# THE COST OF COMMUNITY SERVICES IN PITT COUNTY

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### Introduction

In counties containing or adjacent to rapidly-growing urban areas, there is considerable debate over the desirable mix of land uses and the role that local government can and should play in affecting the rate at which new land uses supplant traditional ones. Pitt County is typical of such counties. The county's economic growth has created unprecedented demands for residential and commercial development, particularly in the county's unincorporated rural areas.

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, 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.

One important element of public debate over appropriate land use policies is whether or not the increased county government expenditures on community services needed to accommodate residential and commercial development exceed the contribution of that development to the county's revenue stream. This report presents the findings of a research project aimed at addressing this specific issue. The research quantifies the contribution to local government revenues of various types of land uses (residential, commercial/industrial,<sup>1</sup> and agricultural), and the demands on local government financial resources of those same land uses. 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 finances.

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) Do the property taxes and other revenues generated by residential land uses exceed the amount of publicly-provided services supplied to them? (2) Does the fact that farm and forest lands are taxed on the basis of their Present Use Value – instead of their potential

<sup>&</sup>lt;sup>1</sup> For simplicity, the term "commercial" will denote both commercial and industrial land uses for the remainder of this report. Likewise, "agricultural" will refer to farm and forest land uses.

value in residential or commercial uses – mean that they are contributing less in tax revenues than the value of publicly provided services they receive?

As has been found in other COCS studies, the answer to each of these questions is "no" for Pitt County. The residential sector contributes only 77¢ to the county's coffers for each dollar's worth of services that it receives. Commercial and industrial land uses are the largest net contributors to the public purse, contributing \$2.76 in revenues for each dollar of publicly provided services that they receive. Despite being taxed on the basis of current land uses, property in agricultural land uses is found to be a net contributor to the local budget, generating \$1.62 in revenues for every dollar of public services that it receives.

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*. 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 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" with regard to county revenues and expenditures. It is important to bear in mind that there is nothing sacred about 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 to be 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 the specific distribution of financial resources given the existing pattern of development.

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#### 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; and (*c*) agricultural. This process was carried out in conjunction with a series of telephone interviews and email exchanges with a variety of local officials knowledgeable about the workings of specific departments.

Once revenues and expenditures were allocated to specific land use categories, the ratio of revenues to expenditures was computed for each. A revenue-expenditure ratio greater than 1.00 indicates that that sector's contribution to the public purse exceeds its use of public funds. Conversely, a revenue-expenditure ratio less than 1.00 indicates that the sector's use of publicly financed services exceeds its contribution to the local budget.

The basis for the current analysis is the actual expenditures recorded for the 2011-2012 fiscal year reported in the audited *Pitt County North Carolina Comprehensive Annual Financial Report for the Year Ending June 30, 2012*. 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 uses partake of the services provided by their departments. Where feasible, expenditures were allocated to land use categories using available data on staff salaries or activity records.

Often, existing records were not amenable to being broken out 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 to make such a guess, one of two allocation schemes was used. For services that exclusively benefit households (as opposed to commercial establishments)<sup>2</sup> – for example, public schools and library services – 100% of expenditures were allocated to the residential sector.<sup>3</sup> For departments whose activities

 $<sup>^2</sup>$  Note that the quality of "residential" services such as public schools may well have a positive influence on business formation, particularly the attractiveness of the county to firms considering relocation. These spillover effects are ignored here, however, because the information needs for quantifying them lie well beyond the scope of this research.

<sup>&</sup>lt;sup>3</sup> Pitt County separates the farm business from the farm residence, assessing the property value of farm residences in the same manner as any other residences. For this reason, farm residences were included in the residential land use category throughout the analysis.

benefited both residences and businesses (including agricultural businesses), expenditures were allocated based on the proportion of total property value accounted for by each land use category. This "default" breakdown of assessed property valuation for 2009-2010 was 62.3% residential, 32.2% commercial, and 5.5% agricultural. The expenditures of most of the county's general administration departments were allocated in this way.

Revenues were handled in a manner similar to expenditures. Property tax revenues were allocated to specific land use categories based on the January 2012 property assessments. Taxes and other revenue sources that are linked directly to commercial activities – for example, Article 39 sales taxes<sup>4</sup> – were allocated exclusively to the commercial sector. Revenues from sources associated exclusively with households (such as recreation fees) were allocated to the residential sector. Revenues raised by specific county government departments from fees charged for services or from inter-governmental transfers were allocated in direct proportion to the allocation of expenditures by those departments, unless respondents indicated otherwise. Any remaining revenues that could not be directly allocated in these ways (e.g., interest income) were allocated according to the "default" proportions of total property value accounted for by each land use category.

#### Results

A detailed breakdown of revenues sources is found in Appendix Table 1. Total county general fund revenues for 2011-2012 were \$133.0 million. About 58.7% of this money came from ad valorem property taxes, while another 10.8% came from sales taxes.

Table 1 summarizes the overall breakdown of county expenditures for the 2011-2012 fiscal year. More detailed information is found in Appendix Table 2. Health and human services<sup>5</sup> and education departments accounted for just over sixty-two percent of the total budget. All school expenditures, and nearly all of the activities of the health and human services departments are

<sup>&</sup>lt;sup>4</sup> The state distributes Article 39 sales tax revenues back to counties on a point-of-sale basis. Article 40 and 42 sales taxes are distributed back to counties based on county population; revenues from these sources were allocated to residential land uses. Article 44 sales taxes are distributed to counties in part on the basis of point of sale and in part on the basis of county population; accordingly, these were allocated to residential and commercial land uses on a 50-50 basis.

<sup>&</sup>lt;sup>5</sup> Health and human services include the Social Services, Public Health, Mental Health, and Human Services departments.

exclusive to the residential sector. Hence, the large "footprint" of these two departments in county government has a dominant impact on the results of this study.

Table 2 summarizes revenues and expenditures by land use category. Expenditures exceeded revenues for the residential land use category, while revenues exceeded expenditures for the commercial and agricultural land use categories. The computed revenue/expenditure ratios quantify the extent to which each of the three land use categories is either a net contributor or a net drain on Pitt County's financial resources. For comparative purposes, the bottom of the table provides the results from some 103 other Cost of Community Services studies that have been conducted throughout the U.S., as well as nine studies that were conducted in Chatham, Wake, Alamance, Orange, Gaston, Henderson, Franklin, Durham, and Guilford Counties over the course of the past decade.

The revenue/expenditure ratio for the residential land use category is 0.77; this implies that for each dollar in property tax and other revenues generated by residential land uses, the county spends \$1.30 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 1.62 for agriculture implies that revenues substantially exceed expenditures for this land use category. The commercial land use category stands out as having the highest revenue/expenditure ratio (2.63). This result indicates that the county spends only 36¢ on services benefiting commercial and industrial establishments for every public dollar generated by those establishments.

Finally, Table 3 presents an analysis which computes the residential property value needed to generate an exact balance between average revenues contributed by the 61,459 current housing units in the county and the average value of public services consumed by households. This "breakeven" house price was computed assuming that any new household would consume the average amount of services reflected in the 2011-2012 budget – i.e., that they would possess the average number of school kids, consume an average amount of public health and social services, etc. The computation further assumes that any new household would contribute the average amount of non-property tax revenues generated by existing residential properties, and takes as a benchmark the 2012 property tax rate of 68¢ per \$100. Based on these assumptions, the breakeven property value is computed to be just under \$179,000.

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#### Discussion

The results presented above provide answers to the two questions posed at the beginning of this report. As regards the public services provided by Pitt County, commercial and industrial land uses emerge as being the largest net contributor to local financial resources. In contrast, the value of public services provided to residential land uses exceed the property taxes and other revenues that they contribute to the county budget. This finding contrasts with claims that are sometimes made that residential development is a boon to county finances due to its expansion of the property tax base. It would appear that the very large footprint of the education and health and human services expenditures in the overall county budget plays a dominant role in explaining this phenomenon. Finally, agricultural lands more than pay their own way. This is true despite these properties 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).

Qualitatively, these findings for Pitt County are consistent with the findings of nearly every Cost of Community Services study that has been carried out in other communities throughout the U.S. The degree of cross-subsidization of the residential sector – in particular, the extent to which the Pitt County's commercial sector pays for services provided to its residential sector – is somewhat less than the median in other studies that have been conducted nationally. Closer to home, the relative balance of revenues and expenditures for the residential and commercial land use categories is qualitatively similar to the that which was found in comparable studies conducted in other rural North Carolina counties.

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 Pitt County that has been computed here is based on current land use patterns in the county. Determining whether or not this distribution is appropriate – either now or in the future – is an issue that can only be resolved in the political arena.

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Cotogomy	Expenditure	%
Category	Expenditure	/0
Health and Human Services <sup>a</sup>	39,276,818	31.6%
Education	39,204,523	31.5%
Public Safety	30,283,773	24.4%
General Government	12,712,923	10.2%
Economic and Physical Development	1,719,088	1.4%
Cultural Services	618,966	0.5%
Debt Service	314,996	0.3%
Environmental Protection	217,076	0.2%

 Table 1. Pitt County Expenditures for 2011-2012

a. Health and human services include the Social Services, Public Health, Mental Health, and Human Services departments.

Source: Pitt County North Carolina Certified Annual Financial Report for the Year Ended June 30, 2012

	Residential	Commercial	Agricultural			
Revenues	\$89,925,674 (67.6%)	\$38,133,018 (28.7%)	\$4,949,714 (3.7%)			
Expenditures	\$116,116,263 (87.3%)	\$13,837,067 (10.4%)	\$3,055,076 (2.3%)			
<b>Revenues/Expenditures ratio</b> <sup>a</sup>	0.77	2.76	1.62			
	Revenue/Expe	nditure ratios from na	ational studies <sup>b</sup>			
Minimum	0.47	0.96	1.01			
Median	0.87	3.57	2.78			
Maximum	0.99	20.00	50.00			
	<b>Revenue/Expenditure ratios from local studies</b>					
Wake County (2001)	0.65	5.63	2.12			
Alamance County (2006)	0.68	4.29	1.69			
Orange County (2006)	0.76	4.21	1.38			
Chatham County (2007)	0.87	3.01	1.72			
Gaston County (2008)	0.81	2.41	1.13			
Henderson County (2008)	0.86	2.52	1.03			
Franklin County (2009)	0.89	1.90	1.32			
Durham County (2010)	0.87	3.03	1.70			
Guilford County (2010)	0.74	3.44	1.62			
Yadkin County (2011)	0.89	2.63	1.63			
Median	0.81	3.03	1.62			

## Table 2. Revenues vs. Expenditures in Pitt County

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. These figures are derived from 103 Cost of Community Services summarized on the American Farmland Trust website (http://farmlandinfo.org/documents/27757/FS\_COCS\_8-04.pdf).

# Table 3. Breakeven Analysis for Residential Property Value in Pitt County

<ul> <li>(2) Residential Non-Property Tax Revenue Contribution in 2009-2010 \$41,316,972</li> <li>(3) Total residential expenditures in 2009-2010 \$116,116,262</li> <li>(4) Total Expenditures needing to be paid for by property taxes [(3) - (2)] \$74,799,293</li> <li>(5) Number of residential properties in the county 61,455</li> </ul>		Breakeven property value $[100 \times (6) \div (1)]$	\$ 178,979
<ul> <li>(2) Residential Non-Property Tax Revenue Contribution in 2009-2010 \$41,316,972</li> <li>(3) Total residential expenditures in 2009-2010 \$116,116,262</li> <li>(4) Total Expenditures needing to be paid for by property taxes [(3) - (2)] \$74,799,293</li> </ul>	(6)	Per household expenditures needing to be paid for by property taxes $[(4) \div (5)]$	\$1,217
<ul> <li>(2) Residential Non-Property Tax Revenue Contribution in 2009-2010 \$41,316,972</li> <li>(3) Total residential expenditures in 2009-2010 \$116,116,263</li> </ul>	(5)	Number of residential properties in the county	61,459
(2) Residential Non-Property Tax Revenue Contribution in 2009-2010 \$41,316,972	(4)	Total Expenditures needing to be paid for by property taxes [(3) - (2)]	\$ 74,799,291
	(3)	Total residential expenditures in 2009-2010	\$ 116,116,263
(1) Property tax rate (\$ per \$100) 0.6	(2)	Residential Non-Property Tax Revenue Contribution in 2009-2010	\$ 41,316,972
	(1)	Property tax rate (\$ per \$100)	0.68

	Total	Residential	Commercial	Agricultural	<b>Breakdown</b> <sup>a</sup>
Ad Valorem Taxes	78,023,599	48,608,702	25,123,599	4,291,298	
Taxes	20,084,461	48,271,278	24,949,200	4,261,509	default
Penalties and Interest	246,829	337,424	174,399	29,789	default
Local Option Sales	14,321,819	6,763,708	7,558,112	0	
Article 39	7,587,453	0	7,587,453	0	0-100-0
Article 40	4,449,682	4,449,682	0	0	100-0-0
Article 42	2,343,367	2,343,367	0	0	100-0-0
Article 44	-58,683	-29,342	-29,342	0	50-50-0
Other Taxes Total	2,058,527	1,127,606	833,673	97,248	
Occupancy tax	25,288	0	25,288	0	0-100-0
Payment in lieu of taxes	1,768,140	1,101,551	569,341	97,248	default
Privilege licenses	9,892	0	9,892	0	0-100-0
Marriage licenses	26,055	26,055	0	0	100-0-0
Gross receipts tax	229,152	0	229,152	0	0-100-0
Unrestricted Intergovernmental Revenues	1,576,494	217,401	1,359,093	0	
Alcohol, beer, and wine tax	259,093	0	259,093	0	0-100-0
Pitt County ABC Board	1,100,000	0	1,100,000	0	0-100-0
Social Services fees and grants	217,401	217,401	0	0	100-0-0
Sales and Services	7,517,447	5,105,612	1,989,095	422,740	
Rents, concessions and fees	4,640,027	3,312,979	1,062,566	264,482	default
Prison inmate reimbursement	2,877,420	1,792,633	926,529	158,258	default

#### **Appendix Table 1. Pitt County Revenues by Land Use Category for 2011-2012**

	Total	Residential	Commercial	Agricultural	<b>Breakdown</b> <sup>a</sup>
<b>Restricted Intergovernmental Revenues</b>	26,837,035	26,194,055	605,825	37,155	
Public Health fees and grants	5,627,559	5,239,257	388,302	0	93.1-6.9-0
Social Services fees and grants	20,403,815	20,403,815	0	0	100-0-0
Mental Health fees and grants	130,121	130,121	0	0	100-0-0
Jail fees	332,648	207,240	107,113	18,296	default
Auto. E&P - Register of Deeds	79,142	49,305	25,484	4,353	default
Federal and State grants	263,750	164,316	84,928	14,506	default
Permits and Fees	1,753,794	1,335,623	367,481	50,691	
Building permits and inspection fees	307,267	277,155	30,112	0	90.2-9.8-0
Register of Deeds	660,260	411,342	212,604	36,314	default
Excise stamps	414,253	373,656	40,597	0	90.2-9.8-0
Rabies control fees	22,963	22,963	0	0	100-0-0
Animal fees	87,660	87,660	0	0	100-0-0
Court facility fees	261,391	162,847	84,168	14,377	default
Investment Earnings	113,424	70,663	367,481	50,691	default
Miscellaneous	395,438	207,128	158,472	29,838	
Sale of capital assets	11,943	7,440	3,846	657	default
Other income	794,324	494,864	255,772	43,688	default
TOTAL REVENUES	133,008,406	<b>89,925,674</b> (67.6%)	<b>38,133,018</b> (28.7%)	<b>4,949,714</b> (3.7%)	

Appendix Table 1. Pitt County Revenues by Land Use Category for 2011-2012 (continued)

a. Percentage breakdown by land use category (residential-commercial-agricultural). Default percentages were based on 2012 assessed property valuation (residential - 62.3%; commercial - 32.2%; agricultural - 5.5%).

	Total	Residential	Commercial	Agricultural	Breakdown <sup>a</sup>
General Government	12,712,923	7,920,151	4,093,561	699,211	
Governing board, County	, ,	, ,	, ,	<i>,</i>	
Manager, Legal, PIO	1,247,108	776,948	401,569	68,591	default
Finance, Tax					
Assessor, Tax Collector	3,043,499	1,896,100	980,007	167,392	default
Elections	613,412	382,156	197,519	33,738	default
Register of Deeds	711,089	443,008	228,971	39,110	default
Human resources	563,594	351,119	181,477	30,998	default
Print shop/mailroom, MIS, GIS	2,335,707	1,455,145	752,098	128,464	default
Buildings & grounds, housekeeping	2,553,735	1,590,977	822,303	140,455	default
Non-departmental general admin	1,644,779	1,024,697	529,619	90,463	default
Public Safety	30,283,773	20,928,664	7,654,220	1,700,889	
Sheriff's Department, school					
security, other public safety	12,245,757	9,306,775	2,167,499	771,483	76.0-17.7-6.3
Detention Center, jail inmate/health					
services	14,798,550	9,219,497	4,765,133	813,920	default
Emergency services	878,431	718,557	143,184	16,690	81.8-16.3-1.9
Communications	1,118,518	696,837	360,163	61,518	default
Planning E911	127,471	79,414	41,046	7,011	default
Animal and mosquito control	454,010	454,010	0	0	100-0-0
Inspections	273,355	170,300	88,020	15,035	default
Medical examiner	106,070	106,070	0	0	100-0-0
Transportation	4,669	4,669	0	0	100-0-0
Court facility	276,942	172,535	89,175	15,232	default
<b>Environmental Protection</b>	643,453	643,453	0	0	
Other environmental protection	232,824	232,824	0	0	100-0-0
Soil and water conservation	393,129	393,129	0	0	100-0-0

# Appendix Table 2. Pitt County Expenditures by Land Use Category for 2011-2012

	Total	Residential	Commercial	Agricultural	<b>Breakdown</b> <sup>a</sup>
Economic and Physical Development	1,719,088	1,022,974	420,186	275,927	
Planning and zoning	637,734	575,236	62,498	0	90.2-9.8-0
Permitting center	126,644	114,233	12,411	0	90.2-9.8-0
Other economic development	173,913	0	173,913	0	0-100-0
Engineering	127,873	79,665	41,175	7,033	default
Cooperative extension	299,447	59,889	29,945	209,613	20-10-70
Farmers' Market	42,159	0	0	42,159	0-0-100
Natural disasters	311,318	193,951	100,244	17,122	default
Human Services	334,534	334,534	0	0	
Other human services	212,093	212,093	0	0	90.2-9.8-0
Veterans affairs	122,441	122,441	0	0	90.2-9.8-0
Public Health	9,505,483	8,849,605	655,878	0	
Administration	2,381,811	2,217,466	164,345	0	93.1-6.9-0
Services and programs	7,123,672	6,632,139	491,533	0	93.1-6.9-0
Social Services	28,818,543	28,818,543	0	0	
Administration	11,510,927	11,510,927	0	0	100-0-0
Nursing and Medical	8,235,122	8,235,122	0	0	100-0-0
Communicable Disease	6,857,114	6,857,114	0	0	100-0-0
Tuberculosis	2,215,380	2,215,380	0	0	100-0-0
Mental Health	618,258	618,258	0	0	
Services and programs	618,258	618,258	0	0	100-0-0
Education:	39,204,523	39,204,523	0	0	
Pitt County schools	34,829,142	34,829,142	0	0	100-0-0
Pitt Community College	4,375,381	4,375,381	0	0	100-0-0

# Appendix Table 2. Pitt County Expenditures by Land Use Category for 2011-2012 (continued)

	Total	Residential	Commercial	Agricultural	<b>Breakdown</b> <sup>a</sup>
Cultural Services	618,966	618,966	0	0	100-0-0
Debt Service	314,966	196,243	101,429	17,325	default
Total Current Expenditures	124,348,163	108,555,875	12,936,129	2,856,159	
Fund Transfer	8,660,243	7,560,387	900,938	198,918	87.3-10.4-2.3
TOTAL EXPENDITURES	133,008,406	116,116,263 (87.3%)	13,837,067 (10.4%)	3,055,076 (2.3%)	

## Appendix Table 2. Pitt County Expenditures by Land Use Category for 2011-2012 (continued)

a. Percentage breakdown by land use category (residential-commercial-agricultural). Default percentages were based on 2012 assessed property valuation (residential - 62.3%; commercial - 32.2%; agricultural - 5.5%).