

**Cecil 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 Cecil County. 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/industrial land uses.

The Cecil County COCS study analyzed the actual revenues and expenditures for the county and the Board of Education. The county fiscal year 2001, which ran from July 2000 to June 2001, was chosen because it was the most recent year for which actual revenue and expenditure data could be obtained. The study focused on the Cecil 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 Cecil County, income tax revenues amounted to \$29 million and made up 31 percent of general fund revenues.

### **The COCS study found that for county services:**

- ?? Residential Development generated \$72,232,503 in revenues to cover expenditures of \$84,308,241, resulting in a deficit of \$12,075,738.
- ?? Commercial and Industrial Development generated revenues of \$15,992,863 to cover expenditures of \$5,381,754.
- ?? Total revenues from Farm and Open Land were \$2,752,011, while expenditures were only \$1,829,209.

In other words, for every \$1 of revenue generated by residential property in Cecil County in fiscal year 2001, \$1.17 was spent providing services to those lands. For every \$1 received from commercial and business land uses in the county, only 34 cents was spent to provide services. For every \$1 received from ranch/farm/open land uses in the county, only 66 cents was spent providing services.

The Cecil County COCS findings demonstrate that while residential development contributes the largest amount of revenue, its net fiscal impact is actually negative. Commercial and industrial development offsets most of this shortfall, while farm and open land contributes to the surplus.

## INTRODUCTION

Cecil County is located at the northeastern corner of Maryland and is one of the two northernmost counties in the Delmarva Peninsula. Cecil's geographic location makes it unique among Delmarva counties. Significant growth pressure from the Wilmington-Newark and Baltimore areas has changed the landscape of Cecil County in recent decades. Interstate 95 and U.S. Route 40 make the county readily accessible and connect these urban centers.

Between 1990 and 2000, Cecil's population increased by 20.5 percent, reaching 85,951 in 2000.<sup>1</sup> This is nearly double the rate of population increase for Maryland (10.8 percent) during the same time period and has resulted in significant moderate- to low-density residential development in the farming area north of I-95.

Cecil County is comprised of two distinct land regions. The east-west running C & D Canal forms the approximate boundary between the Piedmont region to the north and the Atlantic Coastal Plain to the south. The county has identified the region south of the canal as containing the county's most productive agricultural soils. The region south of the canal is also south of I-95, and agriculture is the primary land use. As a contrast, agriculture in the northern Piedmont region is increasingly fragmented with residential development.

Cecil boasts a diverse agricultural industry that includes poultry, dairy products, nursery and greenhouse crops, and equine and related businesses. In 1997, total sales of all products came to just over \$59 million.<sup>2</sup> However, some agricultural indicators point toward a gradual loss of agriculture in the county. Between 1982 and 1997, the number of farms in Cecil County declined by 8 percent<sup>3</sup> while farm size remained constant. In that same period, the amount of land in farms decreased by 15 percent<sup>4</sup> and the number of farm jobs decreased by 22 percent.<sup>5</sup>

The Cecil 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. AFT developed a suite of low-cost studies that uses 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. Undertaken by AFT to examine agricultural and land use trends on the Delmarva Peninsula, this study's purpose is to provide information to help county officials make informed planning decisions. The project also

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<sup>1</sup> U.S. Census 2000.

<sup>2</sup> USDA Census of Agriculture, 1997.

<sup>3</sup> Ibid.

<sup>4</sup> Ibid.

<sup>5</sup> Regional Economic Information System.

includes completing Agricultural Industry Profiles and Impact of Growth on Agriculture studies in addition to Cost of Community Services studies for several Delmarva counties.

### **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. Unlike traditional fiscal impact analysis, 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 Cost of Community Services study:

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

### **COCS Process in Cecil County**

The Cecil 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 Development 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 less than five acres. Commercial and Industrial Development is defined as property actively

used for business purposes other than agricultural or forestry, including retail and whole-sale 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 requirement 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 was also 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 \$40,742 was subtracted from the total land value to yield the “excess value.” This value was determined by computing the average land value (as assessed by SDAT) of all one-acre lots in Cecil County.

| 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, farm buildings   |   | 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

The study was conducted at the county level and focused on the county general fund. The general fund provides funding for all county-level services including police, fire and rescue, planning and zoning, public works administration, financial management, administration and others. County officials and department heads were interviewed in order to determine the demand for county services by land use category as well as how funds coming into the general fund were spent by land use category. Property taxes are the largest revenue source for the general fund and make up 55 percent of all revenues. Income tax, which is collected by the state and distributed to each county, made up 34 percent of all revenues. Public school services provided by the Board of Education were the most expensive of all county services and accounted for 53 percent of all expenditures. Tax-exempt lands and buildings, owned by government or other organizations, were not included in the study. Nor were enterprise funds that are used to fund water and wastewater systems. 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.

These were some of the materials gathered and reviewed 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 services, building inspections, and others (per interviews with department heads);
- ?? Cecil County audited financial statements for fiscal year 2001;
- ?? “Cecil County Development Trends & Fiscal Impacts 1999-2008,” Lipman, Frizzell & Mitchell, LLC, 1999; and
- ?? “Fiscal Impacts of Residential, Commercial/Industrial, and Agricultural Land Uses in Cecil County, Maryland,” Cecil County Office of Economic Development, 1994.

2. Allocate revenues and expenditures by land use

After conducting extensive interviews, researchers were able to allocate expenditures and revenues into land use categories. Revenues in the form of income taxes and property taxes paid on all residential structures were allocated to Residential Development. All educational expenditures including the Board of Education and Cecil Community College allocations were attributed to Residential Development. Expenditures of most of the county departments providing public services were split among the three land use categories.

Some line items had straightforward allocations because records were available by land use. 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 police services were attributed to residential development, with smaller portions going to Farm and Open Land and Commercial/Industrial Development.

### Calculation and use 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 Cecil County: 78 percent of the total assessed value was from Residential Development, 16 percent from Commercial and Industrial Development, and 6 percent from Farm and Open Land.

Assessment values were added together for each land use category as they are indicated in the table on page 8. Fallback percentages were used as defaults for both revenues and expenditures.

### 3. Analyze data and calculate ratios

Once interviews were completed 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 calculated for each of the three land use categories. Then, by comparing total revenues to total expenditures in each category, the total net contribution or loss was calculated. This information is 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**

Specific findings for Cecil 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 clearly shows how much each land use costs for every dollar of revenue that it generates for the county.

In Cecil County, Residential Development generated \$72,232,503 in revenues to cover expenditures of \$84,308,241, resulting in a deficit of \$12,075,738. Commercial and Industrial Development generated revenues of \$15,992,863 to cover expenditures of \$5,381,754. Total revenues from Farm and Open Land were \$2,752,011 while expenditures were only \$1,829,209.

| <b>Cecil County</b>        | <b>FY 01<br/>Financial<br/>Statements*</b> | <b>Residential<br/>Development</b> | <b>Commercial/<br/>Industrial<br/>Development</b> | <b>Farm/Open<br/>Land</b> |
|----------------------------|--|------------------------------------|---|---------------------------|
| a) Total Revenues          | \$90,977,377                               | \$72,232,503                       | \$15,992,863                                      | \$2,752,011               |
| b) Total Expenditures      | \$91,519,204                               | \$84,308,241                       | \$5,381,754                                       | \$1,829,209               |
| Net surplus or (shortfall) | (\$541,827)                                | (\$12,075,738)                     | \$10,611,109                                      | \$922,802                 |
|                            |  |                                    |   |                           |
| Final land use ratio       |  | <b>1:1.17</b>                      | <b>1:0.34</b>                                     | <b>1:0.66</b>             |

\*Includes "Operating transfers in" and "Operating transfers out" of the general fund.

The final land use ratios are presented in the last row of the table and show the costs re-quired per dollar of revenue generated in fiscal year 2001. For every dollar of revenue that Residential Development generated for Cecil County, \$1.17 was required in public services for county residents. For every dollar of revenue that Commercial and Industrial Development generated in the county, \$0.34 was required in services. For every dollar that was generated by Farm and Open Land, \$0.66 was required for associated county services.

#### **DISCUSSION**

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

The findings of this study are somewhat similar to those of the Cecil County Office of Economic Development's 1994 study, "Fiscal Impacts of Residential, Commercial/Industrial, and Agricultural Land Uses in Cecil County, Maryland" and "Cecil County Development Trends & Fiscal Impacts 1999-2008" by Lipman, Frizzell, and Mitchell, LLC (LF & M). Each study uses a slightly different methodology, and each was conducted in a different fiscal year, yet both come to the conclusion that residential development demands \$1.17 to \$1.34 in public services for every dollar it contributes to the county in revenues.

| Community                            | Residential  | Commercial/Industrial | Farmland/Open Land | Source  |
|--------------------------------------|--------------|-----------------------|--------------------|---|
| Median for COCS studies nationally * | \$1 : \$1.16 | \$1 : \$0.27          | \$1 : \$0.36       | 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 Cecil County is higher than the Farm and Open Land expenditure of many other COCS studies. This is due in part 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. Cecil County's Farm and Open Land expenditure is also partially explained by a high level of county services provided to this land use. These include agricultural economic development, planning staff support for the Chesapeake Bay Critical Areas law and the acquisition of land through the Board of Parks.

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.<sup>6</sup> 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.

Suburban expansion continues to convert prime Delmarva's prime agricultural lands to sprawling subdivisions. Between 1982 and 1997, the Delmarva Peninsula lost 81,900 acres of agricultural land.<sup>7</sup> Much of this was in the form of low-density residential

<sup>6</sup> USDA Economic Research Service, 1993.

<sup>7</sup> National Resource Inventory, 1982, 1997.

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.<sup>8</sup> The Maryland Department of Planning estimates that Cecil County will lose 1.17 acres of agricultural and forest land with each new household between 1997 and 2020, and Wicomico County will lose 1.61 acres. These trends have prompted local groups interested in the agricultural industry to determine how much land is necessary to keep agricultural 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.

The findings of this study provide factual information to help residents of the county understand the demands for services in relation to tax revenues generated. The agricultural landscape has defined rural Cecil County for generations, and land use decisions made today will affect how the county grows in the future.

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<sup>8</sup> Maryland Department of Planning, 2001.