

ELK TOWNSHIP COST OF COMMUNITY SERVICES

Overview. The development of farmland and open space into other uses has impacts beyond the visible ones of new roads and new houses – it also has definable impacts on the financial health of a municipality. This *Cost of Community Services Study* specifically analyzes the fiscal relationships between municipal and education services, and the four major land uses that could potentially exist in Elk Township – residential, commercial, industrial, and agricultural. The results of this analysis document what a number of other sources have already concluded: tax revenues and other fees provided by new residential development do not cover the costs of municipal services and educational demands that such development generates. At the same time, farmland and commercial land generates a net budget surplus.

Introduction. Approximately $\frac{3}{4}$ of Chester County is unprotected from development; those acres consist largely of prime farmland and other critical open spaces. Many municipalities in Chester County are rapidly changing due to this development – entire regions of the County have seen their “identities” change from rural and agricultural to suburban and residential. This growth affects the size and complexity of the local government, the types and qualities of the services it offers, and the taxes and tax rates it must levy. For example, the Oxford Area School District has already been affected, as evidenced by facilities expansion to accommodate projected and continued increases in student populations, and its average annual property tax increase of over six percent during the past five years. Expanding farmland and other open space preservation efforts, balanced with moderate increases in residential land development, will temper these effects.

Accordingly, this *Cost of Community Services Study* documents the increases in school-related expenses that can be expected from increased residential development (in particular), in support of Elk Township’s proposed open space referendum. Passage of the referendum in the May, 2006 primary election will provide a source of funds for the Township to preserve some of its most important agricultural lands and other critical open spaces.

Methodology. This *Cost of Community Services Study* analyzes the local fiscal impacts of growth in terms of the four major, potential land uses in Elk – residential, commercial, industrial, and agricultural. These uses provide public revenues through taxes and fees, while at the same time, demand services that require the expenditure of public dollars. Further, all these land uses have impacts (i.e., expenditures) that affect the Township’s and School District’s finances and delivery of services. But those impacts are far from equal. This study assesses current municipal economic conditions and helps predict future municipal circumstances if current trends continue.

The study utilizes the methodology devised specifically for Pennsylvania by Timothy W. Kelsey, Associate Professor of Agricultural Economics at Penn State University (*Calculating a Cost of Community Services Ratio for Your Pennsylvania Community*, Penn State Cooperative Extension Service, 1998). As



shown in the following listing, applied in the methodology are County property tax, as well as municipal and School District, financial data, all from 2004 or 2005, depending on the source; these are the time frames from which the most complete data were available. Chester County taxes and services are not included. Given the use of data from one specific time frame, the study is a “snapshot” of municipal costs related to its land uses. However, use of data from a different time period will simply show a trend in these land use-related costs; i.e., the overall conclusion that residential development costs a community more than the revenue it generates should not change.

Steps in the Cost of Community Services Study

Background

1. Collect data from the municipality, school district, and county tax assessment office.

Municipal Calculations

2. Determine property tax base percentages by land uses.
3. Determine municipal tax revenues and allocate by land uses.
4. Determine municipal non-tax revenues and allocate by land uses.
5. Determine municipal expenditures and allocate by land uses.

School District Calculations

6. Determine school district tax revenues and allocate by land uses.
7. Determine school district non-tax revenues and allocate by land uses.
8. Determine school district expenditures and allocate by land uses.

Results

9. Calculate the Cost of Community Services ratios and actual dollar differences by land uses.
10. Interpret the results.

Farmland and Open Space Implications

11. Determine residential tax shortfall per public school student.
12. Calculate the school district-related costs of developing a hypothetical 150-acre farm.
13. Calculate costs of protecting the same hypothetical 150-acre farm.
14. Calculate the preservation costs’ break-even period.

Actual tax revenues generated by the four land uses are different for a given township and/or school district, depending on the combination of levied taxes (e.g., property, real estate transfer, earned income, per capita). Non-tax revenues include license and permit revenues, public service fees, highway aid, and funds school districts receive from the Commonwealth, called the Equalized Subsidy



for Education. The expenditures spent on the four land uses range from police and fire services to parks and recreation to highway, school, planning and zoning, and other government services.

As called for by the study, municipal and school district revenues and expenditures were allocated or assigned to each of the four land uses, based either on how the funds were actually generated or spent, or by using a “default” allocation method derived from the property tax base. It should be noted that no land in Elk Township is currently used for industrial purposes. The attached spreadsheets, Pages 1 through 8, document the methodology as applied to Elk Township.

Results. After all the revenue and expense figures were entered, allocated, and tallied, gross revenues and expenditures for each land use were compared, and cost-revenue ratios were calculated. Specifically, the ratios depict the net impact of each land use as a comparison between how much was spent on that land use for each dollar the land use generated, summarized as follows for Elk Township:

Residential (e.g., single-family houses, townhouses, mobile homes, farm residences)-- 1 : 1.04

Agricultural (i.e., farms greater than 10 acres)-- 1 : 0.04

Commercial (e.g., stores, gas stations, offices)-- 1 : 0.03

Industrial (e.g., wholesaling, manufacturing)-- not applicable

Currently, residential land use creates a deficit, contributing less to the community than it received in expenditures. Both agriculture and commercial uses however, contributed substantially more than they received. For example, for every \$1.00 collected from the residential community, \$1.04 was spent, a four percent shortfall. For farmland, \$0.04 was spent for every \$1.00 collected, generating a 96 percent surplus. Similarly, commercial land required only \$0.03 in expenditures for every \$1.00 generated, a 97% surplus.

In actual dollar figures, the differences were perhaps even more dramatic, with residential land uses requiring approximately \$125,000 more in expenditures than revenues; the Township spent close to \$3,600,000 on these land uses that only generated \$3,475,000 (approximately) in revenue. On the other hand, gross revenue from farmland was about \$52,000 with net revenue approximately \$54,000, due to expenditures of only about \$2,000. Similarly, commercial land required only \$350 in expenditures to almost \$13,000 in revenue (both dollar figures are approximated).

Conclusions. While these cost of community services figures and ratios reflect 2004 or 2005 data, they will vary from year to year as previously noted. In fact, if current development and school enrollment trends continue, the fiscal disparities described here will become more exaggerated, since the great majority of new residential developments are built on farmland and other open spaces. Regardless, the conclusion of this study should not vary: residential land uses will consistently fall short of covering their full costs, while farmland uses (in particular) will consistently provide a significant surplus.



Specifically, this study documents that:

- residential development contributes to a permanent, large public school budget shortfall;
- moreover, residential development will continue to stretch the Township budget as demands for services and administrative requirements increase;
- by contrast, the remaining farmland in Elk Township is an 'economic engine' in generating budget surpluses; and,
- property owners will almost certainly experience continued upwardly spiraling taxes, especially school district taxes, to make up the shortfalls.

These findings correspond to many other similar studies. In Pennsylvania, Professor Kelsey and the Brandywine Conservancy came to the same conclusions in Costs of Community Service studies for more than 20 townships across the Commonwealth. The American Farmland Trust and others have reached identical conclusions in 72 other studies in 18 other states. In particular, this study's results are also consistent with the outcomes of the same analysis, for 2001, for Lower Oxford and East Nottingham Townships.

Finally, the Appendix to this Study further analyzes the impact of residential and agricultural land uses on school district budgets and their populations, as well as assesses the relative impacts of farmland preservation vs. farmland development for residential purposes.



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Appendix

Residential Development and School District Budgets. The primary, though not the only, reason for the shortfall between residential expenditures and revenues is the residential demand on the public school system. Although residents provide only a portion of the full costs required to support local public school students, they receive all the benefits, for the simple reason that all students come from residential land uses.

In its 2005 budget, total expenses for the Oxford Area School District were reported at \$41,814,787, and the School District reported a total of 3,473 students in the same time period. Therefore, it cost approximately \$12,040 to educate each student that school year. During this same period, it is estimated that 243 of the total 3,473 District students came from Elk Township. Accordingly, it cost a total of about \$2,925,720 to educate Township students that year. While the students are fully a product of residential areas, only \$2,097,867, or \$8,633 per student, came to the School District directly from the residents of Elk in the form of taxes, a \$829,853 total or \$3,407 per student shortfall. While the deficit is made up or subsidized partly by taxes on the other land uses in Elk Township (i.e., commercial, agricultural) and partly by state and federal government education subsidies, it does add up quickly for a Township that sends over two hundred students to their public schools. And as Elk continues to grow, and the School District receives more students every year, local taxes must be increased to make ends meet. And in fact, the Oxford Area School District property tax levy ranged from 17.23 mills in 2001 to 22.71 mills in 2005, an average annual increase of 6.3 percent. With continued growth, municipal services (police, fire, roads, libraries, recreation, etc.) will also increase, requiring additional revenue that will likely come from increased municipal taxes.

Slowing Tax Increases through Open Space Preservation. From this analysis, it is clear that the preservation of farmland and other open space uses can help slow the rising municipal service and educational costs of rapid development by protecting land that would otherwise be converted to new housing. The expense of protecting farmland and other open space (through purchase of development rights or fee simple purchase of land) may require a modest initial increase in taxes. Yet these expenses can be quickly recouped and surpassed. Not only are new school and municipal costs avoided, but in the case of farmland preservation, farm tax income is maintained. And, local funds to preserve agricultural lands can be used to meet acceptance criteria for publicly-funded farmland preservation programs, as well as to possibly leverage other private sources.

In dramatic contrast to the permanent increase in taxes caused by new residential development, lands that are preserved normally require a one-time financial commitment. Every dollar spent to purchase land or development rights avoids the greater and repeated costs of municipal and school district services. Any locally required management or maintenance costs (such as where public access is



allowed or for parks) are on a much smaller scale than the preservation costs and can be supplemented by other funding sources, such as grant programs or private donations.

For example, suppose a property that could produce 100 new homes was a 150-acre farm, and those 100 new homes would send 100 students to District schools (conservatively). Using the \$3,407/student shortfall calculated above, these 100 students would generate a total annual shortfall of \$340,700. By purchasing the farm's 100 development rights at \$12,000 each, the municipality and its residents would spend \$1,200,000, but would enjoy substantial tax savings in the long term:

$$\begin{aligned} \$12,000 \times 100 &= \$1,200,000 \\ \$1,200,000 \text{ divided by } \$340,700/\text{year shortfall} &= 3.5 \text{ years break even period} \end{aligned}$$

In other words, and in about 3½ years from the date of the development right purchase, the municipality would have otherwise experienced a school district shortfall amount equal to the purchase cost of the development rights. Beyond this time, the annual shortfall would continue, and would also potentially affect other school district municipalities. However, voters in three other Oxford Area School District municipalities (e.g., Upper Oxford, Lower Oxford, East Nottingham) have approved open space referenda, balancing this latter effect.

As previously noted, funding for agricultural preservation is available through County, State, and Federal farmland preservation programs, rather than sole reliance on local taxes for financing these purchases. In fact, the Chester County Challenge Grant Program requires a 50 percent match of the land's purchase price from the Township and/or other sources (e.g., partial donation of development value by the landowner).

Concerning Preferential Farmland Assessments. In some areas of Chester County, officials have raised concerns that school district revenues are unfairly decreased by government-funded farm preservation practices. Many school districts derive the majority of their local revenues from a tax on the assessed property values of the lands within their district. Two state laws allow farms to be assessed at a lower value. Act 319 lowers the assessed value of farmland below its "fair market value" to its "agricultural-use value" based on a continuing agricultural land use and the agricultural productivity of the soils. A similar state act, Act 515, also lowers a farm's assessed value, based on its location, size, and use. In areas under significant development pressure, undeveloped land values – and the taxes levied on those lands – tend to climb substantially as their fair market values rise. Acts 319 and 515 are designed to alleviate some of the financial pressures farmers face to sell to developers, but both of these translate into lower real estate tax revenues for a given school district. However, this concern does not recognize that if the farmers did sell their land, most of it would likely produce houses and children instead of crops. Those children would likely strain the schools' financial resources more than the lowered farmland assessment (e.g., supplies, buses, teachers, buildings). Finally, even though farmland assessed under Acts 319 or 515 does receive a property tax reduction, it still provides tax monies to the local school district.

