

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

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Introduction

In counties located near 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. Yadkin County is typical of such counties. The county's economic growth, as well as that of the adjoining counties of the Piedmont Triad, have created unprecedented demands for residential and commercial development, particularly in the county's 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 cost of 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 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,¹ 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 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) 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

¹ 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 Yadkin County. The residential sector contributes only 89¢ 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 \$2.63 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 \$1.63 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*. 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 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.

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 2009-2010 fiscal year reported in the audited Yadkin County North Carolina Financial Statements for the Year Ending June 30, 2010. 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 and/or activities 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)² – for example, public schools and library services – 100% of expenditures were allocated to the residential sector.³ For departments whose activities benefited both residences and businesses (including agricultural businesses), expenditures were

² 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.

³ Yadkin 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.

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 71.5% residential, 18.2% commercial, and 10.3% 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 2009 property assessments. Taxes and other revenue sources that are linked directly to commercial activities – for example, Article 39 sales taxes⁴ – 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 2009-2010 were \$33.7 million. About 60.3% of this money came from ad valorem property taxes, while another 14.9% came from sales taxes.

Table 1 summarizes the overall breakdown of county expenditures for the 2009-2010 fiscal year. More detailed information is found in Appendix Table 2. Education and human services⁵ departments – accounted for nearly sixty percent of the total budget. Because all school expenditures, and nearly all of the activities of the human services departments are exclusive to the residential sector, the large “footprint” of these two departments in county government has a dominant impact on the results of this study.

⁴ 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.

⁵ Human services include both the public health and social services departments.

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 Yadkin 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 0.89; this implies that for each dollar in property tax and other revenues generated by residential land uses, the county spends \$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 1.63 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 38¢ 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 15,900 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 2009-2010 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 2009/2010 property tax rate of 74¢ per \$100. Based on these assumptions, the breakeven property value is computed to be \$163,065.

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 Yadkin 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 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 Yadkin 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 Yadkin 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 Yadkin 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 local political arena.

Table 1. Yadkin County Expenditures for 2009-2010

Category	Expenditure	%
Human Services	9,978,385	32.7%
Public Safety	7,940,219	26.0%
Education	7,884,365	25.8%
General Government	3,457,723	11.3%
Economic and Physical Development	674,833	2.2%
Cultural and Recreational Services	643,453	2.1%

a. Human services include both the Social Services and Public Health departments.

Source: *Yadkin County North Carolina Financial Statements for the Year Ended June 30, 2010*

Table 2. Revenues vs. Expenditures in Yadkin County

	Residential	Commercial	Agricultural
Revenues	\$25,268,815 (75.0%)	\$6,009,754 (17.8%)	\$2,411,126 (7.2%)
Expenditures	\$29,918,124 (88.8%)	\$2,288,169 (6.8%)	\$1,480,595 (4.4%)
Revenues/Expenditures ratio^a	0.89	2.63	1.63
	Revenue/Expenditure ratios from national studies^b		
Minimum	0.47	0.96	1.01
Median	0.87	3.57	2.78
Maximum	0.99	20.00	50.00
	Revenue/Expenditure ratios from local studies		
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
Median	0.81	3.03	1.62

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 Yadkin County

(1) Property tax rate (\$ per \$100)	0.74
(2) Residential Non-Property Tax Revenue Contribution in 2009-2010	\$10,731,942
(3) Total residential expenditures in 2009-2010	\$29,918,124
(4) Total Expenditures needing to be paid for by property taxes [(3) - (2)]	\$19,186,182
(5) Number of residential properties in the county	15,900
(6) Per household expenditures needing to be paid for by property taxes [(4) ÷ (5)]	\$1,207
Breakeven property value [100 × (6) ÷ (1)]	\$ 163,065

Appendix Table 1. Yadkin County Revenues by Land Use Category for 2009-2010

	Total	Residential	Commercial	Agricultural	Breakdown^a
Ad Valorem Taxes	20,331,290	14,536,872	3,700,295	2,094,123	
Taxes	20,084,461	14,360,390	3,655,372	2,068,699	default
Penalties and Interest	246,829	176,483	44,923	25,423	default
Local Option Sales	5,027,904	3,223,548	1,804,356	0	
Article 39	1,715,662	0	1,715,662	0	0-100-0
Article 40	1,824,418	1,824,418	0	0	100-0-0
Article 42	1,310,436	1,310,436	0	0	100-0-0
Article 44	177,388	88,694	88,694		50-50-0
Other Taxes Total	15,542	0	15,542	0	
Unfortified wine tax	15,923	0	15,923	0	0-100-0
Occupancy tax	-381	0	-381	0	0-100-0
Unrestricted Intergovernmental Revenues	246,499	246,499	0	0	
State Aid to Counties	93,966	93,966	0	0	100-0-0
Senior Citizens Exemption	152,533	152,533			100-0-0
Restricted Intergovernmental Revenues	5,840,767	5,754,819	31,698	54,250	
Federal and State Grants	5,761,571	5,698,194	17,285	46,093	98.9-0.3-0.8
Court Facilities Fees	79,196	56,625	14,414	8,157	default

Appendix Table 1. Yadkin County Revenues by Land Use Category for 2009-2010 (continued)

	Total	Residential	Commercial	Agricultural	Breakdown^a
Permits and Fees	342,949	215,282	33,644	94,022	
Building permits and inspection fees	134,656	100,992	26,931	6,733	75-20-5
Fire inspection fees	5,200	0	5,200	0	0-100-0
Register of Deeds	187,962	112,777	0	75,185	60-0-40
Other permits and fees	15,131	1,513	1,513	12,105	10-10-80
Sales and Services	1,443,779	1,052,114	257,461	134,204	
Rents, concessions and fees	25,603	20,892	2,996	1,715	81.6-11.7-6.7
Ambulance fees	1,015,886	726,358	184,891	104,636	default
Jail fees	19,674	14,067	3,581	2,026	default
Sheriff's fees	48,117	44,171	3,464	481	91.8-7.2-1.0
Court costs and officer's fees	33,714	24,106	6,136	3,473	default
Liaison officer program	86,122	86,122	0	0	100-0-0
Environmental health fees	79,472	39,736	31,789	7,947	50-40-10
Recreation fees	28,858	20,633	5,252	2,972	100-0-0
Other fees	106,333	76,028	19,353	10,952	default
Investment Earnings	45,527	32,552	8,286	4,689	default
Miscellaneous	395,438	207,128	158,472	29,838	
Loan repayments	11,000	7,865	2,002	1,133	default
Cablevision fees	105,748	0	105,748	0	0-100-0
Miscellaneous	278,690	199,263	50,722	28,705	default
TOTAL REVENUES	33,689,695	25,268,815	6,009,754	2,411,126	
		(75.0%)	(17.8%)	(10.3%)	

a. Percentage breakdown by land use category (residential-commercial-agricultural). Default percentages were based on 2009 assessed property valuation (residential - 71.5%; commercial – 18.2%; agricultural - 10.3%).

Appendix Table 2. Yadkin County Expenditures by Land Use Category for 2009-2010

	Total	Residential	Commercial	Agricultural	Breakdown^a
General Government	3,457,723	2,446,837	589,052	421,835	
Governing Body	33,587	24,015	6,113	3,459	default
Administration	198,599	141,998	36,145	20,456	default
Elections	127,725	91,323	23,246	13,156	default
Finance	216,885	155,073	39,473	22,339	default
Professional	468,385	334,895	85,246	48,244	default
Data Processing	209,927	150,098	38,207	21,622	default
Tax Assessor	408,808	292,298	74,403	42,107	default
Land Sales	47,377	33,875	8,623	4,880	default
Revaluation	225,137	160,973	40,975	23,189	default
County Attorney	8,338	5,962	1,518	859	default
Register of Deeds	221,176	132,706	0	88,470	60-0-40
Public Buildings	219,324	156,817	39,917	22,590	default
Hospital	657,214	469,908	119,613	67,693	default
Court Facilities	44,117	31,544	8,029	4,544	default
Land Records	81,076	57,969	14,756	8,351	default
GIS	91,723	65,582	16,694	9,447	default
Bonuses and Benefits	94,945	67,886	17,280	9,779	default
Retiree Insurance	103,380	73,917	18,815	10,648	default
Cultural and Recreational	643,453	643,453	0	0	
Recreational	232,824	232,824	0	0	100-0-0
Library	393,129	393,129	0	0	100-0-0
Cultural	17,500	17,500	0	0	100-0-0
Education	7,884,365	7,884,365	0	0	
Public School	7,633,057	7,633,057	0	0	100-0-0
Community College	251,308	251,308	0	0	100-0-0

Appendix Table 2. Yadkin County Expenditures by Land Use Category for 2009-2010 (continued)

	Total	Residential	Commercial	Agricultural	Breakdown^a
Human Services	9,978,385	9,805,193	138,554	34,638	
<i>Health</i>	2,855,753	2,682,561	138,554	34,638	
Administration	347,514	326,438	16,860	4,215	93.9-4.9-1.2
Nursing and Medical	186,757	186,757	0	0	100-0-0
Communicable Disease	169,449	169,449	0	0	100-0-0
Tuberculosis	1,643	1,643	0	0	100-0-0
Breast/Cervical Cancer	36,836	36,836	0	0	100-0-0
Environmental Health	304,233	152,117	121,693	30,423	50-40-10
Child Health	410,405	410,405	0	0	100-0-0
Maternal Health	264,117	264,117	0	0	100-0-0
Family Planning	230,320	230,320	0	0	100-0-0
Women, Infants, and Children	270,396	270,396	0	0	100-0-0
MCH Block Grant-Nutrition	2,295	2,295	0	0	100-0-0
Healthy Carolinians	69,497	69,497	0	0	100-0-0
Mental Health	139,140	139,140	0	0	100-0-0
Dental Health	423,151	423,151	0	0	100-0-0
<i>Social Service</i>	6,566,081	6,566,081	0	0	
Administration	3,155,253	3,155,253	0	0	100-0-0
Juvenile Restitution	129,245	129,245	0	0	100-0-0
Assistance Programs	2,864,375	2,864,375	0	0	100-0-0
County Portion-Aid	417,208	417,208	0	0	100-0-0
<i>Other Human Services</i>	556,551	556,551	0	0	
Operating Expenses	493,802	493,802	0	0	100-0-0
Elder Affairs	16,197	16,197	0	0	100-0-0
Veterans Services	46,552	46,552	0	0	100-0-0

Appendix Table 2. Yadkin County Expenditures by Land Use Category for 2009-2010 (continued)

	Total	Residential	Commercial	Agricultural	Breakdown^a
Public Safety	7,940,219	6,187,376	1,231,384	518,652	
Sheriff	2,285,174	2,097,790	164,533	22,852	91.8-7.2-1.0
Law Enforcement Communications	681,257	613,131	54,501	13,625	90-8-2
Jail	1,188,087	849,482	216,232	122,373	default
Liaison Officer	110,971	110,971	0	0	100-0-0
Animal Control	180,690	180,690	0	0	100-0-0
Emergency Medical Services	2,806,582	1,843,924	637,094	322,757	65.7-22.7-11.5
Fire Marshal	68,237	15,967	51,451	819	23.4-75.4-1.2
Fire and Rescue	278,592	189,164	64,076	25,352	67.9-23.0-9.1
Medical Examiner	18,000	18,000	0	0	100-0-0
Community Justice	105,138	105,138	0	0	100-0-0
Building Inspections	217,491	163,118	43,498	10,875	75-20-5
Economic and Physical Development	674,833	188,199	117,885	368,749	
Planning and Zoning	138,625	113,950	17,744	6,931	82.2-12.8-5
Cooperative Extension Service	172,046	51,614	8,602	111,830	30-5-65
Soil and Water Conservation	226,355	22,636	22,636	181,084	10-10-80
Economic Development	97,807	0	48,904	48,904	0-50-50
Economic Development Projects	40,000	0	20,000	20,000	0-50-50
Total Current Expenditures	30,578,978	27,155,423	2,076,875	1,343,874	
Fund Transfer	3,110,717	2,762,702	211,294	136,722	88.8-6.8-4.4
TOTAL EXPENDITURES	33,689,695	29,918,124	2,288,169	1,480,595	
		(88.8%)	(6.8%)	(4.4%)	

a. Percentage breakdown by land use category (residential-commercial-agricultural). Default percentages were based on 2009 assessed property valuation (residential - 71.5%; commercial – 18.2%; agricultural - 10.3%).