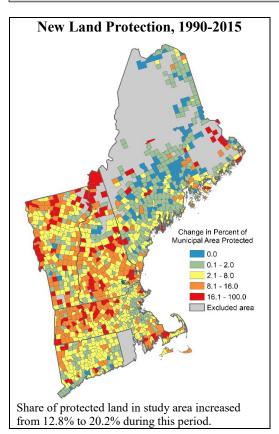
DOES LAND CONSERVATION RAISE PROPERTY TAXES? EVIDENCE FROM NEW ENGLAND CITIES AND TOWNS

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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. Although new protection was substantial, we found small average impacts on tax rates. The average annual area of new protection of 85 acres was associated with an increase in a homeowner's annual tax bill of just \$0.72 per \$100,000 of property value. Tax rate impacts varied based on the type of protection and characteristics of the town or city. We found greater impacts for towns that were growing slowly, had lower median household incomes, or fewer second homes. Where they had the greatest effects, the impact for 85 acres of new protection ranged from a \$5 to \$30 annual tax bill increase per \$100,000 of property value.



Protected lands provide important ecological and social benefits including recreational opportunities, preservation of cultural heritage, wildlife habitat, and ecosystem services including 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 fewer town services and may have previously been taxed at lower rates. Permanent protection can also boost the value of nearby properties—potentially increasing other revenues.

We used data from more than 1400 towns and cities in New England from 1990 to 2015 to assess the impact of new land protection on local property tax rates. New protection included private conservation easements and purchases by non-profit organizations, local governments, and state and federal agencies 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 \$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. These small impacts did not persist—we found no impacts beyond three years.

Variation by types of protection and towns. Tax rate increases were somewhat higher when land protection occurred through municipal purchases or private easement protection. For a 1% increase in the percentage of town land protected, we found tax rate increases of 0.10% for new municipal protection and 0.048% for private

easements, compared to the 0.024% average increase. Tax rate impacts of acquisitions by NGOs or state and federal agencies were not statistically different from zero.

Considering differences across municipal types, we found more substantial tax rate increases when towns were growing slowly, had lower median incomes, fewer second homes, and less land enrolled in current use programs. The size of these impacts ranged from \$5 to at most \$30 in additional taxes paid for each \$100,000 in property value.

Impacts by Protection Type and Community Characteristics

Type / characteristics	Findings	Possible explanations
Municipal protection	Tax rate increase. Tax bill change of \$14.95 per \$100,000 of taxable value.	Land fully taken off of tax rolls / local funds for purchase.
Private easements	Tax rate increase. Tax bill change of \$8.18 per \$100,000 of taxable property value.	Reduced revenue unless already enrolled in current use.
NGO protection	Possible tax rate decrease. Not statistically different from zero.	Potentially offsetting increases in nearby property values.
State/federal protection	Possible tax rate increase. Not statistically different from zero.	Much land already enrolled in current use; inconsistent PILOT payments.
Slower tax base growth	Larger tax rate increase.	Less potential for offsetting growth in other revenues.
Lower median incomes	Larger tax rate increase.	Less ability to pay for increased amenity value; possibly less capacity to access to state/federal grants and NGO networks.
Fewer second homes	Larger tax rate increase.	Less potential for increased amenity value, higher service costs compared to tax base.
Smaller tax base	No consistent effect.	Growth in tax base mattered more consistently than the size of the tax base.
Larger share existing land protection	No consistent effect.	Loss of developable land may pose constraints on growth, but increased infill/density may also increase tax base.
Urban vs. Rural	Tax rate increase in rural towns not statistically different from zero.	Growth in tax base mattered more consistently than density.
Less enrollment in current use programs	Larger tax rate increase.	Land in current use value is already assessed at low value.

Conclusion. These results suggest that for the majority of towns and cities, new land protection can be achieved without substantial impacts on other taxpayers. However, the towns least able to afford tax increases also tended to be those with greater impacts. 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.

The full research paper can be accessed <u>here</u>. Email the authors at: <u>alexey_kalinin@fas.harvard.edu</u>
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