

**Impact of Growth on Agriculture
in Wicomico County, Maryland**

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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INTRODUCTION

The goals of the Impact of Growth on Agriculture Study were to gain a better understanding of how future development on farmland could affect the local economy and to provide county officials with information to help them plan for agriculture as well as for future growth.

METHODOLOGY

The impact study uses local economic data produced by the IMPLAN software. IMPLAN stands for Impact analysis for PLANning. Using data from published sources, such as the Regional Economic Information System (REIS) and County Business Patterns, IMPLAN calculates annual output for all the industries in a county or state. Then, using an estimated transactions matrix, IMPLAN calculates the flow of goods and services through the local economy.

For this study, the most recent data available were from 1999. For the purposes of this study, it was assumed that all agriculture, including livestock and food processing, is dependent on harvested cropland. Output from all of those agricultural industries and their linkages in 1999 totaled \$508 million (Table 1). This figure includes not only direct output from the industries but also the purchases made by the agriculture industry in supporting other local industries.

Table 1

Commodity	Output
Poultry and eggs	\$124,635,800
Poultry processing	\$122,330,800
Prepared feeds	\$109,258,800
Sausages and other prepared meats	\$73,728,550
Greenhouse and nursery products	\$28,484,260
Condensed and evaporated milk	\$17,261,280
Feed grains	\$8,377,408
Vegetables	\$6,894,017
Oil bearing crops	\$6,357,606
Bread, cake, and related products	\$4,573,507
Food grains	\$2,059,992
Forest products	\$1,104,000
Dairy farm products	\$820,641
Fruits	\$729,881
Hay and pasture	\$693,997
Cattle	\$406,675
Miscellaneous livestock	\$207,488
Hogs, pigs, and swine	\$152,422
Sheep, lambs, and goats	\$429
Totals	\$508,081,300

In 1997, there were 66,635 acres of harvested cropland in the county and 3,459 acres of pastureland, resulting in a total of 70,094 acres of productive farmland. By dividing the total output

of the agricultural industry by the total acreage of productive farmland, the value of \$7,249 per acre is obtained. Or, each acre of productive farmland results in \$7,249 in agricultural production in Wicomico County.

ECONOMIC IMPLICATIONS

The 1990 Wicomico County Comprehensive Plan estimates that approximately 600 acres of land were converted to developed uses every year between 1982 and 1990. Of the 241,415 acres that make up Wicomico County, 29 percent are in productive farmland. If it is assumed that this percentage also applies to the 600 acres that are developed each year, 174 acres of productive farmland is developed each year. The net result is an annual loss of \$1,261,326 in agricultural industry production.

Total annual, 10-year, and 20-year losses in agricultural output, assuming 174 acres of productive farmland are developed annually are described in Table 3. Output is equal to shipments plus net additions to inventory. It is a measure of the value of production and includes commodities used in the farm production process but not sold on the open market (such as feed grain and hay). It is not uncommon for output estimates to exceed published cash receipts data.

Table 2

Timeframe	Loss of Output
One Year	\$1,261,326
Ten Year	\$10,261,326
Twenty Year	\$25,226,520

IMPLICATIONS

Nobody can accurately predict the future—or the total effect of new development on agriculture. This Impact Analysis presents the current economic contribution of these industries as fully and accurately as possible based on reliable data sources such as IMPLAN, and then uses the best local data on agricultural land lost to development on an annual basis. This serves as a reasonable—but conservative—predictor of the effect of future development on agricultural land.

The findings show that converting Wicomico’s agricultural lands to developed uses could have an impact of over \$1 million annually on the local farm economy, not to mention linked regional farm economies, as much of the food grown in the county is processed elsewhere and existing farm industries purchase goods and services elsewhere. Regional food processors rely on regional inputs and must maintain a level of operation in order to stay profitable. While it may be true that new development generates new income, the loss of the agricultural land base is permanent. And if it goes, all of the linked food and supply industries are impacted.

It is also important to take into account all of the “free” or non-market services farmland provides to the county. Scenic and aesthetic qualities of farmland are highly valued by both local residents and visitors. Often, these qualities are used to bring in tourists who purchase local goods and services from commercial and retail businesses. Additionally, farmland serves as a storm water retention area, provides wildlife habitat, and a groundwater recharge zone. All of these functions

benefit the community—but it is very difficult to quantify them. Good planning should take these services into account when planning for growth and for a future for agriculture.