

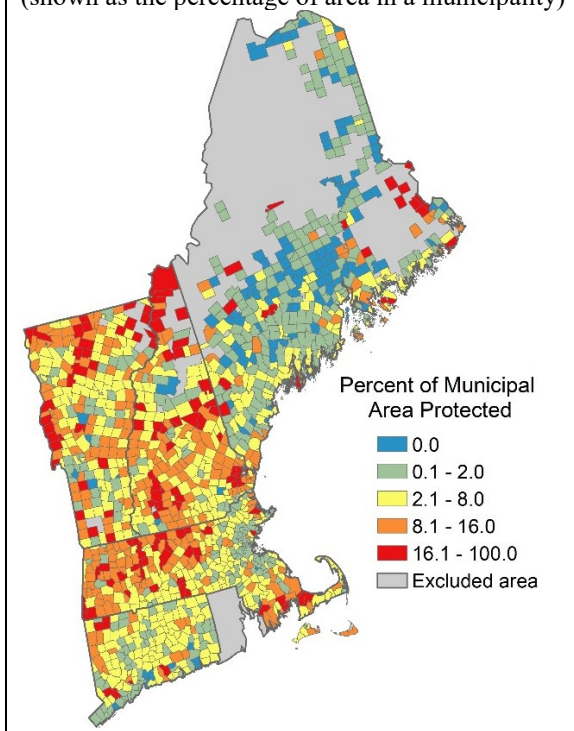
DOES LAND CONSERVATION RAISE PROPERTY TAXES? EVIDENCE FROM NEW ENGLAND CITIES AND TOWNS

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Summary: Our research assessed the impacts of new land protection on local property tax rates in more than 1400 municipalities in New England between 1990 and 2015. Average impacts on tax rates were small: the average area of new protection of 85 acres was associated with an increase in a homeowner's annual tax bill of \$0.72 per \$100,000 of property value. Furthermore, there was no evidence that municipalities spent less on services in response to new land protection. Tax rate impacts did vary based on characteristics of the town and the type of protection, but even where they had the greatest effects, the impact for 85 acres of new protection ranged from a \$5 to \$30 increase for each \$100,000 of value.

Figure 1: Change in Land Protection, 1990-2015 (shown as the percentage of area in a municipality)



Protected lands provide important ecological and social benefits including recreational opportunities, preservation of cultural heritage, wildlife habitat, and ecosystem services such as improved water quality, decreased flood risk and increased climate resilience. Yet concerns about whether land protection erodes local tax bases and shifts tax burdens to other landowners are common. This is because the taxes paid on protected land are typically lower than what would be paid if it were developed for housing or business. On the other hand, protected land typically requires few town services and often boosts the value of nearby properties—potentially increasing the tax base. We used data from more than 1400 towns and cities in New England from 1990 to 2015 and multiple regression analysis to assess the impact of new land protection on local property tax rates.

During this time, the amount of protected land in our study area increased from 12.8% to 20.2% (Figure 1). New protections were achieved using conservation easements and when non-profit organizations, local governments, and state and federal agencies purchased

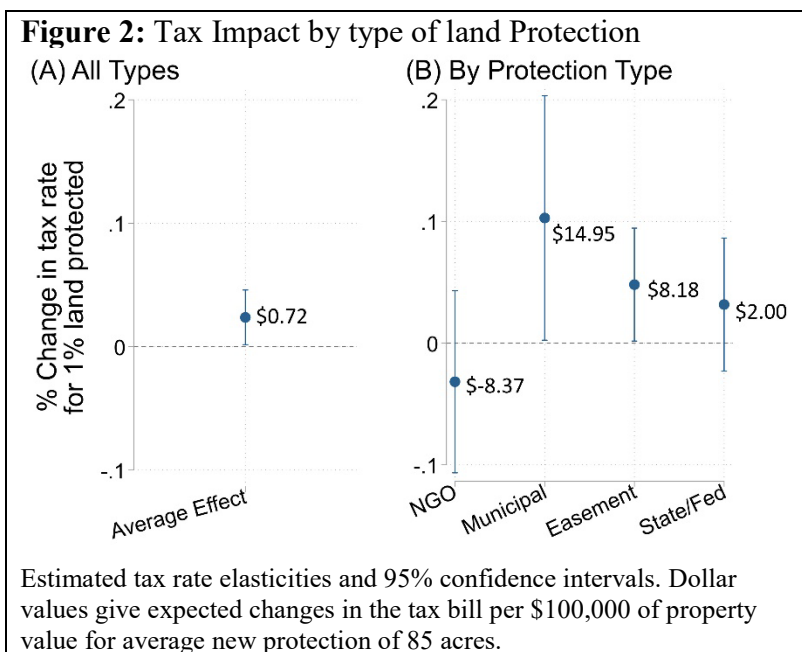
land for conservation. To isolate the impacts on tax rates that can be attributed directly to land protection, we used data from the same municipalities over time and controlled for changes in employment, prior growth in the tax base, and economic and population trends.

Main results. The changes in the tax rates attributed to new land protection were small. Specifically, a 1% increase in the percentage of town land protected was estimated to cause a 0.024% increase in the tax rate. This corresponds to an increase in a homeowner's annual tax bill of just \$0.72 per \$100,000 of taxable property value for the average annual increase in area protected of 85 acres. For the owner of a

typical New England home (valued at \$266,493), that would be an additional \$1.92 on their tax bill of \$3475. We did not find evidence that municipalities collected fewer revenues or reduced expenditures on public goods as a result of land protection. We also did not find that the small increases in tax rates persisted beyond three years. These results suggest that for the majority of towns and cities, new land protection can be achieved without substantial impacts on other taxpayers or public goods.

Variation by types of protection and towns: Although our analysis showed that the tax impacts of new land protection were small on average, they varied based on the type of land protection and towns.

Tax rate increases were higher when land protection occurred through ownership by municipalities and through easement protection on private land. For a 1% increase in the percentage of town land protected, we found tax rate increases of 0.10% and 0.048%, respectively. These translate to a tax bill increase of \$14.95 and \$8.18 per \$100,000 of taxable property value. Land acquired by state and federal agencies was associated with a small increase in tax rates (\$2.00 per \$100,000) and NGO protection was associated with a decrease, but results were not statistically significant.



Considering differences across town types, we found that impacts were not generally greater for towns that already had a high share of land protected, had smaller tax bases, or were rural. However, we did find greater impacts for towns that were growing slowly, had lower median household incomes, or fewer second homes (Table 1). We also found greater tax impacts for towns that engaged in substantial municipal protection when they had low growth rates or small tax bases, and for towns that received state and federal protection when they already had a very high share of land protected. The size of these impacts ranged from \$5 to at most \$30 in additional taxes paid for each \$100,000 in property value.

These results indicate that the rate of growth in property values mattered more for tax impacts than the density of development or how much land was already protected. They also suggest that the towns least able to afford tax increases were often those with greater impacts. Less well-off towns may not have been able to take advantage of state and federal grants or other resources when engaging in land protection. Slower growing towns also had less potential for new conservation to boost the value of nearby homes. Reducing these disparities may require greater funding for state and federal “PILOT” (payments in lieu of taxes) programs, contributions of funds or in-kind work by non-profits, private fundraising to support municipal purchases, or credits from participation in programs for carbon sequestration or other ecosystem services. Targeted support can help to recognize the contributions of local municipalities to state and regional benefits of land protection.

Table 1: Impacts by Community Characteristics

Town Characteristics	Magnitude of Tax Increase	Potential Explanation
Slower Tax Base Growth	Larger tax increase.	Less growth in property value to offset loss of taxable value. Growth in revenue from new development is also accompanied by growth in demand for services, while conservation land has low cost of services.
Lower Income	Larger tax increase.	Property value growth is limited due to lower ability to pay for housing. Towns may have fewer resources and less access to state/federal grants and NGO networks.
More Second Homes	Smaller tax increase.	Protected land boosts property values & service costs may be smaller in communities with many second homes.
Smaller Tax Base	No consistent effect. Possible increase for Municipal protection.	Growth in tax base matters more consistently than the size of the tax base.
More Existing Land Protection	No consistent effect. Possible increase for State/Federal protection.	PILOT payments don't fully offset the lost tax revenue; constraints on growth.
Urban vs Rural	No significant increase in rural towns. Significant tax increase in exurban towns.	Lower property values and land in current use may result in smaller impacts for rural towns on average.
More Land in Current Use Taxation	Smaller tax increase	Land in "current use" value is already assessed at low value.