# The Fiscal Impacts of Land Uses on Local Government

Jeffrey H. Dorfman
Land Use Studies Initiative and
Department of Agricultural & Applied Economics
The University of Georgia

April 2006

# The Fiscal Impacts of Land Uses on Local Government

Around the country, about one million acres of farmland per year are being developed for other uses. Local governments, especially in rural areas, often have difficulty financing the services that come with this development and are constantly looking for ways to improve their financial health. Local government officials often believe that one solution to their government's financial difficulties lies through development, by increasing the property tax base; however, a growing body of empirical evidence shows that while commercial and industrial development can indeed improve the financial well being of a local government, residential development worsens it. While residential development brings with it new tax (and fee) revenue, it also brings demand for local government services. The cost of providing these services exceeds the revenue generated by the new houses in every case studied (American Farmland Trust).

Growth and development policies are in the spotlight in many areas of the country. Newspapers eagerly print lists of the fastest growing counties in the U.S. State governments compete against each other for new business investments from large employers. Redevelopment and revitalization efforts in downtown urban areas continue to be pushed, and often succeed. Everybody wants growth in their city, town, county or state, but only specific types of growth. To make things more confusing, different people want different types of growth. Some want new residential development, thinking more people and houses represent new taxable property and new vitality for a community. Others want industrial development to provide manufacturing jobs (and new taxable property). A different group would like new shopping and commercial development, but not any industrial development. Smart growth and mixed use projects are pushed by some, while other people want nothing other than houses anywhere near their (existing) homes, and the new houses should preferable be exactly like theirs or slightly more expensive. There is no right or wrong answer on what "good" or smart growth is, they are subjective ideas; there is, however, plenty of evidence connecting different land uses with fiscal impacts on local governments (cities, towns, counties).

This report examines some of that evidence, documenting likely fiscal impacts of residential developments, commercial/industrial developments, and farm/forest (undeveloped) lands.
I will discuss the results of many specific fiscal studies of counties around the country and some other evidence on fiscal impacts of land use types and patterns. This evidence and these empirical findings will hopefully be useful for both citizens and politicians in making local land use decisions.

Because most of my studies have been done in Georgia, some of the terms used will be Georgia-specific. I will try to define terms and provide alternatives where possible, but I apologize if there are spots where the local term is unclear to those in other parts of the country. The report will begin by discussing cost of community service studies, present results of such studies, and then discuss planning tools that can be derived from those results. Following that, other types of fiscal impact studies are discussed along with other economic rules or findings related to land use decisions. Finally, a brief summary of the report wraps up the main body of fiscal impact analysis as it relates to local land use decisions today.

## Cost of Community Service Studies

Cost of Community Service (COCS) studies involve a reorganization of a local government's (usually a county's) records in order to assign the government revenues and costs of public services to different classes of land use or development such as residential, commercial, industrial, farm, forest and open lands. COCS studies look at average revenues and expenditures, not changes at the margin, and are thus not capable of precisely predicting the impact of future decisions. Still, they provide the benefit of hindsight, a budgetary baseline from which to make decisions about the future. They can also allow for informed decision-making on such policy topics as tax abatements for farm or forestland (or even for commercial/industrial development). Further, educated guesses can often be made from these averages as to the likely marginal cost of development and the impact on a local government's financial situation as a result of land use transition. That is, the COCS results are a good starting point from which marginal impacts can be estimated.

Three land use categories are commonly defined for COCS studies: residential, commercial/ industrial, and farm/forest/open space. The residential category is sometimes subdivided to allow a separate depiction of the fiscal impacts of manufactured housing. Financial information is obtained from the county, town or city and the local school system (if it is a separate entity. The revenues and expenditures in the budgets are allocated to the land use categories based on the review of available records and interviews with local officials and service providers (farmhouses are included in the residential category.) For example, a county's expenditures on family and welfare programs would be classified as all benefiting residential development; the costs of roads would be allocated across all types of development (although not equally); and expenditures on a Forestry Commission would likely be allocated to farm and forestland. The resulting totals for revenues generated and expenditures incurred can be presented as a ratio of expenditures-to-revenues for different land use types. Where expenses are difficult to allocate across land use categories, emphasis is placed on the expert knowledge of county staff to estimate service expenditures by land use category. Data on the acreage, population, and property value in each land use category is also used in determining some expenditure allocations. Also, it is important to note that, in my studies, the vast majority of sales tax revenue is allocated to the residential land use category. This implies that when estimating the impact of future residential growth, the numbers account for the resulting increase in sales tax collections from the new residents. New business formation that may occur is not captured (that is, new business property taxes are missed), but increased sales to existing (or new) business built into the model.

Following the allocation of all money flows to one of the land use categories, revenues and expenditures are totaled for each land use category and revenues-to-expenditures ratios are then calculated. In calculating the ratios in my studies, an adjustment is performed to account for revenue generated from sources outside the county (which amounted to 6.0% of the total revenues); this adjustment recognizes that all expenditures are partially funded from these outside sources. The figures can be presented as dollars of revenue per dollar of expenditure or expenditures per dollar of revenue, and they can be shown with or without schools included. The figures can also be converted into fiscal surplus or shortfall per acre for each category of land use.

While the above described results are averages across categories, not all developments within a category have the same fiscal impact.  For example, the cost of providing services to a house varies somewhat by location but very little by value.  Thus, conditional on other factors, as a house becomes more expensive and pays more in property taxes (the main source of revenues in most local jurisdictions), a break-even home value can be calculated.  This calculation, which accounts for all non-property tax revenue, provides a useful decision tool for local government planners and decision makers.  Simply put, non-property tax revenue per house is subtracted from service costs to find the amount of property tax revenue needed to just break-even on a house.  Then, the county, town, or city property taxation rules and rates are used to compute the home value that provides that amount of revenue.  For schools, the average per pupil cost from local tax money is computed (state and federal money is excluded) and then the similar calculations are made to allow the computation of a break-even home value needed to generate sufficient local revenue to cover the locally-generated expenditures for whatever number of children per household is expected or is being modeled.  In states and jurisdictions schools and local government are combined, but in others they are separate.  Thus, there is not a single break-even home value in these locations, but two (or more—in the extreme there could be one for a county, one for a township, one for a town, and one for the schools).

## Review of COCS Studies from Around the Nation

About 90 COCS studies have been completed by a variety of researchers around the country for cities and rural communities.  The maximum, median, and minimum ratios of local government revenues-to-expenditures collected from these studies are shown in Table 1.  The "Minimum" row states that for every dollar the county generates from the residential category, it spends $2.11 in services. The commercial/industrial and farm/forestland categories show that, on average, the government receives more than it spends and therefore, these land uses create a surplus. The numbers show the fallacy of depending on residential development as a sound growth policy.  In not a single instance did residential development generate sufficient revenue to cover its associated expenditures.

**Table 1.  A National Summary of COCS Study Results**

| | Revenue: Expenditures | | |
|---|---|---|---|
| **County** | **Residential** | **Comm./Ind.** | **Farm/Forest** |
| Minimum | 1 : 2.11 | 1 : 1.04 | 1 : 0.99 |
| Median | 1 : 1.15 | 1 : 0.27 | 1 : 0.36 |
| Maximum | 1 : 1.02 | 1 : 0.05 | 1 : 0.02 |

Footnote: these figures are for 83 COCS studies compiled by the American Farmland Trust (http://www.farmlandinfo.org/fic/tas/COCS_9-01.pdf).

Results of seventeen studies by this author, fifteen in Georgia, one in North Carolina, and one in Florida are displayed in Tables 2 and 3. These results show the revenue to expenditure ratios for the counties without schools (Table 2) and with schools (Table 3). The ratios vary considerably. Residential ratios are consistent in that all seventeen local governments lose money on their residential development. Surprisingly, without schools included, five counties lose money on farm/forest land. With schools included, farm/forest land provides a fiscal surplus in all but one case, but in the counties with separate school and county governments that does not help the county pay the bills.

The obvious conclusion from Tables 2 and 3 is that bedroom communities are not economically sustainable at tax rates that are likely to be levied. In fact, when a rural community with a large base of farm and forestland begins to convert that land into residential development, either as a planned growth strategy or due to market forces and a lack of growth control measures, the local government is virtually guaranteed to head down a path of deteriorating financial stability and increasing local property tax rates.

In counties where manufactured housing is separated out as a fourth category, it is also included in the general residential category. That is, residential includes all types of residential development, single family and multifamily, attached and detached, site built and manufactured housing. The manufactured housing category separates out this category of housing from the rest of residential development as a planning and zoning aid for some rural counties where this is a significant share of the new residential housing in the county. This type of residential development clearly places a significant financial burden on the county, schools, and, therefore, on other county taxpayers.

## How Much House is Enough?
The revenue and expenditure allocations that lead to the ratios in Tables 2 and 3 can also be used to estimate the value of a house (or residential unit) that provide an amount of revenue to the local government exactly equal to the cost of services received. The cost of providing services to a residential unit varies by location, lot size, and the specific usage of local government services (especially schools). However, for the moment, we will ignore the variation in service costs. If we assume a constant average service cost per household and a constant amount of non-property tax revenue per household (sales tax, user fees, parking tickets, etc.), the calculation of a break-even home value becomes straightforward. The county, town, or city property taxation rules and rates are used to compute the home value that provides that amount of revenue needed to close the gap between total service costs and non-property tax revenue. This is what I refer to as the county (city, town) break-even home value.

For schools, the average per pupil cost from local tax money is computed (state and federal money is excluded) and then the similar calculations are made to allow the computation of a break-even home value needed to generate sufficient local revenue to cover the locally-generated expenditures for whatever number of children per household is expected or is being modeled. While there are some states and jurisdictions where schools and local government are combined, here we report breakeven values as if they are separate budgetarily. Break-even home values for counties and schools are shown in Table 4.

4

**Table 2.  Cost of Community Service Study Results without Schools**

| County | Revenue to Expenditures | | | |
|---|---|---|---|---|
| **GEORGIA** | **Residential** | **Commercial/Industrial** | **Farm/Forest** | **Manuf. Housing** |
| Appling | 0.57 | 2.98 | 1.42 | |
| Athens-Clarke | 0.86 | 1.46 | 0.42 | |
| Brooks | 0.86 | 1.48 | 1.13 | 0.53 |
| Carroll | 0.83 | 1.93 | 1.01 | |
| Cherokee | 0.64 | 3.19 | 1.92 | |
| Colquitt | 0.89 | 1.51 | 0.79 | 0.47 |
| Dooly | 0.57 | 1.42 | 2.66 | |
| Grady | 0.71 | 5.19 | 1.07 | 0.41 |
| Habersham | 0.81 | 1.04 | 1.42 | |
| Hall | 0.95 | 0.95 | 1.87 | 0.33 |
| Jones | 0.87 | 1.17 | 2.86 | |
| Miller | 0.84 | 1.16 | 0.96 | 0.43 |
| Mitchell | 0.82 | 1.52 | 1.02 | 0.40 |
| Oconee | 0.90 | 1.25 | 1.18 | |
| Thomas | 0.53 | 1.43 | 0.60 | 0.28 |
| Union | 0.95 | 1.31 | 0.69 | 0.39 |
| **FLORIDA** | | | | |
| Leon | 0.85 | 1.57 | 1.47 | |
| **NORTH CAROLINA** | | | | |
| Union | 0.80 | 1.31 | 1.45 | |

| County | Expenditures to Revenues | | | |
|---|---|---|---|---|
| **GEORGIA** | **Residential** | **Commercial/Industrial** | **Farm/Forest** | **Manuf. Housing** |
| Appling | 1.75 | 0.34 | 0.70 | |
| Athens-Clarke | 1.16 | 0.68 | 2.38 | |
| Brooks | 1.16 | 0.68 | 0.88 | 1.89 |
| Carroll | 1.21 | 0.52 | 0.99 | |
| Cherokee | 1.56 | 0.31 | 0.52 | |
| Colquitt | 1.12 | 0.66 | 1.27 | 2.13 |
| Dooly | 1.75 | 0.70 | 0.38 | |
| Grady | 1.41 | 0.19 | 0.93 | 2.44 |
| Habersham | 1.23 | 0.96 | 0.70 | |
| Hall | 1.05 | 1.05 | 0.53 | 3.03 |
| Jones | 1.15 | 0.85 | 0.35 | |
| Miller | 1.19 | 0.86 | 1.04 | 2.33 |
| Mitchell | 1.22 | 0.66 | 0.98 | 2.50 |
| Oconee | 1.11 | 0.80 | 0.85 | |
| Thomas | 1.89 | 0.70 | 1.67 | 3.57 |
| Union | 1.05 | 0.76 | 1.44 | 2.56 |
| **FLORIDA** | | | | |
| Leon | 1.18 | 0.64 | 0.68 | |
| **NORTH CAROLINA** | | | | |
| Union | 1.25 | 0.76 | 0.69 | |

**Table 3.  Cost of Community Service Study Results with Schools**

| County | Revenue to Expenditures | | | |
|---|---|---|---|---|
| **GEORGIA** | **Residential** | **Comm/Industrial** | **Farm/Forest** | **Manuf. Housing** |
| Appling | 0.44 | 5.94 | 2.82 | |
| Athens-Clarke | 0.72 | 2.46 | 0.49 | |
| Brooks | 0.64 | 2.39 | 2.56 | 0.29 |
| Carroll | 0.79 | 3.32 | 1.75 | |
| Cherokee | 0.63 | 8.50 | 5.10 | |
| Colquitt | 0.78 | 2.24 | 1.25 | 0.43 |
| Dooly | 0.49 | 2.02 | 3.76 | |
| Grady | 0.58 | 9.77 | 2.61 | 0.26 |
| Hall | 0.80 | 1.52 | 4.47 | 0.25 |
| Jones | 0.81 | 1.54 | 2.82 | |
| Miller | 0.65 | 1.92 | 1.90 | 0.26 |
| Mitchell | 0.72 | 2.17 | 1.66 | 0.27 |
| Thomas | 0.61 | 2.60 | 1.50 | 0.27 |
| Union | 0.88 | 2.31 | 1.38 | 0.30 |
| **FLORIDA** | | | | |
| Leon | 0.72 | 2.76 | 2.37 | |
| **NORTH CAROLINA** | | | | |
| Union | 0.77 | 2.44 | 4.13 | |

| County | Expenditures to Revenues | | | |
|---|---|---|---|---|
| **GEORGIA** | **Residential** | **Comm/Industrial** | **Farm/Forest** | **Manuf. Housing** |
| Appling | 2.27 | 0.17 | 0.35 | |
| Athens-Clarke | 1.39 | 0.41 | 2.04 | |
| Brooks | 1.56 | 0.42 | 0.39 | 3.45 |
| Carroll | 1.27 | 0.30 | 0.57 | |
| Cherokee | 1.59 | 0.12 | 0.20 | |
| Colquitt | 1.28 | 0.45 | 0.80 | 2.33 |
| Dooly | 2.04 | 0.50 | 0.27 | |
| Grady | 1.72 | 0.10 | 0.38 | 3.85 |
| Hall | 1.25 | 0.66 | 0.22 | 4.00 |
| Jones | 1.23 | 0.65 | 0.35 | |
| Miller | 1.54 | 0.52 | 0.53 | 3.85 |
| Mitchell | 1.39 | 0.46 | 0.60 | 3.70 |
| Thomas | 1.64 | 0.38 | 0.67 | 3.70 |
| Union | 1.13 | 0.43 | 0.72 | 3.39 |
| **FLORIDA** | | | | |
| Leon | 1.39 | 0.36 | 0.42 | |
| **NORTH CAROLINA** | | | | |
| Union | 1.30 | 0.41 | 0.24 | |

Break-even values for schools are shown for different values of public school children per household (1, 2, and 0.75).  In many cases 0.75 school kids per household is a good estimate for new suburban or rural residential development, but this number can vary widely within a single school system on a neighborhood-to-neighborhood basis.  I have seen numbers from 0.14 to 1.5 within the same town.

**Table 4.  Break-even Home Values for Counties and Schools**

| County<br>GEORGIA | County | School - 1 kid | School - 2 kids | School - 0.75 kid |
|---|---|---|---|---|
| Appling | $192,900 | $465,300 | $925,600 | $350,200 |
| Athens-Clarke | $173,000 | $572,800 | $1,140,600 | $430,900 |
| Brooks | $65,100 | $345,600 | $686,100 | $260,400 |
| Carroll | $122,200 | $309,900 | $614,900 | $233,700 |
| Cherokee | $184,200 | $517,300 | $1,029,500 | $389,200 |
| Colquitt | $57,000 | $388,100 | $771,100 | $292,300 |
| Dooly | $42,700 | $478,100 | $951,200 | $359,800 |
| Grady | $103,000 | $282,400 | $559,900 | $213,100 |
| Hall | $162,200 | $368,400 | $731,800 | $277,600 |
| Jones | $81,300 | $239,300 | $473,600 | $180,700 |
| Miller | $71,700 | $333,500 | $662,100 | $251,400 |
| Mitchell | $113,400 | $445,800 | $886,500 | $335,600 |
| Thomas | $121,900 | $333,000 | $661,000 | $251,000 |
| Union | $121,400 | $649,900 | $1,294,900 | $488,700 |
| **NORTH CAROLINA** | | | | |
| Union | $203,700 | $350,700 | $667,100 | $271,600 |

## How Much Does Farm Preservation Cost?

There has been an ongoing debate over the equity of state and local government programs that provide tax relief for farm and forestland. These programs provide tax relief by assessing the land at its "current use" in place of its "highest and best use." In return, landowners must agree to keep the land in its current use for 10 years or be subject to financial penalties (at least in most state programs).  These programs help to slow development and preserve farm/forestland and green space. In Georgia, agricultural lands are eligible for enrollment in the Conservation Use Valuation Assessment (CUVA) or the Agricultural Preferential (AG PREF) program to receive these tax incentives.  Most other states have similar programs.

A major underlying question, however, is: How much of a tax burden is shifted to homeowners to make up for this loss in revenue?  This question can be answered in Georgia counties by empirical investigation of the tax digest and the results of the COCS studies.  To compute the impact of these tax incentive programs, the reduction in the tax digest (the sum total of property value in the county) due to these programs is added back into the tax digest.  This yields a hypothetical tax digest as if these programs did not exist.  Then a tax rate is computed to produce the same revenue as collected currently by the local government and school combined.

This produces a slightly lower tax rate that property owners would pay if these tax incentive programs did not exist.  The difference between this lower, hypothetical rate and the actual tax rate allows computation of the fiscal impact of these tax programs for any specified property value.

Table 5 takes the different tax rates (the real one and the one that would be revenue neutral in the absence of preferential agricultural assessment) and converts them into the amount of additional property tax (both county and school) a representative homeowner pays because of the existence of these programs.  The numbers are computed for various home prices and a standard homestead exemption.  For example, the owner of a $75,000 house in Union County (GA) pays an additional $29.10 per year.  These numbers let residents decide for themselves if the tradeoff of higher taxes in exchange for preserving farmland (perhaps only temporarily) is worth it.

The numbers in Table 5 show quite a wide range in the impact of agricultural assessment programs on homeowner tax burdens.  In counties with more residential and commercial property and/or less farmland, the burden of these programs is light. In the more suburban to urban counties of Athens-Clarke (GA) and Union (NC), homeowners pay very small additional amounts and would almost certainly vote in favor of such a program in order to help preserve farmland.  In more rural, agriculturally-dependent counties without much non-agricultural tax base, the tax burden falls much more heavily on homeowners.

**Table 5.  Homeowner Tax Increases as a Result of Farmland Assessment Programs**

| County\ House Value | $75,000 | $100,000 | $150,000 | $200,000 |
|---|---|---|---|---|
| **Georgia** | | | | |
| Athens-Clarke | $   4.84 | $   6.57 | $  10.03 | $  13.49 |
| Carroll | 10.01 | 15.02 | 25.03 | 35.05 |
| Colquitt | 12.32 | 16.72 | 25.52 | 34.32 |
| Grady | 24.08 | 32.68 | 49.88 | 67.08 |
| Hall | 25.17 | 34.16 | 52.14 | 70.11 |
| Miller | 49.02 | 66.52 | 101.54 | 136.55 |
| Mitchell | 95.54 | 129.67 | 197.91 | 266.16 |
| Thomas | 9.02 | 12.24 | 18.69 | 25.13 |
| Union | 29.10 | 39.49 | 60.28 | 81.06 |
| **North Carolina** | | | | |
| Union | 9.66 | 12.88 | 19.31 | 25.75 |

## Looking at Fiscal Impacts by Acre: Can a Balance be Maintained?

The revenue and service cost numbers used in Tables 2 and 3 can be recast into the fiscal surplus or shortfall on a per acre basis for each type of land use development.  This can be an especially useful way to examine the data for planning purposes because it provides an insight into the

ratio of residential to commercial/industrial development that will be needed to avoid future tax increases. If residential development creates a fiscal shortfall and commercial/industrial development creates a fiscal surplus, the ratio of acres of new residential to acres of new commercial/industrial development necessary to balance each other out can be computed. This ratio could serve as a planning guide for future land use maps, long-range plans, etc. Also, this ratio can serve as a warning. If the ratio is unrealistic (in terms of acres of business development needed), that implies that allowing residential growth will lead to tax increases for existing residents. An obvious caveat to these numbers is that they are based on the county's current average type of residential and commercial/industrial development. New development in each category could be better or worse than the average from a fiscal impact standpoint; thus development must be analyzed on case-by-case basis. However, these ratios give a starting point from which adjustments can be made. A collection of these per acre numbers is displayed in Table 6 below.

**Table 6. Fiscal Surplus or Shortfall per Acre by Land Use Type**

| County<br>GEORGIA | Residential | Comm/Ind | Farm/Forest | Manuf Hous | Comm : Resid<br>Ratio |
|---|---|---|---|---|---|
| Athens-Clarke | $ -400.03 | $ 898.37 | $ -72.00 | | 0.45 |
| Brooks | -43.71 | 219.76 | 0.17 | | 0.20 |
| Colquitt | -42.53 | 537.14 | -0.20 | | 0.079 |
| Grady | -4.76 | 869.24 | 0.30 | $ -37.95 | 0.005 |
| Hall | -148.99 | -261.07 | 14.80 | -1,503.22 | N/A |
| Miller | -86.22 | 64.13 | -0.50 | -230.67 | 1.34 |
| Mitchell | -5.56 | 206.21 | -0.82 | -107.25 | 0.027 |
| Thomas | -65.32 | 533.23 | -1.51 | -180.65 | 0.12 |
| Union | -16.38 | 157.35 | -2.95 | -241.61 | 0.10 |
| **FLORIDA** | | | | | |
| Leon | -210.51 | 104.66 | 9.20 | | 2.01 |
| **NORTH CAROLINA** | | | | | |
| Union | -318.14 | 644.64 | 12.89 | | 0.49 |

To make the figures in the commercial to residential ratio column make sense, we refer to a specific example. For Brooks County (GA), the ratio is 0.20 which means that 0.20 acres of commercial/industrial development would be needed to offset the fiscal impact of each acre of average residential development. Looked at another way, this means one new acre of business development for every five acres of residential development. This is a fairly high ratio, but not necessarily impossible. In another example, Grady County (GA) has a ratio of 0.005, implying that one new acre of commercial/industrial development would be needed to offset the fiscal impact of each 200 acres of average residential development. This can be easily accomplished. In contrast, Leon County (FL) has a ratio of 2.01 meaning it needs two acres of commercial/ industrial development to offset each acre of average residential development. This is impossible to achieve unless there is a large increase in office or industrial development because retail businesses will not be added at a ratio even approaching one to one.

National statistics on retail square footage per consumer suggest that the retail component of commercial/industrial development will account for between 0.01 to 0.03 acres for each new acre of residential development at suburban densities (single family, detached homes). Thus, any ratio above this can be accomplished only through one of two occurrences: catch up retail development or office/industrial development. In some rural or recently suburbanized areas, retail development is low compared to the population; these areas can get more retail than the ratio of 0.01 to 0.03 as developers play catch up to the underserved local residents. Given that many national chain stores will not open in areas below threshold incomes, such catch up development is quite plausible in many locations. The second option is non-retail development. Industrial land uses are the most likely path here, but building office developments aimed at professional service firms and small companies that wish to avoid the commute into a nearby urban area is also a possible strategy.

Again, differential fiscal impacts are important here. For example, industrial development provides a much higher per acre fiscal surplus than retail or office development, so fewer acres of industrial development are needed to balance residential development. Also, higher value, denser, or better located residential development would not need as much offsetting (if any) commercial development since its fiscal impact would be more favorable than average. While, the numbers suggest Union County (NC), Leon County (FL), Athens-Clarke County (GA), and Miller County (GA) will have great difficulty in keeping their tax rates from rising over time; they could avoid this outcome by attracting new residential development near or above the county break-even home price. Referring back to Table 4 and comparing the break-even values to local average new home sales prices (not shown) suggests that, for example, Union (NC) and Miller (GA) Counties are likely to escape tax increases due to this path.

## Implications for Governments and Farm/Forest Land Preservation Efforts

The main implication of COCS studies is that a local government that approves the conversion of farm or forestland to residential development is likely to face a worsening in its financial condition. While the lure of an increased property tax base is often attractive to a local government when it is considering a request to approve a new subdivision, local government officials must realize that their expenditures will likely rise more than their revenues, resulting in a budget shortfall unless millage rates are increased. The conversion of farmland to houses will worsen the financial condition of the county government if the new homes have an average value below the break-even value, and in many cases will have an especially large and negative impact on the local school system's finances. Schools are impacted more heavily because they are very expensive and only very high-priced homes can come close to generating enough school-collected revenue to support even one child per household; i.e., the school systems have a higher break-even value. In counties where new homes have an average selling price that clearly exceeds the county's break-even value, the county will not be harmed fiscally by that new growth, but very few locations will have high enough average new home values to cover the accompanying educational costs. In cases where new homes fall below the break-even value (for towns, cities, counties, or schools), the shortfall must be covered by either by new commercial/industrial development that generates an offsetting surplus or by raising taxes on all existing taxpayers.

Further, COCS studies generally confirm that programs which reduce property tax burdens on farm and forestland as a mechanism to encourage farm and forestland preservation are equitable and serve only to bring the tax burden more in line with the cost of servicing that property. Farm and forestland may not generate an impressive looking tax base, but neither do they create a large demand for government services.

The findings of COCS studies should be carefully evaluated in light of the changing character of these rural counties. COCS studies should not be used to promote one land use type over another without a careful and full understanding of their limitations. They do, however, make clear that residential development alone is not a rational economic development strategy. Rural communities must ensure that their development is balanced with enough commercial and industrial development to "support" residential development that does not generate enough local government revenues to cover the expenditures it requires.

Finally, the variety of ways to display and analyze the findings of these studies shown in this report show how carefully such numbers must be used. Because the basic numbers use average revenues and expenditures and may not reflect the costs and revenue of a particular development project, factors such as density, value, location this must be taken into account when analyzing the outcomes of any specific new development. Further, the setting has an impact. In urban areas, residential and commercial growth tend to occur together in fairly fixed proportions, so that some offsetting of the negative impact of residential development occurs automatically. In suburban and especially in rural areas, such linkages are less likely to exist so that residential growth is not necessarily followed by commercial development. However, keeping these warnings in mind and with appropriate care, the ratios, break-even values, tax-neutral land use ratios and other numbers shown in this paper can be valuable planning tools for local governments facing residential growth pressures.

## References

American Farmland Trust (1992). *Does Farmland Protection Pay?  The Cost of Community Services in Three Massachusetts Towns*. The Massachusetts Department of Food and Agriculture.

American Farmland Trust, (1993).  *Is Farmland Protection A Community Investment?  How to Do a Cost of Community Services Study.*  (Washington, DC: American Farmland Trust).