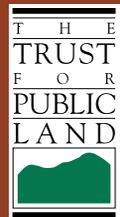


# Community Choices



Thinking Through Land Conservation, Development, and Property Taxes in Massachusetts



# Mission Statement

*The Trust for Public Land conserves land  
for people to improve the quality of life  
in our communities and to protect our natural  
and historic resources for future generations.*

Researched and written by Deb Brighton of Ad Hoc Associates.

Designed by Chave Design Associates, New Haven, CT.

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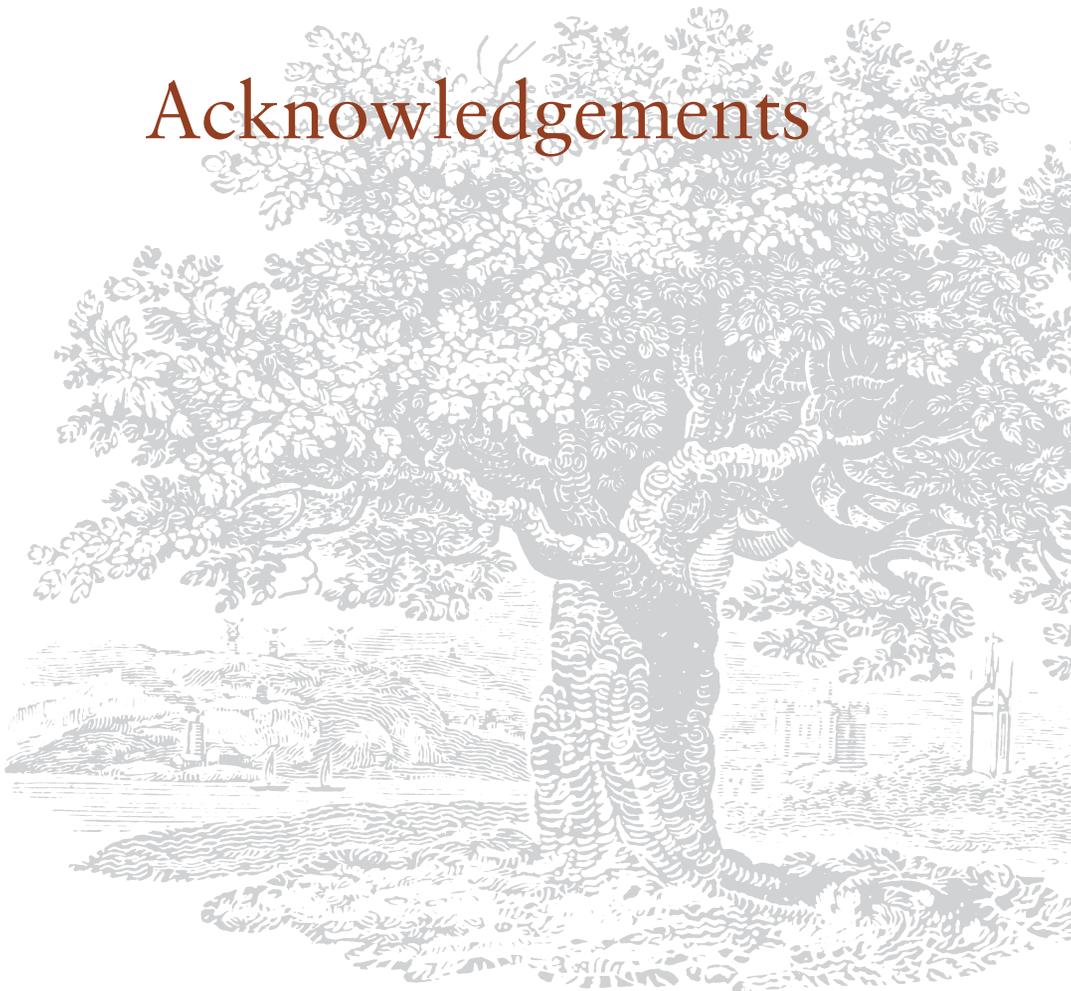
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Sarah Putnam

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At a time when communities face growing development pressure on their farms, forestland, and recreation land, it is imperative that they have access to accurate information about the costs and benefits of conservation and development. Prosperous, healthy towns are created and sustained by striking an appropriate balance between growth and the preservation of community assets. This study examines the relationship between property taxes and different types of development in order to help local officials, land trusts, and residents make informed land use decisions. We hope that the results of these decisions will enrich our Commonwealth and provide lasting benefits to both current and future generations of residents.

Sincerely,

Whitney Hatch  
Vice President and New England Regional Director  
The Trust for Public Land



## Local Land Protection & Community Preservation

*by Bob Durand, Secretary of Environmental Affairs*

Massachusetts has recently enjoyed great prosperity. Too frequently, however, this prosperity has come at a greater than necessary cost. Since 1950 Massachusetts has developed land at a rate six times that of population growth. While this pattern of development has fiscal and social implications, as Secretary of Environmental Affairs, I am most acutely aware of the pressures that poorly planned development has on the natural resources of the Commonwealth.

I have emphasized a number of important initiatives intended to address this concern. In addition to ongoing programs, such as the Watershed Initiative and the Growth Planning Program, I have placed additional importance on biological conservation and environmental education efforts and instituted a new program in “Community Preservation.”

The Community Preservation Program is about maintaining quality of life in our municipalities by empowering cities and towns to preserve what is important to their individual character. One means of empowering communities is to provide them with resources that promote recognition of the fiscal, environmental, and social impacts of different development options. Through full understanding of the implications of land use decisions, communities can make the right choices regarding the legacy they are leaving for future generations. The Trust for Public Land’s

COMMUNITY CHOICES report is an excellent source of the type of information communities need to evaluate alternative futures.

Another important empowerment tool is the buildout analysis, which illustrates maximum development permitted as-of-right by current local zoning. Through the Community Preservation Program, buildout analyses are being completed for Massachusetts communities; 32 were completed by the end of June 1999. Following completion of each buildout analysis, I am convening a Community Preservation Summit of my staff, municipal officials, and legislators to discuss the results of the analysis, and problems and opportunities these analyses present. It is my intention that this summit provide the basis for an ongoing dialogue and cooperative relationship among my office, municipalities, and the legislature regarding land protection and community preservation.

It is my belief that empowered communities will recognize the benefits of land protection, an understanding that has led to a pledge by the Cellucci Administration to protect 200,000 acres of land by 2010, in addition to the 100,000 acres protected over the last eight years. Through strategic partnerships with organizations such as the Trust for Public Land and the Executive Office of Environmental Affairs, the cities and towns of the Commonwealth can achieve sustainable economic development that accommodates growth without sacrificing community character or our environmental resources.



Kenneth Martin

*Before: Open space in Harvard.*

## Purpose

This study investigates the relationship between property tax bills and permanent land conservation, through public or nonprofit ownership of either land or conservation easements.

## Methods

This study looks at the relationship between land conservation and property taxes both over the short term and long term.

The **short-term** effect of land conservation is the removal of land value from the tax rolls. Any taxes no longer paid on the protected land must be shifted to other taxpayers. To examine the extent of the tax shift, this study calculates the tax increase caused by removing \$500,000 of property value from the tax rolls in seven sample towns.

The **long-term** effect of land conservation is the preclusion of new development, which could pay more taxes and thus reduce residential property tax bills, or at least slow the rate of increase. To see whether there is an association between the various types of development and high or low property tax rates, this study correlates the residential property tax rate in each Massachusetts town with various measures of development and with various measures of ruralness.

## Major Findings

- In the **short term**, land protection, by fully or partially exempting land from taxation, often reduces the tax base and results in a tax increase. The tax increase that any individual taxpayer will experience depends on whether or not there are payments in lieu of taxes received on the protected property, the size of the town's tax base, the budget approved by the voters, and the value of the individual taxpayer's property. This can be

easily calculated so that the costs of “carrying” the conservation project can be made explicit to voters and taxpayers.

- In the **long term**, contrary to the common perception that development will bring lower taxes, property tax rates are generally higher in more developed towns than in more rural towns.

The residential property tax rate is, on average, lower in more rural towns where there are more acres of open land per capita.

The residential property tax rate is, on average, higher in more developed towns where there are more residents, there is more commercial and industrial property, and there are more jobs.

- The towns with the highest residential property tax rates do not spend the most per pupil on education. In fact, less is spent per pupil on education in the high-tax towns than in the low-tax towns. This indicates that high property tax rates are not necessarily a result of decisions to offer above average educational opportunities.
- The residential property tax rate is, on average, higher in towns in which the income of residents is higher. These are not generally the most developed towns. When towns with similar per capita incomes are compared, property tax rates are higher in the more developed towns and lower in the more rural towns.
- In Massachusetts, the property tax is particularly burdensome for lower income households. Residential property tax represents about 7.3 percent of household income for the poorest 20 percent of households in the state. This is roughly five times higher than the 1.55 percent of income used to pay property taxes by the 20 percent of households with the highest incomes.



Kenneth Martin

*After: New residential development in Harvard.*

# Short-term Effects of Land Conservation on Property Taxes



Ernest Braun

*Walden Woods in Concord.*

Like building a police station or a library, conserving land is an investment in the community. There may be two types of municipal costs associated with conservation: the cost of acquisition and the cost of taxes foregone when the value or a portion of the value of protected land is removed from the property tax rolls.

If residents are asked to pay for the acquisition of land through their property taxes, the price is explicit. The effect of foregone taxes, however, is rarely calculated. When land is permanently protected for conservation, the town often loses at least some of the taxes from the land. The town must make up these revenues by raising the tax rate, and therefore increasing the tax bills for all property taxpayers.

Taxpayers are often concerned about the trade off: an increase in local tax bills versus the environmental, recreation, and quality-of-life benefits of conservation. To make an informed decision, taxpayers need to know what the increase in the local tax bills will be. This section explains the steps involved in calculating the tax implications of various conservation options, using seven towns as examples.

In some cases, ownership of the land is transferred to a private nonprofit organization or government agency that is exempt from taxation; in these cases the town does not receive any of the taxes that otherwise would be paid on the land. In other cases only the development rights are transferred to a private nonprofit organization or government agency, and the taxable value of the property is reduced. All else being equal, the change from a privately owned unrestricted parcel to a permanently protected parcel will decrease the tax base and thereby shift some of the tax burden to other property taxpayers in town.

In many cases the tax shift is less than anticipated because of increases in state aid or payments in lieu of taxes. The amount of the tax shift varies, depending on the method of conservation used and the tax situation of the town.

### Conservation Methods and Their Impacts on Property Taxes

**Federal Ownership.** The federal government does not pay property taxes, but federal agencies do make payments in lieu of taxes to municipalities.

The United States Fish and Wildlife Service, for example, often pays an amount calculated as 3/4 of 1 percent of the value of the land.<sup>1</sup> In recent years, however, Congress has not fully funded these payments, and they have been reduced as a result.

Both the U.S. Forest Service and the National Park Service make payments in lieu of taxes. In fiscal year 1994 the payment was \$0.75 per acre. Recent legislation increased the payment to \$0.93 in fiscal year 1995, \$1.11 in fiscal year 1996, \$1.29 in fiscal year 1997, \$1.47 in fiscal year 1998, and \$1.65 in fiscal year 1999. In the future, the payment is scheduled to increase annually at the rate of inflation.<sup>2</sup> This program was generally fully funded until fiscal year 1995, when the payment was \$0.72 per acre instead of the authorized \$0.93, and in fiscal year 1996, when the payment was \$0.79 instead of the authorized \$1.29.

In addition, for the first five years after acquisition of land or interests in land by the National Park Service, towns receive an annual payment calculated as 1 percent of the market value of the acquisition (or the town's tax rate multiplied by the value of the acquisition if this is less than 1 percent of the market value). This payment was also cut in fiscal year 1995; actual payments received by municipalities in 1995 were 77 percent of the promised amount.

*Like building a police station or a library, conserving land is an investment in the community.*



Brian Tague

*Mashpee National Wildlife Refuge.*



Susan Lapidus

*Fishing alongside the Wilson Mountain Reserve in Dedham.*

In the case of all federal acquisitions, payments for newly acquired land may be delayed because payments are based on data from previous years.

**State Ownership.** The state does not pay property taxes on its land. However, depending on the land use and the state agency with jurisdiction over the property, the state makes a payment to the municipality. The payment is usually determined by a formula—the value of the property multiplied by the three year average tax rate multiplied by a proration factor. In 1996 the proration factor was close to 50 percent, meaning the state paid an amount approximately equal to 50 percent of the taxes that would have been paid on the land in the average town if it had remained in private ownership.

One state agency, the Metropolitan District Commission, makes payments in lieu of taxes to communities in which it owns watershed property. The properties are assessed at their commercial value, regardless of whether they would be eligible for reduced property taxes under Massachusetts General Law chapters 61, 61A, or 61B.<sup>3</sup> Even when the property depreciates, the payment is not reduced. There may be a gap in payments, however, because newly acquired land is not added to the payment list until the next five year Department of Revenue reassessment.

**Municipal Ownership.** Towns and cities do not pay property taxes. Land acquired by a municipality comes off the property tax rolls, and all of the property taxes that had been paid by the private owner are shifted to other taxpayers.

**Ownership by a Nonprofit Conservation Organization.** In general, land owned by a nonprofit conservation organization is tax exempt. In this case, all of the property taxes that had been paid by the private owner are shifted to other taxpayers.

**Conservation Easements.** Easements<sup>4</sup> are an increasingly popular means of permanently protecting land because they are typically less expensive than outright acquisition and maintain private ownership. Most easements protect land from development and from certain environmentally damaging activities, such as clear-cutting or gravel removal.

The private landowner continues to own and pay taxes on the land itself, but conservation easements often reduce the taxable value of land. The amount of the reduction varies from town to town and from easement to easement. Placing a conservation easement on land that is enrolled in the chapter 61, 61A, or 61B programs may not change the taxable value of the land at all. Similarly, a conservation easement that allows limited development on a small parcel may hardly reduce the taxable value of the land. On the other hand, a conservation easement that prohibits any development on a parcel that would otherwise be highly developable may considerably reduce the assessed value.

### **Tax Situation of the Town**

There are two local factors that influence the tax shift to other taxpayers when land is removed from the property tax rolls: the size of the tax base and the budget approved by the voters.



Susan Lapides

Table 1. Change in the annual property tax on an average single family residence due to the acquisition of property worth \$500,000 by a conservation entity in 1997 (assumes no payment in lieu of taxes).	Town	Assessed \$ Value of the Total Land Base	Assessed \$ Value after the Conservation Project	Tax \$ on an Average Single Family Residence	Tax \$ after the Conservation Project	Increase \$ in Average Property Tax Bill
	BOXFORD	747,252,281	746,752,281	3,636.88	3,639.31	2.43
CARLISLE	542,966,998	542,466,998	5,381.06	5,386.00	4.94	
DARTMOUTH	1,911,990,235	1,911,490,235	1,747.91	1,748.37	0.46	
LEE	379,536,235	379,036,235	1,746.93	1,749.22	2.29	
LOWELL	2,530,706,418	2,530,206,418	1,887.05	1,887.05	0.00	
MASHPEE	1,259,198,160	1,258,698,160	2,027.03	2,027.84	0.81	
MIDDLEBOROUGH	876,797,742	876,297,742	1,841.73	1,841.73	0.00	

In general, in towns with a small tax base, reducing the tax base by conveying a \$500,000 parcel to a tax-exempt owner has a much greater effect than in towns with a large tax base.

All else being equal, the tax shift is greater in towns with higher property tax rates than in towns that have lower tax rates. This is because towns with higher tax rates lose more tax revenues when land is removed from the tax rolls, and therefore a larger amount is shifted to other taxpayers.

Reducing the tax base has little effect on the amount of state aid received for education. Even though the town’s revenues from property taxes have decreased, the “standard of effort” (calculated in the state’s formula as an indication of the town’s ability to pay) would not decrease.<sup>5</sup> For towns receiving overburden aid, however, the equalized valuation per pupil would decrease and, in some cases, this could increase the overburden aid.<sup>6</sup>

The loss of tax base due to a conservation project would not affect the town’s levy limit or the levy ceilings.

### Calculations of Tax Shift Due to Permanent Conservation

Table 1 shows the result of reducing the tax base by \$500,000 in seven towns, assuming no offsetting revenues.

The tax increase is greatest in Carlisle for two reasons: the tax base is small so there is less overall property value across which to spread the tax shift; and the value of a residence is very high, meaning a change in the tax rate would have a relatively large impact on the tax bill. The situation is similar in Boxford.

Lee has a small tax base, but the value of a residence is fairly low so the increase in the tax bill is not as great as it is in Carlisle.

Mashpee and Dartmouth have fairly large tax bases and moderate value residences, so the increase in the property tax bill on a single family residence is fairly low.

The table shows no increase in the tax bill on a single family residence in Lowell or Middleborough because these two towns use a

	Town	Assessed \$ Value of the Total Land Base	Assessed \$ Value after the Conservation Project	Tax \$ on an Average Single Family Residence	Tax \$ after the Conservation Project	Increase \$ in Average Property Tax Bill
<b>Table 2.</b> Change in the annual property tax on an average single family residence due to the acquisition of property worth \$500,000 by the state in 1997 (assumes payments in lieu of taxes).	BOXFORD	747,252,281	746,752,281	3,636.88	3,637.92	1.04
	CARLISLE	542,966,998	542,466,998	5,381.06	5,383.61	2.55
	DARTMOUTH	1,911,990,235	1,911,490,235	1,747.91	1,748.06	0.15
	LEE	379,536,235	379,036,235	1,746.93	1,748.04	1.11
	LOWELL	2,530,706,418	2,530,206,418	1,887.05	1,887.05	0.00
	MASHPEE	1,259,198,160	1,258,698,160	2,027.03	2,027.40	0.37
	MIDDLEBOROUGH	876,797,742	876,297,742	1,841.73	1,841.73	0.00

classification system to lower the tax bills of residences and, as a result, the tax shift would be absorbed by nonresidential property.

Many state revenues are distributed according to formulas that give more aid to towns that have less ability to raise revenue. One of the ways of measuring the ability to raise revenue is the equalized value of all taxable property—the tax base. In theory at least, if the tax base is decreased by a conservation acquisition, the town’s ability to raise property taxes would be reduced and the town would get more state aid. Formulas for state education aid, highway aid, and lottery aid are all based to some extent on the tax base. However, most of these formulas are so heavily constrained by prior year allocations and appropriation levels that slight variations in the property tax base do not have much, if any, effect in the short term. Only the new portion of lottery revenues (the amount anticipated in one year minus the amount distributed in the prior year) showed any variation in the seven sample towns when \$500,000 was removed from the tax base and no payments in lieu of taxes were received.

Table 2 shows the tax consequences of a state acquisition of the same \$500,000 property. If the land were acquired by the state, the town would receive payments in lieu of taxes. In addition, state aid would be affected. As a result, the tax shift is generally less if the land is acquired by the state than if it is acquired by the town.

The pattern in Table 2 is similar to that in Table 1. The main difference is that part of the tax loss is absorbed by the state as a whole when a state payment is made to the town to make up for about one half of the taxes.

The payments in lieu of taxes from the state, even though they are less than the taxes that the town would ordinarily receive on the property, are factored into state aid calculations by increasing the municipal revenue growth factor. This, in turn, increases the “standard of effort” expected of the town. In Dartmouth, Mashpee and Middleborough, this would result in slightly less overburden aid. In Middleborough there would be an increase in foundation aid and a decrease in overburden aid, resulting in a net loss of state education aid of \$894.

*Some types of development require more municipal services than others.*



Alex S. MacLean

*A residential subdivision in Dartmouth.*

### **Is Conservation a Wise Investment?**

Calculating the net municipal revenue loss due to conservation gives taxpayers a starting point for evaluating whether conservation is a worthwhile long-term investment for their community. When taxpayers evaluate other investments, such as a fire truck or a school addition, the cost that will be borne through their property tax bills is generally presented to taxpayers in the budget process. Although the net effect of removing property from the tax rolls is the same, often the calculation of the resulting tax increase is not well understood, mainly because it doesn't affect the budget.

Once the net revenue loss due to conservation has been calculated, taxpayers can begin to tackle the question of whether such an investment is worthwhile. Some of the questions to be asked may include:

- What are the environmental benefits of protecting the property?
- Are there direct benefits to residents, including public access for recreation?
- To what extent does the protection of the land contribute to the quality of life of the residents and to the goals of the town?
- What are the likely alternative uses of the property and their impacts?
- Will conservation promote tourism or protect local resource based industries? Will conservation increase other property values?

# Long-term Relationship Between Development and Property Taxes

One of the long-term concerns often voiced about land conservation is that it prevents rather than encourages development, and development is presumed to lower municipal property taxes by adding to the tax base.

In general it is true that land increases in value when it is developed—thereby adding taxable value to the town’s tax base. However, development usually requires more town services—thereby increasing the budget. Some types of development require more municipal services than others do. To investigate whether or not development leads to lower taxes, this study looked at the relationship between tax rates and the following indicators of development: population, employment, and business property.

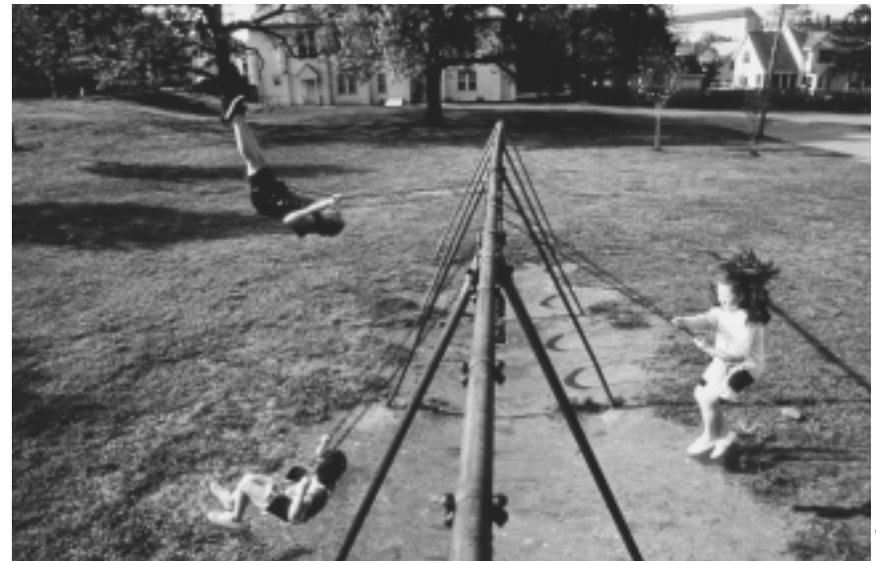
Rather than taking a theoretical approach, this study documents what has actually happened to cities and towns in Massachusetts.

## Population and Property Taxes

The most likely type of development a community will experience is residential development. In the past many people have argued that, in the long term, residential development helps to lower property taxes by increasing the tax base.

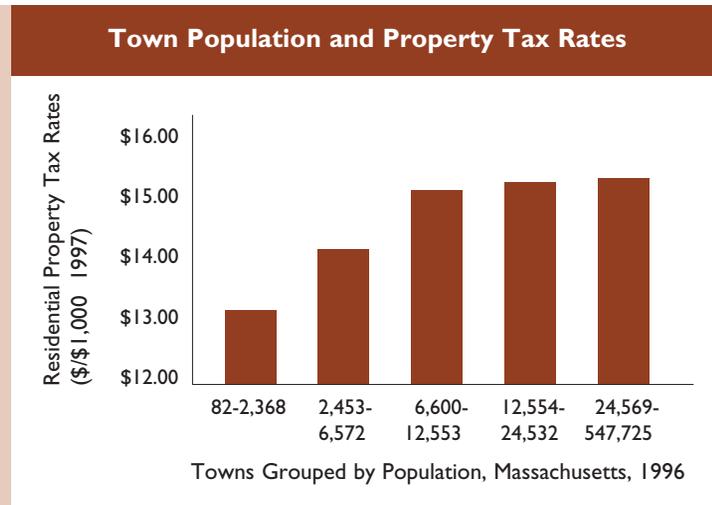
If this were true, it would follow that the Massachusetts towns with the most residents would have the lowest tax rates. Notably, this is not the case.

To examine the relationship between residential development and property tax rates, Massachusetts towns were ranked according to population and divided into five groups. The residential tax rate was then averaged for each group (Figure 1).



Susan Lapides

Figure 1.



On average, the residential tax rate was lower in the group containing the towns with the fewest year round residents and higher in the group containing the towns with the most year round residents.

The most obvious explanation of Figure 1 is that, on average, residences do not pay enough in school taxes to cover the cost of educating the children in the residences. On average, according to the U. S. Census data, there were 0.45 school children per single family residence in Massachusetts in 1990. The average expenditure per pupil was \$5,465 in 1996, meaning the average single family residence cost the average school district \$2,459 to educate its 0.45 students for one year. The average single family residence paid \$1,139 in school taxes, leaving a gap of \$1,320 per year to be made up by other taxpayers, either through municipal property taxes or through state aid.<sup>7</sup>

Although more residences mean more taxes received by the municipality, they also mean more costs to the municipality.

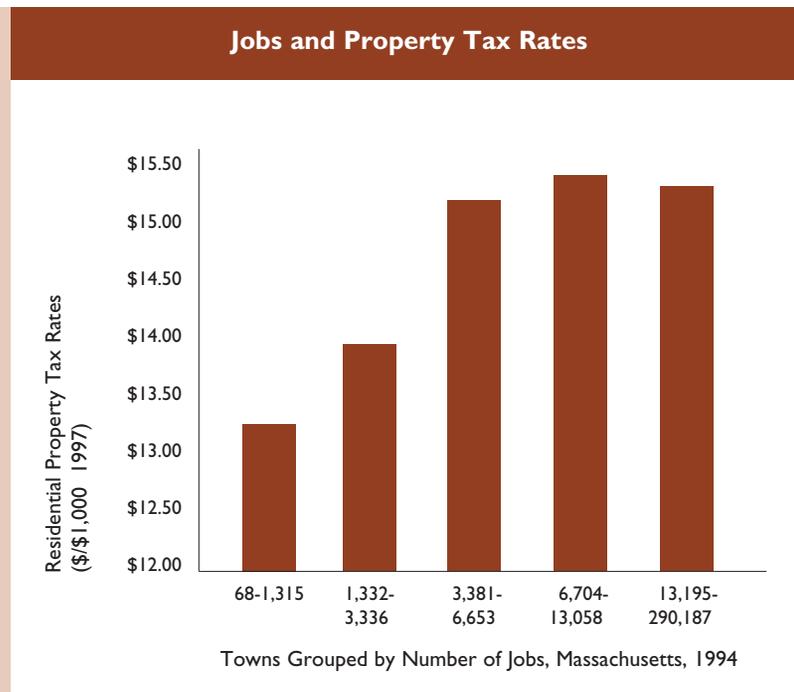
This does not indicate that population growth necessarily means higher taxes; however, it does indicate that, on average, towns with more year round residents have higher, rather than lower, tax rates.

### Commercial Activity and Property Taxes

Recognizing that year round residences are unlikely to pay their way, a second frequently asked question is: wouldn't taxes be lower if the town had more commercial and industrial developments to pay property taxes?

It is frequently calculated that commercial and industrial developments pay more in taxes than they cost the town in services. The logical conclusion would be that towns with the most commercial and industrial tax base would have the lowest tax rates in the state. This is not the case.

Figure 2.



Commercial and industrial developments pay both town and school taxes without directly increasing school costs. Most analyses of the fiscal impact of different types of development have found that, while year round residences are a fiscal drain to the municipality, most non-residential developments pay more in taxes than they cost the municipality to service.<sup>8</sup> In addition, some towns in Massachusetts classify property to reduce the residential share of taxes and shift the tax burden to commercial and industrial property.

As a result, it would seem logical that towns with the most commercial and industrial activity would have the lowest tax rates. An analysis of the relationship between commercial development and tax rates indicates that this is not the case. On the contrary, average tax rates are generally higher in towns that have more commercial activity.

One indication of commercial activity is the number of jobs. To examine the relationship between property tax rates and employment, Massachusetts towns were ranked according to employment, and divided into five groups. The residential property tax rate was averaged for the group. On average, residential property tax rates were lower in the groups with fewer jobs and higher in the groups with more jobs (Figure 2).

Another indication of commercial activity is the value of business property. To examine the relationship between property tax rates and the value of business property, Massachusetts towns were ranked according to the total value of commercial property and industrial property and divided into five groups. The residential tax rate was averaged for each group (Figure 3). According to this analysis, tax rates are not lower in towns with the most business property. On average, tax rates were lower in the groups with less business property, and higher in the groups with more business property.

*Average tax rates are generally higher in towns that have more commercial activity.*

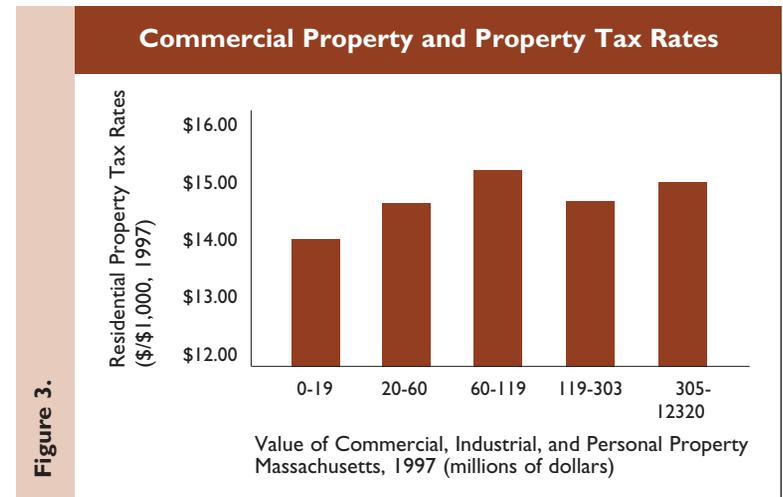


Figure 3.

This indicates that tax rates tend to be higher—rather than lower—in towns that have the most commercial activity. Similar studies in Connecticut, New Hampshire, Maine, and Vermont have found comparable patterns. In general, average residential tax bills are higher in municipalities that have the most commercial and industrial development.<sup>9</sup>

On the surface, this finding seems to contradict both conventional wisdom and the fiscal impact studies cited previously that show that commercial and industrial developments are tax-positive. Several points should be considered in explanation:

- Commercial/industrial development and residential development go together. Municipalities that have commercial and industrial development generally have jobs. Residential growth, which costs more than it pays, accompanies jobs. Most fiscal impact analyses, when determining that a commercial development is tax positive, do not consider these secondary impacts. Although there are certainly examples of towns that have a disproportionate amount of commercial development, there is a very strong correlation between the number of jobs in town and the number of residents in the same town.
- In general, communities with larger tax bases offer more services. In some cases, additional services are required to deal with the demands of growth, and there is no net benefit to residents. In other cases, an additional level of service provides new or improved benefits to residents (such as 24 hour police protection or a municipal swimming pool).
- The charts show the relationship between total amounts of commercial development and tax bills. Clearly, a town would be better off if it could have a high proportion of tax-positive



Nancy Kafka

*Commercial development in Billerica.*

development and a low proportion of tax-negative development. This could happen, for example, if land and housing values were significantly higher in one town than in neighboring towns. If a commercial development were to occur in the town with high property values, it is likely that much of the associated residential development would occur in the surrounding towns where it would be cheaper to find housing. In that case, one town would get the tax-positive commercial development and the surrounding towns would get the associated tax-negative residential development.

Although there are certainly instances of a town increasing its commercial tax base while neighboring towns assume responsibility for supporting the work force, in the long run it is likely that towns that get commercial development will also get at least some associated residential development.

- In general, commercial and industrial developments do not appreciate as rapidly as residential property or open land. A commercial development that represented 10 percent of the tax base initially may, over time, represent only 5 percent of the tax base—due only to differences in rates of appreciation.
- Massachusetts state aid formulas tend to buffer the gains that might otherwise occur from a tax-positive commercial development. The formulas factor in growth in tax base and decrease state aid accordingly.

Although commercial and industrial developments generally pay more in taxes than they cost the town in services—at least directly and initially—the actual result in Massachusetts towns is that the tax rate is more likely to be higher—rather than lower—in towns that have the most commercial activity.

*Commercial development almost always triggers residential development.*



Kenneth Martin

# Long-term Relationship Between Open Land and Property Taxes

*Although more residences mean more taxes received by the municipality, they also mean more costs to the municipality.*

## Undeveloped Land in General

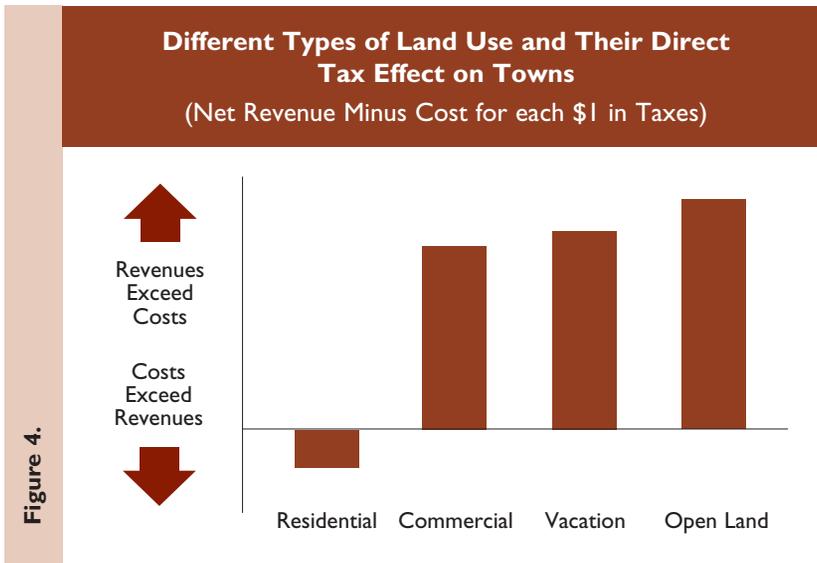
Many fiscal impact studies have found that undeveloped land pays more in taxes than it directly costs the town to service.<sup>10</sup> Residences, on the other hand, generally cost the town more to service than they generate in tax revenues. To some degree, tax revenues from undeveloped land help offset the costs of people (Figure 4).

Although a general principle of government is that the costs of necessary services are borne by society at large and not only by the individuals who most directly benefit, a look at the fiscal costs and revenues associated with various types of land uses can help townspeople and local officials understand and plan for future municipal and school district costs.

To look at the relationship between municipal property taxes and open land in Massachusetts, this study correlated the residential property tax rate with both the acres per capita and the value of land as a percent of the total municipal tax base.

The total acreage in town was divided by the population to give an idea of population density. Towns were ranked according to population density and divided into five groups with 20 percent of the towns in each. The median value house in each town was determined from the U.S. Census, and the tax bill on the median value house was calculated for each town and averaged for each of the five groups. On average, the tax bills are lowest in towns that have the most land per capita, even though these towns tend to have the most land enrolled in Chapter 61 programs (Figure 5).

The second way to measure ruralness is to look at the percent of a town's tax base that is made up of open land. In fairly rural towns, open land may make up a more significant portion of the



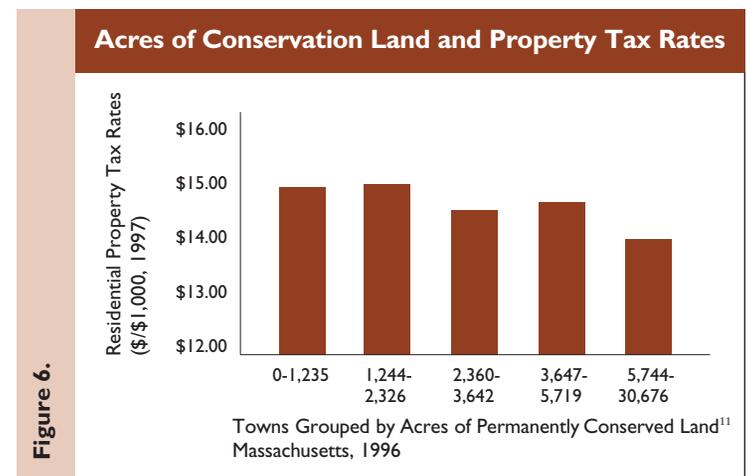
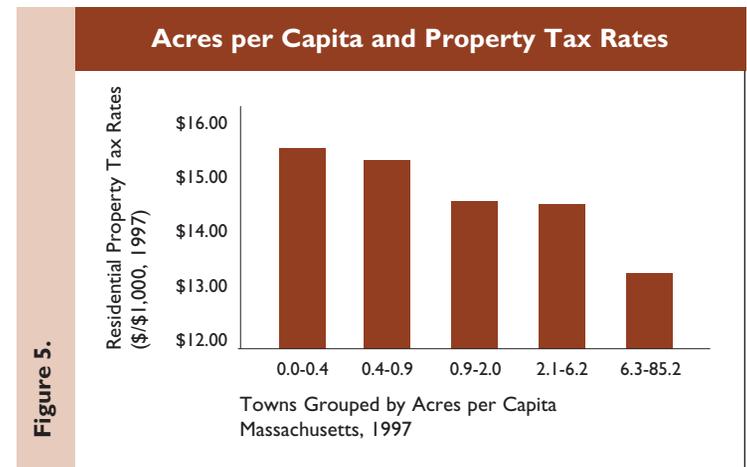
tax base. All Massachusetts towns were ranked according to the proportion of their tax base made up by open land and divided into three groups according to the total value of the open land. The residential property tax rate was averaged for each group. The towns in which open land makes up a larger proportion of the tax base have lower tax rates, on average, than the more developed towns in which open land makes up a smaller proportion of the tax base.

### Permanently Protected Land

Earlier in this report, the short-term tax increases resulting from the permanent conservation of land were calculated. The long-term question is: do towns with the most permanently protected land have significantly higher tax rates than other towns?

To answer this question, all Massachusetts towns were ranked according to the acres of permanently protected conservation land and divided into five groups with 20 percent of the towns in each group. The residential tax rate was averaged for each group. The towns that have the most permanently protected land do not, on average, have higher tax rates, as might be expected. In fact, the towns with the most permanently protected land have the lowest tax rates, on average (Figure 6).

It is clear that land conservation does not necessarily lead to high tax rates, as is often assumed. While the graph does not indicate that permanent land conservation lowers tax rates, it does suggest an intriguing correlation between land conservation and property tax rates. It is likely that, because conservation provides a tool for maintaining the overall rural character of a community, it can help control property tax increases.



# Characteristics of Low-tax Versus High-tax Towns

Table 3 compares low-tax towns (the 25 percent of the towns in which the residential tax rate is the lowest) with high-tax towns (the 25 percent of the towns in which the residential tax rate is the highest).

In general, as would be expected given the findings in this report, the towns with the lowest residential tax rates are also more rural.

However, what is unexpected is that the high-tax towns do not earn that distinction because of high per pupil expenditures. In fact, the towns with the highest tax rates spend, on average, less per pupil on education than the towns with the lowest tax rates do.

In addition, residents of the high-tax towns have, on average, lower incomes and therefore less ability to pay property taxes.

Taken together, these statistics make it clear that the high tax rates associated with more developed towns are not a result of prosperity of residents or the willingness of higher income households to spend more on education. The tax rates are high in towns where the incomes are not high; and these rates, in combination with state aid, do not enable the towns to spend as much on education as taxpayers in the low-tax towns are able to spend.

The state classifies communities by seven types: resort/retirement community, small rural town, rural economic center, residential suburb, growth community, economically developed suburb, and urbanized center. In general, as would be expected given the other findings of this study, urbanized centers have higher tax rates, and the resort and small rural communities have lower tax rates. The residents of the urbanized areas also have lower incomes.

<b>Table 3.</b> Average characteristics of the 25 percent of towns with the lowest property taxes and the 25 percent of towns with the highest property taxes in Massachusetts.	<b>Town Characteristics</b>	<b>Low-tax Towns</b>	<b>High-tax Towns</b>
	Per capita income, 1989	\$18,214	\$16,864
	Population growth, 1980–1990	+720	+1,136
	Population, 1994	18,811	21,157
	Number of jobs, 1994	9,961	10,729
	Spending per pupil, 1996	\$6,074	\$4,263
	Number of students, 1997	2,403	3,407

# Property Taxes in Massachusetts

Although tax revolts all over the United States give evidence to widespread concern over rising property tax bills, the situation is particularly acute in New England. Local governments (including county, town, and school districts) are more reliant on the property tax in New England than they are in other regions of the United States.

In Massachusetts 73 percent of the locally raised revenues (excluding state and federal aid) come predominantly from the property tax (Figure 7). By contrast, in the United States as a whole, only 47 percent of locally raised revenues come from the property tax, and more than 50 percent of locally raised revenues come from other taxes and charges.<sup>12</sup>

As a result, changes in the property tax base are even more important to local officials and taxpayers in Massachusetts than they are to people in most other states outside of New England.

Over time, the property tax has become particularly burdensome to Massachusetts households with the least ability to pay.

The tax roll was once a list of most of the manifestations of each person's income and wealth—including real estate and other property, such as bee hives, watches, pianos, merchandise, and equipment. According to General Walker, who wrote about the property tax in 1888, “the New England people of the old stock were a saving people. Whatever was earned, beyond the necessities of life, was turned into property, and presumably the most remunerative kind of property. Property thus became an index of ability, and as such formed a just basis of taxation.”<sup>13</sup>

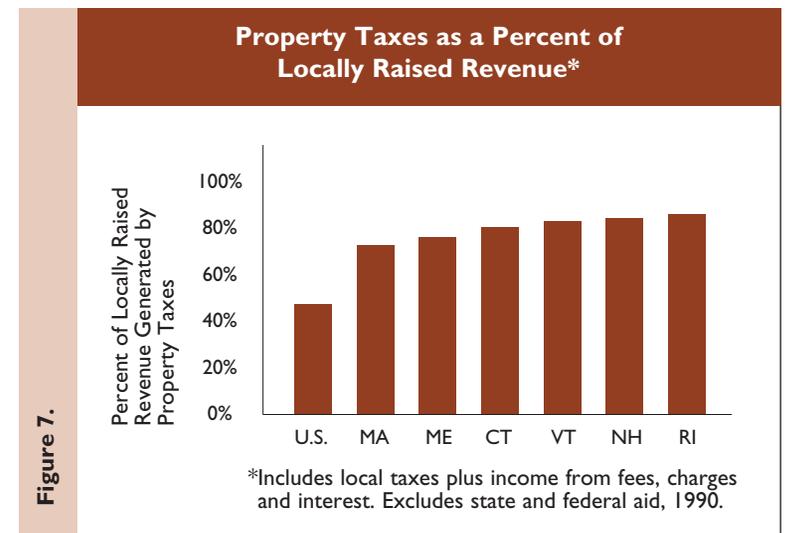
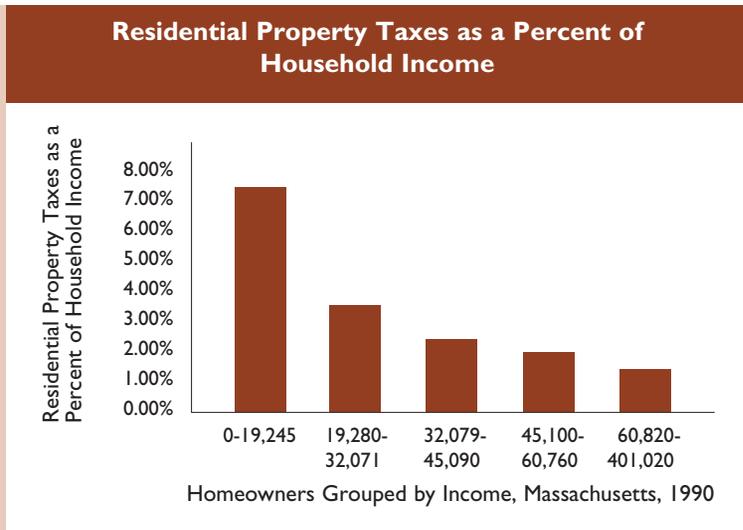


Figure 7.

Figure 8.



Since then, the tax base has lost its close connection with income and wealth. Now the property tax is based predominantly on real estate. Because lower income households spend a much higher proportion of their incomes on housing, the property tax takes a higher proportion of their incomes than it does of the households with higher incomes. For this reason, raising the tax rate is a more serious issue for lower income households than for higher income households.

To look at the relationship between the residential property tax and income in Massachusetts, households that owned their homes were ranked according to household income and divided into five

groups of equal size. Within each group, the property tax on the primary residence was calculated as a percent of income. In Massachusetts, the residential property tax represents about 7.3 percent of the household income of the 20 percent of the households that have the lowest incomes. This is roughly five times higher than the 1.5 percent of income used to pay the property tax by the households in the highest income group (Figure 8).

It could be said that the residential property tax is even more regressive than the chart indicates. Because property taxes can be deducted from the federal income tax, households that itemize deductions have an effective property tax liability that is lower than that shown in the chart. The deduction would lower the tax liability of the higher income households more than it would lower the tax liability of lower income households because higher income households are more likely to itemize deductions and the savings is greater for higher tax brackets.

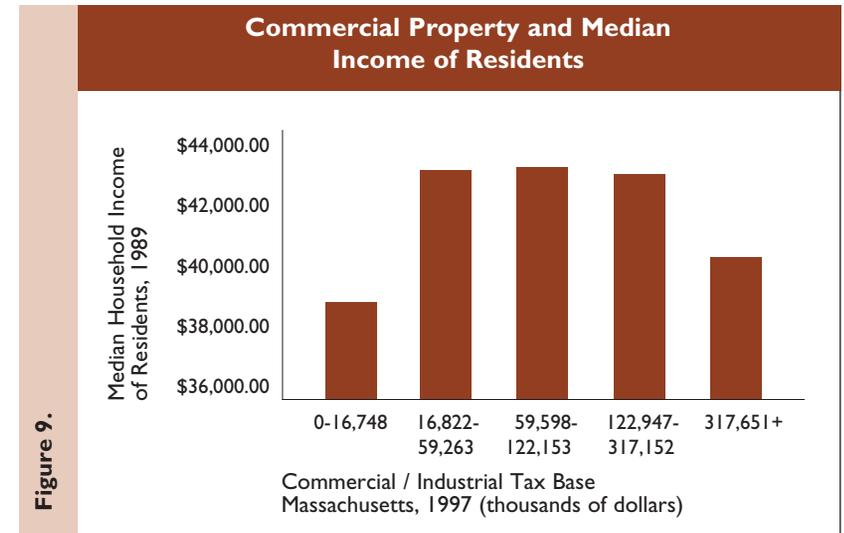
Residents of the New England states are particularly concerned about property taxes. This concern is often focused on changes in the tax base because, holding the budget constant, if development swells the tax base, tax bills will go down. Similarly, if conservation decreases the tax base, tax bills will go up. However, in reality, few towns have been able to find development that can increase the tax base without also increasing service costs. The balance between budget and tax base is crucial.

### Income and Property Taxes

There is a popular assumption that the towns with the most growth, measured either in terms of population or commercial activity, are the most prosperous and that the residents are better off because they have higher incomes. This is not necessarily the case. There is not a strong relationship between the tax base and income (Figure 9). As many people will probably verify from their experience, residents of the cities and towns in Massachusetts that have the most business property often have lower incomes than the residents of more suburban towns.

After adjusting for the variation in per capita income—that is, comparing the tax rates in towns with similar median household incomes—the correlation between growth and high tax rates is still strong. Similarly, the correlation between ruralness and low tax rates is still strong after adjusting for the variation in per capita income.

However, it is important to note that, in general, people who are better able to pay are more willing to spend money on schools and local services. More money is invested per pupil in education in towns in which the residents have higher incomes. To the extent that high income households tend to live in different towns than low income households, children from high income households may be receiving a better public education than children from low income households.



*The correlation between growth and high tax rates is strong, even after adjusting for variations in per capita income.*

# Conclusions

Decisions about development and conservation within any community should be based on the residents' goals for the future and informed by a clear understanding of the likely tax consequences. Understanding the relationship between land use and property taxes in Massachusetts can help provide a sound basis for community decision making.

- In the **short term**, the permanent protection of land generally results in a tax shift. In the **long term**, land conservation helps control property taxes by limiting increases in municipal services.
- When deciding between conservation and the development of individual properties, voters need to consider not only the cost to taxpayers but also the extent to which conservation helps achieve community goals. Key considerations include the extent to which conservation increases property values of other land, supports or stabilizes the local economy, protects the water supply or important wildlife habitat, or provides recreational benefits to residents. It is also important to consider likely alternative uses of the property and their compatibility with community goals.
- It is generally true in Massachusetts that the towns with the most development have higher rather than lower tax bills. There are several explanations for this:
  - open land provides more in taxes than it costs the town in services while the opposite is true for residences;
  - commercial and industrial developments, although they generally provide more in taxes than they directly cost the town to service, create jobs that lead to residential development;
  - larger towns have larger budgets.



Susan Lapidus

- From a taxpayer’s perspective, conservation of a key property may be less expensive than allowing it to be developed in a way that would not provide enough in taxes to cover related service costs.
- If the residential population increases in a town, property taxes probably will rise, unless there is some increase in non residential property value to offset the net costs resulting from most new residences.
- The permanent protection of one property often redirects rather than precludes development. Over the short term at least, the amount of development a given town is likely to experience will probably not be changed by the conservation of a single parcel. Instead, the conservation of certain key parcels may influence the location and pattern of development, which may make providing municipal services more efficient and less costly.
- Citizens’ decisions about development and conservation in their communities should be based on their goals for the future and a clear understanding of the likely tax consequences.

When planning for a town’s future, property taxes are just one of many concerns. Most communities strive to create a prosperous and healthy environment in which to raise the next generation—not solely to maintain low tax rates. The challenge when evaluating future investments is to strike a balance between what improves the community, what residents can afford, and what is fair. Planning for both conservation and development is an important part of achieving that goal.



Ava Morrison

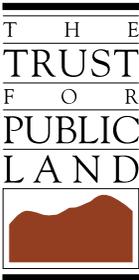
*Town owned farmland in Concord.*

# Footnotes

1. According to the provisions of 16 U.S.C. Section 715, the agency would pay the greater of 25% of net receipts divided between towns on a per acre basis; 3/4 of 1 percent of the adjusted purchase price; or \$0.75 per acre. In New England states, the payment has been based on 3/4 of 1 percent of the adjusted purchase price.
2. 31 U.S.C. Section 6903(b)(1). Some federal agencies, including the U.S. Fish and Wildlife Service and the U.S. Forest Service also share a portion of revenue generated from the property with local jurisdictions in which they own land. Any amount received from these agencies is subtracted from the payments in lieu of taxes.
3. These state programs were enacted to help maintain existing agricultural, forest, and recreation lands in Massachusetts. Each program offers significant property tax relief to qualifying landowners who enroll their properties for prescribed periods of time. Under these programs, municipalities have the option to purchase enrolled properties within their borders when they are sold for commercial, residential, or industrial development.
4. A conservation easement (sometimes called a conservation restriction) is a legal agreement between a landowner and a qualified conservation organization or government agency that permanently limits a property's uses in order to protect its conservation values. See *Conservation Options: A Landowner's Guide*, prepared by the Land Trust Alliance, Washington, D.C.
5. This is because the standard of effort is based on the municipal revenue growth factor rather than on the actual equalized valuation.
6. Overburden aid is additional state education aid designed to assist towns of low and moderate wealth. The overburden percentage for all towns in which the equalized valuation per pupil is less than 95% of the state average is 100%. A change in the ratio in these towns would not change the overburden percentage; it would still be 100%.
7. Census data from the Public Use Micro Data Sample for all Massachusetts Public Use Micro Data Sample Areas. Tax and expenditure data from the Division of Local Services. School taxes estimated as the same proportion of the property tax bill as school expenditures are of total local expenditures.
8. See for example, *Fiscal Impact Analysis and the Fiscal Impact Hierarchy: A Glimpse at the Argument*. Prepared by Robert W. Burchell for the Lincoln Institute of Land Policy, Cambridge, MA, 1992. See also the *Cost of Government Services* reports. Prepared by the American Farmland Trust, Northampton, MA. See also *Fiscal Impacts of Growth: Worksheets for Analysis*. Prepared by The Center for Economic Development, University of Massachusetts, Amherst, MA, 1988.
9. This is documented in *Land Conservation and Local Property Taxes; Property Taxes and Development in the Squam Lakes Area; The Effect of Land Conservation on Property Tax Bills in Six Vermont Towns; The Effects of Development and Land Conservation on Property Taxes in Connecticut Towns; and Open Land, Development, Land Conservation in Maine's Organized Municipalities*. All available from Ad Hoc Associates, RD 1 Box 319, Salisbury, VT 05769.
10. See for example, *Cost of Community Services: Snapshots of Net Fiscal Impacts of Different Land Uses in Towns*. Prepared by American Farmland Trust, Northampton, MA, 1992.
11. Source of data: Massachusetts G.I.S. Includes permanently protected land held by the federal government, state government, local government, private nonprofit conservation organizations, private for profit conservation organizations, 1997.
12. Locally raised revenue is all revenue available to county, town, school and special districts except state and federal aid. It includes the following locally raised revenues where applicable: local property tax, local sales tax, local excise tax, local rooms/meals tax, local income tax, local fees, local charges, interest on local funds, miscellaneous local revenue. In many states, particularly those in New England, local governments do not have the option of raising many of these types of revenues.
13. From "The Bases of Taxation," *Political Science Quarterly*, vol. iii (1888) p. 6. Cited in *History of Taxation in Vermont*, by Frederick A. Wood, 1894.







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