

Kent County, Maryland
Cost of Community Services Study

Prepared by American Farmland Trust

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American Farmland Trust

American Farmland Trust (AFT) is a nonprofit conservation organization founded in 1980 to protect our nation's strategic agricultural resources. AFT works to stop the loss of productive farmland and to promote farming practices that lead to a healthy environment. AFT provides a variety of services to landowners, land trusts, public officials, planners, agricultural agencies and others. Services include Cost of Community Services studies, workshops on farmland protection and estate planning, farmland protection program development and agricultural economic analysis.

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EXECUTIVE SUMMARY

American Farmland Trust conducted a Cost of Community Services (COCS) study to gain a better understanding of the financial impact of existing land uses in Kent County, Maryland. The study is a snapshot in time of current revenues and expenditures on a land use basis. It analyzes the financial demands of public services (e.g. schools, road and bridge maintenance, courts) and shows how much it costs to provide these services to farmland and open space, residential, and commercial land uses.

The Kent COCS study analyzed the fiscal year 2001 actual revenues and expenditures for the county and the Board of Education. This year was chosen because it is the most recent year for which actual revenue and expenditure data could be obtained. The study focused on the Kent County general fund budget because it represents revenues and expenditures for most of the services provided in the county. Services funded by the general fund include public safety, state's attorney, planning and zoning, county administration, circuit court, public works and accounting.

The State of Maryland differs from many other states in that it distributes a significant portion of residents' income tax to the county in which they live. In Kent County, income tax revenues amounted to \$7 million and made up 28 percent of general fund revenues.

The COCS study found that for county services:

- ?? Residential Development generated \$21,177,037 in revenues to cover expenditures of \$22,242,430.
- ?? Commercial and Industrial Development generated revenues of \$2,775,087 to cover expenditures of \$1,773,768.
- ?? Farm and Open Land generated \$2,060,743, while expenditures were only \$860,079.

In other words, for every \$1 of revenue generated from residential properties, Kent County spent \$1.05 providing services to those lands. For every \$1 from Commercial and Industrial land uses the county spent 64 cents to provide services. For every \$1 from Farm and Open Land uses in the county, only 42 cents was spent providing services.

The Kent County COCS findings demonstrate that while residential development contributes the largest amount of revenue, on average its net fiscal impact is negative. Farm and Open Land offsets most of this shortfall, while Commercial and Industrial Development contributes to the surplus.

INTRODUCTION

Kent County is located on the northern portion of the Delmarva Peninsula. It is bounded on the north, south and west by the Chesapeake Bay and its tributaries and bordered on the east by the state of Delaware. The county is part of the Atlantic Coastal Plain and approximately 57 percent (102,251 acres) of it is prime farmland.¹

The present day population of Kent County remains similar to that of 1900, when the county population was 18,786. Between 1990 and 2000 the population increased by eight percent, to 19,197 in 2000.² The Maryland Department of Planning projects that Kent County's population will reach approximately 19,550 by the year 2010.

Some farmland in the county has been subdivided for residential development, and much of this has occurred on waterfront properties. The demand for vacation and retirement homes recently has increased. In contrast to its neighboring counties, a significant portion of Kent's population still resides in the small towns that include Chestertown, Rock Hall, Millington and Galena. Commercial development is also concentrated around these towns, and in 1990, only 6 percent of the county was in developed land uses.³

The county's agricultural output in 1999 totaled \$63,533,000. The top four agricultural products were poultry and eggs, dairy farm products, feed grains, and greenhouse and nursery products. Farm credit data indicate that there was a negative cash flow for cash grains in six of the nine years from 1992 to 2001. Chesapeake Fields Institute, a not-for-profit organization that seeks to increase the profitability of farming, has recently been established in the county to address this issue.

The Kent County Cost of Community Services study (COCS) is part of the Delmarva Farmland Strategy Project, which American Farmland Trust (AFT) initiated to bring new tools to communities that are struggling with how to accommodate change and growth while retaining a profitable agricultural sector. Included in the project are a suite of low-cost studies using each community's financial, land use and economic records and statistics to bring a local perspective to decisions about land use, fiscal and economic issues. When used, these tools can change the dialogue in a community from speculation to projection and from emotion to analysis. The project also includes completing Agricultural Industry Profiles and Impact of Growth on Agriculture studies in addition to Cost of Community Services studies for several Delmarva counties. The Town Creek Foundation and American Farmland Trust have provided the major funding for this project.

¹ Kent County Comprehensive Plan, 1996.

² U.S. Census 2000.

³ Kent County Comprehensive Plan, 1996.

What is a Cost of Community Services Study?

A COCS study is a case study analysis of the net fiscal impacts of different land uses in the present. It provides a snapshot in time of costs versus revenues based on current land use. Averaged COCS studies are descriptive—not predictive—and are based on audited financial statements for a specific community. These analyses show what services private residents receive in return for the taxes they pay to their local jurisdiction.

AFT developed the COCS approach to investigate three common claims staff often heard at community meetings:

1. Open lands—including working agricultural and forest lands—are an interim land use that should be developed to their “highest and best use”;
2. Farmland gets an “unfair” tax break when it is assessed at its actual use value for agriculture instead of at its potential use value for development;
3. Residential development will lower property taxes by increasing the tax base.

The process of conducting a COCS study is relatively straightforward and easy to understand. Information from financial statements is allocated to land use categories. The studies rely on this financial data and probing interviews with local government officials to understand how revenues were generated and how appropriations were spent during a recent year.

METHODOLOGY

There are three basic steps in the process of conducting a COCS study:

1. Collect data: Obtain relevant budgets and reports; contact officials, boards and departments.
2. Allocate revenues and expenditures by land use.
3. Allocate expenditures by land use.

COCS Process in Kent County

The Kent County COCS study was conducted using the fiscal year 2001 (July 2000 to June 2001) financial statements because this was the most recent year with closed books. The following three land use categories were deemed appropriate for the study: 1) Residential Development, 2) Commercial and Industrial Development and 3) Farm and Open Land.

For the purposes of this study, Residential land use is defined as property used for dwellings, *including farmhouses* and the one-acre “homesite” they occupy, apartments, townhouses, condominiums, and vacant residential and commercial/industrial parcels of less than five acres. Commercial and Industrial land use is defined as property actively used for business purposes other than agriculture or forestry, including retail and wholesale production and utilities. Farm and Open Land is defined as property used or designated as farmland, woodland or open land.

According to the Maryland State Department of Assessments and Taxation (SDAT), farmland and woodland is land that is being “actively used” for agriculture or forestry. The minimum acreage for open land or vacant land was based upon the SDAT minimum acreage require-

ment for land to qualify for the Agricultural Use Assessment. This requirement states that farmland must be three acres or greater and woodland five acres or greater to qualify. The higher value of five acres was chosen as the minimum acreage for the Open Land category. SDAT also requires that the one-acre “homesite” on farms be assessed at the residential rate. This requirement also was used as the basis for determining the value of “excess land” on residential properties six acres or greater with houses. For these properties, the average one-acre residential value of \$33,606 was subtracted from the total land value to yield the “excess value.”

The table below provides a detailed description of the types of assessments that were grouped into the three COCS categories:

Maryland Land Use Categories		COCS Land Use Categories		
Class	Description	Residential	Commercial & Industrial	Farm & Open Land
Agriculture (A)	Properties receiving an Agricultural Use Assessment, Forest Conservation Management Agreement, and/or Private Management Plan	Farm houses and one acre		Farmland & farm buildings
Commercial (C)	Commercial properties		All parcels with buildings and vacant parcels ? 5 acres	Vacant parcels ? 5 acres
Industrial (I)	Industrial properties		All parcels with buildings and vacant parcels < 5 acres	Vacant parcels ? 5 acres
Residential (R)	Residential properties	Houses and land for properties ? 5 acres; houses and 1 acre of land for properties ? 6 acres		Vacant parcels 5 acres; excess land on parcels with houses ? 6 acres
Townhouses (T)	Townhouse and row houses	All properties		
Apartments (M)	Rental residential properties with four or more units, built as apartments	All parcels with buildings and vacant parcels < 5 acres		Vacant parcels ? 5 acres

1. Collect data: Obtain relevant budgets and reports; contact officials, boards and departments

Appointments were scheduled with Kent County officials and department heads. The purpose of these interviews was to obtain relevant information and to collect necessary documents. The following were some of the materials gathered to conduct the analysis for the county:

- ?? 2001 assessed property values broken down by land use classification;
- ?? Fiscal year 2001 reports of calls made for EMS and police and others per interviews with department heads; and
- ?? Kent County audited financial statements for fiscal year 2001.

The study was conducted at the county level, focusing on the county general fund. Kent County also maintains several enterprise funds that pay for airport maintenance, road construction and maintenance, solid waste disposal, and public water and wastewater services. The funding and expense for these services were not included in the study, as they are not accounted for in the general fund. However, if the county sold bonds and used the proceeds to finance the construction of the above facilities, the services were allocated to the appropriate land use and applied to the expenditures for debt principal and interest.

2. Allocate revenues and expenditures by land use

Researchers conducted interviews with local officials to improve understanding of county financial statements and to allocate fiscal year 2001 revenues and expenditures into the three land use categories. In the interviews, officials were asked how revenue was generated and which land uses benefited from expenditures. Property taxes provide the primary source of revenue for county government operations in Maryland, and these were divided among the three land uses as per the assessor's records. Revenues generated by residents, such as income tax revenues, were allocated to Residential Development. Expenditures related to agriculture, such as the creation of ditches to drain standing water off farmland, were allocated to Farm and Open Land. Most were not generated entirely by one land use, but were split between land uses.

Some line items had straightforward allocations because records were available by land use. For example, building permits were allocated according to how many fees were generated by residential development versus commercial development. Line items without straightforward records by land use were broken down based on the activity in the associated department. For example, most of the county fire and emergency services were attributed to residential development, due to the nature of the calls, with smaller portions going to Commercial/Industrial and Farm and Open Land.

Calculation of "fallback percentages"

Even after extensive record searches, there was not a clear allocation into land use categories for some line items. For example, administrative salaries and public buildings serve the entire county in a general capacity. In this type of situation, a "fallback" percentage was used based on the breakdown of assessed value for each land use relative

to the total fiscal year 2001 assessed value for Kent County. Thus, 75 percent of the total assessed value was from Residential Development, 14 percent from Commercial and Industrial Development, and 11 percent from Farm and Open Land. Fallback percentages were used as defaults for both revenues and expenditures.

3. Analyze data and calculate ratios

Once interviews were complete and the necessary data collected, the information was entered into a computer spreadsheet. The dollar amount for each line item of the budget was dispersed among the three land use categories according to the associated percentage breakdown. Once the percentages were entered for each line item, total revenues and total expenditures were summed for each of the three land use categories. By comparing total revenues to total expenditures in each category, the total net contribution or loss was calculated. Data calculations are presented in a simple ratio that shows the actual expenditure for every dollar raised (see table of findings below). The findings were checked for accuracy and analyzed to understand differences in the ratios.

FINDINGS

In Kent County, on average, Residential land use generated \$21,177,037 in revenues to cover expenditures of \$22,242,430, resulting in a net loss of \$1,065,393 to the county. Commercial and Industrial land use generated revenues of \$2,775,087 to cover expenditures of \$1,773,768. Total revenues from Farm and Open Land were \$2,060,743, while expenditures were only \$860,079.

Specific findings for Kent County are presented in the table below. The first two rows of the table show the total dollars that were allocated to each land use for revenues and expenditures. The third row shows the net dollar impact on the county budget for each land use. This was determined by comparing the revenues generated with the expenditures provided. The final row of the table presents this same information in the form of ratios. This is a clear way to see how much each land use costs for every dollar of revenue that it generates for the county.

Kent County	FY 01 Financial Statements*	Residential Development	Commercial/ Industrial Development	Farm/Open Land
a) Total Revenues	\$24,876,277	\$21,177,037	\$2,775,087	\$2,060,743
b) Total Expenditures	\$26,012,868	\$22,242,430	\$1,773,768	\$860,079
Net surplus or (shortfall)	\$1,136,591	(\$1,065,393)	\$1,001,319	\$1,200,665
Final land use ratio		1 : 1.05	1 : 0.64	1 : 0.42

*Includes "Other financing sources and uses" of the general fund.

The final land use ratios are presented in the last row of the table and show the costs required per dollar of revenue generated in fiscal year 2001. For every dollar of revenue that Residential land use generated for Kent County, \$1.05 was required in public services for county residents. For every dollar of revenue that Commercial and Industrial land use

generated in the county, \$.64 was required in services. For every dollar that was generated by Farm and Open Land, \$.42 was required for associated county services.

DISCUSSION

In Kent County, Farm and Open Land had the lowest net cost of the land uses studied. Commercial and Industrial land use also generated more in revenues than it required in services. Residential land use, on the other hand, created a net loss in the county due to its higher service demands.

Community	Residential	Commercial/Industrial	Farmland/Open Land	Source
Median for COCS studies nationally*	\$1 : \$1.16	\$1 : \$0.27	\$1 : \$0.37	n/a
Carroll County, Maryland	\$1 : \$1.15	\$1 : \$0.48	\$1 : \$0.45	Carroll County Dept. of Management and Budget, 1994
Cecil County, Maryland	\$1 : \$1.17	\$1 : \$0.34	\$1 : \$0.66	American Farmland Trust, 2001
Frederick County, Maryland	\$1 : \$1.17	\$1 : \$0.50	\$1 : \$0.53	American Farmland Trust, 1997
Kent County, Maryland	\$1 : \$1.05	\$1 : \$0.64	\$1 : \$0.42	American Farmland Trust, 2002
Northampton County, Virginia	\$1 : \$1.13	\$1 : \$0.97	\$1 : \$0.23	American Farmland Trust, 1999
Wicomico County, Maryland	\$1 : \$1.21	\$1 : \$0.33	\$1 : \$0.96	American Farmland Trust, 2001

*See Appendix for a complete list.

The expenditure per dollar of revenue required by Farm and Open Land in Kent County is slightly higher than the Farm and Open Land expenditure of many other COCS studies. This may be due to the low rate at which agricultural land is assessed in Maryland. According to the Maryland State Department of Assessments and Taxation, agricultural land is assessed at \$100 to \$500 per acre, with a \$300 per acre average. The Maryland agricultural use assessment law was the first of its kind, enacted in 1956. While this law remains one of the most effective, farm owners in some states pay even less in property taxes. As of 1993, farm owners in Delaware paid only \$0.09 in property taxes per \$100 of fair market value on agricultural land, the lowest in the nation. Farm owners in Maryland paid \$0.48 and those in Virginia \$0.56, with a national average of \$0.80.⁴ The low assessment rate results in a considerable tax savings to farmers and, as the Maryland studies show, creates a favorable situation for farm owners in which their property tax payments more closely approximate what they receive in services.

⁴ USDA Economic Research Service, 1993.

Despite the favorable agricultural use assessment laws in the Delmarva, suburban expansion continues to convert the Peninsula's prime agricultural lands to sprawling subdivisions. Between 1982 and 1997, the Delmarva Peninsula lost 81,900 acres of agricultural land.⁵ Much of this development was in the form of low-density residential development (0.5 acres or larger lot size). In Maryland, low-density development increased from 47 percent in 1973 to 58 percent in 1997 and is expected to reach 62 percent by 2020.⁶ The Maryland Department of Planning estimates that Kent County will lose 1.29 acres of agricultural and forest land with each new household between 1997 and 2020, Cecil County will lose 1.17 acres and Wicomico County will lose 1.61 acres. These trends have prompted local groups interested in the agricultural industry to determine exactly how much land is necessary to keep agriculture alive on the Peninsula. Clearly, efforts will need to be stepped up in the coming years to preserve the agricultural heritage here.

Working lands also provide services to local residents—and visitors—that are hard to account for economically. These non-market services include providing wildlife habitat, groundwater recharge and floodwater control. Furthermore, it would be interesting to quantify the contribution of nature and agricultural-based tourism and recreational opportunities. Also, how much do secondary industries, such as food processing and lumber milling, depend on working lands? All of these contributions need to be considered by local officials in planning for future development in their municipality.

As stated previously, Kent remains a county in which a considerable portion of its residents live in and around the small town centers. This means the county has retained most of its best agricultural soils but also appears to have saved its taxpayers money. And unlike the other Maryland and Delaware counties it borders, Kent is not experiencing population and developmental growth at a rapid rate. Kent County officials and farm and local conservation groups have taken a proactive approach to ensure that agriculture remains the top industry and the preferred land use. The results of those efforts are reflected in the findings of this study. The residential development revenue to expenditure ratio of \$1 to \$1.05 is among the lowest of all COCS studies conducted to date. This may be due to the relatively compact residential development pattern of the county. Lower mileage on school buses, police cars, fire trucks and ambulances, fewer water and sewer extensions, and a reduced need to finance capital projects that result in long-term debt all work to minimize the tax burden.

Unlike other Maryland counties that are developing their farm and forestlands, Kent County has a unique opportunity to preserve its rural heritage. With the continued efforts of local officials, farm and conservation groups and concerned citizens, Kent County could remain a place where people live in vibrant town centers, cows roam in open pastures and crops are grown on prime agricultural soils.

⁵ National Resource Inventory, 1982, 1997.

⁶ Maryland Department of Planning, 2001.