



# Open Space Protection

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## A Progress Report for Elk Township

**BRANDYWINE CONSERVANCY**

**February 2016**

**Elk Township Open Space Preservation Committee  
&  
Elk Township Board of Supervisors  
are acknowledged for their constructive work  
protecting open space and farmland in the Township.**

### **ELK TOWNSHIP BOARD OF SUPERVISORS:**

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### **ELK TOWNSHIP OPEN SPACE COMMITTEE:**

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**BRANDYWINE  
CONSERVANCY**

### **Municipal Assistance Program**

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## **C O N T E N T S :**

### **1. Introduction**

### **2. Elk Township Protected Lands Prior to 2005**

**Map 1:** 2005 Protected Lands

**Table 1:** Land Preservation Data prior to Local Open Space Funding

**Map 2:** 2006 Preservation Priorities

### **3. An Open Space funding Mechanism is established**

### **4. 2007-2015—Thirty-seven Percent of Elk Township is Permanently Protected**

**Map 3:** 2015 Protected Lands

**Table 2:** Preservation funded by Elk Township

**Table 3:** Chester County Land Preservation Data

### **5. Retention of the Township's Open Space Tax**

**Map 4:** Population in Oxford Area School District

### **6. Saving Elk Township Land for the Next Ten Years (2015-2025)**

**Map 5:** Preservation Opportunities-2015

**Map 6:** Percentage of Chester County protected, by Township

**Cost of Community Services Study** for Elk Township, including financial spreadsheets

**Appendix** to Cost of Community Services Study-School District costs.

# Elk Township Open Space Preservation Program

## 2005 - 2015 Progress Report

### **1. Introduction**

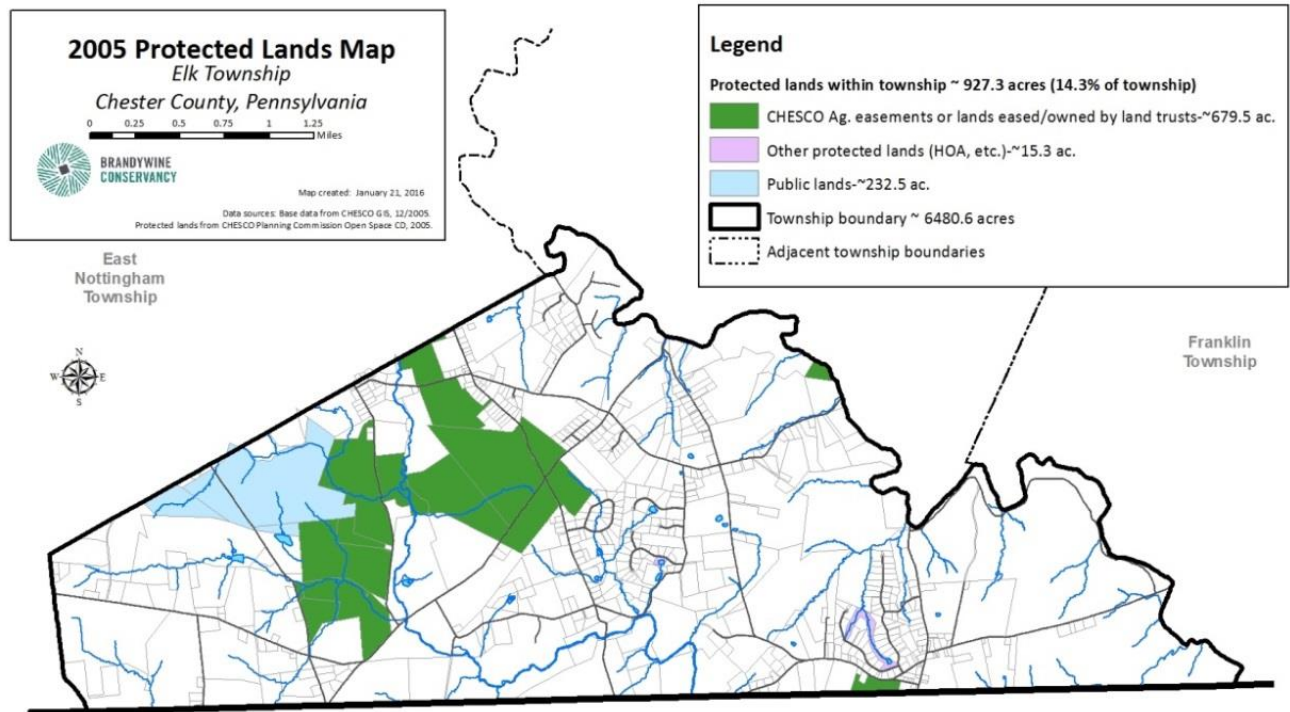
Before 2005 Elk Township had no formal program to preserve farms and open space. In 2006 Elk Township residents voted to pass an open space funding referendum to strategically guide the preservation of important agricultural and open space within the township. Since 2006, Elk Township's protected lands have increased from fourteen percent of the township to an impressive thirty-seven percent.

This report details the progression of land protection in Elk Township over the last ten years and updates the 2005 Cost of Community Services Study to reflect current financial figures. Also included are a series of maps illustrating land protection, prioritized open space and farmland for future protection, and an appendix detailing school district costs as the largest component of the Township's budget.

### **2. Elk Township Protected Lands Prior to 2005**

Several large farms and open properties in Elk Township had been permanently protected by 2005—a total of seven properties, totaling 937 acres, or about 14% of the township. This includes the 154 acre Chrome Barrens municipal parkland on Barren Road, acquired in 2003 and managed by Elk Township, The Nature Conservancy, and Pennsylvania's Department of Conservation and Natural Resources as part of the globally important Chrome Serpentine Barrens.

These protected lands are depicted in *Map 1* on the following page.



*Map 1: Permanently Protected  
Lands in 2005*

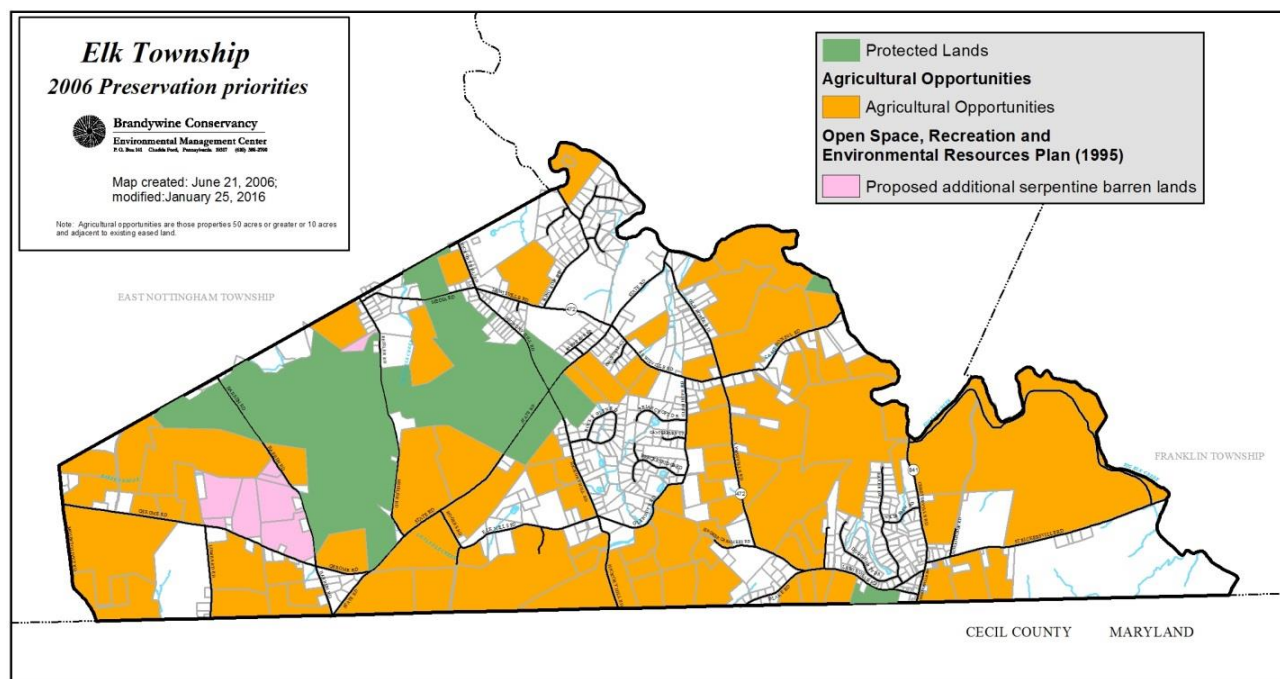
The majority of 2005 protected land was under easements funded by Chester County Farmland Preservation Program; two important properties were eased under the Chester County Preservation Partnership program. The Chester County Land Preservation data prior to 2011 (the date of the first Elk Township Open Space participation) is summarized in *Table 1*, below.

<b>Land Preservation Data for Elk Township prior to Local Open Space Funding</b>						
<b>#</b>	<b>Tax Parcels</b>	<b>Date</b>	<b>Acres</b>	<b>County \$- acres</b>	<b>State \$- acres</b>	<b>Elk \$- acres</b>
43	70-3-28, 70-3-35	8/16/1994	125	125	125	0
46	70-4-2	8/19/1994	74	74	74	0
	70-3-30E	1/1/1998	60	60	60	0
219	70-1-8.2, 70-1-9, 70-3-35.1	3/13/2006	32	32	0	0
243	70-2-36	6/21/2007	38	0	38	0
	70-3-38.3	1/1/2008	85.7			0
275	70-4-13.1, 70-4-13.1B, 70-4-13.1C, 70-4-13.4, 70-4-13.5	11/25/2008	33	33	0	0
278	70-2-19	1/8/2009	50	0	50	0
289	70-2-25.11A	8/25/2009	54	54	0	0
292	70-4-13.3	9/29/2009	17	17	0	0
295	70-4-1	11/5/2009	59	59	0	0
299	70-2-22, 70-2-23	11/9/2009	85	85	0	0
	70-4-3.15	1/1/2010	99.5	99.5	0	0
<b>Total Acres</b>			<b>812</b>	<b>638.5</b>	<b>347</b>	<b>0</b>

*Table 1: Land Preservation Data for Elk Township Prior to Local Open Space Funding*

Unprotected open land in 2005 totaled over 930 acres of Prime Farmland plus an additional 2,800 acres of farmland and open space; an aggregate sum of 3,730 acres. This amounts to 57% of the Township that potentially was at risk for non-farm development. (See *Map 2: Agricultural Opportunities Analysis*, on the following page.)





*Map 2: 2006 Preservation Priorities  
and Agricultural Opportunities*

### **3. An Open Space Funding Mechanism is Established**

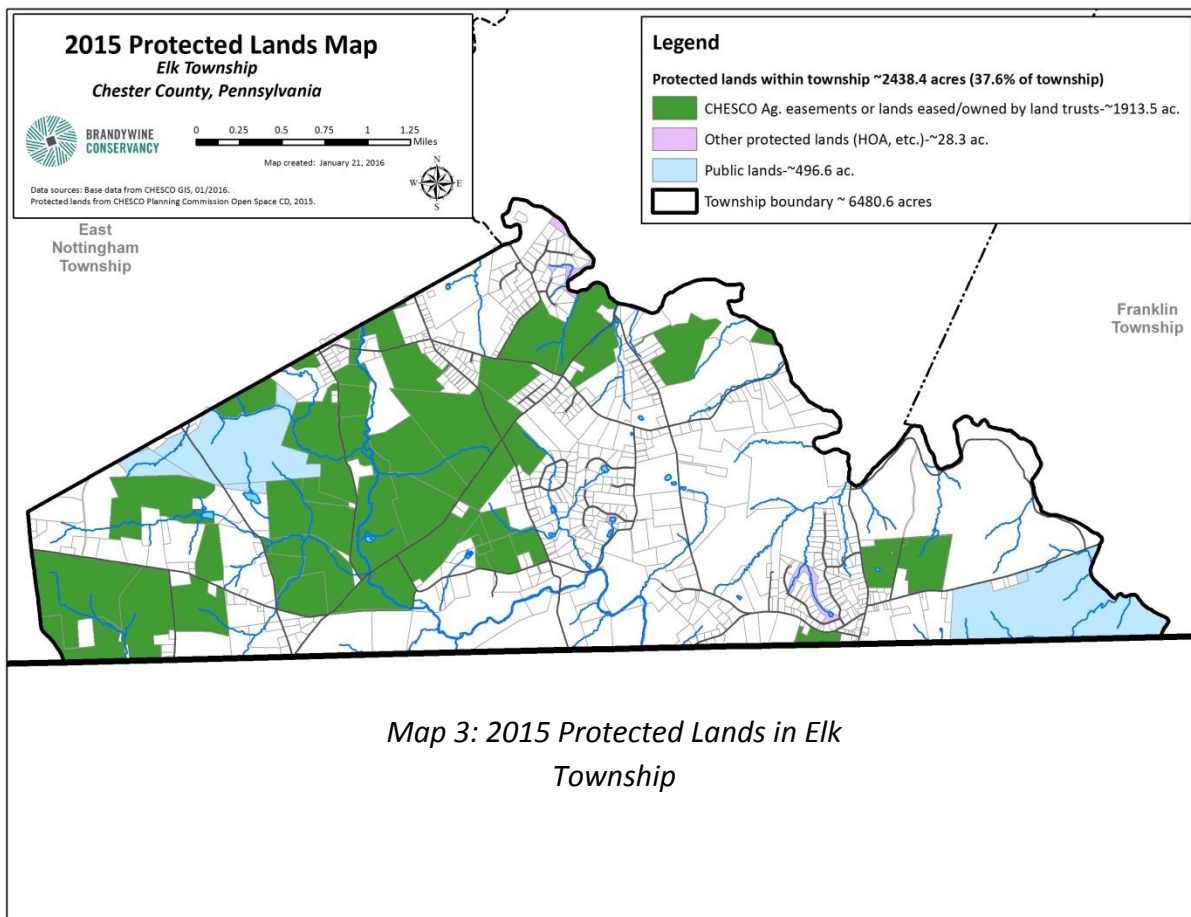
Elk citizens and municipal officials voted in 2006 to take an active role in the permanent protection of local farms and open space by passing an open space funding referendum. The referendum authorized a Township funding stream generated by a modest 0.5% increase on the earned income tax for Township wage earners. The Open Space Fund accrues approximately \$90,000 each year and costs the average Township household about sixty dollars annually\*.

Before 2005, undeveloped lands in Elk Township were either purchased in fee-simple or protected by purchasing development rights from landowners, but these lands were not always prioritized for preservation by the Township. Once Elk began funding farmland protection, it gained a voice regarding which farms and open spaces were preserved. Importantly, the Township has been able to stretch its open space funds of \$1,165,291 (accrued over ten years) by leveraging \$2,254,080 in Chester County funding: more than a two-to-one match!

\*U.S.Census Data reports 1,500 households; the ½% open space tax has generated \$92,500 per year to date, or about \$61 per household yearly.

#### **4. 2007-2015—Thirty-seven Percent of Elk Township is Permanently Protected**

Through careful application of its open space preservation funding for the past eight years, Elk Township has nearly tripled the acreage of permanently protected open space. (See *Map 3*, below.) Now over 37% of Township land is preserved farmland and open space; available for agriculture, public recreation, clean water and air, and for the preservation of Elk's rural way of life. This rate of land preservation is among the highest in Chester County and results from leveraging local funding to take greater advantage of County farmland preservation dollars.



In order to accrue a fund balance sufficiently large to participate in the Chester County Farmland Preservation Program, the Township banked the Earned Income Tax revenue dedicated to open space preservation for several years. The first Township open space funds were used in 2011 on a single easement, and, in 2012, Elk Township had sufficient funds available to purchase voluntarily offered development rights on three farms totaling 230 acres. The cost to the Township for easement projects closing in 2012 was \$777,245.50, made in



payments over three years. The farms, if developed residentially, would have cost an estimated \$876,300\* every year for schooling the estimated 150 students living in the new houses. The Township spent \$474,000 in 2012, as a first installment, to protect these 230 acres from residential development. The second year's installment cost the Township \$151,594 for the 230 eased acres; the third year's installment also cost \$151,594. In less than one year the Township has fully paid for any liability generated by the easement purchases of 2012 and will never have to pay for school costs from developing that land.

\*Assuming approximately 150 new school students from this land (one per household.) Each student costs \$5,842 more to educate than the residential taxes pay to Elk Township.  $150 \times \$5,842 = \$876,300$ . See Appendix of COCS: Residential Growth and School District Budgets; p. 3.

Table 2, below, lists the land preservation projects partially funded by Elk Township's Open Space Fund.

PROPERTY UPI#	FUNDING PROGRAM	ACRES	PURCHASE PRICE	TOWNSHIP MATCH	PAYMENT TERMS
<b>PAID IN FULL:</b>					
70-3-38.3	Preservation Partnership	85	\$ 461,000.00	N/A	N/A
70-3-37	Challenge Grant	47	\$ 323,865.00	\$ 143,940.00	Lump sum payment made on 10/10/12
70-3-22	Challenge Grant	36	\$ 160,245.00	\$ 80,122.50	Lump sum payment made on 7/20/15
70-4-13.6	Challenge Grant	16	\$ 59,040.00	\$ 29,520.00	Lump sum payment made on 2/1/14
70-3-20.4	Challenge Grant	28	\$ 88,326.00	\$ 44,163.00	Lump sum payment made on 7/20/15
70-3-15	Preservation Partnership	91	\$ 461,000.00	\$ 184,400.00	Lump sum payment made on 12/5/11
70-3-36	Challenge Grant	130	\$ 909,568.00	\$ 454,784.00	Three payments made on 11/27/12, 10/7/13, and 11/3/14
70-3-41.1	Challenge Grant	55	\$ 357,043.00	\$ 178,521.50	Lump sum payment made on 10/10/12
<b>PAYMENTS DUE:</b>					
70-5-5; 70-5-9	Challenge Grant	89	\$ 599,284.00	\$ 249,849.00	Two payments due 7/31/16 & 7/31/17
<b>TOTALS</b>		<b>577</b>	<b>\$ 3,419,371.00</b>	<b>\$ 1,365,300.00</b>	

Table 2: Open Space Protection Projects Paid for by Elk Township's Dedicated Funding\*

\*Source of Table 2: Elk Township Office, 2015.

Table 3, below, shows Chester County's participation in preserving land in Elk Township

<b>Chester County Land Preservation Data for Elk Township</b>						
#	Tax Parcels	Date	Acres	County \$-acres	State \$-acres	Elk \$-acres
43	70-3-28, 70-3-35	8/16/1994	125	125	125	0
46	70-4-2	8/19/1994	74	74	74	0
	70-3-30E	1/1/1998	60	60	60	0
219	70-1-8.2, 70-1-9, 70-3-35.1	3/13/2006	32	32	0	0
243	70-2-36	6/21/2007	38	0	38	0
	70-3-38.3	1/1/2008	85.7			0
275	70-4-13.1, 70-4-13.1B, 70-4-13.1C, 70-4-13.4, 70-4-13.5	11/25/2008	33	33	0	0
278	70-2-19	1/8/2009	50	0	50	0
289	70-2-25.11A	8/25/2009	54	54	0	0
292	70-4-13.3	9/29/2009	17	17	0	0
295	70-4-1	11/5/2009	59	59	0	0
299	70-2-22, 70-2-23	11/9/2009	85	85	0	0
	70-4-3.15	1/1/2010	99.5	99.5	0	0
346	70-3-37	10/18/2012	48	48	0	48
347	70-3-41.1	10/18/2012	53	53	0	53
349	70-3-36	12/12/2012	129	129	0	129
352	70-3-32, 70-3-47, 70-4-10	2/12/2012	184	0	184	0
380	70-4-13.6	2/20/2014	16	16	0	16
388	70-5-5, 70-5-9	7/1/2014	88	88	0	88
391	70-3-20.4	7/25/2014	28	28	0	28
408	70-3-22	11/19/2014	36	36	0	36
Total Acres			1394.2	1036.5	531	398

Table 3: Chester County Partnership Funding of Elk Township Land Protection

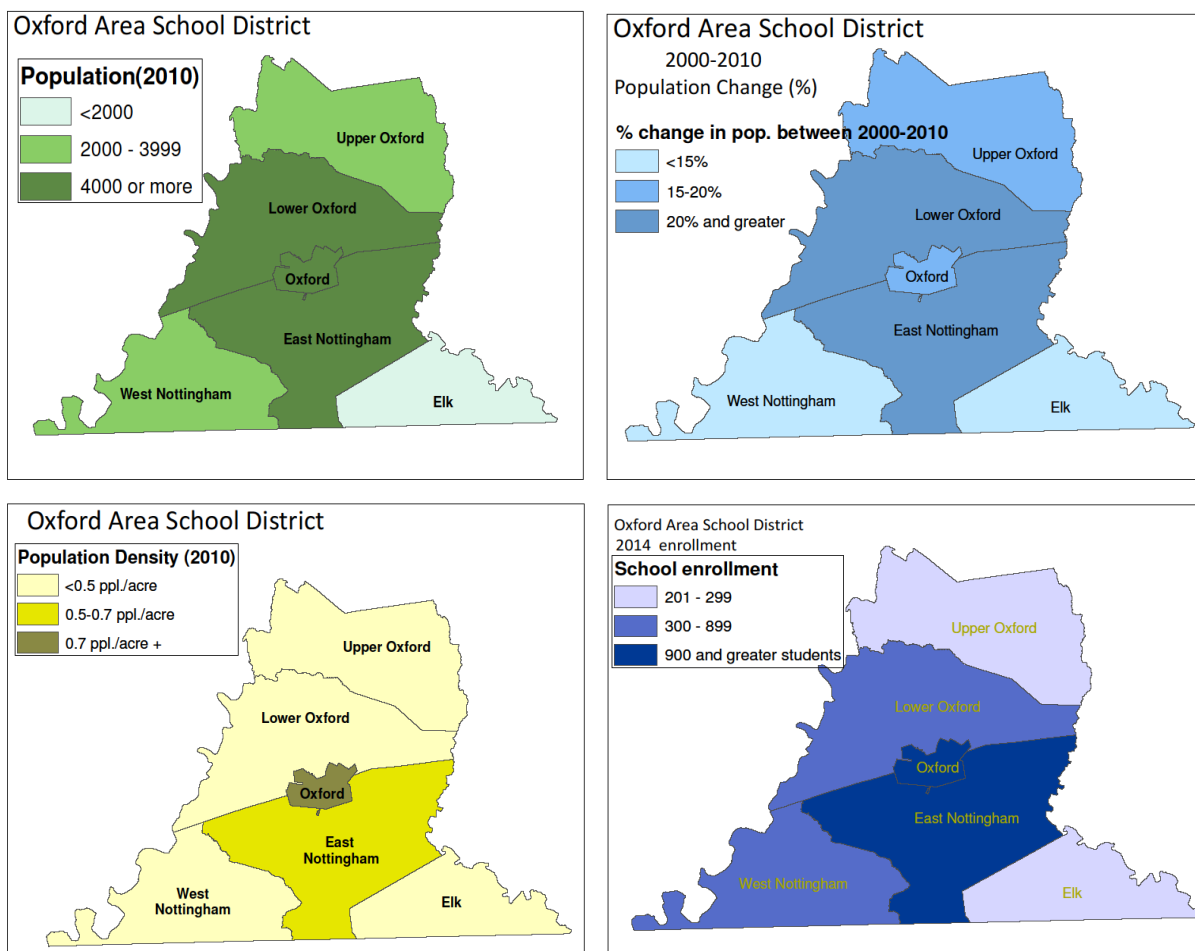
These projects were partially funded by Chester County Farmland Preservation Grants or Chester County Preservation Partnership Grants, with other matching funding sources.

## 5. Retention of the Township's Open Space Tax

Elk Township's Open Space Preservation funding has been a vital part of the success story of local farm and open space protection. For about \$60 per year--the price of a Christmas tree or a family dinner out at a local restaurant— most Elk households now know that their view will be open, their neighbor's fields will grow crops, not houses, and their taxes will remain low.

This report contains a 2015 Cost of Community Services Study (COCS) report, which updates the previous COCS completed in 2005. The 2015 financial analysis reveals similar revenue/expense ratios to those calculated ten years ago, but several additional observations are relevant. Residential development still costs the township more than it receives in tax revenues and most of that cost is generated from added school students. Because Elk Township is one of six municipalities in the Oxford Area School District, reducing residential growth in Elk alone will not entirely remove the fiscal burden of new school students—some neighboring townships allow unrestrained development. (See *Map 4: below*)

### Oxford Area School District Enrollment by Municipality

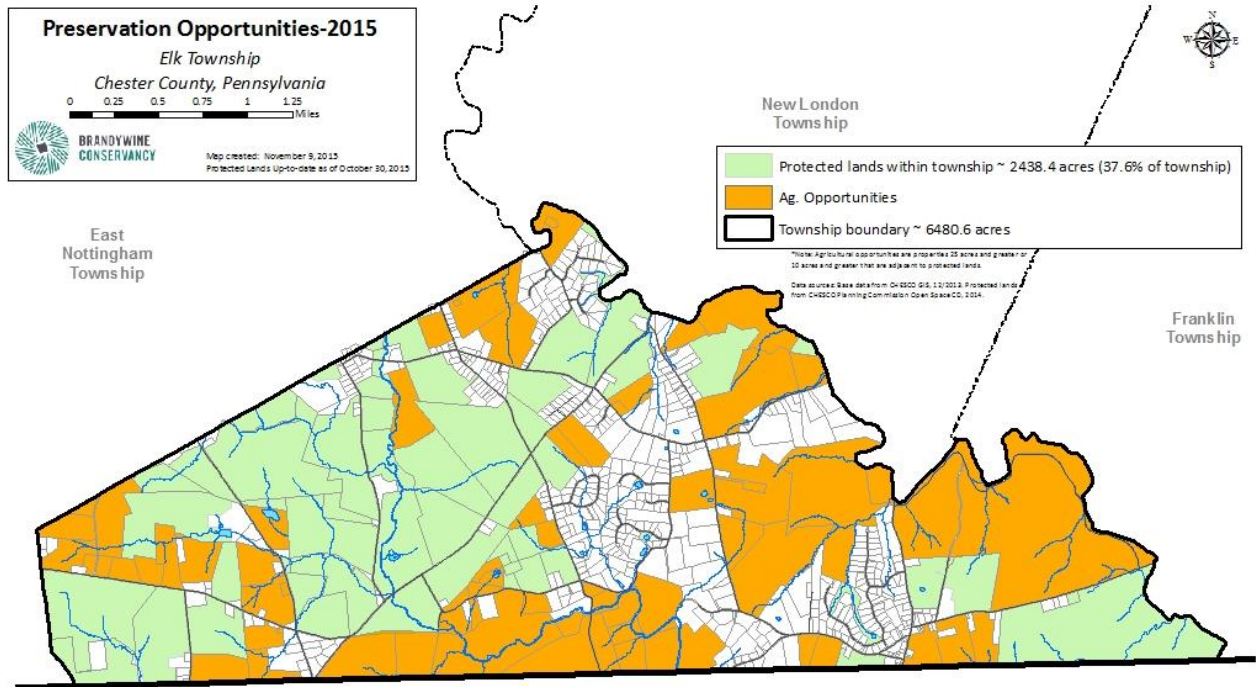


Map 4: Population trends in the Oxford Area School District

It is worth noting that the sluggish real estate market during the economic downturn of 2008-2009 effectively slowed new home construction throughout the entire school district and in Elk there was significant protection of open space which had previously been platted for residential development. Land protection has a demonstrable momentum of its own—protected open space encourages the protection of adjacent properties. Protecting one farm often leads to protecting a group of farms, as landowners see from neighbors how the process works to everyone's advantage. Elk Township's open space funds are vital because their product—a critical mass of protected farmland and open space—has created a climate of protected open space that is resistant to small-lot housing developments, supportive of agriculture, and actively promotes the Township's future as a sustainable landscape of farms, fields, and small communities. Market forces recognize and place a premium on protected open space. Elk Township has made a commitment to farming, open space, and planned residential growth; demonstrating that commitment by protecting more than 37% of its open space, and by joining in regional planning efforts to integrate balanced growth with preservation as a member of the Oxford Regional Planning Committee.

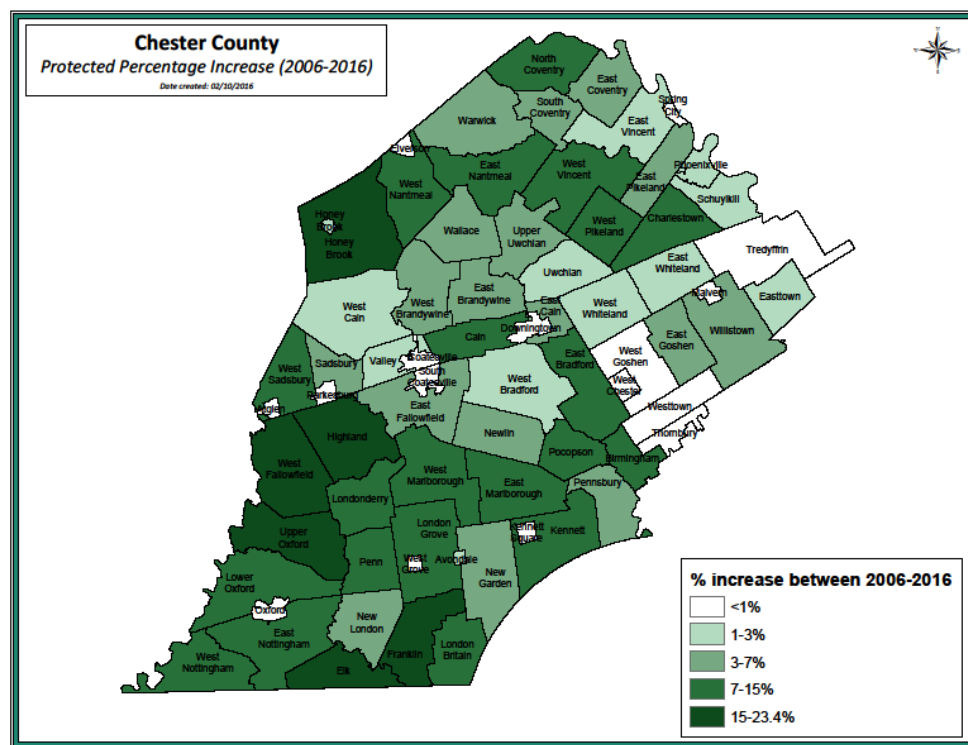
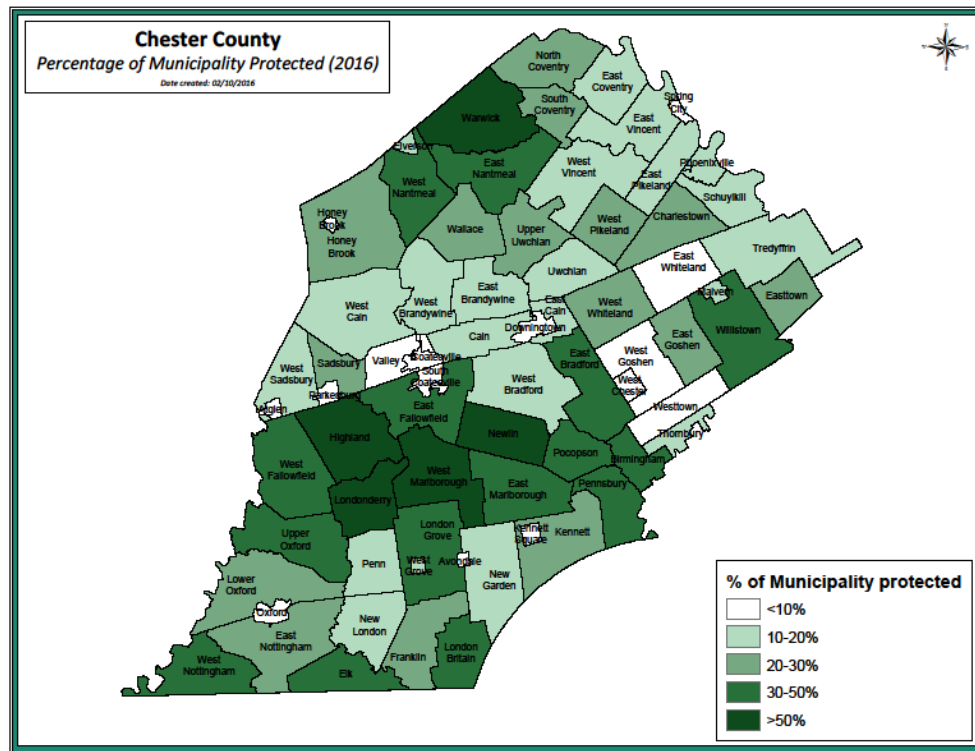
## **6. Saving Elk Township Land For the Next Ten Years (2015-2025)**

What does the future hold for Elk Township? *Map 5*, below, shows the remaining undeveloped land in the township. Not all of this can or will be protected but the phenomenal amount of farmland/open space protection in Elk, sparked and fed by Elk's Open Space Protection Program, will continue to encourage landowners who decide to limit development on their own land that such preservation efforts are fully supported by their community. Community financial support helps to sustain the critical land mass required for a viable and profitable farming economy and it also preserves important rare landscapes that draw visitors. Elk Township's Open Space Protection Program puts financial incentives at work in the service of a community consensus on values, placing a premium on protecting Elk Township's beauty, fertile farm soils, globally rare habitats, and traditional farming economy.



Map 5: Preservation Opportunities-2015

The two maps on the following page summarize Elk Township’s remarkable progress in securing a future for open space and farmland inside its borders. Certainly notable is the percentage of protected land in Elk Township, but even more striking is the second map—showing the percentage increase in protected land over the past decade. Elk Township has demonstrated a concerted effort towards conservation that is among the highest in the County.





# *Elk Township*

## *Cost of Community Services*

### **Overview**

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The development of farmland and open space into built-up land has impacts beyond the roads, increased traffic, and new houses – it also has definable impacts on a municipality's financial health. This *Cost of Community Services* study specifically analyzes the fiscal relationships between municipal and education services, and the three major land uses – residential, commercial, and agricultural – in Elk Township. Industrial use is often a fourth category but Elk currently has no industrial land uses. The results of this analysis document what a number of other sources have already concluded: tax revenues and fees generated by new residential development do not cover the costs of municipal services and educational demands that such development produces. On the other hand, farmland and open space consistently generate a net budget surplus.

### **Introduction**

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The Oxford Region of Chester County is approximately 56% farmland and 14% other open space; therefore, in 2012, 70% of the Oxford Region consisted of undeveloped open lands. Only 20% of the region is protected from development and nearly half of the region's land is available for development (the balance may have natural constraints, already be developed, or be protected.)\* Some of the best agricultural soils in Chester County are found in the Oxford area and agriculture is an economically viable occupation with the critical mass of active farms that are necessary for infrastructure support services.

The open space protection programs of the five townships within the Oxford Area School District vary in effectiveness (or existence) and land development in one township financially affects all the municipalities. Suburban residential development drives up the size and complexity of local government, demands increased municipal services, and increases the taxes the local government must levy. For example, the Oxford Area School District has fairly recently been affected by residential growth, as evidenced by its new high school, expanded middle and elementary schools, and

recently acquired administration building to serve continued increases in student populations. Population growth between 2002 and 2014 has helped to fuel a 40 % school district property tax increase. These negative effects can only be tempered by planning for the location of residential growth and by moderating its pace, in part, by permanently preserving farmland and other important open space. There is often a lag time between the construction of new houses and higher taxes and new schools so any analysis takes place over a span of years.

Accordingly, this *Cost of Community Services* (COCS) study updates the 2005 study done by the Brandywine Conservancy, using current budget figures to document increases in school expenses that can be expected from increased residential development in particular. Elk Township passed a referendum in 2006 for funding the protection of open space through its Earned Income Tax, and began collecting the ½% tax in 2008 (the full EIT rate in Elk is 1.5%.) In 2011 Elk Township protected its first property using its open space funds; the following year three farms were protected and, to date, nine properties have been protected using Elk Township's Open Space Fund. The \$1.1 million spent by Elk Township for open land preservation has leveraged an additional \$2.4 million in outside funding to preserve Township open space. This COCS study demonstrates that open space, including farmland, is a net financial gain for the tax-paying community, and, thus, protecting open space with public funds is actually a means of reducing taxes.

\*2012 Oxford Region Multimunicipal Comprehensive Plan as amended September 24, 2015

## **Methodology**

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This Elk Township *Cost of Community Services* study analyzes the local fiscal impacts of the three major land uses in Elk – residential, commercial, and agricultural. These uses provide public revenues through taxes and fees while demanding services that require the expenditure of public dollars. Further, all three land uses have impacts (i.e., require 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 COCS study uses a 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). The following data is applied in the methodology: County property assessments, as well as municipal and School District financial data, all from 2014 (or 2014-2015 for the District.) Chester County taxes and services are not included. Using data from one specific time frame, the study creates a snapshot of municipal costs related to its land uses. Subsequent use of data from a different time period will show a trend in these land use-related costs; the finding 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 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 cost break-even period.

Actual tax revenues generated by the four (here, three) land uses are different for every 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 school district funding from the Commonwealth, called the Equalized Subsidy for Education. The expenditures



spent on the three 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's methodology, Elk Township's revenues and expenditures as well as Elk's portion of the Oxford Area Consolidated School District (OASD) revenues and expenditures were allocated to each of the three 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. The attached spreadsheets\*, pages 1 through 8, document the methodology as applied to Elk Township.

\*ELK TOWNSHIP: Cost of Community Services Study, 2014 data; pp 1-8; attached as a part of this report.

## **Results**

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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, comparing 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: 1.11

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

**Commercial** (e.g., stores, gas stations, offices)-- 1: 0.08

**Industrial** (e.g., wholesaling, manufacturing)-- Not Applicable to Elk at this time

Currently, residential land use creates a deficit, paying less to the community than it receives in expenditures. Both agriculture and commercial uses contributed substantially more than they received. For example, for every \$1.00 collected from the residential community, \$1.11 was spent, an 11% shortfall for the Township. For farmland, \$0.04 was spent for every \$1.00 collected, generating a 96% surplus. Similarly, commercial land required only \$0.08 in expenditures for every \$1.00 generated: a 92% surplus. In the 2005 COCS study, residential development cost \$1.08

for every tax dollar generated; the cost to Elk Township for residential land uses has increased 2.8 % in the past ten years.

In actual dollar figures, the differences were perhaps more dramatic, with residential land uses requiring \$340,568 more in expenditures than revenues; the Township spent over \$25,600,000 on residential land uses that only generated \$23,800,000 in revenue. On the other hand, net revenue from farmland was \$12,660, with township expenses for that farmland being only \$477.

## Conclusions

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As previously noted, these *Cost of Community Services* figures and ratios reflect 2014 data (2014-15 OASD data), and will vary slightly from year to year. 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 development takes place on farmland or other open spaces. Regardless, the conclusion of this study is clear: 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 generates modest but consistent budget surpluses and, if protected, prevents the rapidly increasing deficits caused by uncontrolled residential development;
- all property owners will experience upwardly spiraling taxes, especially school district taxes, to make up the shortfalls; and,
- commercial land use contributes a positive cash flow for the Township budget but, since such uses are not permanent, they may be abandoned and result in municipal maintenance/security burdens or conversion to a more costly residential use.

These findings correspond with other COCS studies, including eleven done by Professor Kelsey as well as fourteen by the Brandywine Conservancy; all 25 in Pennsylvania



townships. The American Farmland Trust has calculated corresponding outcomes for 72 studies spread across 18 states. This COCS study's general findings are also consistent with the same analysis done in 2005 for Elk Township and with those of the 2013 COCS study for East Nottingham Township.

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 calculating the relative impacts of farmland preservation vs. farmland development for residential purposes.

\* *ELK TOWNSHIP COST OF COMMUNITY SERVICES* Appendix ; attached as part of this report.





ELK TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 1/8				
<b>TAX BASE</b>				
Item	\$ Land Total	\$ Buildings Total	\$ Combined Total	Tax Base
Residential (R)	\$19,085,160	\$59,863,320	\$78,948,480	
R-vacant/misc	\$1,636,600	\$0	\$1,636,600	
R-apartment	\$59,950	\$146,890	\$80,585,080	
R-mobile home park	\$1,137,210	\$1,346,720	\$2,483,930	
R-buildings on farm (calculated below)	\$0	\$9,591,170	\$9,591,170	
<b>R-Total</b>	<b>\$21,918,920</b>	<b>\$70,948,100</b>	<b>\$173,245,260</b>	<b>97.9%</b>
Commercial (C)	\$47,040	\$484,530	\$531,570	
C-motels	\$0	\$0	\$0	
C-mom&pop stores				
C-office buildings	\$69,810	\$421,630	\$491,440	
C-shopping centers	\$59,250	\$129,930	\$189,180	
C-misc-exempt	\$927,000	\$165,790	\$1,092,790	
C-church	\$53,770	\$30,330	\$84,100	
<b>C-Total</b>	<b>\$1,156,870</b>	<b>\$1,232,210</b>	<b>\$2,389,080</b>	<b>1.4%</b>
Industrial-not in park				
Industrial-in park				
Industrial-misc				
<b>Industrial-Total</b>	<b>\$0</b>	<b>\$0</b>	<b>\$0</b>	<b>0.0%</b>
<b>Farmland (from below)</b>	<b>\$1,237,200</b>		<b>\$1,237,200</b>	<b>0.7%</b>
<b>Total</b>			<b>\$176,871,540</b>	<b>100.0%</b>
<b>Farmland calculations</b>				
	<b>\$ Land Total</b>	<b>\$ Buildings Total</b>	<b>\$ Total</b>	
	\$1,237,200	\$9,591,170	\$10,828,370	
Data Source: Chester County Department of Assessment, November 19, 2015				
Note: Farmland calculations assume "farmland" comprises only those parcels under Act 319/515				

ELK TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 2/8

GENERAL FUND TAX REVENUES

Item	\$ Total	%Residential	\$Residential	%Commercial	\$Commercial	%Industrial	\$Industrial	%Agriculture	\$Agriculture
Real property tax	\$24,341	97.9%	\$23,830	1.4%	\$341	0.0%	\$0	0.7%	\$170
Real estate transfer tax	\$24,955	97.9%	\$24,431	1.4%	\$349	0.0%	\$0	0.7%	\$175
Per Capita tax	\$0		\$0		\$0		\$0		\$0
Earned income tax	\$199,604	100.0%	\$199,604		\$0		\$0		\$0
Total taxes and municipal "Tax Default" %	\$248,900	99.6%	\$247,865	0.3%	\$690	0.0%	\$0	0.1%	\$345

Data Source: 2014 Municipal Annual Audit and Financial Report, 150635 Elk TWP, Chester County by Dept of Community & Economic Development, Harrisburg, PA

[illegible]

Elk TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 4a/8									
G E N E R L F U N D E X P E N D I T U R E S									
Item	\$ Total	%Residential	\$Residential	%Commercial	\$Commercial	%Industrial	\$Industrial	%Agriculture	\$Agriculture
<b>Township Administration</b>									
Legislative/ Governing Body	\$5,228	99.42%	\$5,198	0.42%	\$22	0.00%	\$0	0.16%	\$8
Tax Collection	\$7,871	100.00%	\$7,871	0.42%	\$33	0.00%	\$0	0.16%	\$13
Solicitor/ Legal Services	\$12,644	99.42%	\$12,571	0.42%	\$53	0.00%	\$0	0.16%	\$20
Secretary/ Clerk	\$31,949	99.42%	\$31,764	0.42%	\$134	0.00%	\$0	0.16%	\$51
Other Govt Administration/General		99.42%	\$0		\$0		\$0		\$0
Engineering Services	\$10,827	99.42%	\$10,764	0.42%	\$45	0.00%	\$0	0.16%	\$17
General Gov't Building and Plant	\$152,726	99.42%	\$151,840	0.42%	\$641	0.00%	\$0	0.16%	\$244
Auditing/Bookkeeping Services	\$1,030	99.42%	\$1,024	0.42%	\$4	0.00%	\$0	0.16%	\$2
<b>Public Safety</b>									
Fire	\$37,568	99.60%	\$37,418	0.42%	\$158	0.00%	\$0	0.00%	\$0
Protective Inspection	\$11,919	99.60%	\$11,871	0.42%	\$50	0.00%	\$0	0.00%	\$0
Planning & Zoning			\$0		\$0	0.00%	\$0	0.00%	\$0
Ambulance/Rescue	\$9,673	100.00%	\$9,673	0.00%	\$0	0.00%	\$0	0.00%	\$0
Emergency Management			\$0		\$0		\$0	0.00%	\$0
Other Public Safety	\$200	100.00%	\$200	0.00%	\$0	0.00%	\$0	0.00%	\$0
<b>Health and Human Services</b>									
Health and Human Services	\$2,352	100.00%	\$2,352	0.00%	\$0	0.00%	\$0	0.00%	\$0
<b>Sanitation</b>									
Solid Waste Collection & Disposal			\$0		\$0		\$0		\$0
Wastewtr./Sewage Collection, Tmt.			\$0		\$0		\$0		\$0
<b>Highways and Streets</b>									
General Services	\$2,109	99.60%	\$2,101	0.42%	\$9	0.00%	\$0	0.00%	\$0
Winter Maintenance	\$154,849	99.60%	\$154,230	0.42%	\$650	0.00%	\$0	0.00%	\$0
Street Lighting	\$473	99.60%	\$471	0.42%	\$2	0.00%	\$0	0.00%	\$0
Traffic Control Devices	\$1,981	99.60%	\$1,973	0.42%	\$8	0.00%	\$0	0.00%	\$0
Tool Repair		99.60%	\$0		\$0	0.00%	\$0	0.00%	\$0
Road and Bridge Maintenance	\$25,355	99.60%	\$25,254	0.42%	\$106	0.00%	\$0	0.00%	\$0
<b>Culture and Recreation</b>									
Library	\$2,522	100.00%	\$2,522	0.00%	\$0	0.00%	\$0	0.00%	\$0
Recreation	\$1,884	100.00%	\$1,884	0.00%	\$0	0.00%	\$0	0.00%	\$0
Other Culture and Recreation		100.00%	\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
Senior Citizen Center			\$0	0.00%	\$0	0.00%	\$0	0.00%	\$0
<b>Miscellaneous</b>									
Intergovernmental Expenditures			\$0		\$0		\$0		\$0
Unallocated Employee Benefits	\$9,019	99.42%	\$8,967	0.42%	\$38	0.00%	\$0	0.16%	\$14
Insurance Premiums	\$7,728	99.42%	\$7,683	0.42%	\$32	0.00%	\$0	0.16%	\$12
<b>Total General Fund</b>	<b>\$489,907</b>	<b>99.54%</b>	<b>\$487,629</b>	<b>0.41%</b>	<b>\$1,988</b>	<b>0.00%</b>	<b>\$0</b>	<b>0.08%</b>	<b>\$382</b>

Data Source: 2014 Municipal Annual Audit and Financial Report, 150635 Elk TWP, Chester County by Dept of Community & Economic Development, Harrisburg, PA

Elk TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 4b/8									
LIQUID FUELS & OTHER SPECIAL FUNDS									
	\$ Total	%Residential	\$Residential	%Commercial	\$Commercial	%Industrial	\$Industrial	%Agriculture	\$Agriculture
<b>Special Fund Revenues</b>	\$201,771	99.42%	\$200,601	0.42%	\$847	0.00%	\$0	0.16%	\$323
Interest & Rent Earnings	\$148	99.42%	\$147	0.42%	\$1	0.00%	\$0	0.16%	\$0
State Revenues and Entitlements	\$60,271	99.42%	\$59,921	0.42%	\$253	0.00%	\$0	0.16%	\$96
<b>Total Special Fund Revenues</b>	<b>\$262,190</b>	<b>99.42%</b>	<b>\$260,669</b>		<b>\$1,101</b>		<b>\$0</b>		<b>\$420</b>
<b>Special Fund Expenditures</b>									
Construction & rebuilding	\$59,325	99.42%	\$58,981	0.42%	\$249	0.00%	\$0	0.16%	\$95
<b>Total Special Fund Expenditures</b>	<b>\$59,325</b>	<b>99.42%</b>	<b>\$58,981</b>	<b>0.42%</b>	<b>\$249</b>	<b>0.00%</b>	<b>\$0</b>	<b>0.16%</b>	<b>\$95</b>

Data Source: 2014 Municipal Annual Audit and Financial Report, 150635 Elk TWP, Chester County by Dept of Community & Economic Development, Harrisburg, PA

**ELK TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 5/8**

***SCHOOL TAX REVENUES***

<b>Item</b>	<b>\$ Total</b>	<b>%Residential</b>	<b>\$Residential</b>	<b>%Commercial</b>	<b>\$Commercial</b>	<b>%Industrial</b>	<b>\$Industrial</b>	<b>%Agriculture</b>	<b>\$Agriculture</b>
Real estate tax	\$1,649,667	97.90%	\$1,615,024	1.40%	\$23,095	0.00%	\$0	0.70%	\$11,548
Interim tax			\$0		\$0		\$0		\$0
Public utility realty tax			\$0		\$0		\$0		\$0
Earned income tax	\$128,315	100.00%	\$128,315	0.00%	\$0	0.00%	\$0	0.00%	\$0
Real estate transfer tax	\$24,955	97.90%	\$24,431	1.40%	\$349	0.00%	\$0	0.70%	\$175
Delinquent taxes	\$72,654	97.90%	\$71,128	1.40%	\$1,017	0.00%	\$0	0.70%	\$509
<b>Taxes from Township &amp; School District; &amp; "Tax Default" %</b>	<b>\$1,875,591</b>	<b>98.04%</b>	<b>\$1,838,898</b>	<b>1.30%</b>	<b>\$24,462</b>	<b>0.00%</b>	<b>\$0</b>	<b>0.65%</b>	<b>\$12,231</b>

Data Source:Oxford Area School District Audit Report; June 30, 2014 and Chip Lewis at Oxford Area School District (breakdown by township of students and local taxes collected.)

**ELK TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 6/8**

**SCHOOL NONTAX REVENUES**

Item	\$ Total	%Residential	\$Residential	%Commercial	\$Commercial	%Industrial	\$Industrial	%Agriculture	\$Agriculture
Township share of nontax rev.	\$739,030	100.00%	\$739,030	0.00%	\$0	0.00%	0.00	0.00%	\$0
Tax revenues from township (from 5)	\$1,875,591	98.04%	\$1,838,829	1.30%	\$24,383	0.00%	0.00	0.65%	\$12,191
<b>Total revenues from Township</b>	<b>\$2,614,621</b>	<b>98.59%</b>	<b>\$2,577,859</b>	<b>0.93%</b>	<b>\$24,383</b>	<b>0.00%</b>	<b>0.00</b>	<b>0.47%</b>	<b>\$12,191</b>

Elk Township had 201 students in 2014, out of a total school population of 3,869 students, or 5.2% of the students

Total 1875,591 SD taxes from ElkTownship/total 34,191,955 SD taxes = 5.5 % SD tax revenue from ElkTownship

Total \$47,628,867 SD revenue - total \$34,191,955 SD tax revenue = total SD non tax revenue x %5.5 SD revenue fromElkTownship  
= Township share of nontax revenue

Data Source:Oxford Area School District Audit Report; June 30, 2014 and Chip Lewis at Oxford Area School District (breakdown by township of students and local taxes collected.)



**ELK TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 7/8**

***SCHOOL DISTRICT EXPENDITURES***

<b>Item</b>	<b>\$ Total</b>	<b>%Residential</b>	<b>\$Residential</b>	<b>%Commercial</b>	<b>\$Commercial</b>	<b>%Industrial</b>	<b>\$Industrial</b>	<b>%Agriculture</b>	<b>\$Agriculture</b>
Township share of expenditures		100.0%		0.0%		0.0%		0.0%	
<b>Total expenditures</b>	<b>\$2,935,136</b>	<b>100.0%</b>	<b>\$2,935,136</b>						

Total OASD expenditures x 5.2% taxes from Elk Township = Elk Township share of expenditures  
 56,444,926 x .052 =

**ELK TOWNSHIP: Cost of Community Services Study, Brandywine Conservancy, 2014 data, pg. 8/8**

***COST OF COMMUNITY SERVICES***

<b>Item</b>	<b>\$ Total</b>	<b>\$ Residential</b>	<b>\$ Commercial</b>	<b>\$ Industrial</b>	<b>\$ Agriculture</b>
<b>Revenues</b>					
General fund munic. tax revenue (2)	\$248,900	\$247,865	\$690	\$0	\$345
General fund munic. nontax revenue (3)	\$55,441	\$54,716	\$584	\$0	\$141
Special fund munic. revenue (4)	\$262,190	\$260,669	\$1,101	\$0	\$420
School District tax revenue (5)	\$1,875,591	\$1,838,898	\$24,462	\$0	\$12,231
Elk share of school district nontax rev. (6)	\$739,030	\$739,030	\$0	\$0	\$0
<b>Total Revenues</b>	<b>\$3,181,152</b>	<b>\$3,141,178</b>	<b>\$26,837</b>	<b>\$0</b>	<b>\$13,137</b>
<b>Expenditures</b>					
General fund munic. expenditures (4)	\$489,907	\$487,629	\$1,988	\$0	\$382
Special fund munic. expenditures (4)	\$59,325	\$58,981	\$249	\$0	\$95
School District expenditures (7)	\$2,935,136	\$2,935,136	\$0	\$0	\$0
<b>Total Expenditures</b>	<b>\$3,484,368</b>	<b>\$3,481,746</b>	<b>\$2,237</b>	<b>\$0</b>	<b>\$477</b>
<b>Calculating the COCS ratios</b>					
<b>Item</b>	<b>\$ Total</b>	<b>\$ Residential</b>	<b>\$ Commercial</b>	<b>\$ Industrial</b>	<b>\$ Agriculture</b>
Total revenues	\$3,181,152	\$3,141,178	\$26,837	\$0	\$13,137
Total expenditures	\$3,484,368	\$3,481,746	\$2,237	\$0	\$477
<b>Ratios (expenditures / revenues)</b>	<b>1.10</b>	<b>1.11</b>	<b>0.08</b>	<b>0.00</b>	<b>0.04</b>
<b>Net Difference ( revenues - expenditures)</b>	<b>-\$303,216</b>	<b>-\$340,568</b>	<b>\$24,600</b>	<b>\$0</b>	<b>\$12,660</b>

*ELK TOWNSHIP*  
*COST OF COMMUNITY SERVICES*  
 Appendix

**Residential Growth and School District Budgets**

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The primary reason for the shortfall between residential expenditures and revenues comes from residential demands on the local 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 2014-2015, total expenses for the Oxford Area School District (OASD) were reported at \$56,828,634—double the expenditures ten years earlier of \$27,892,691-- and the School District reported a total of 3,869 students for School Year 2014-15 (in 2003, there were 3306). In 2003, it cost an average of \$8,437 to educate each student, but in 2014-15 it cost \$14,688 per student, not all borne by the local townships.

In 2014-2015, 5.2% of the district (OASD) or 201, public school students came from Elk Township. Accordingly, it cost approximately \$2,952,328 to educate Elk Township students this year. Even though the students are entirely a product of residential areas, only \$1,777,982, or \$8,846 per student, came to the school district directly from the residents of Elk in the form of taxes, a \$5,842 per student shortfall. While the deficit is partly subsidized by taxes on commercial and agricultural land, and partly by state and federal education subsidies, it adds up quickly for a township that sends hundreds of students to their public school.

Elk Township weighs its future development and preservation options in light of resident needs; school district costs are a large factor in any budget considerations. As the OASD enrollment grows in one or in all five of its municipalities, local taxes must be increased to make ends meet. And in fact, the OASD property tax



levy rose from 15.29 mills in 1998 to 18.22 mills in 2002, an average annual increase of 4.5 percent. In school year 2014-15 the OASD tax rate was 30.5347; an increase of 40% since 2002, despite the fact that OASD enrollment has only increased 17%. The school district's audit report cites successfully contested real estate assessments, combined with falling earned income tax revenue resulting from stagnant income growth during the recent recession as two causes of the continued school budget shortfall. There are also school population thresholds that, once exceeded, require new school construction, as happened from 2005-2009 when a new high school was built, both a middle school and elementary school were expanded, and a new admin building purchased, all clearly a factor in rising tax rates. This study does not examine the OASD budget in detail but this COCS study does show that depending on residential growth to pay Township bills is a questionable strategy given that, with continued growth, municipal services (police, fire, roads, libraries, recreation, etc.) will also increase, requiring additional monies (likely coming from higher municipal taxes.)

### **Slowing Tax Increases through Open Space Preservation**

From this analysis, it is clear that preserving farmland and open space can slow rising municipal and educational costs by protecting land that would otherwise be converted to new housing. The expense of protecting farmland and 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 and are a good financial investment. Not only does the Township avoid new school and municipal costs, but when farmland is preserved, farm tax income is maintained. Using local funds to preserve agricultural lands greatly improves the chances of a property's acceptance into County, State, and Federal farmland preservation programs, and potentially leverages other private funding sources.



In dramatic contrast to the permanent increase in costs and taxes caused by new residential development, lands that are preserved normally require a one-time financial commitment. Every dollar spent to protect open space and farmland avoids the larger, perpetual costs of providing municipal and school district services. Any locally-required management or maintenance costs (such as where public access is allowed or for parks) are much smaller than the preservation costs and can be supplemented by grants, private donations, or other funding sources.

For example, suppose a 150-acre farm property could accommodate 100 new homes, and those 100 homes sent 100 students to OASD schools (conservatively). Using the \$5842/student shortfall calculated above, these 100 students would generate an annual shortfall of \$584,200. By buying the farm's 100 development rights at \$4,676\* each, Elk residents would spend \$467,600, but would enjoy permanent substantial tax savings relating to that property:

$$\begin{aligned} \$4,676 \times 100 &= \$467,600 \\ \$467,600 \text{ divided by } \$584,200/\text{year shortfall} \\ &= \text{less than ten month break-even period} \end{aligned}$$

Such a preservation effort, fully funded by the Township, would be paid back in less than one year of tax savings. Ten years ago the break-even period for local funding to preserve open space was over two years; costs have risen now so that the Township can recoup its costs for preserving farmland and open space within the same budget year.

\*This per acre cost to purchase a farmland preservation easement in Elk Township was calculated for six easements acquired in 2012 and 2014 within Elk Township by averaging the price paid per acre. It ranged from a high of \$6,810 to a low of \$3,154.



In other words, less than a year after purchasing development rights, Elk Township will have avoided a school district shortfall amount equal to the purchase cost of the development rights. Such an annual shortfall would continue well beyond that initial year, would cost the Township that money year after year, and would also potentially affect other school district municipalities (for instance, if new school capital expenditures were required to house expanding student populations.) Of the six Oxford Area School District municipalities, four out of five townships have active open space protection programs, which will tend to balance this latter effect.

As previously noted, money to preserve open space and farmland is available through County, State, and Federal farmland preservation programs, and preservation projects are much more likely to be funded at those levels when there is a local financing component. The township does not have to solely rely on local taxes to finance these purchases. And, by contributing its own funds to such a program purchase, a township signals significant local support for a preservation project which also improves the chances of a property's acceptance into one of these programs.



## **Preferential Farmland Assessments**

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In some areas of Chester County, local officials have raised concerns that school district revenues are unfairly decreased by state-funded farm preservation practices. Many schools derive most of their local revenues by 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. Acts 319 and 515 are designed to alleviate some of the financial pressures farmers face to sell to developers, but both of these Acts result in lower real estate tax revenues for a school district. However, this concern is valid only in a very short term and does not recognize that once the farmers sell their land, it is likely to produce houses and children instead of crops. Those children would likely strain the schools’ financial resources and physical capacity more than the lowered farmland assessment (e.g., supplies, buses, teachers, buildings). Finally, even though farmland assessed under Acts 319 or 515 receives a property tax reduction, it still provides some tax revenue to the local school district.

