transition from a period of unprecedented growth to what is likely to be a period of significant decline.<sup>2</sup> As discussed later, revenues from a land transfer tax are much more sensitive to the state of the housing market than revenues from a property tax or a sales tax.

Table 1 shows the estimated revenues from an additional one-quarter-cent sales tax and from a 0.4 percent land transfer tax in fiscal years 2005–6 and 2006–7. Clearly, for some counties, the 0.4 percent land transfer tax would have yielded more revenue, whereas for other counties, the one-quarter-cent sales tax would have yielded more revenue. However, even over the last two years, estimates for revenues from a land transfer tax have been highly volatile. In Jones County, for example, esti-

Table 1. **Estimated Revenue from Tax Options**

County	2006–7 1/4¢ Sales Tax	2005–6 0.4% Land Transfer Tax	2006–7 0.4% Land Transfer Tax	Change in Estimated Land Transfer Tax Revenue from 2005–6 to 2006–7
Alamance	\$ 3,841,857	\$ 3,251,750	\$ 2,729,468	– 16%
Alexander	467,394	451,304	399,216	– 12%
Alleghany	204,203	434,558	466,432	7%
Anson	313,232	267,848	238,096	– 11%
Ashe	549,707	1,126,440	1,134,040	1%
Avery	543,762	1,332,874	1,109,368	– 17%
Beaufort	1,186,875	1,113,084	1,034,928	– 7%
Bertie	205,275	213,012	345,012	62%
Bladen	458,603	313,386	302,900	– 3%
Brunswick	3,112,319	14,041,348	8,745,684	– 38%
Buncombe	8,436,602	9,894,652	10,256,468	4%
Burke	1,590,672	1,054,402	1,170,936	11%
Cabarrus	5,267,593	6,860,952	6,779,188	– 1%
Caldwell	1,476,042	1,217,068	1,507,160	24%
Camden	158,392	276,154	230,260	– 17%
Carteret	2,552,628	6,262,066	3,846,744	– 39%
Caswell	168,401	189,664	199,808	5%
Catawba	4,836,544	3,386,124	3,090,216	– 9%
Chatham	994,185	2,671,990	2,875,192	8%
Cherokee	845,047	1,691,628	992,280	– 41%
Chowan	304,496	388,200	267,000	– 31%
Clay	212,267	942,798	564,044	– 40%
Cleveland	1,906,886	1,159,962	1,281,344	10%
Columbus	934,330	443,968	577,284	30%
Craven	2,400,049	3,030,396	2,540,752	– 16%
Cumberland	8,141,461	5,911,688	6,072,256	3%
Currituck	929,877	1,966,616	1,304,236	– 34%
Dare	3,153,888	4,318,868	2,874,928	– 33%
Davidson	2,748,945	2,432,254	2,538,416	4%
Davie	658,486	1,016,194	1,040,204	2%
Duplin	822,800	666,810	446,212	– 33%
Durham	9,206,212	10,281,965	9,764,416	– 5%
Edgecombe	782,520	537,170	411,564	– 23%
Forsyth	11,418,327	8,295,714	8,283,944	0%
Franklin	785,570	1,336,866	1,485,908	11%
Gaston	4,445,691	3,718,896	4,477,704	20%
Gates	98,974	128,564	179,716	40%

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mates surged nearly three times in value, while in Perquimans County, they declined by almost a half, and in Watauga County, there was no statically meaningful change.

Counties that choose the land transfer tax must be prepared for revenue surprises even in the short term. Next

year's revenue from the sales tax is much easier to predict.

### Long-Term Revenue Projections

Forecasting revenue far into the future is even more difficult than forecasting

one year in advance. However, some trends can be explored. Sales tax revenue is driven largely by personal income. Although year-to-year spending fluctuates, over time, people spend and save predictable portions of their salary. Economists can project sales tax revenue by using estimates of the growth in personal income. On that basis, they expect the strongest growth to occur in the urban and suburban counties.

Both the population gap and the income gap between urban and rural counties have been growing over time. However, rural counties that border a major urban center—such as Union County, which borders Mecklenburg County, and Chatham County, which borders Durham and Wake counties—should see strong growth in commercial shopping as well as residents.

As time goes on, however, the sales tax will likely not keep up with income growth in the county or with the cost of school construction. The sales tax in North Carolina is levied mostly on manufactured goods that can be purchased in a store. High-growth industries like health care and retirement planning are not covered by the sales tax. As the economy continues to move from manufacturing toward services, growth in sales tax revenue will slow.

For example, lawnmowers and weed eaters are taxed under the sales tax, but lawn care services are not. As more residents contract for their lawn care needs, the sales tax will begin to cover a smaller and smaller portion of the lawn-care sector of the economy.

Over a longer horizon, a county can expect current operating and capital expenditures and general salary expenditures for public schools to slowly outpace the revenue that it receives from a sales tax increase. Unless a county has limited construction needs, a one-time increase in the sales tax is not likely to be a long-term solution. The time horizon is quite long, perhaps 15–20 years in some cases, but the trends in construction costs and sales tax revenues are steady.

Like growth in revenue from the sales tax, growth in revenue from the land transfer tax depends on population and income. Yet growth in revenue from the land transfer tax also depends on local amenities. That is, revenue from

Table 1. **Estimated Revenue from Tax Options** (continued from page 21)

County	2006–7 1/4¢ Sales Tax	2005–6 0.4% Land Transfer Tax	2006–7 0.4% Land Transfer Tax	Change in Estimated Land Transfer Tax Revenue from 2005–6 to 2006–7
Graham	\$ 151,697	\$ 253,202	\$ 195,056	– 23%
Granville	842,627	1,052,944	1,218,236	16%
Greene	173,320	119,616	140,004	17%
Guilford	15,673,853	13,596,148	13,072,804	– 4%
Halifax	1,135,918	612,078	981,728	60%
Harnett	1,505,336	1,877,684	2,063,884	10%
Haywood	1,613,812	2,246,888	2,062,508	– 8%
Henderson	2,553,967	4,214,018	3,896,004	– 8%
Hertford	528,074	196,466	296,236	51%
Hoke	341,644	828,736	924,304	12%
Hyde	133,649	231,896	169,548	– 27%
Iredell	4,908,336	6,855,846	6,963,820	2%
Jackson	1,035,437	3,616,940	3,404,268	– 6%
Johnston	3,428,087	4,496,488	4,450,992	– 1%
Jones	88,575	91,770	256,762	180%
Lee	1,517,896	958,334	1,135,724	19%
Lenoir	1,307,049	388,390	477,860	23%
Lincoln	1,489,937	2,310,316	2,293,000	– 1%
Macon	1,230,402	2,269,592	1,863,892	– 18%
Madison	227,647	830,008	722,228	– 13%
Martin	496,596	166,492	187,052	12%
McDowell	815,667	812,310	1,022,900	26%
Mecklenburg	33,040,341	44,781,832	49,416,096	10%
Mitchell	368,970	485,242	365,628	– 25%
Montgomery	428,562	712,956	591,920	– 17%
Moore	2,473,222	3,366,042	3,101,740	– 8%
Nash	2,834,317	1,559,404	1,485,548	– 5%
New Hanover	8,719,284	13,997,492	9,032,612	– 35%
Northampton	187,597	304,188	324,256	7%
Onslow	3,934,310	4,525,258	4,776,580	6%
Orange	3,031,453	4,192,222	4,113,088	– 2%
Pamlico	194,740	737,856	672,680	– 9%
Pasquotank	1,167,495	1,150,724	926,312	– 20%
Pender	826,380	3,037,918	2,497,692	– 18%
Perquimans	151,188	478,268	273,372	– 43%
Person	745,479	625,808	617,448	– 1%
Pitt	4,584,613	3,697,888	3,389,016	– 8%
Polk	274,500	1,030,936	1,006,812	– 2%
Randolph	2,442,154	1,961,362	2,002,704	2%
Richmond	877,791	428,512	457,428	7%
Robeson	2,239,943	725,152	755,240	4%
Rockingham	1,673,750	1,075,322	1,125,472	5%
Rowan	2,597,696	1,982,686	2,280,928	15%
Rutherford	1,296,835	1,954,906	1,976,552	1%

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Table 1. **Estimated Revenue from Tax Options** (continued from page 22)

County	2006-7 1/4¢ Sales Tax	2005-6 0.4% Land Transfer Tax	2006-7 0.4% Land Transfer Tax	Change in Estimated Land Transfer Tax Revenue from 2005-6 to 2006-7
Sampson	\$ 1,080,272	\$ 456,708	\$ 432,860	- 5%
Scotland	761,301	322,756	263,336	- 18%
Stanly	1,344,973	830,872	864,872	4%
Stokes	518,731	503,532	539,356	7%
Surry	1,931,278	897,684	770,284	- 14%
Swain	244,696	608,306	371,996	- 39%
Transylvania	848,348	1,730,626	1,539,320	- 11%
Tyrrell	51,858	101,494	83,724	- 18%
Union	3,672,624	10,326,782	10,569,080	2%
Vance	1,037,014	426,722	397,952	- 7%
Wake	27,963,291	42,829,792	44,786,400	5%
Warren	192,708	555,526	639,020	15%
Washington	202,305	131,606	120,428	- 8%
Watauga	1,844,185	3,063,760	3,060,852	0%
Wayne	2,570,523	1,486,384	1,290,244	- 13%
Wilkes	1,397,974	962,820	974,644	1%
Wilson	2,016,771	1,186,820	1,154,880	- 3%
Yadkin	541,171	278,618	351,351	26%
Yancey	329,720	830,748	853,496	3%
<b>Total</b>	<b>\$250,000,000</b>	<b>\$310,996,925</b>	<b>\$299,615,353</b>	<b>- 4%</b>

Source: North Carolina Association of County Commissioners, "Estimated Additional County Revenue Authority," [www.ncacc.org/documents/revenueauthority\\_073107.pdf](http://www.ncacc.org/documents/revenueauthority_073107.pdf). Sales taxes were estimated using revenues from the point-of-delivery portion of the Article 44 sales tax. Before the current legislation, four existing provisions in the North Carolina General Statutes authorized sales taxes for all one hundred counties. Those provisions are known as Article 39, Article 42, Article 43, and Article 44. They have slightly different characteristics. The sales tax option now available to counties is most similar to a portion of Article 44. Article 44 authorizes a sales tax to be collected in all counties. One-half of the proceeds is to be distributed on the basis of county population; this is known as the "per capita portion." The other half of the proceeds is to be distributed to the county in which the item was purchased; this is known as the "point-of-delivery portion." Land transfer taxes were estimated using measures of deed stamp revenue. The county land transfer tax is designed to yield twice the revenue of the existing deed stamp tax. The deed stamp tax also is known as the "excise stamp tax on conveyances."

the land transfer tax is influenced by how desirable a county is as a vacation, retirement, or commuter community. Rural counties, such as Dare County, which have many outside visitors, have experienced large increases in revenue from the land transfer tax over the past five years.

Rapidly growing counties will likely see rates of growth in revenues from the land transfer tax that exceed the rates of growth in their population. As a county becomes denser, property values in the central core tend to grow faster than they do on the periphery. This growth causes revenues from the land transfer tax to grow ever faster.

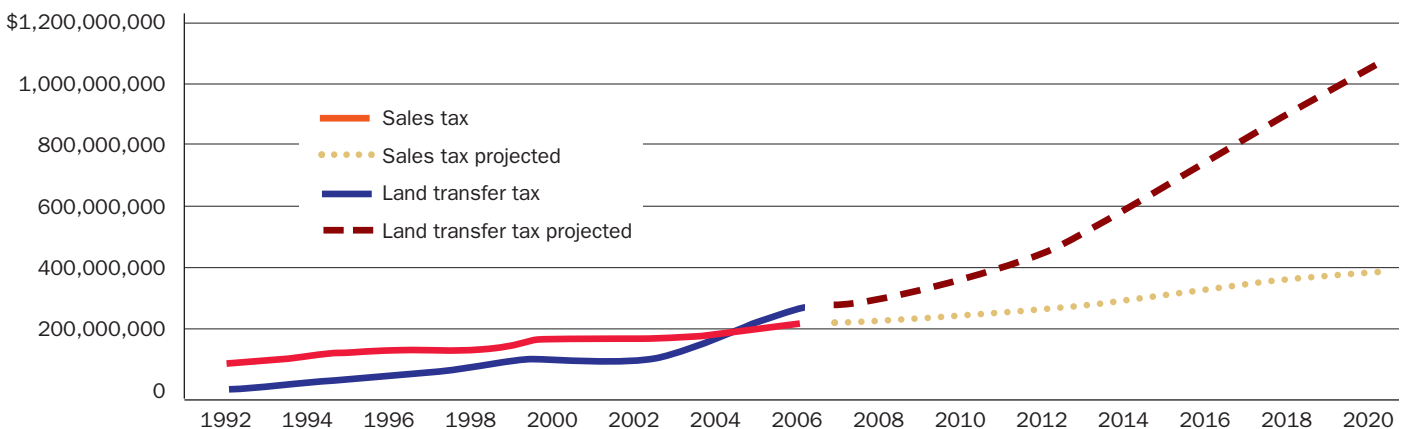
Rural counties without a retirement or vacation base can expect slow growth in revenue from land transfer taxes over the long term. In the short term, they may experience some of the same unexpected surges and declines that urban counties will, but the growth will be slower, on average.

Although each county's experience will be different under a land transfer tax, projected statewide revenues from a land transfer tax are growing faster than construction costs and can be expected at least to keep pace with construction costs over the next twenty-five years. (For actual and projected revenues from both taxes statewide, see Figure 1.)

### Revenue Stability

Many county leaders consider the sales tax to be a volatile revenue source, com-

Figure 1. **Statewide Revenue from the One-Quarter-Cent Sales Tax and the 0.4 Percent Land Transfer Tax, Actual and Projected, 1992-2020**



Source: North Carolina Department of Revenue, "Part III: State Tax Collections," [www.dor.state.nc.us/publications/abstract/2007/part3.html](http://www.dor.state.nc.us/publications/abstract/2007/part3.html). Land transfer taxes were estimated using a measure of deed stamp revenue.

pared with the property tax. The sales tax truly is less predictable than the property tax. Property values rarely fall, and there is little reason to think that North Carolina will experience falling property values anytime soon. In addition, property is re-valued every four to eight years. Therefore a government can have a very accurate estimate of its tax base between revaluations.

The sales tax, on the other hand, responds to the performance of the overall economy (see Figure 2). When North Carolina's economy goes into recession, growth in sales tax revenue slows down, and sales tax revenue may even decrease.

During a recession, sales tax revenue does not decline as fast as the overall economy or the state government's total budget because even when times are tough, consumers and businesses spend money on necessities. They may spend down savings or borrow to cover costs if their incomes fall.

Revenue from land transfer taxes, however, is highly sensitive to the performance of the economy. Almost all U.S. recessions begin in the housing market.<sup>3</sup> Slowdowns in housing sales drag the entire economy down. Rather than being linked just to home prices, as the property tax is, the land transfer tax

is linked to prices and the number of sales. Although prices are slow to fall, sales of homes can plummet. Few homeowners will sell their homes for a loss, and builders have no incentive to start homes that they do not think they can sell. So when

the housing market becomes weak, prices remain stable, but the number of homes that are sold each month declines drastically, and homes stay on the market for much longer periods.

Therefore a county that depends on the land transfer tax to meet spending needs could find itself facing a budget crisis going into a recession (see Figure 3).

**Revenue from the sales tax is less predictable than that from the property tax. But revenue from the sales tax is more responsive to the economy's performance.**

#### North Carolina's Economic Outlook for 2008 and 2009

If both revenue sources are sensitive to economic conditions, what kind of economy can the state expect over the next few years? Economic forecasting has always been more art than science, but a few developments are predictable.

The downturn in the national housing market probably will continue at least through 2008 and into 2009. Increases in home prices nationally have followed a pattern similar to that in the late 1980s in Los Angeles County. Los Angeles County experienced what at the time was an unprecedented boom in housing prices. They peaked in 1990.

From 1990 to 1996, they fell roughly 27 percent, according to data compiled by Standard and Poor's.<sup>4</sup>

The national increase in home prices from 2002 to 2006 was similar in size and shape to the Los Angeles bubble. Nationally, housing prices fell a record 8.9 percent in 2007 from their peak in 2006. They would have to fall an additional 19.9 percent in 2008 to match the 27 percent total decline seen in the aftermath of the Los Angeles boom.<sup>5</sup> Home prices must therefore fall significantly faster than the record decline set in 2007 if the likely bottom in the housing market is to be reached by the end of 2008. This makes it quite probable that the housing bust will continue at least into early 2009.

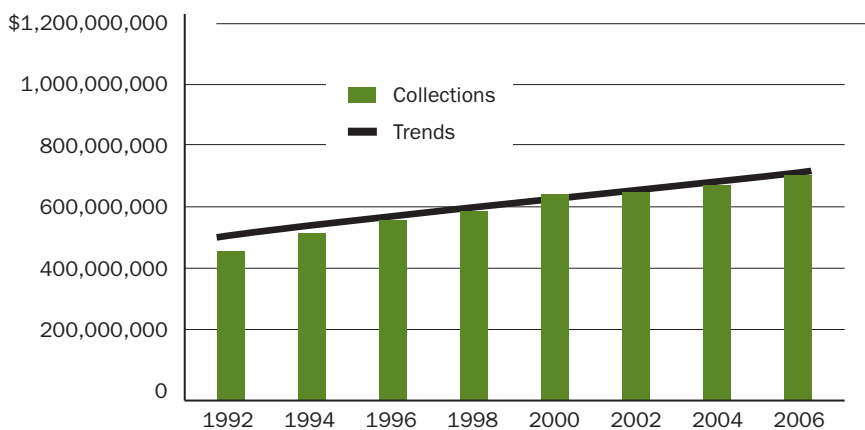
To compound matters, the government has limited resources for combating the decline in housing prices. Typically, booms and busts in the housing market are driven in part by changes in mortgage interest rates. Mortgage interest rates are in turn driven by inter-bank lending rates, set by the Federal Reserve Board.

This housing boom has been different, though. The Federal Reserve Board began raising rates in 2004, in part to stop the housing bubble while it was still small.<sup>6</sup> The bubble, however, accelerated throughout 2004, 2005, and the beginning of 2006 because of a change in how mortgages were financed on Wall Street. These changes made it easier for borrowers with poor credit histories to obtain loans and borrowers with good credit histories to obtain much larger loans than in the past. More borrowers meant more buyers and an increasing demand for homes.

Unfortunately, those borrowers began to default on their loans in much larger numbers than ever before. Throughout the second half of 2007 and into 2008, banks and other institutions began undoing the changes that made loans easy to obtain and, indeed, instituted new guidelines that made some loans even more difficult to obtain than before 2004.

These higher loan standards are shrinking the pool of borrowers and causing the demand for housing to fall. Just as the Federal Reserve Board was unable to stop the rise in housing prices

Figure 2. **Collections and the Trend in Revenue from the One-Cent Sales Tax, 1992–2006**



Source: North Carolina Department of Revenue, "Part III: State Tax Collections," [www.dor.state.nc.us/publications/abstract/2007/part3.html](http://www.dor.state.nc.us/publications/abstract/2007/part3.html).



associated with looser lending standards, it seems unable to stop the fall in housing prices associated with more stringent lending standards.

This situation offers further reason to think that the decline in housing prices

will continue for some time. It also suggests that states such as North Carolina, which experienced little in the way of a housing bubble, may not be completely spared from the housing bust. Home prices in North Carolina did not rise

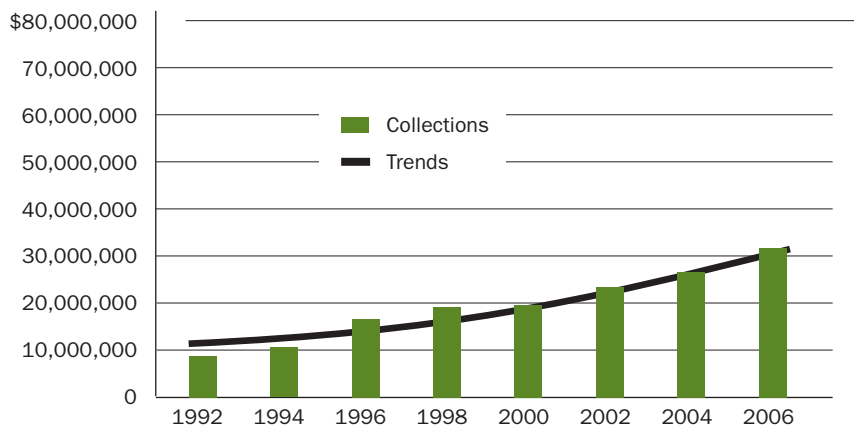
dramatically, in part because a steady supply of new home building absorbed increases in demand. As those buyers disappear, however, there may be a glut of housing in the state, which will drive down prices.

Yet North Carolina has a growing population. Therefore, any excess inventory in new homes is likely to sell off faster in North Carolina than in the rest of the country. Relative to the nation as a whole, the outlook for housing in North Carolina is better than average, but there still will be significant challenges in 2008 and 2009.

As a result, revenue from a land transfer tax may grow more slowly, on average, for the next couple of years and be much less predictable. After the storm passes, the state should return to steadier growth in potential receipts from the land transfer tax, but that revenue source will always be sensitive.

Regarding the sales tax, recessions usually begin in housing and then spread

Figure 3. **Collections and the Trend in Revenue from the Land Transfer Tax, 1992–2006**



Source: North Carolina Department of Revenue, “Part III: State Tax Collections,” [www.dor.state.nc.us/publications/abstract/2007/part3.html](http://www.dor.state.nc.us/publications/abstract/2007/part3.html). Land transfer taxes were estimated using a measure of deed stamp revenue.

to the rest of the economy. Only twice in the nation's history has a housing downturn not led to a national recession: once at the beginning of the Korean War and again at the beginning of the Vietnam War. At this time, signs point toward a recession.<sup>7</sup>

Recessions are typically associated with slower growth in sales tax revenue and, in some cases, an outright decline. The decline is not as severe as that associated with the land transfer tax. However, counties should be aware that sales tax growth may be lower than projected in 2008 and 2009.

### Tax Incidence

Determining who bears the burden of a tax can be complex. For example, even though gasoline distributors have the statutory responsibility to pay an excise tax per gallon of gasoline, they simply raise the price of gasoline to recoup the tax. Gasoline consumers end up paying most of the tax.

On the other hand, sales taxes are charged directly to consumers. Yet con-

sumers have a limited budget. The more in sales tax they pay, the smaller their budget for goods and services. Therefore an increase in the sales tax will typically lower the total amount that consumers purchase. So an increase in the sales tax will mean less revenue for some businesses.

For example, if a family spends \$100 a week on groceries plus 2 percent in a sales tax, its total expenditure is \$102. If the sales tax is raised to 5 percent, that same family must pay \$105 a week for the same groceries. Therefore it has \$3 less for some other purchase. In this way, the sales tax affects not only consumers but also businesses.

Changing prices or shopping behavior in response to taxes is called "shifting the burden." Stores shift the burden of excise taxes onto consumers by raising prices. Consumers shift the burden of sales taxes onto stores by reducing the amount of their purchases.

So who will end up paying for the new sales or land transfer taxes?

The degree to which sales tax burdens are shifted depends on whether the goods

being taxed are necessities or discretionary purchases. Sales taxes on necessities are generally borne by consumers. When faced with higher taxes on necessities, consumers have little choice but to pay them. In addition, retailers such as Wal-Mart tend to operate on thin margins to begin with and have little room to lower prices further when their shoppers face higher taxes.

When the sales tax falls on discretionary items, however, consumers will reduce their overall purchases. They may reduce the number of times per month that they eat at restaurants or go to the movies. So restaurants, movie theaters, and other discretionary retailers may see a decrease in revenues after an increase in the sales tax.

The land transfer tax tends to be more straightforward. It is charged to the seller of the property, and in most cases, the seller actually bears the cost. Sellers of land cannot shift the burden as easily to buyers because sellers are accepting the highest bid. If the buyer already is paying more than the next-highest bidder, why should he or she pay any more?

The seller's only alternative is to threaten to take the property off the market unless the buyer pays a higher price to include the land transfer tax. Most sellers do not have the option of taking their properties off the market.

A few sellers, however, are likely to have that kind of negotiating power. Sellers of commercial real estate and homebuilders can choose not to develop land if doing so is not profitable. In this case, they may hold back property from the market unless buyers are willing to incur a portion of the land transfer tax.

Like the sales tax, the land transfer tax is relatively small, and the burden, relatively light. However, the land transfer tax falls on a smaller group of taxpayers and therefore is a somewhat heavier burden per taxpayer than the sales tax.

As a general principle, each additional dollar of tax burden is harder on a taxpayer. Thus, taxes will be less onerous if they are spread across as wide a group as possible. If a county already has high property taxes, it might make taxes less burdensome by increasing sales taxes than by initiating a land transfer tax, which also falls on property owners



when they sell their property. On the other hand, counties with low property tax burdens may find it less onerous to increase the land transfer tax than to add a quarter of a cent to the combined state and local sales tax rate.

### The Effect on Local Economic Growth

Concerns have long been raised that high tax rates slow economic growth. Indeed, some international evidence suggests that nations with high taxes grow more slowly than nations with low taxes.<sup>8</sup> In the United States, however, the evidence has been mixed. The longest sustained period of growth in modern U.S. history was during the 1990s, which coincided with relatively high national tax rates.

Nonetheless, a community may be rightfully concerned that relatively higher taxes will put it at a disadvantage in attracting businesses and residents. On this issue, there are two points to keep in mind.

First, the proposed tax increases are both rather small, and any effect on

growth is likely to be relatively small as well. The studies that indicate the largest increase in growth rates from a decrease in taxes suggest that an increase of 10 percent in the total tax burden could result in a total decrease in growth of 4.8 percentage points over a fifty-year horizon, or less than 0.1 percentage point of growth per year. The proposed tax increases would represent an increase in the total tax burden for the average North Carolinian of 1.2 percent. The resulting decrease in growth would then be approximately 0.6 percentage point over fifty years, or roughly 0.01 percent per year.<sup>9</sup> Therefore, even the largest estimate produces a rather small effect on growth.

Second, and more important, the effect of taxes on growth depends on how the revenue is used. If it is used for projects that do little to enhance a community's desirability as a place to live and work, then the tax is more likely to have a negative impact on growth. If the

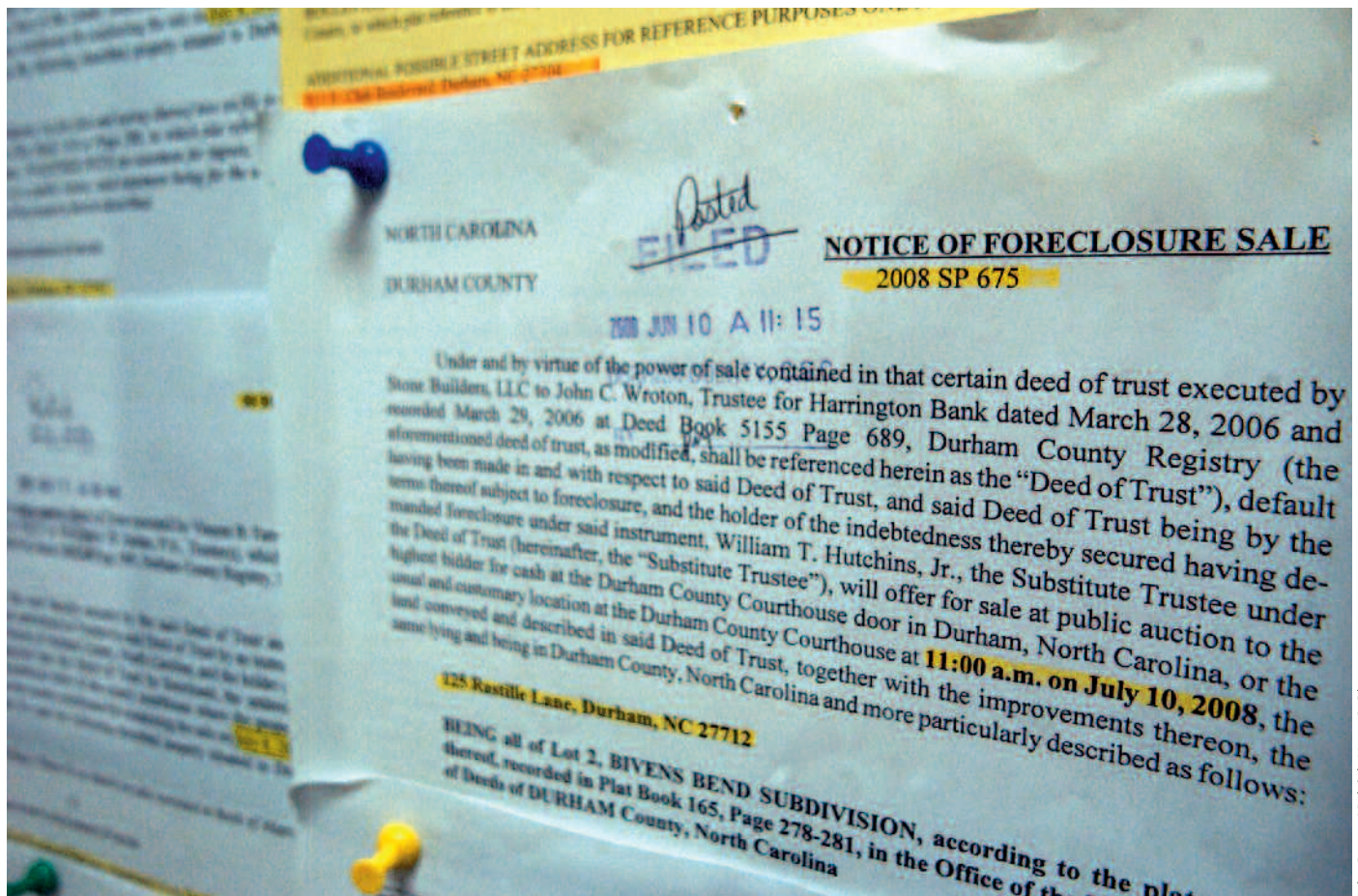
revenue is spent on critical construction needs or other high-value projects, however, then a tax increase may lead to more rapid growth.

Concerns about growth are typically most acute in relation to the land transfer tax. The land transfer tax by itself does make it less profitable for developers to build new housing. The proposed tax would reduce a developer's revenue by 0.4 percent. However, this disincentive to develop could potentially be offset if the increase in tax revenue is used to fund projects that increase demand for housing in the county.

New school construction, for example, could raise the quality of education in a county and increase the demand for housing there. This increase in demand might outweigh the negative effects of the tax on growth.

Suppose that a developer is considering building a house that costs \$95,000 to construct and will sell for \$100,000. The builder will make a profit of \$5,000.

**A common concern is that higher taxes will hurt economic growth.**



John Rottier / Raleigh News & Observer



Table 2. **Results of 2007 Referendums**

County	Revenue Option	Result
Brunswick	0.4% land transfer tax	Failed
Catawba	1/4¢ sales tax	Passed
Chatham	0.4% land transfer tax	Failed
Columbus	1/4¢ sales tax	Failed
Cumberland	1/4¢ sales tax	Failed
Davie	0.4% land transfer tax	Failed
Davie	1/4¢ sales tax	Failed
Gates	0.4% land transfer tax	Failed
Graham	0.4% land transfer tax	Failed
Graham	1/4¢ sales tax	Failed
Greene	1/4¢ sales tax	Failed
Harnett	0.4% land transfer tax	Failed
Harnett	1/4¢ sales tax	Failed
Henderson	0.4% land transfer tax	Failed
Hertford	1/4¢ sales tax	Failed
Hoke	0.4% land transfer tax	Failed
Johnston	0.4% land transfer tax	Failed
Johnston	1/4¢ sales tax	Failed
Lenoir	1/4¢ sales tax	Failed
Macon	0.4% land transfer tax	Failed
Martin	1/4¢ sales tax	Passed
Moore	0.4% land transfer tax	Failed
Pender	0.4% land transfer tax	Failed
Pitt	1/4¢ sales tax	Passed
Robeson	1/4¢ sales tax	Failed
Rutherford	0.4% land transfer tax	Failed
Rutherford	1/4¢ sales tax	Failed
Sampson	1/4¢ sales tax	Passed
Surry	1/4¢ sales tax	Passed
Swain	0.4% land transfer tax	Failed
Union	0.4% land transfer tax	Failed
Washington	1% land transfer tax	Failed

Source: North Carolina Association of County Commissioners, “Six Counties to Pursue Sales Tax in November,” [www.ncacc.org/2008revenueoptions.html](http://www.ncacc.org/2008revenueoptions.html).

If the county introduces a land transfer tax of 0.4 percent, the builder will pay an extra \$400 to build and sell the home, reducing the profit to \$4,600.

However, if the county uses the tax revenue to construct a new school, the sale price of houses in the community may rise to \$101,000 or more. The builder then would have costs of \$95,000 plus \$404 in a land transfer tax, but the home would sell for \$101,000. Thus the builder would make a profit of

\$101,000 minus \$95,404, or \$5,596—more than the original \$5,000. By using the revenue from the land transfer tax to enhance the community’s value, the county has contributed to an increase in builders’ profits and encouraged faster growth. Therefore the key question is whether or not the tax revenue can be put to use in a way that increases the quality of life of the community and the demand of potential residents to live there.

## Tax Fairness

The evaluation of tax fairness, or tax equity, depends as much on personal values as it does on data. However, economists use three metrics to measure the fairness of a tax code: horizontal equity, vertical equity, and ability to pay.

“Horizontal equity” means that the tax code treats similar taxpayers in the same way. A tax code has more horizontal equity if it does not contain specialized exemptions or deductions that only a select group of taxpayers can claim. To qualify as horizontally equitable, a tax code must base its existing exemptions or deductions on material circumstances rather than political clout.

The sales tax has been criticized as horizontally inequitable because it applies to the sellers of tangible goods but not the sellers of services. For example, a company that rents landscaping equipment has to charge its customers a sales tax, whereas a company that performs landscaping services does not. The companies are similar in terms of the market they serve, but one faces a higher tax burden.

At first glance, the land transfer tax seems to fall on homeowners, but not renters. However, this is not exactly the case. Real estate developers are one of the few groups that are able to pass some of the land transfer tax on to consumers. Developers who build apartment complexes may be able to pass the tax on to apartment management companies, which may then pass it on to renters. The extent to which they can pass it on depends on the particulars of the market, but renters may bear some of the burden of the land transfer tax.

Vertical equity measures the progressivity of a tax code. A tax code has more vertical equity if wealthier taxpayers pay a larger share of their income than poorer taxpayers pay of their income.

The desirability of vertical equity is hotly debated. However, the economic intuition is that it is more difficult for poorer residents to afford taxes. Therefore the overall burden of taxation is reduced if the wealthy pay a larger share.

Because economists cannot know for sure how hard it is for any family or individual to meet a tax bill, they cannot know how much progressivity, if any, is best. They can, however, analyze



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which taxes are more progressive and which are less.

Sales taxes are among the least progressive taxes. They apply only to the portion of a person's income that he or she uses to purchase tangible goods. Lower-income residents use a larger fraction of their income for purchasing than for saving or investing, and their purchases tend to be weighted heavily toward goods rather than services. Therefore a lower-income family often pays a larger fraction of its income in sales tax than a wealthy family does, resulting in low vertical equity for the sales tax.

The land transfer tax, on the other hand, is one of the most progressive taxes. As income rises, households spend an ever-greater fraction of it on property (whether as a home or for an investment). Wealthier families may own many times the value of property that low- and middle-income families own.

Ability to pay is similar to progressivity, but there is a subtle difference.

**Spreading taxes across as wide a group as possible makes them less burdensome on the individual taxpayer.**

progressivity, but meets the ability-to-pay standard because a person pays the sales tax only if he or she is purchasing a product. If the person does not have the necessary funds to pay the sales tax, then he or she will not buy the product.

Property taxes, on the other hand, do not meet the ability-to-pay standard. A resident's property tax bill may exceed his or her entire income. Therefore the resident may face a tax that he or she does not have the ability to pay.

The land transfer tax is charged only when a property changes ownership in exchange for money, not when it is transferred through gifts or inheritance. As a result, the land transfer tax almost always meets the ability-to-pay standard.

In a few cases, a landowner may be forced to sell a property for less than he or she owes on the mortgage, and the

A tax conforms to the ability-to-pay standard if everyone who is required to pay taxes has sufficient income to do so. The sales tax, for example, is low in

mortgage holder will attempt to collect the difference. Such cases are rare because mortgage holders typically do not attempt to collect the difference. When these cases arise, however, the proposed land transfer tax would add to the amount that the mortgage holder attempts to collect.

### Results of Referendums on Sales and Land Transfer Taxes

In 2007, fifteen counties held a referendum on the 0.4 percent land transfer tax, and one held a referendum on a previously authorized 1.0 percent land transfer tax. In all sixteen counties, the referendum failed. Sixteen counties also held a referendum on the one-quarter-cent sales tax. In five counties, the referendum passed. (For the type of tax involved in the referendums and the results by county, see Table 2.)

As of June 2008, twenty-one more counties had held a referendum on the one-quarter-cent sales tax. In three counties, the referendum passed. Also, four more counties had held a refer-

Table 3. **Referendums Scheduled for 2008 and Results to Date**

County	Revenue Option	Date	Outcome
Alexander	1/4¢ sales tax	January 8	Passed
Ashe	0.4% land transfer tax	May 6	Failed
Burke	1/4¢ sales tax	November 4	—
Columbus	1/4¢ sales tax	November 4	—
Cumberland	1/4¢ sales tax	May 6	Passed
Duplin	1/4¢ sales tax	May 6	Failed
Edgecombe	1/4¢ sales tax	May 6	Failed
Gaston	1/4¢ sales tax	May 6	Failed
Gates	0.4% land transfer tax	May 6	Failed
Greene	1/4¢ sales tax	May 6	Failed
Guilford	1/4¢ sales tax	May 6	Failed
Haywood	1/4¢ sales tax	May 6	Passed
Henderson	1/4¢ sales tax	May 6	Failed
Hertford	1/4¢ sales tax	May 6	Failed
Lee	1/4¢ sales tax	May 6	Failed
Lincoln	1/4¢ sales tax	May 6	Failed
Moore	1/4¢ sales tax	May 6	Failed
Nash	1/4¢ sales tax	May 6	Failed
Onslow	1/4¢ sales tax	May 6	Failed
Orange	0.4% land transfer tax	May 6	Failed
Polk	0.4% land transfer tax	November 4	—
Randolph	1/4¢ sales tax	May 6	Failed
Rockingham	1/4¢ sales tax	May 6	Failed
Stanly	1/4¢ sales tax	May 6	Failed
Tyrrell	0.4% land transfer tax	May 6	Failed
Wayne	1/4¢ sales tax	May 6	Failed
Wilkes	1/4¢ sales tax	May 6	Failed
Wilson	1/4¢ sales tax	May 6	Failed

Source: North Carolina Association of County Commissioners, “Six Counties to Pursue Sales Tax in November,” [www.ncacc.org/2008revenueoptions.html](http://www.ncacc.org/2008revenueoptions.html).

endum on the land transfer tax, and in all four, the referendum failed. Three additional counties plan a referendum in 2008, two on the sales tax and one on the land transfer tax. (For the type of tax involved in the referendums and the results by county, see Table 3.)

## Conclusion

Counties may choose between two new revenue options, a one-quarter-cent increase in the sales tax and a 0.4 percent land transfer tax. Statewide, the sales tax would yield more revenue, yet some counties would receive greater revenue in the

first year from the land transfer tax. In general, revenue from the land transfer tax will grow faster than revenue from the sales tax, and the land transfer tax is more likely to keep pace with rising construction costs. However, the land transfer tax is less stable than the sales tax because it is tied to the real estate market, which is likely to be turbulent over the next few years. The tax tends to fall on wealthier residents more heavily. However, the poor are not exempt, for the tax is sometimes shifted into rental costs.

The sales tax is both steadier and more familiar, yet on a statewide basis, it is projected to grow more slowly than

the economy as a whole. Also, it tends to be regressive and can hit the poor particularly hard.

In analyzing tax options, economists deal with mathematical models and statistical evidence. Most policy makers find these tools helpful. Major policy decisions, however, depend crucially on values that no statistical analysis can answer. For a given county, one of the taxes may raise more money now, raise more money in the future, and have growth and economic-sensitivity properties that match that county’s needs. Yet if that tax increases the burden on a group that the county’s leaders feel is already overburdened, then choosing another revenue source is perfectly appropriate for the county.

## Notes

1. North Carolina Department of Health and Human Services, Division of Medical Assistance, “North Carolina Medicaid: Carolina ACCESS Statewide Enrollment Report (April 2008),” [www.dhhs.state.nc.us/dma/ca/enroll/caenr0408.pdf](http://www.dhhs.state.nc.us/dma/ca/enroll/caenr0408.pdf).

2. Office of Federal Housing Enterprise Oversight, [www.ofheo.gov/hpi.aspx](http://www.ofheo.gov/hpi.aspx).

3. Edward E. Leamer, “Housing Is the Business Cycle,” paper presented at a symposium sponsored by the Federal Reserve Bank of Kansas City, Jackson Hole, WY, August 30–September 1, 2007 (revised October 11, 2007), [www.kansascityfed.org/publicat/sympos/2007/PDF/2007.10.11.Leamer.pdf](http://www.kansascityfed.org/publicat/sympos/2007/PDF/2007.10.11.Leamer.pdf).

4. Standard and Poor’s, “S&P/Case-Shiller Home Price Indices,” February 26, 2008, [www2.standardandpoors.com/spf/pdf/index/cs\\_national\\_values\\_052703.xls](http://www2.standardandpoors.com/spf/pdf/index/cs_national_values_052703.xls).

5. I multiplied year-over-year percentage declines to calculate the total decline—in this case:  $(1 - .089) \times (1 - .199) = .911 \times .878 = .730 = (1 - .270)$ . In other words, a decline of 8.9 percent times a decline of 19.9 percent equals a decline of 27.0 percent.

6. Federal Reserve Board, “Intended Federal Funds Rate, Change and Level, 1990 to Present,” [www.federalreserve.gov/fomc/fundsrate.htm](http://www.federalreserve.gov/fomc/fundsrate.htm).

7. Chris Reese and John Parry, “NBER’s Feldstein Says U.S. Sliding into Recession,” Reuters, April 7, 2008, [www.reuters.com/article/ousiv/idUSN0747602120080407](http://www.reuters.com/article/ousiv/idUSN0747602120080407).

8. Young Lee and Roger H. Gordon, “Tax Structure and Economic Growth,” *Journal of Public Economics* 89 (2005): 1027–1043, <http://scholar.google.com/scholar?hl=en&lr=&cluster=10719518669212326631>.

9. These are my calculations. Details are available on request.