

# Cost of Community Services Studies



Cost of Community Services studies examine both the tax revenues generated by different land uses and the costs to local government of providing services to those same uses. They help people understand the fiscal outcomes of keeping land in agriculture or as open space versus developing land for other purposes.

## Introduction

Cost of Community Services (COCS) studies help people understand the fiscal impacts associated with different types of land use. COCS studies show that the fiscal consequences of different land uses vary significantly, in terms of both tax revenues received *and* local government services expenses incurred.

The results of a COCS study are in the form of an easy-to-understand ratio that compares how many dollars of local government services are required for every dollar in taxes collected. Common services include road repair, sewer maintenance, and public schools (schools constitute an especially large portion of government spending in residential areas). A ratio greater than 1.0 means that for every dollar of revenue collected from a given category of land, more than one dollar is spent on services for that land. A ratio below 1.0 means the government spends less in services for the land than it receives in tax revenue, resulting in a net gain. (Examples: a ratio of 1.32 means that \$1.32 is spent in government services for every tax dollar collected; a ratio of 0.07 means that 7 cents are spent for every dollar collected.)

Because COCS studies can be conducted quickly and inexpensively, they are an easy yet informative tool for local governments to use when planning for the future of their community.

COCS studies also dispel common misconceptions about the fiscal impacts of land use. They show that farmland and open space consistently deliver large net gains to government finances, while residential development is usually a drain on government budgets.

## History

COCS studies were first introduced in the mid-1980s by the [American Farmland Trust](#), primarily because farmland is the most common land type converted to development. The organization wanted to devise an easy and inexpensive method for rural communities to measure the contribution agricultural lands make to their local tax base.

Since that time, the American Farmland Trust has documented more than 150 local governments in 26 states that have conducted COCS studies.

## Findings

Nearly all COCS studies show that residential land is a net drain on local governments, with a ratio above 1.0. The ratios for the other two land use categories studied (commercial/industrial and farmland/open space) are usually well below 1.0, representing net gains for local governments.

Chester County's 2019 [Return on Environment](#) report summarizes the COCS study findings of eleven Chester County municipalities that had conducted the studies through 2018. *See* the table below.

In all eleven municipalities, the studies found that residential land contributed less in taxes than it demanded in services. In contrast farmland (and commercial and industrial) contributed far more in taxes than it demanded in services.

Chester County Municipality	Residential	Commercial	Industrial	Agricultural
E. Nottingham Township	1.11	0.04	0.04	0.04
Elk Township	1.11	0.08	n/a	0.04
Highland Township	1.14	0.05	n/a	0.03
Honey Brook Township	1.07	0.06	0.06	0.06
Kennett Township	1.12	0.51	0.12	0.12
London Britain Township	1.01	0.20	n/a	0.20
London Grove Township	1.13	0.14	0.15	0.19
Londonderry Township	1.08	0.02	0.02	0.02
Lower Oxford Township	1.08	0.02	0.02	0.02
W. Fallowfield Township	1.13	0.03	0.03	0.03
W. Sadsbury Township	1.33	0.03	0.03	0.03

Source: “Community Cost Savings” from *Return on Environment* (Chester County, 2019)

Going beyond Chester County, the next table shows the results of COCS studies conducted in 15 Pennsylvania townships in the 1990s and early 2000s. In each case, farmland and open space deliver significant positive fiscal impacts to the community. When compared to the data from Chester County, the ratios elsewhere in Pennsylvania appear to be fairly consistent.

To view results from other states and national averages, see the “[Cost of Community Services Studies](#)” fact sheet from the American Farmland Trust.

Several COCS studies are posted under the topic [Cost of Community Services Studies](#) at the [WeConservePA Library](#), including ones referenced in the below table from [Shrewsbury Township](#) and [Hopewell Township](#).

Pennsylvania Municipality	Residential	Commercial/Industrial	Farmland/Open Space	Source
Allegheny Township	1.06	0.14	0.13	Kelsey, 1997
Bedminster Township	1.12	0.05	0.04	Kelsey, 1997
Bethel Township	1.08	0.17	0.06	Kelsey, 1992
Bingham Township	1.56	0.16	0.15	Kelsey, 1994
Buckingham Township	1.04	0.15	0.08	Kelsey, 1996
Carroll Township	1.03	0.06	0.02	Kelsey, 1992
Hopewell Township	1.27	0.32	0.59	SCAEG, 2002
Kelly Township	1.48	0.07	0.07	Kelsey, 2006
Lehman Township	0.94	0.20	0.27	Kelsey, 2006
Maiden Creek Township	1.28	0.11	0.06	Kelsey, 1998
Richmond Township	1.24	0.09	0.04	Kelsey, 1998
Shrewsbury Township	1.22	0.15	0.17	SCAEG, 2002
Stewarson Township	2.11	0.23	0.31	Kelsey, 1994
Straban Township	1.10	0.16	0.06	Kelsey, 1992
Sweden Township	1.38	0.07	0.08	Kelsey, 1994

Source: “Cost of Community Services Studies” (Farmland Information Center, 2016)

## Interpretation of Findings

COCS studies are valuable because they paint an accurate picture of a local government’s current costs and revenue as it relates to classes of land use. This picture offers people a basis from which to understand how development—and conservation—relate to government services and budgets.

Because of the many variables involved, the ratios in a COCS studies cannot be used to accurately project the service costs or tax revenues of new development, especially if the new development differs substantially from existing developments. (To learn more about predicting these ratios, see “[Costs and Revenues of Residential Development: A Workbook for Local Officials and Citizens.](#)”)

## Implementation

COCS studies are relatively simple to create and understand. They are inexpensive, and, depending on the size of the jurisdiction, can be conducted in just a few hours.

They use easy-to-access data and require no expertise; to calculate the results, you need only a basic understanding of municipal financing and mathematics.

The Penn State Cooperative Extension offers a [manual](#) with step-by-step instructions to conduct a COCS study. The manual includes a section that helps the reader understand and interpret the outcomes of the study.

The [Farmland Information Center](#), the research branch of the American Farmland Trust, conducts COCS studies using similar methodology, with only a slight difference in the accounting of expenses and revenues.

## Conclusion

COCS studies help local government officials understand the fiscal implications of different land uses. With the results of COCS studies informing their thinking, these officials can more effectively and responsibly make decisions, set policies, and plan for the future of their communities.

COCS studies can also support conservation efforts, which are often hampered by misconceptions and false assumptions about the fiscal consequences of protecting land from development—especially the impact on taxpayers. By presenting the impacts of preserved farmland and open space in a financial framework that is easy to interpret, COCS studies can counter these misconceptions.

Decades of consistent COCS study findings offer overwhelming evidence that, in most cases, conservation saves local governments money. This conclusion gives those already compelled by the environmental and social benefits yet another layer of justification. More importantly, it informs those who might be unconvinced by environmental and social arguments but value fiscal responsibility, giving

them a reason to care about protecting farms and open space.



Nate Lotze is the primary author. [Andrew M. Loza](#) is the contributing author and editor. Robert Campbell and Loza updated the guide in 2024.

WeConservePA produced this guide with support from the Colcom Foundation, the William Penn Foundation, and the Community Conservation Partnerships Program, Environmental Stewardship Fund, under the administration of the Pennsylvania Department of Conservation and Natural Resources, Bureau of Recreation and Conservation.

© 2009, 2017, 2024 WeConservePA

Text may be excerpted and reproduced with acknowledgement of WeConservePA.

v. 2/2/2024