

# *Opportunity Knocks—*

# *Open Space as a Community Investment*

By Michael Frank



HERITAGE  
CONSERVANCY

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## Opportunity Knocks: Community Investments in Land

For decades, people in suburban and rural places have discussed, studied, argued and fought for ways to keep some of the land in their communities open and undeveloped. While zoning techniques, such as cluster development and transferable development rights, have had some success, there are areas where development is best avoided rather than moved around. Lively discussion has also focused on the changing quality of life and community character. The debate approaches an emotional level when residents and business owners, both lifelong and newcomers, find their municipal and school district tax bills increasing to pay for road improvements, additional police personnel, new schools and other services and facilities that rapid development and sprawl bring.

Matters related to open space, farmland, community character, quality of life, taxes and development are all intertwined. Municipal and school district officials in Bucks County, as well as areas throughout the nation, have realized that many of the costs of development, particularly in areas of rapid change, are borne by the community rather than the developer. In particular, residential development requires more services than it produces in tax revenues to pay for services. Public school systems, which take the biggest bite of local tax dollars, are directly affected by the location, amount, type and timing of development. In addition to the qualitative aspects of preserving open space and farmland, there is a fiscal side which should be addressed.

Charles Baker, former president and member of the Central Bucks School Board, has said it is important to take a business approach to the management of public school systems. A successful business cannot operate properly by just increasing the price of the product or service (raising public school taxes). Nor can a business survive by reducing the quality of the product or service provided to the client (eliminating school programs or increasing class sizes). It's important to control demands on the cost side of the equation. By buying land or conservation easements to reduce the number of new homes and children who enter the system, costs can be better managed.

The Penn State Cooperative Extension published the results of several studies that quantified the relative costs of development patterns. Timothy W. Kelsey, associate professor of Agricultural Economics, analyzed the relative governmental costs and tax revenues of different land uses in several townships throughout Pennsylvania. Residential development costs much more for municipal and school district services than farming, commercial and industrial land uses. By far, agriculture contributes more than it takes in terms of governmental services.

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# B

## uy Schools – Buy Open Space: Bucks County Experience

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In June of 1994, about 70 people met at Delaware Valley College for a seminar titled "Why We Can't Say NO to Development." Much of the discussion focused on how much current homeowners and businesses pay through increased taxes to accommodate the costs of new development. Particular emphasis was given to school costs. However, one speaker, a lawyer who represents developers, reminded everyone that a piece of undeveloped land is a valuable asset that belongs to someone. It may be a farmer's retirement program or the means to finance his kids' college educations. Land is a basic part of the product provided to a developer's customer. He said it is fundamentally unfair for municipal officials to fool around with zoning techniques that reduce the value of that asset. The attorney charged the group that, if a community doesn't want to see a piece of land developed, the community should find a way to buy it.

In response to the attorney's challenge, relevant numbers were collected and analyzed. In the Central Bucks School District's newsletter, *CB Insight*, Spring 1994, it was reported that the cost to educate a public school student was \$7,300 per year and it was expected that each new home would produce, on average, about one additional public school student. The average new house generated \$2,300 in real estate tax revenues and \$400 in earned income taxes for a total of \$2,700. As such, there was an annual shortfall of \$4,600 per household between the taxes it generated and the costs to the school district. The shortfall must be made up from other sources of revenue, such as increased taxes spread over all in the community.

It was also found that the approximate cost to purchase an acre of undeveloped farmland in the Central Bucks area was \$16,000 and the price of a conservation easement or development right was about \$11,000 per acre. These figures were derived from appraisals prepared for the Bucks County Agricultural Land Preservation Board in the second half of 1994 for raw, unimproved land in Buckingham Township.

### **The evaluation lead to the conclusion that the community could choose to:**

- 1) raise taxes to make up the shortfall for the ever increasing number of school students,
- 2) raise taxes to invest in the preservation of land and thereby avoid some of the future shortfall in public school costs, or
- 3) try to balance the two. Spend money for land. Spend money for schools.

The community had choices.

In 1998, the revenue and cost numbers were updated. In the Spring 1998 issue of *CB Insight*, it was reported that it costs about \$8,615 per year to educate a public school student in the Central Bucks School District, based on the 1996-97 school year. The average house generated \$2,913 in taxes. Therefore, the shortfall per household was about \$5,702 per year, an increase of \$1,102 in four years. It should be noted that the shortfall for a new home is much less in the first year due to the transfer tax that is collected.



It was estimated that each home will produce 0.83 additional public school students on average. Homes make up about 85 percent of the tax base in the Central Bucks School District.

The value or potential purchase price of land varies substantially, based on many factors. For the purposes of these calculations, \$16,500 per acre was used for the purchase of land and \$12,933 was used for the purchase of the agricultural easements (development rights). These figures are averages derived from appraisals in 1998 prepared for the Bucks County Agricultural Lands Preservation Board for raw, unimproved farmland in Buckingham, Plumstead and Warrington townships.

On a hypothetical 100-acre farm, which is zoned for one house per acre, it is reasonable to anticipate that 85 new homes might be constructed. The net public school costs to the community would be the number of houses (85) times the number of public school students per household (0.83) times the annual shortfall per house (\$5,702). The community's costs related to schools from 85 homes on a 100-acre farm would be about \$402,276 per year.

The cost, on average, to the community to purchase the 100-acre farm would be \$1,650,000. Therefore, it would take about 4.10 years to break even (\$1,650,000 divided by \$402,276).

The costs, on average, to the community to purchase the agricultural easements (development rights) on the 100-acre farm would be \$1,293,300. Therefore, it would take about 3.21 years to break even (\$1,293,300 divided by \$402,276).

*The community's costs related to schools from 85 homes on a 100-acre farm would be about \$402,276 per year.*

#### **Development of the Proverbial "100-Acre Farm" – Costs to the Community**

	85	New Homes
x	0.83	Public School Students Per Home
	<u>70.55</u>	Public School Students in the Subdivision
x	\$5,702	Shortfall Per Household per year
	<u>\$402,276</u>	Shortfall from the 85 New Homes per year

#### **Preservation of the Proverbial "100-Acre Farm" – Savings for the Community**

##### *Purchase the Land for Community Use*

	100	Acres Purchased
x	\$16,500	Average Cost Per Acre – Fee Simple Purchase
	<u>\$1,650,000</u>	Purchase Price of the Farm

\$1,650,000 / \$402,276 (shortfall) = 4.10 year break even

#### **Preservation of the Proverbial "100-Acre Farm" – Savings for the Community**

##### *Purchase the Conservation Easements*

	100	Acres Purchased
x	\$12,933	Average Cost Per Acre – Easements Purchase
	<u>\$1,293,300</u>	Purchase Price of the Easements

\$1,293,300 / \$402,276 (shortfall) = 3.21 year break even

Obviously, these are very simple illustrations. They do not include appraisal fees, closing costs and debt service (interest payments) related to the land purchases. They also do not address the increasing costs of public education systems and debt service related to building or expanding schools. While it is appropriate to debate the amount of the spread between the school system costs and land preservation costs, it is clear that the cost to educate a public school student is more than the average home provides in school district revenues; and the balance is made up by others in the community. If land or conservation easements are purchased, the shortfalls will be reduced. It is important to consider that, after those land purchases are paid off, the community costs end. For all practical purposes, the shortfall related to school costs will continue as long as the homes exist.

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## **Other Costs of Development**

Other references to the relationship between residential development and the cost of public services are found in impact statements submitted with development applications. As part of land development submissions, Solebury Township requires fiscal impact statements. The demographic characteristics of Solebury Township are that, from a 4-bedroom single-family house, it is anticipated there will be 0.88 school-age children per home and only 77 percent will attend the public school system. About 23 percent of school-age children attend private or parochial school.

Based on the accepted standards and procedures included in the *Development Impact Assessment Handbook* (Burchell, Listokin, Dolphin, et.al, Urban Land Institute, 1997), a fiscal impact evaluation was submitted for a development of 168 single-family homes on a 157-acre site. The applicant's report stated there would be an estimated net cost to the county government of \$32,038.36 per year, based upon 1998 dollars. The net cost to the township would be \$65,352.63 per year and the annual deficit to the school district was estimated to be \$686,586.23.

Another study submitted for the development of 228 single-family homes and 34 town-houses on a 256-acre site in Solebury Township forecasted an annual deficit to the township of \$14,035.00 and to the school district of \$816,609.00.

## **Bucks County Bonds and Other Appropriations**

Bucks County taxpayers have not been reluctant to vote for bond referendums to preserve open space. Several communities have approved real estate taxes or earned income taxes for these purposes. In several situations, municipal officials, understanding the public support for the preservation of critical properties, have appropriated money in their budgets without referendums. While not all such initiatives were undertaken based on the rationale that there would be savings in the costs of public services, a substantial amount of money has been approved for open space purposes in Bucks County, as inventoried in the following table. Two county initiatives are also listed.

<b>Municipal Level</b>	<b>Amount Raised</b>	<b>Date Approved</b>
<b>Bond Issues</b>		
Bedminster Township	\$2.5 million	11/97
Buckingham Township	4.0 million	11/95
	9.5 million	11/99
Doylestown Township	3.75 million	6/91
Lower Makefield Township	7.5 million	1/98
	7.5 million	11/98
Middletown Township	0.325 million	1998
New Britain Township	2.5 million	11/96
Newtown Township	1.1 million	1/98
	1.65 million	1/98
Northampton Township	5.0 million	5/98
Plumstead Township	4.0 million	4/96
Solebury Township	4.0 million	4/96
	10.0 million	11/99
Upper Makefield Township	6.0 million	11/96
Warrington Township	2.1 million	5/95
Warwick Township	1.5 million	4/00
Wrightstown Township	1.5 million	11/95
<b>Total Municipal Bond Issues:</b>	<b>\$74.425 million</b>	
<b>Real Estate or Income Taxes</b>		
Milford Township	2 mills real estate tax estimated to produce \$42,000 to \$44,000 per year	11/97
East Rockhill Township	0.125 percent earned income tax estimated to produce \$80,000 per year	5/99
New Britain Township	0.125 percent earned income tax estimated to produce \$345,000 per year	4/00
West Rockhill Township	0.125 percent earned income tax estimated to produce \$130,000 per year	4/00
<b>County Level</b>		
Open Space Bonds	\$3.5 million	11/94
	59.0 million	5/96
<b>Total County Bond Issues:</b>	<b>\$62.5 million</b>	

The total benefit is often greater than the dollar amounts noted above. Some of these funds will be leveraged with grants from other governmental entities. For example, the Bucks County Agricultural Lands Preservation Board puts up about 25 percent of the cost to purchase farmland conservation easements and the Pennsylvania Department of Agriculture, Bureau of Farmland Protection, matches with 75 percent. The Pennsylvania Department of Conservation and Natural Resources provides up to 50 percent of the cost of open space purchases. Foundation funds and money from other private interests, such as adjoining landowners, have been contributed to ensure land preservation projects are successful. Organizations like Heritage Conservancy, with the experience and staff talent needed to coordinate these efforts, have assisted municipalities in stretching the dollars raised locally to the maximum benefit of the community and taxpayers.

It needs to be noted that bond referendums are not always accepted by the taxpayers. Referendums were not passed in three Bucks County municipalities in recent years and one failed in Chester County. Often the disagreement involves who will bear the tax burden. Wage earners pay when an earned income tax is used. Farmers pay a portion of a general real estate tax which goes to buy their farmland. The method of financing and the amount of the earned income tax or level of debt are always important issues to be addressed.

*...a substantial amount of money has been approved for open space purposes in Bucks County.*

# Bonds and Other Appropriations in Areas Outside of Bucks County

Although the numbers noted are significant, the public's willingness to raise money through taxation for open space protection is not unique to Bucks County or Pennsylvania. The Land Trust Alliance publishes a report card on ballot measures. Nationwide, voters passed 84 percent of 148 state and local ballot initiatives for more than \$5 billion in public funding for open space preservation purposes in 1998. In 1999, 90% of the 102 referenda passed.

Other referendums of note in Pennsylvania include those listed in the following table.

Municipal Level	Amount Raised	Date Approved
<b>Centre County</b>		
Halfmoon Township	2 mills real estate tax to raise \$100,000 per year	11/99
<b>Chester County</b>		
East Bradford Township	0.125 percent earned income tax	6/98
East Marlborough Township	0.2 mills real estate tax to raise \$95,000 per year	11/99
Willistown Township	0.125 percent earned income tax	11/99
<b>Delaware County</b>		
Nether Providence Township	\$2.8 million	1996
Middletown Township	\$5.4 million	1987
Radnor Township	0.25 percent realty transfer tax for open space or park improvement fund expected to raise \$335,000 per year	1995
	\$10.0 million	1996
<b>Montgomery County</b>		
Lower Gwynedd Township	\$2.0 million	1994
Lower Merion Township	\$1.885 million	1994
Lower Providence Township	\$3.1 million (land)	1994
Whitpain Township	\$10.0 million	10/99
<b>County Level</b>		
Berks County	\$30 million	2/99
Chester County	\$50 million	11/97
	\$75 million	4/99
Monroe County	\$25 million	1998
Montgomery County	\$100 million	10/93

## Statutory Authority for Raising Money for Open Space

Specific authority has been enacted in Pennsylvania to permit municipalities to purchase land or easements for the preservation of open space and farmland. Other than municipalities which have adopted home rule charters, Pennsylvania municipalities have no inherent right of local self government and must rely on those authorized activities granted by the legislature.

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## Dillon's Rule

In 1868, Justice John F. Dillon established a doctrine which described municipal governments as "mere tenants at the will of the legislature." This doctrine has been reaffirmed in judicial decisions in 1870, 1899 and 1978. As such, a municipality may exercise those powers, and no others, that are granted in express words, those necessary or fairly implied to express powers, or those essential to the declared objectives and purposes; not simply convenient, but indispensable. Pennsylvania is a "Dillon's Rule" state.

In 1996, Act 153 was enacted as an amendment to Act 442 of 1967. This law broadened the ability of local governments to acquire interests in real property (including development rights) for open space purposes. These purposes include recreation, scenic resources, historic resources, and the conservation of natural resources, including farmland, forests and pure and adequate water supply. Local governments may levy a tax on real estate or earned income above the existing limits or the Local Government Unit Debt Act in order to purchase development rights, but only if they first receive referendum approval from the voters. The law says the tax imposed may not exceed the rate or limit authorized by the referendum.

Properties may be acquired in fee and resold after restrictive easements or covenants have been placed on the land. Property interests may be purchased on an installment or deferred basis, but may not be acquired through condemnation.

Land or development rights to be purchased must have been identified in a resource, recreation or land use plan recommended by the planning commission of the municipality in which the property is located and that plan must first be adopted by the governing body. If the community does not have a planning commission, the process relies on a similar plan prepared by the county planning commission and adopted by the municipal governing body.

In the event that the governing body decides to dispose of acquired land or development rights, these interests must first be offered to the original property owner at the original price paid by the local government. If the offer to the original property owner is not accepted within 90 days, the property interests may be sold in the manner provided by law. The law also requires that the governing body first obtain referendum approval of the voters to dispose of the land or development rights.

In addition, for the first time, this act authorizes local school districts to freeze the millage on lands whose development potential has been removed.

Act 138 of 1998 was enacted as an amendment to the Agricultural Area Security Law, Act 43 of 1981. This act authorizes local governments to purchase agricultural conservation easements to preserve farmland in established agricultural security areas. Local governments may undertake this activity on their own or in cooperation with a county or the Commonwealth as joint owners. The act permits local governments to incur debt to purchase these easements.

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## Matters of Concern

Several issues or concerns have been raised and deserve discussion before there is a vote to raise money for open space and farmland protection.

### Concern

#### No. 1 – Development won't be stopped

It is certain that these land purchases will not stop development. Similar efforts in Lancaster and Chester Counties in Pennsylvania, Howard County in Maryland, and in the Old Mission Peninsula, Michigan have not stopped development. That would be an unrealistic goal. Land and development rights purchases have provided these communities with a means to achieve land preservation goals and to become active participants in the use of important pieces of real estate. For the farmer or landowner who wants or needs to sell, often the only option is to sell to someone who will develop the land. There are few, if any, other alternatives. These programs provide real options for municipalities and for landowners, rather than accepting the resolution that all land in their communities will, in time, be fully developed.

### Concern

#### No. 2 – It's too little and too late

Concern has been expressed that too little land will be preserved. If we can accept that development will not be stopped and that all remaining undeveloped land will not be preserved, it is possible to focus on what can be achieved rather than what cannot. There are notable examples of municipalities that have protected significant portions of their community. Buckingham Township, Bucks County, has set a goal of preserving 20 percent of its land area. By the end of 1999, 2,850 acres had been preserved through actions of the county, the township and private citizens. Similar programs can be designed to preserve key pieces of ground, such as a great site for active or passive recreation uses, a unique stand of trees, key farms, a historic site, or a greenbelt around a village that is a special example of a community's past. It might be determined to preserve as much land as possible with the money available or focus on more expensive land located in the path of development. A municipality may choose to purchase land or just the development rights to achieve the goals of the community. Always, it's important for program goals to be identified and promoted so that the community's residents and taxpayers will understand the purpose of such a program.

### Concern

#### No. 3 – Developers will jump to other properties

There is also concern that if Parcel A is preserved, the developers will simply go buy Parcel B. First of all, if Parcel A is important to the community, the preservation of that piece has merit regardless of the development of B. However, reality is that the owners of Parcel B or C or D may not be ready to sell. The owner of Parcel A may need to sell for a variety of reasons. That owner may only need to sell the development rights, which could keep the land open and in his or her possession. Over time, the owners of Parcels B, C and D may want to have the option to participate in the land preservation program.

### Concern

#### No. 4 – Land and easement prices will become too high

Another concern is that, as land or development rights are acquired, the remaining land will increase in value and become too expensive for further public purchases. However, the land cost may increase whether the remaining land is developed or purchased for

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preservation. Usually, the price increases as the resource becomes scarce. Even if the value of the remaining land escalates beyond the financial capabilities of the municipalities, the value to the community in terms of goals achieved and the saved educational costs from the land preserved will still be greater than if all the land had been developed.

### *Concern*

#### **No. 5 – Tax revenues from nonresidential uses will make up the shortfalls**

It has been said that the tax revenues from nonresidential land uses will cover the shortfalls in school costs resulting from residential development. It is true that nonresidential uses pay a much larger share of school cost than might otherwise be allocated to such uses. However, nonresidential uses need other municipal services, such as road improvements and police services, that offset portions of the advantage to the school district. It also has been noted that, with the development of major nonresidential uses, the demand for higher density housing increases which may result in a related increase in public school enrollment and thereby offset the revenue advantage from the nonresidential development. There are qualitative aspects in this consideration also. It is unlikely that every municipality would want or should have a mega-mall, a huge office park or an industrial complex.

### *Concern*

#### **No. 6 – Financial ability of rural communities is too small**

In many rural communities, it is felt that the tax base is so small that no amount of money could be compiled to purchase anything meaningful. However, a small annual tax will establish a fund that will grow or be ready money to respond to the opportunity to purchase development rights at the right price or to have match money for a program funded by another level of government. Another consideration related to rural areas is the comparatively lower land values and it may be advantageous to purchase easements before these values begin to escalate.

### *Concern*

#### **No. 7 – State supplements will cover the shortfalls**

Others have said that all or part of the shortfall, the difference between the cost to educate a public school student and the tax revenues received from the average household, comes from state supplements. However, revenue from the state is not free money. These funds come from taxes paid by homeowners and businesses throughout the Commonwealth. In many areas, the amount sent to the state is more than the amount returned to local areas.

### *Concern*

#### **No. 8 – Only rich landowners and affluent communities will benefit**

It has also been charged that land preservation using public funds is an elitist concept that will benefit only rich landowners or affluent communities. However, many farmers are land rich but cash poor and these programs keep their options open. Although there is often a developer to sell to, an important option would be to be able to sell development rights and continue to farm the land. In addition, many who are impacted the most by rapidly rising school taxes are the elderly and those who live on modest, fixed incomes. Control of school costs is as important in areas where households typically have modest incomes.

*...many farmers are land rich but cash poor...an important option would be to sell development rights and continue to farm the land.*



*Farmland preservation and open space protection are accepted and understood public purposes.*

## *Concern*

### **No. 9 – Taxpayers never vote to increase taxes**

Finally, there is always concern with raising taxes for any purpose. However, voters have approved referendums for land preservation in many areas. Farmland preservation and open space protection are accepted and understood public purposes.

#### **Examples of Voter Approval Rates**

<b>Municipality</b>	<b>Ballot</b>	<b>Bond Amount</b>	<b>Approval Rate</b>
Buckingham	Nov. 1995	\$ 4.0 million	82 percent
Buckingham	Nov. 1999	\$ 9.5 million	85 percent
Lower Makefield	Nov. 1998	\$ 7.5 million	71 percent
Solebury	Nov. 1996	\$ 4.0 million	93 percent
Solebury	Nov. 1999	\$10.0 million	90 percent
Chester County	Nov. 1997	\$50.0 million	81 percent

These bond measures have been equated to the resolve of a family to take out a mortgage on a home. The family finds a home they want and can afford. They enjoy it and pay for it over time. In like manner, the community decides to pursue a quality of life it wants for the future. If this quality includes open space or recreation land, the community should pay for it while the residents benefit from it. In a real sense, the community is taking greater control of its future. Often, the annual cost per family is very low. Act 153 of 1996 permits payments to be made over a multi-year period, thereby reducing the property owner's annual capital gains tax and the payments by the township.

## *R***ural and Urban: Areas of Mutual Interest**

A word needs to be noted about related conditions in cities and older suburbs. In the last several decades, many middle and upper income families have moved to the suburbs and rural areas. Businesses, industries and jobs followed, which has caused financial stress in urban areas and older suburbs. Possibly, the preservation of land in the outer, rural areas may make reuse of the older communities more attractive. Reinvestment in these communities would be better than the abandonment of existing infrastructure for new, expensive services and facilities in rural areas. Increased interest in the older areas may relieve some level of pressure on the rural landscape. For all these areas, the factors, which will determine the quality of life in the long term, are inextricably related.

## *S***eize the Opportunity**

In the development history of many municipalities, there is a 20- or 25-year period of rapid change when a large amount of land is converted from open space and farm uses to developed uses. It seems that pressure to sell takes place in the years before rapid development actually begins as developers compete to buy properties or options to buy land. Farmers have said this pressure to sell causes uncertainty among these owners of larger properties. Sell out or hold onto the land? Obviously, this is a grand opportunity to those who want to sell. For those who want to hold onto their land or continue to farm,

having other financial options is important. The ability to sell the land's development value and hold on to the ground is an important option for landowners. Having publicly financed open space funds available gives municipalities the ability to offer this option to interested landowners.

A policy to acquire land or development rights should be resolved by the community before a decision on a key piece of land must be made. In more rural communities, it would be important to have money already approved to purchase land or development rights. For more developed communities, it would be equally important to have ready money available to purchase parcels in the remaining open parts of the community or for properties needed for specific public purposes.

Many areas of the Commonwealth are experiencing significant development pressures. It is important that municipalities identify goals related to the conservation of land resources and consider the impacts of development on community services, particularly the school systems. Help may be provided by county planning commissions, well established conservation organizations like Heritage Conservancy, or community planning consultants. In many communities, capable and interested residents would be able to collect the necessary information and prepare an evaluation that would quantify the relationship between the costs of new development and the costs to purchase land or conservation easements. For those communities under development pressure, timing is most important. These matters should be evaluated before opportunities to protect important lands are lost.

It is important to understand that the purchase of land or development rights will not stop further development or the rising cost of education, but it will blunt the economic impacts of rapid development and protect valued community assets. A dollar spent to purchase land or development rights avoids greater and repeated costs of municipal and school district services. Children from new homes will need to be educated. Over all, conservation of land will complement new development. Both development and preservation have places in the future of our communities. It is this balance that is important.

Land preservation is not an extravagant expense. It's an investment in your community.

*A dollar spent to purchase land or development rights avoids greater and repeated costs of municipal and school district services.*



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## References

Association of New Jersey Environmental Commissions, *Open Space is a Good Investment: The Financial Argument for Open Space Preservation* , Mendham, N.J.

Central Bucks School District, *CB Insight*, Spring 1994, Volume 4, Issue 2.

Central Bucks School District, *CB Insight*, Spring 1998.

*The Chronicle of Philanthropy* , “Stemming the Tide of Sprawl: Rampant Growth is No Longer Seen as Just and Environmental Issue,” February 11, 1999.

*The Chronicle of Philanthropy* , “Preserving Open Space for the Ages: As Land Trusts Win Broad Support, They Grapple with New Challenges,” July 29, 1999.

Delaware Valley Regional Planning Commission, *The Future of First Generation Suburbs in the Delaware Valley Region* , Philadelphia, Pa., December 1998.

Frank, Michael, “Money Saved if Land Not Developed,” *Reading Eagle* , December 31, 1997.

Frank, Michael, “Buy Land – Buy Schools; How Bucks County Does It,” *Springs & Sinks*, ClearWater Conservancy, May 1999.

Kelsey, Timothy W., *Fiscal Impacts of Different Land Uses: The Pennsylvania Experience*, Penn State Cooperative Extension, University Park, Pa., 1997.

Land Trust Alliance, *Voters Invest in Parks and Open Space: 1998 Referenda Results* , Washington, DC, 1999.

*The New York Times*, “Town Finds Rare Way to Protect Farms: Tax,” September 11, 1994.

Pennsylvania Department of Environmental Resources and Pennsylvania Department of Conservation and Natural Resources, *Learning About Land: A Guide for Educators* , 1999.

*The Philadelphia Inquirer* , “Of Tax Cuts, and Cities, and the Effects of Suburban Sprawl,” May 24, 1999.

*The Philadelphia Inquirer* , “Area Legislators Join to Slow Suburban Sprawl, City Flight,” June 30, 1999.