

**THE COST OF COMMUNITY SERVICES
IN CHATHAM COUNTY**

A Report to the Chatham County Planning Department

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COST OF COMMUNITY SERVICES IN CHATHAM COUNTY

Introduction

Like many rural counties located near fast-growing urban areas, Chatham County faces a complex set of issues revolving around the desirable mix of land uses within the county. Over the past decade, the continuing economic growth of the adjoining counties of the Research Triangle have created unprecedented demands for residential and commercial development in Chatham County. On the one hand, this situation has been welcomed by many because it has created significant economic development opportunities for the county's citizens and a significant increase in the county's revenue base. On the other hand, many of the county's citizens worry that the rapid pace of these changes will alter the rural character of Chatham County in ways that are undesirable.

As new land uses supplant traditional ones in Chatham County, there is concern that the increased local government expenditures on community services needed to accommodate accelerated residential and commercial development may exceed the contribution of that development to the county's revenue base. This report presents the findings of a research project aimed at addressing this specific issue. The research quantified the contribution to local government revenues of various land use sectors (residential, commercial, industrial, and farmland), and the demands on local government financial resources of those same land use sectors. This "snapshot" of current revenues and expenditures allows an assessment of the costs and benefits of different land uses from the perspective of local government finance.

The analysis presented here employs a methodology established by the American Farmland Trust, one that has been used in numerous Cost of Community Services (COCS) studies throughout the U.S. Like those studies, the current research was motivated by two questions: (1) Does farmland receive an unfair tax advantage when it is assessed at its actual use – as in North Carolina – instead of its potential use in residential or commercial development? (2) Do the property taxes and other revenues generated by residential, commercial and industrial land uses exceed the amount of publicly-provided services required by those land uses?

As has been found in other COCS studies, the answers to these questions are negative for Chatham County. Despite being taxed on the basis of current land uses, the farm sector is found to be a net contributor to the local budget, receiving \$0.92 in public services for every dollar that it generates in revenues. Conversely, for every dollar contributed to the county budget by residential sector, the county spent somewhere between \$1.07 and \$1.12 in services to that sector. Commercial/industrial land uses are found to be the largest net contributors to the public purse, receiving somewhere between \$0.47 and \$0.76 worth of publicly provided services for each dollar in revenues that they generate.

At the outset, it is important to recognize two important limitations of analyses such as the one presented here. First, COCS studies highlight the relative demands of various land uses on local fiscal resources *given the current pattern of development*. As such, one should be cautious in extrapolating from the results of studies such as this in order to gauge the impact of future patterns of development on local public finance. Nonetheless, the results of studies such as this are useful in informing debates over such issues as whether or not alternative types of land uses are likely to contribute more in tax dollars than they demand in the way of support services.

Second, the current study in no way deals with the *social* value of each of these forms of development – i.e., their contribution (positive or negative) to the well-being of the county’s citizens. Rather it focuses on the more narrow issue of whether or not these land uses “pay their own way.” It is important to bear in mind that there is nothing particularly sacred regarding an exact balance between revenues and expenditures associated with a particular land use – even when balancing the local budget is an overriding priority. Indeed, one of the primary functions of a local government is to redistribute local financial resources such that services desired by citizens are supplied *even when those services cannot pay for themselves*. Determining the optimal distribution of those resources is a public policy issue resolved in the political arena. A study such as this fits into the process wherein such issues are resolved by shedding light on the relative costs and benefits of specific distribution of financial resources implicit in the existing pattern of development.

Methodology

The basic approach used in this research was quite simple. Working from the most recent available county financial data, revenues and expenditures were allocated among three specific land use categories: (a) Residential; (b) Commercial/Industrial; and (c) Farm. This allocation process was carried out in conjunction with a series of interviews conducted with a variety of local officials knowledgeable about the workings of specific departments – e.g., the county health director, the public works director, the sheriff, the superintendent of schools, etc. Once revenues and expenditures were allocated to specific land use sectors, the ratio of revenues to expenditures for each sector was computed. A revenue-expenditure ratio greater than one indicates that that sector's contribution to the public purse exceeds its demands for public funds. Conversely, a revenue-expenditure ratio less than one indicates that the sector's demand for publicly financed services exceeds its contribution to local public finance.

The basis for the current analysis was Chatham County's Comprehensive Annual Financial Report for the 1997-98 fiscal year. As noted above, the allocation of these data to specific sectors was done in consultation with a variety of local officials (listed in the Acknowledgements). These individuals were best equipped to assess the extent to which the various land use sectors partake of the services provided by their departments. Where feasible, expenditures were allocated to the various land use categories using available data on staff salaries and/or activities records. For example, the County Building Inspections Department maintains monthly records on the number and type of inspections conducted, and so we were able to compute the share of residential and commercial inspections and allocate the Inspections Department's expenditures accordingly.

Often, existing records were not amenable to being decomposed into various land use categories. In many of these cases, we relied on a local official's best guess of how their department's efforts were allocated. Where the relevant officials were unable (or unwilling) to make such a guess, we used one of two default allocation schemes that seemed most sensible. For services that exclusively benefit households (as opposed to commercial establishments) – for example, library services and Board of Elections services – we allocated expenditures based on

the distribution of the county's population between farm households and nonfarm households.¹ For services benefiting both households and commercial establishments (such as Emergency Management activities and many General Government functions), we allocated expenditures based on the proportion of total property value accounted for by each land use category.

Finally, early on in the research a question arose as to the appropriate treatment of expenditures related to Chatham County's rapidly increasing Latino population. According to Census Bureau estimates – which almost surely understate the true numbers – the proportion of county population made up by Latinos grew from 1.5% in 1990 to 2.6% in 1997. Additionally, as of December 1998, Latino children accounted for 8.76% of public school students. Among county residents, the dramatic growth in the Latino population is commonly linked to certain industries within the county – particularly the poultry processing plants in Siler City. This amounts to an argument that expenditures directly attributable to this segment of the population – specifically public health services and public school expenses – should be allocated to the commercial/industrial sector. On the other hand, one could argue that many residents of Chatham County (of all ethnic groups) have moved there because of work opportunities, that singling out Latinos is both arbitrary and inappropriate, and that expenditures related to this sub-population should be allocated to the residential sector.

It was decided to conduct parallel analyses, one allocating Latino-related expenditures to the commercial/industrial sector, and the other allocating them to the residential sector. This essentially places upper and lower bounds on the computed revenue/expenditure ratios for the residential and commercial/industrial sectors.

¹ An important exception to this was in the allocation of public schools expenditures. Based on information supplied by the Superintendent of Schools and the County Health Director, it was assumed that 1% of all students were from farm households and 99% were from nonfarm households.

Results

A detailed breakdown of revenues sources is found in Appendix Table 1. Total county revenues for 1997-98 were slightly more than \$39.5 million. Approximately 52% of this money came from property taxes. The largest other revenue sources were sales taxes (15%) and inter-governmental transfers from state and federal sources (18%).

Table 1 summarizes the overall breakdown of county expenditures for the 1997-98 fiscal year. More detailed information is found in Appendix Tables 2 and 3. Overall expenditures for 1997-98 were just under \$40.5 million. Two departments – human services and education –each accounted for roughly one quarter of the total budget. In addition to expenditures out of the General Fund, there are three additional expenditure sources that account for about 15% of the total budget. These include Enterprise Funds related to solid waste management and water utilities; contributions to Special Revenue Funds (primarily supporting public safety functions); and a Capital Projects Fund that is exclusively devoted to public schools.

Table 2 summarizes revenues and expenditures by land use category. As noted earlier, twin analyses were conducted – one allocating public schools and health expenditures directly attributable to the Latino population to the residential sector, the other allocating these expenditures to the commercial sector. In either event, the figures in Table 2 indicate that expenditures exceeded revenues for the residential land use category, while revenues exceeded expenditures for the commercial/industrial and farm land use categories.

The computed revenue/expenditure ratios quantifies the extent to which each of the three land use categories are either a net contributor or a net drain on Chatham County's financial resources. The two ratios for the residential sector are 0.90 and 0.93, depending on how expenses related to the Latino population are treated. These imply that for each dollar in property tax and other revenues generated by residential land uses, the county spends somewhere between \$1.07 and \$1.12 to provide services supporting those land uses. In other words, the residential sector is on balance a net user of local public finances.

On the other hand, the other two land use categories are net contributors to local fiscal resources. The revenue/expenditure ratio of 1.09 for the farm sector implies that for every dollar in revenues attributable to farms, the county spends only \$0.92 in services benefiting the farm sector. The commercial/industrial land use category stands out as the sector having the lowest revenue/expenditure ratios (2.13 and 1.32), and the one most sensitive to how one treats school and public health expenditures directly attributable to the Latino population.² Even when all of these expenditures are allocated to the commercial/industrial sector, the results indicate that the county spends only \$0.76 in services benefiting commercial and industrial establishments for every public dollar generated by those establishments. This figure falls to \$0.47 when Latino-related expenditures are allocated exclusively to the residential sector.

Conclusion

The results presented above provide answers to the two questions posed at the beginning of this report. As regards the public services provided by Chatham County, farms more than pay their own way. This is true despite farms being taxed on the basis of their current use (as opposed to their potential use were they to be transformed into commercial or residential uses). In contrast, the value of public services provided to residential land uses exceed the property tax and other revenues that they contribute to the county budget. This contradicts claims that are sometimes made that residential development is a boon to county finances due to its expansion of the property tax base. Finally, commercial and industrial land uses emerge as being the largest net contributors to local financial resources – even when public expenditures attributable to the county’s burgeoning Latino population are allocated to this sector.

The main finding of this research, then, is that farm and commercial/industrial land uses subsidize residential land uses in Chatham County. This is consistent with the findings of other Cost of Community Services studies carried out in other communities throughout the U.S. However, the degree to which the revenue/expenditure ratios of these various land uses differ from one another is much more modest than has been found in most other studies. In other

² These expenditures (totaling approximately \$1.5 million) represent a much larger fraction of commercial/industrial expenditures than of residential expenditures, and therefore affect the ratio of revenues to expenditures much more strongly.

words, the degree of cross-subsidization of the residential sector by the other land use sectors is significantly more modest in Chatham County than in other locations.

As was stressed at the outset, some degree of subsidization of certain land uses by other land uses is to be expected in virtually every community. The distribution of revenues and expenditures among various land uses in Chatham County that has been computed here is based on current land patterns in the county. Determining whether or not this relatively balanced distribution is appropriate – either now or in the future – is an issue that can only be resolved in the local political arena.

Table 1. Chatham County Budget Expenditures for 1997-98

Item	Expenditure	%
Education	\$10,014,518	24.8
Debt Service	4,074,577	10.1
Human Services	10,773,759	26.6
Public Safety	5,022,377	12.4
Economic and Physical Development	664,116	1.6
General Government	2,924,456	7.2
Culture & Recreation	657,011	1.6
Total General Fund	\$34,130,814	84.4
Enterprise Funds	\$1,381,752	3.4
Special Revenue Funds	1,435,020	3.5
Capital Projects Funds	3,500,596	8.7
Total Other Funds	\$6,317,368	15.6
TOTAL EXPENDITURE	\$40,448,182	100

Source: *Chatham County Comprehensive Annual Financial Report*

Table 2. Chatham County Revenues and Expenditures by Land Use Category for 1997-98

Land Use Category	Revenues (R)	Expenditure (E)	R/E Ratio^a
<i>----- Expenditures attributable to the Latino population treated as residential^b -----</i>			
Residential	\$32,948,191	\$36,681,581	0.90
Farm	\$1,318,025	\$1,206,962	1.09
Commercial/Industrial	\$5,239,806	\$2,460,105	2.13
TOTAL	\$39,506,022	40,448,182	
<i>----- Expenditures attributable to the Latino population treated as commercial^c -----</i>			
Residential	\$32,948,191	\$35,269,146	0.93
Farm	\$1,318,025	\$1,206,962	1.09
Commercial/Industrial	\$5,239,806	\$3,972,074	1.32
TOTAL	\$39,506,022	40,448,182	

- a. This ratio measures the amount of county revenue contributed by a given land use sector for each dollar in public services used by that sector.
- b. Based on estimates that allocated to the residential sector all public health and public school expenditures that are directly attributable to Latinos.
- c. Based on estimates that allocated to the commercial/industrial sector all public health and public school expenditures that are directly attributable to Latinos.