

Can Local Governments Give Citizens What They Want? Referendum Outcomes in Massachusetts

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Economists and political scientists have long debated the nature of the process that determines government taxation and service levels in a democracy. The two basic questions are the degree to which citizens “get what they want” from the public sector and what it is they want. What citizens want from the public sector may vary with both individual and governmental characteristics, as well as with political currents, such as the “tax revolt” that swept the nation beginning in the late 1970s. Residents’ desires may not be directly reflected in government outcomes when elected officials or even the voters themselves (through referenda) are in control of decisions about funding levels, and government agencies “produce” the public goods and services provided.

Some analysts view referendum outcomes as a direct expression of residents’ preferences; after all, residents may go to the polls and approve or disapprove a specific project. Others, however, argue that disagreements among the citizens of a jurisdiction, lobbying by interested parties, or variations in voter turnout may skew the vote outcome. Furthermore, they point out that public officials, not residents directly, decide what will appear on the referendum ballot, limiting the choices facing voters. And local administrators decide on how the budget is converted into local public services. That is, even with referenda determining the total budget, voters may not trust local officials to spend the money as they wish.

During the 1980s, cities and towns in Massachusetts experienced a fundamental change in the ground rules for local revenue-raising that increased the importance of local referenda. Localities in Massachusetts have only one significant revenue source of their own—the property tax. In November 1980, the Commonwealth’s voters enacted Proposition 2½, bringing down property tax rates and limiting the year-to-year rate of growth of property tax revenues. Under Proposition 2½, a community’s property tax rate had to be reduced to 2.5 percent and thereafter

the community's cap on property tax revenues (the "levy limit") rises by 2.5 percent per year (plus an allowance for new growth) unless voters approve a local referendum to raise property taxes by more.

Because property values rose faster than 2.5 percent annually, property tax rates generally declined in the 1980s. But because general inflation and local costs also rose faster than 2.5 percent per year, an increasing number of communities became constrained by Prop 2½'s limit on levy growth as the decade progressed. As a result, an increasing number of localities proposed and approved referenda to

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increase their Prop 2½ "levy limits."

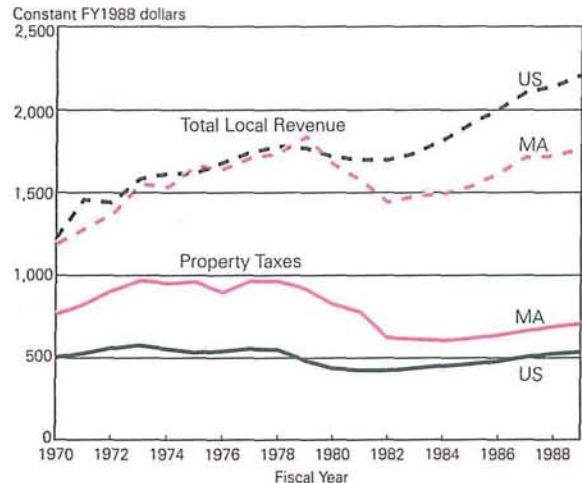
This article uses the Massachusetts experience in the last decade to shed light on the general issue of whether and how resident preferences find expression in local public sector outcomes as well as on what those preferences appear to have been in this particular time and place. After reviewing recent patterns and trends of property taxation and referendum outcomes in the Commonwealth in Part I, the article focuses on votes that communities took to increase levy limits applying to fiscal year 1991. As background, some of the economics and political science literature on local voting is reviewed in Part II. Because so many communities have never once held a vote to raise the levy limit, the discussion of referenda distinguishes between the determinants of calling for a vote at all (in Part III) and the vote outcome (in Part IV). The conclusion speculates about possible future referendum patterns in Massachusetts.

I. Putting on a Lid: Property Taxation in Massachusetts in the 1970s and 1980s

Property tax revenues in the Commonwealth rose almost 1 percent per year in real terms in the 1970s and declined almost 1.5 percent per year in the 1980s. Nationally, by contrast, property taxes de-

Figure 1

Local Government Revenues per Capita



Source: U.S. Bureau of the Census, *Government Finances*.

clined slightly in real terms in the 1970s and grew over 3 percent annually in the 1980s.¹ This radical downshift in property taxation in Massachusetts was attributable to Proposition 2½, which began restricting local property tax levies in Massachusetts in fiscal year 1982 (FY1982).

Total property tax revenues actually declined in nominal terms in FY1982, as all communities with effective property tax rates in excess of 2.5 percent (about half of Massachusetts' 351 cities and towns) were required to cut revenues 15 percent (and in each year after FY1982) until the rate fell to 2.5 percent, while the other communities' property tax revenues could rise only 2.5 percent annually. (See the box for definitions of key terms and a summary of how Proposition 2½'s limits are calculated.) These declines caused the property tax gap between Massachusetts and other states to narrow noticeably (see Figure 1), but after most of the reductions were complete in FY1984, real per capita local property tax revenues rose at about the same rate in Massachusetts as in the nation as a whole.²

After the early years of revenue reductions in a number of communities, statewide property tax rev-

How Proposition 2½ Works

The levy limit is the maximum amount of property tax revenue a community is allowed to raise in a given fiscal year under the restrictions of Proposition 2½. Each community's initial limit was set at 2.5 percent of the market value of taxable property. The levy limit rises by 2.5 percent per year plus an allowance for new growth; local residents can also vote to raise the levy limit in a given year by enacting an override or exclusion. Even if a community's property tax revenue (its levy) is not at its levy limit in a given year, the limit rises by 2.5 percent per year plus new growth (unless this increase would cause the effective tax rate to exceed 2.5 percent). Thus a community's levy limit is not affected by its actual levy in earlier years. Furthermore, the levy can rise by more than 2.5 percent in a year if it is below the levy limit the previous year.

The allowance for new growth is calculated as the previous year's tax rate multiplied by the amount of new growth. New growth includes the value of all new or substantially renovated property on the tax roll (properties whose values rose by more than 50 percent in a year's time not simply because of revaluation, or exempt property returned to the tax roll, or the added value of subdivision parcels and condominium conversions). Each year's new growth goes into the levy limit which then automatically grows by 2.5 percent to form the basis for calculating the next year's

limit. (The legislature recently broadened the definition of new growth, as recommended by the Hamill Commission, to include all increases in value except those attributable to simple appreciation or revaluation, beginning in FY1992.)

An override is a permanent increase in a community's levy limit. Voters enact an increase in the levy limit for a specific fiscal year; the increase is permanent in the sense that the new levy limit then becomes the base for calculating future years' levy limits. An exclusion, by contrast, is a temporary increase in the levy limit for a specific capital expenditure or debt service. The levy limit is increased by the amount of funds needed for the capital expenditure (one year) or to pay debt service on specific debt issues (for the life of the debt issue).

Except in the case of exclusions, the levy limit can never exceed 2.5 percent of the market value of the property tax base (the "levy ceiling"). That is, the effective property tax rate at the levy limit cannot exceed 2.5 percent except when voters have enacted exclusions that temporarily raise the levy limit above this levy ceiling.

Note: For careful and more complete explanations of Proposition 2½'s workings, see *Everything You Always Wanted to Know About Levy Limits . . . But Were Afraid to Ask: A Primer on Proposition 2½*, prepared by the Division of Local Services, Massachusetts Department of Revenue.

enue growth was accelerating by the mid-1980s, and levy limits were growing about as fast, as allowances for new growth gave most communities considerably more than the 2.5 percent automatic annual additions to the levy limit. (Appendix Table A.1 reports the year-to-year changes in property tax revenues and levy limits on a statewide basis in the years after Proposition 2½.) But aid from the state, which increased substantially in the early years of Prop 2½, began to grow more slowly and then declined at the end of the decade, increasing pressure to raise property taxes and propelling more and more communities close to their limits. By FY1990, almost 300 of the Commonwealth's 351 cities and towns were taxing at 99 percent or more of their levy limits, up from fewer than 130 as recently as FY1987.

Meanwhile, property values skyrocketed, leading to declines in effective property tax rates and a growing difference between the levy limit and the levy ceiling (2.5 percent of property values). This meant that the "override capacity" that could be tapped by voting overrides or exclusions was also growing by leaps and bounds, at least through FY1990. The pressure on levy limits as more and more communities approached them, in conjunction with this growing "capacity" as property values rose and property tax rates fell, led to increased use of overrides and exclusions to raise the levy limit.

The number of communities attempting to raise their levy limits rose fairly steadily year by year through FY1990, and then jumped for FY1991. Even with a sizable number of first attempts each year, the

bulk of overrides and exclusions were enacted in communities that had passed them before. (Appendix Table A.2 reports the number of communities attempting and passing overrides and exclusions in FY1983 through FY1991.) The success rate of override and exclusion attempts also rose and then dived in FY1991, although the number of communities passing overrides and exclusions was higher for FY1991 than for FY1990. Even so, many communities still have not put any override or exclusion ballots before their voters. Almost one-sixth of the 351 cities and towns had proposed neither overrides nor exclusions to their voters through FY1991 (and another one-sixth had not passed any that were proposed).

The contribution of overrides and exclusions to the levy limit accelerated as the decade progressed. Table 1 reports statewide trends in levy limit growth, breaking out the contributions made by overrides, exclusions, and new growth; the limit also rises by an automatic 2.5 percent per year. While new growth accounts for over one-half the levy limit increase each year, voted increases jumped into double digits in FY1989 and continued to rise thereafter.

Even the sizable amounts of new growth that occurred in the late 1980s did not raise levy limits enough to keep many communities from bumping into them, and the prognosis is for much more constraint in the near future. The contribution of new growth declined in FY1990 and can be expected to

decline further in FY1991 and FY1992, because of the drastic falloff in new construction statewide as the economy has weakened. Among the 247 communities for which complete FY1991 data are available from the Department of Revenue, current new growth accounted for only 37 percent of the increase in the levy limit, while overrides and exclusions jumped to 29 percent of the total increase. The pickup in voted increases kept the overall rate of increase in the levy limit comparable to the previous year's for these communities.

Underlying these statewide trends were widely different experiences for cities and towns in the Commonwealth of varying population size. The key difference is that the smallest municipalities enacted more overrides and exclusions, and as a result, they experienced the most rapid increase in property tax revenues over the decade. The smaller places had both a greater incidence of override and exclusion attempts and a higher rate of success in passing them. (See Appendix Tables A.3 and A.4.)

Despite much faster growth in property tax revenues, the small and middle-sized towns enjoyed lower property tax rates and higher levels of local public services at the end of the decade than the biggest communities. Tax rates could be similar or lower even while financing above-average service levels where property value per capita (the underlying property tax base) was high. The per capita tax

Table 1
Sources of Growth in the Levy Limit Statewide

Fiscal Year	Dollar Increase in the Levy Limit (millions)	Percentage of Statewide Total Increase from:			
		Overrides ^a	Exclusions ^b	New Growth ^c	Automatic 2.5% ^d
1986	196.0	.4	3.4	60.4	35.7
1987	244.5	1.0	4.9	56.1	38.1
1988	263.2	2.4	6.2	56.3	35.1
1989	303.6	7.9	7.4	56.4	28.2
1990	297.3	8.8	9.5	52.7	29.0
1991 (est.) ^e	320.8	22.2	6.6	37.0	34.2

^aIncludes 2.5 percent compounded annual growth of override amounts approved in previous years.

^bNet change in exclusions affecting levy limit in fiscal year, including those voted in earlier years.

^cIncludes 2.5 percent compounded annual growth of "new growth" amounts certified in previous years.

^dThis column reports the (residual) difference between 100 percent and the sum of the three columns to the left; it may not exactly equal the actual automatic 2.5 percent increase from each community's base year levy limit because levy limits do not reflect retroactively reported new growth until it is reported.

^eEstimates for FY1991 based on data available for 247 communities.

Source: Massachusetts Department of Revenue, Division of Local Services, Municipal Data Bank, machine readable data files and author's estimates.

base in communities with population over 5,000 was only 60 percent of that in communities with fewer than 5,000 residents, on average.

II. Referenda on Property Tax Revenues: Hypotheses Regarding the Expression of Residents' Preferences

The changes over time and variation among communities in override experience in the 1980s might directly reflect differences in residents' demands for local public services or it might indicate differences in the ability of voters and/or officials to make the override process work for them. In studying the budget outcomes that result from democratic political processes, researchers have focused on referenda at the local level as being a closer indication of "what the voters want" than are decisions of elected officials that need no direct voter approval. The body of research on referenda has offered a variety of hypotheses about how local residents' preferences find expression in local tax rates and services.

Many observers would argue that Proposition 2½ has done exactly what it was intended to do—put control of the budget into the hands of community residents. Formerly, residents controlled the budget only through participation in Town Meetings or by electing local public officials they believed would do their bidding to ensure reelection. But the conventional wisdom says that the Commonwealth's voters approved Proposition 2½ because they no longer trusted local officials to serve the best interests of residents. Under Proposition 2½, community officials could increase property taxes only 2.5 percent per year (plus an allowance for new growth), unless they gained voter approval for an override. Especially as more and more communities bump up against their levy limits, the override process lets voters decide on service levels. In this view, the communities that do not have overrides on the ballot are communities in which an override would fail, anyway; local officials can read local voter sentiment reasonably well and do not bother the voters with obviously doomed proposals.

Who Controls the Agenda?

But other analysts argue that, even though residents can vote on overrides, their choices are limited to what is on the ballot. In particular, the failure of an override indicates only what the voters reject, not what they want. In this view, the critical question is

what group controls the agenda and what it is that they want. In Massachusetts, elected officials are the ones who decide what overrides or exclusions will be put to a vote: a majority vote of a community's Selectmen, or Town or City Council, with the Mayor's approval in some cases, can put an override question on the ballot. A two-thirds vote is required to put a capital or debt exclusion on the ballot.

If the process is to be successful in representing voters' desires, the "agenda setter" should propose overrides that have a reasonable chance of attracting at least 50 percent of the voters. But the agenda-setters may misread voter preferences in deciding what to offer the voters, or may even act strategically to influence the outcome.³ Different types of government (cities vs. towns, representative vs. open town meetings), or simply variation in the degree of diversity within a community, may affect the ability of the agenda setters to read voter preferences. Furthermore, local officials may not aim for 50 percent voter approval. Fearing voter rejection more than the consequences of underestimating voters' desires, officials may propose only overrides they view as certain to gain approval (Peterson 1991).

The basic issue is the all-or-nothing nature of an override vote. Residents can approve (or disapprove) only what is on the ballot and they influence what appears on the ballot only by convincing their elected officials to offer it to them. As a way around this problem, an increasing number of communities attempting overrides and exclusions in recent years have used a "menu" approach, putting multiple proposals on each ballot, thereby giving the voters more choice about which projects to fund and how much to spend. Also, some Town Meetings have recently voted "contingent appropriations" to pressure their Selectmen to put override questions on the ballot.⁴

Who Controls Production?

A second basis for doubting that Proposition 2½ really gives voters control over local services is the inescapable fact that local public employees control the actual production of public services, given the (voter-approved) budget. Residents may mistrust these employees, believing that it is possible for the Assessor, for example, or the Police Chief or Superintendent of Schools to produce current services at lower cost by operating more efficiently.⁵ But department heads and other administrators do not offer this as an alternative, either because it is not, in fact,

feasible or because it is in their self-interest to continue business as usual.

When this mistrust is widespread, as it appears to have been leading up to the passage of Proposition 2½, voters control what they can—the budget—in hopes that employees will economize. But administrators faced with a tighter budget may not make the choices that voters want them to make, perhaps because the voters are wrong about more efficient operations being possible. And one voter's "waste"

As middle-class taxpayers have shifted their view of government from concern about programs to a focus on the taxes they must pay, the link between the two is sometimes blurred.

may be another's most valued program.⁶

Thus, even under Proposition 2½, voters may have control over some decisions about property taxes and hence the budget, but not over how the money is spent. The agenda-setters still decide the purposes and amounts of overrides that will be put on the ballot and what will be cut from the budget if the override fails. Local legislators (who could be the attendees of an open Town Meeting) and administrators also make the decisions, as they did before Proposition 2½, about how to spend the funds raised within the Proposition 2½ limit (whether or not an override passes). Residents continue to have the power to vote their local officials out of office (or attempt to influence open Town Meeting outcomes), but this translates into budget control only indirectly and with substantial lags.

Do Voters Control Even the Vote?

Proposition 2½ override and exclusion vote outcomes might not reflect residents' wishes for a third set of reasons as well. Holding an election is a cumbersome and time-consuming undertaking. Voter turnout is never particularly high, and those who turn out may not be representative of all eligible

voters or residents. It is difficult for all voters to be well-informed. Various interest groups, or simply the more vocal segments of the population, may wield considerable power in shaping public opinion regarding the issues on the ballot. And given the generally negative view of taxation that has evolved in Massachusetts (and nationwide) in the last fifteen years, even voters who are well-informed regarding the specific issues they face on the ballot may not be sure how those issues relate to what they want from their local government.

As middle-class taxpayers have shifted their view of government from concern about programs to a focus on the taxes they must pay, the link between the two is sometimes blurred. For example, Massachusetts residents talk about moving to neighboring low-tax New Hampshire, "if it weren't for Massachusetts' good public schools." An override vote is explicitly aimed at raising taxes, which no voters will favor independent of a clear perception of individual or community benefit from the services those taxes will buy.

Findings/Hypotheses

Several things are clear from this discussion. First, Proposition 2½ made it more difficult for local governments to raise taxes than was the case with the old "rules." While it is impossible to separate the effects of the change in rules from the change in political consciousness that voted in the new rules, Proposition 2½'s rules undoubtedly had (and continue to have) a constraining effect on property taxes at the margin. In a sense, Proposition 2½ itself can be seen as a shift of "agenda control" toward those in favor of tax minimization, forcing a harder sell on program advocates. Some would say, indeed, the shift of power was too great, to the detriment of local public services, but others argue that voter control is crucial if "unwanted" spending is to be avoided.

Second, many of the concerns that are raised about how well referenda can represent residents' desires are alleviated by the "menu" approach to overrides, wherein voters are offered a number of proposals that can be separately approved or not. The menu approach can greatly reduce the all-or-nothing character of the override choice and provide an outlet for anti-tax sentiment and mistrust of local officials by giving voters some items to vote against even as they approve others. The menu approach may make it even more difficult, however, for voters to become informed, since more items appear on the ballot.

The "Menu" Approach: Multiple Override Proposals on One Ballot

In July 1987, the Legislature amended Proposition 2½ to allow any override to pass with a majority vote (overrides raising the levy limit more than 2.5 percent previously required a two-thirds vote) and to require that an override ballot proposal state the purpose of the override. As a result of these changes, many override ballots now contain a number of separate override proposals, each with a specific dollar amount and stated purpose, which can be voted up or down individually. Some communities present "pyramid" overrides to their voters, which allow voters to choose among two or more funding levels for a specific purpose; the highest dollar amount that gains approval governs.

Approaches such as these allow voters much more direct control over the local budget than do all-or-nothing votes on a sizable percentage increase in the levy limit. While local officials still control the proposals that appear on the ballot, they (obviously) cannot control which ones the voters approve or vote down, and as a result they have less discretion in making spending decisions after the vote is taken, no matter what the voters enact. Thus offering the voters more choice shifts some power from local officials to the voters. (Certainly the presence of a range of proposals on the ballot weakens an "agenda-setter's" ability to

gain voter approval of higher spending through contrast with a weak fallback. The possibility of voter choice among several proposals allows more of a continuum of possible outcomes.)

By the same token, however, officials who want override proposals to pass may increase their probability of success by offering some choices to the voters. One view of the process is that voters, mistrusting their local officials' judgment as to the urgency of various local needs, want to be able to express disapproval of some proposals even as they approve those they consider important.

An analysis of ballot outcomes for FY1991 confirms the view that giving voters some choice increases the likelihood of approval. The 598 override proposals for FY1991 appeared on 225 ballots; the number of override proposals on a single ballot ranged from 1 to 28. Slightly less than 42 percent of the single-question ballots passed, while voters approved at least one item on ballots with more than one proposal 46 percent of the time. Indeed, on ballots with more than 5 questions, something passed 57 percent of the time.

Note: For a detailed description of override procedures and requirements, see "Proposition 2½ Referenda Questions: Requirements and Procedures" (October 1990), prepared by the Division of Local Services, Massachusetts Department of Revenue.

Some observers argue that overrides cannot successfully replace the local budget process—they claim that in putting a "menu" before their voters, local officials have abdicated their responsibility to lead. Others, however, point out that broad slogans and single-issue campaigns have less power in the "menu" context, allowing (forcing?) voters to think through their programmatic priorities. (See the box.)

Third, the variety of individual communities' experiences to date undoubtedly reflects variation along all the dimensions just discussed. For many towns, the restrictions of Proposition 2½ combined with the override process probably work well in translating voters' desires into budgetary decisions; they either have no need for overrides or routinely pass them as needed. In others, the agenda setters may not have successfully tuned in to the alternatives

residents would like to see on the ballot. Yet other cities and towns seem stalled in a standoff between program advocates, concerned with maintaining the quality of local services, and a large bloc of voters, unconvinced that additional tax revenues are needed to obtain or maintain those services. And some municipalities may be unable to pass overrides even to maintain services because they lack the local resources to support increased taxes.

III. Getting on the Ballot: Who Tries?

About one-sixth of the Commonwealth's 351 cities and towns (containing over 40 percent of the state's population) had not attempted any override or exclusion votes through fiscal year 1991. Two types of

communities might be expected to "abstain" from attempts to raise the levy limit. Towns not taxing close to their levy limits or towns with considerable "new growth" could increase property tax revenues faster than 2.5 percent per year without a vote, and hence would not be likely to need to put any override proposals on the ballot. By contrast, a second group of communities with little excess capacity and low incomes, low property values, and high property tax rates might even face significant service cuts without an override, but their officials believe that voters are unwilling to approve still higher rates or they dare not risk the negative reaction that proposing higher rates might bring.

If the process of getting proposals on the ballot "works" in the sense that residents end up with what they want whether they have voted or not, then any communities that have never passed an override or exclusion, whether or not it has been attempted, should be fairly similar along critical voter preference dimensions, and differ from those that have passed overrides. But if the very process of getting an override on the ballot is a significant hurdle, then communities voting down override proposals might resemble communities successfully enacting increases in their levy limits as much as they resemble communities never making the attempt.

Attempts to Raise Levy Limits through FY1990: Patterns

Table 2 reports average values of some indicators of the cost of and need for (and presumably voter preferences regarding) overrides or exclusions for the three groups of cities and towns just discussed. The conventional economic wisdom says that residents with higher incomes would be more likely to enact an increase in the property tax levy because they generally demand a higher level of local public services and can afford to pay for it. The opposite would be true of residents facing high property tax rates that reduce their effective after-tax incomes. Significant excess capacity (room between the levy and the levy limit), whether from substantial rates of new growth, little need to raise taxes in the past, or other sources, would obviously reduce the need for an override or exclusion. The table also reports the "price" of local government services financed via the property tax, an indicator of what it costs a community's average single-family homeowner when community-wide property taxes rise by one dollar per capita. Where residents face a bigger increase in their tax bill to

Table 2
Characteristics of Massachusetts Communities Grouped by Pre-FY1991 Attempts to Raise the Levy Limit

	All Cities and Towns	Overrides and Exclusions through FY1990		
		No Attempts	Some Tries, No Passes	Some Passes
Number of Communities	351	106	42	203
1988 Income Per Capita (\$000)	14.7	13.5	14.1	15.4
Property Value Per Capita (\$000)	98.5	69.6	63.5	120.9
Property Tax Rate, FY1990 (%) ^a	1.20	1.21	1.23	1.19
Property Tax Rate, FY1981 (%) ^a	2.93	3.57	3.41	2.50
"Price" of Public Spending Financed by Property Tax, FY1989 (\$) ^b	2.2	2.4	2.5	2.1
"New Growth" FY1983-90 (%) ^c	18.7	19.7	19.4	18.1
Excess Capacity FY1990 (%) ^c	1.0	1.4	1.0	.8
Increase in Levy, FY1981-90 (%)	63.6	38.6	37.0	82.2
Cost-Adjusted Expenditures, FY1989 (\$) ^d	1,322	1,217	1,173	1,407
Average Population 1988	16,780	31,291	22,460	8,027

^aEqualized tax rate, calculated as property tax levy divided by the state's estimate of market value of taxable property in the community.

^bPrice of public spending indicates how much it costs an average single-family homeowner when the community raises property taxes by \$1 per capita; data for 45 communities are missing.

^cNew Growth and Excess Capacity are expressed as a percentage of the FY1990 levy limit.

^dEstimate of cost-adjusted per capita local public service level; calculated as expenditures per capita divided by the local cost index in additional assistance aid formula; spending reflects all local aid, including regional school aid attributed to member communities, for consistency.

Source: Massachusetts Department of Revenue, Division of Local Services, Municipal Data Bank, machine-readable data files; Massachusetts Department of Revenue, Division of Local Services, "A Report on Proposition 2½ Referenda Questions," May 1989, "Update: Proposition 2½ Referenda Questions," May 1990, and "FY91 Referenda Question Summary," printout January 1991; and author's calculations.

finance a given increase in services, overrides are likely to be less popular.

As expected, communities that passed at least one override or exclusion before FY1991 had higher

incomes and property wealth as well as slightly lower property tax rates and "prices" of public spending than those not attempting overrides. Those passing overrides or exclusions also had lower excess capacity than communities with no attempts; having voted increases in their levy limits, they were more likely to be taxing close to them (or conversely, communities with plenty of excess capacity had no need to vote increases in levy limits).

Communities that had passed one or more overrides or exclusions also had less new growth than those not attempting. One explanation for an effect of new growth independent of excess capacity is that the voters might believe that new growth augments the tax base and the levy limit enough to finance the services required by the new (or redeveloped) property and then some, reducing the pressure on the levy limit created by existing as well as new-growth-related service needs. In addition, perhaps the new voters associated with residential new growth were more financially stretched than long-time residents and were therefore more likely to vote against proposals to raise property taxes.⁷ Note, however, that voted increases in the levy limit (and the fact that these communities faced less serious revenue reductions in the first years of Prop 2½) more than made up for the new growth shortfall: after all was said and done, the actual levies of towns passing overrides or exclusions rose considerably more than those of communities with no attempts.

A key difference is that communities passing overrides and exclusions had much lower tax rates in FY1981 (before Proposition 2½ took effect), on average, than cities and towns with no attempts. Even after raising their levies much faster, the communities that approved overrides and exclusions still had slightly lower tax rates in FY1990 than those with no attempts because their property values per capita were so much higher. Their residents had also succeeded in obtaining more local services than communities not attempting to raise their levy limits (assuming that service levels are captured in the measure of cost-adjusted per capita spending).

Communities passing overrides and exclusions were considerably smaller than communities with no attempts. Various explanations are possible, centering on better communication and less mistrust between voters and officials in smaller places. Form of government may contribute to the directness of communication, both in terms of voters' beliefs about what officials are "up to" and officials' ability to predict voter wishes and to "educate" voters in

advance of a vote: The smallest towns generally have open town meetings as their legislative bodies, the bigger towns rely on (often large) representative town meetings, and city residents elect members of a (relatively small) city council. Furthermore, residents of cities may have more difficulty than do residents of more homogeneous small towns perceiving the benefits of the local spending that would be financed through an override. Each subgroup of a city's diverse population may be inclined to vote no because they believe that "too much" of the increase in public spending will benefit competing subgroups.⁸ Similarly, local officials may want to avoid the risk of appearing to favor one subgroup over another in proposing an override.

Communities that tried but failed to pass overrides and exclusions generally look more like the "no attempts" group than the "some passes" group, with the exception of excess capacity. This difference reflects the fact that communities with no "need" for an override (because they had plenty of leeway to raise taxes without getting voter approval) were not likely to have reason to attempt it. The broader similarities can be taken as evidence that getting something on the ballot is not a major obstacle to residents "getting

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what they want"; proponents of the process would say that officials in the "no attempts" communities rationally put no overrides on the ballot, just as the voters in the "some attempts, no passes" group rationally turned down "unnecessary" or "unwanted" override proposals. As a result, communities without overrides, whether proposed or not, had similar outcomes, including the rate of increase in the levy over the FY1981-90 period, FY1990 effective property tax rates, and cost-adjusted expenditures.

Data such as those reported in Table 2, however, are not the best way to sort out relationships among community characteristics and override activity. Sim-

ple averages obscure variation within groups and cannot control for differences between groups in other variables that may also influence the outcomes.⁹ Multiple regression analysis of override attempts provides a better chance of sorting out these relationships. Multiple regression is a statistical technique that quantifies the relationships between each of a set of explanatory variables and another key variable of interest (such as whether or not a community puts an FY1991 override to a vote), controlling for the key variable's relationships with the other explanatory variables.

Override Attempts for FY1991

Unlike the comparisons reported in Table 2, the multiple regression analysis examines override votes alone, not proposals to raise the levy limit for debt service or a one-time capital expenditure. While funds in the local treasury are somewhat fungible, expenditures for capital (whether one-year outlays or debt-financed) are much more easily postponed than operating expenditures. Thus, if an exclusion vote fails, the capital expenditure is likely to be canceled or put off; funds within the Proposition 2½ limit would not be used for those purposes. Furthermore, the increase in the levy limit engendered by an exclusion is temporary, in contrast with the permanent nature of an override.¹⁰

This multiple regression analysis of the probability of a community holding a vote on an FY1991 override is consistent with the general patterns shown in Table 2 regarding override and exclusion attempts in earlier years. The regression was estimated to "explain" which among all the Commonwealth's cities and towns had one or more FY1991 override votes on the ballot. (See Table 3 for regression estimates.) Of the 351 cities and towns, 181 voted on override proposals to raise their FY1991 levy limits. Communities with lower per capita incomes, higher FY1990 property tax rates, more new growth, and more excess capacity were less likely to hold votes to raise the FY1991 levy limit than those with higher incomes, lower taxes, and so on.

Some of these effects were quite large: While a community with \$11,000 per capita income had only a 44 percent probability of making an override attempt, other things equal, a community with \$19,000 per capita income had a 58 percent probability.¹¹ Thus, communities with higher effective demand for local public services and less ability to meet that demand without an increase in the levy limit were

Table 3
Probability of Override Attempts and Passes in FY1991

Regression Results for All Communities
Coefficient Estimates (and Standard Errors)

Explanatory Variables	Dependent Variable		
	Override Attempted	Override Passed	Override Passed (Conditional) ^a
Constant	.60** (.17)	.33** (.14)	.90** (.25)
Per Capita Income (\$000) in 1988	.018** (.0066)	.031** (.0055)	.030** (.0077)
Residential Property Tax Rate, FY1990 (%)	-.20* (.11)	-.25** (.092)	-.37** (.16)
"Price" of Public Spending via Property Tax, FY1989	.030 (.041)	-.041* (.034)	-.11* (.061)
New Growth, FY1983-90, as % of FY1990 Levy Limit	-.0068** (.0033)	-.0069** (.0028)	-.010** (.0052)
Excess Capacity, FY1990, as % of FY1990 Levy Limit	-.040** (.011)	-.021** (.0092)	-.063** (.028)
Number of Override Attempts Pre-FY1991	.020** (.0090)	.026** (.0075)	.011 (.011)
Population Greater than 5,000 in 1980	-.11* (.067)	-.078 (.055)	-.075 (.086)
City Government	-.26** (.087)	-.15* (.073)	-.42* (.19)
R-squared	.19	.28	.28
Adjusted R-squared	.17	.26	.24
Number of Observations	306	306	155

Note: 45 of the state's 351 cities and towns are excluded from the first two regressions because of missing data; 26 are missing from the third regression. See Appendix Table A.5 for definition of variables.

^a These results are "conditional" on an override attempt; that is, the equation is estimated including only those cities and towns with at least one FY1991 attempt on the ballot.

* Estimated coefficient is significantly different from zero with 90 percent confidence.

** Estimated coefficient is significantly different from zero with 95 percent confidence.

Source: Author's estimates based on data provided by Massachusetts Department of Revenue's Division of Local Services.

more likely to attempt an override or overrides.

The estimates also indicate that the greater the number of previous override proposals on which a community had voted, the higher the probability that one or more proposals to raise the FY1991 levy limit

would be placed before the voters. Thus residents of an otherwise average community with no previous tries had a 47 percent probability of voting on an override in FY1991, while even five previous tries raised that probability to 57 percent. And cities were much less likely (by 26 percentage points) to attempt overrides than towns, even controlling for the economic differences between cities and towns captured by the other included variables.

Communities more likely to have an override on the ballot were also more likely to pass an override. The estimated results of a second regression examining which communities passed at least one override affecting the FY1991 levy limit look similar to those for override attempts, but some important differences emerge. (These estimates are also reported in Table 3.) The similarity presumably derives from two sources: First, to the degree that officials are successful in putting on the ballot only proposals with a reasonable chance of passing, they will make the two equations similar. That is, local officials attempt to judge "demand" and "need" for an override that the actual vote later reveals. Second, at a more mundane level, no override can pass if none are on the ballot, and the sample of observations for the "pass" equation, like the "attempt" equation, includes all communities, even those not attempting an override. (A third regression is also reported in Table 3, which examines which communities, *among those attempting*, actually passed an override.) Ninety-five communities passed at least one override for FY1991, out of the 181 communities with one or more override proposals on one or more ballots.

The interesting comparison between the "attempt" and "pass" equations is the size of the effects of various variables on the relative probabilities of attempting versus passing an override. (And the analysis of passage conditional on an attempt has similar implications.) At the margin, the indicators of effective voter demand for local public services—income, property tax rates, and especially prices—have bigger estimated effects on the probability of a community passing an override than on the probability of putting an override to a vote in the first place. At the same time, the indicators of the need for an override—new growth and excess capacity—raise the probability of having a vote the same or more than the probability of winning the vote.

The number of override attempts in prior years is about equally associated with passing an override and with attempting one, suggesting that both residents and officials learn by doing, or that officials,

having surmounted the obstacle once, find it easier to try again, while voters become convinced of the lack of other alternatives (such as greater efficiency) when their local officials make repeated proposals. It is worth emphasizing that earlier override attempts increase the probability of attempts and passes for FY1991, controlling for measures of voter demand and "need" for an override. Thus the process itself

Local officials have a better reading of their community's need for an increase in the levy limit than of their residents' desire for such an increase. Residents' views are made clearer as they vote.

(of voter education, perhaps, or officials confronting their fear of rejection) adds another dimension to the probability of success.

Finally, controlling for all these other influences, cities are much less likely to propose (by 26 percentage points) or pass (13 percentage points) overrides than communities with town government. Other things equal, one might interpret this fact as evidence that city officials' reluctance to propose increases in the levy limit is a more important factor than voters' disfavor.

While some of these differences between the two equations' estimated coefficients are small, they are consistent with the idea that local officials, in deciding whether to offer override proposals to the voters, have a better reading of their community's need for an increase in the levy limit (the community's lack of other options to raise revenue) than of their residents' desire for such an increase. Then residents' views are made clearer as they vote. These results leave open the possibility, therefore, that officials who decide not to propose any overrides similarly misread potential voter sentiment and fail to offer some overrides that their voters might pass. This possibility is reinforced by the lower explanatory power of the "attempts" equation.

IV. Taking a Vote: Who (What) Wins?

Once an individual override proposal is scheduled to appear on a local ballot, its passage or failure should depend on whether the community's residents favor the increase in services that will be financed with the proposed increase in the property tax levy, or prefer the fallback outcome (continuing to operate within the existing Proposition 2½ levy limit). Thus, many of the determinants are community characteristics like those important in getting an override proposal on the ballot.

Of course, the nature of any specific proposal would also be expected to affect its attractiveness: the size of the tax increase implied by the override, the purpose for which the funds are intended, and voting conditions such as whether other override or exclusion proposals share the ballot. A regression equation was estimated to "explain" the percent of voters in favor of 528 of the 598 override proposals that appeared on ballots for FY1991. (The other 70 proposals had some missing data. See Table 4 for coefficient estimates.)

The percentage of voters in favor of the 528 override proposals studied ranged widely, from 9 percent to 90 percent, but the middle one-half of the cases had vote outcomes in the smaller range of 34 to 51 percent in favor. The average vote came in with only 42 percent approving, and only 144 (one-quarter) of the override proposals passed. The wide range of outcomes and low success rate indicate clearly that community agenda setters do not propose only "sure things" and similarly that they do not propose the maximum override that will be approved by a bare majority—or, if they are attempting to do either of these things, the range of outcomes indicates that they are not very successful at predicting their voters' behavior!

"Purpose" of Override

If the voters place special priority on certain types of local spending, overrides designated for those purposes would have a higher rate of passage, other things equal. Among the FY1991 override proposals, those designated for school-related purposes (such as paying a town's share of regional school district expenses or removing asbestos from a school), public safety (police and fire), and public works (trash collection, roads, sewers, water) received about 4 percentage points more favorable votes than multi-purpose proposals or overrides des-

Table 4
Fraction of Voters in Favor of Individual Override Proposals in FY1991
Regression Estimates

Explanatory Variables	Estimated Coefficient (Standard Error)
Constant	.58** (.046)
Override Purpose is Schools, Public Safety or Public Works	.038** (.0099)
Override Purpose is Health and Welfare	.051** (.022)
Proposed Override Amount Relative to Levy Limit	-.19** (.082)
Other Override or Exclusion Proposals Share Ballot	-.059** (.015)
Second or Later Override Attempt for FY1991	.012 (.014)
Number of Years Since Community's First Override or Exclusion Attempt	-.011** (.0028)
Community Made No Override or Exclusion Attempts Before FY1991	-.039* (.021)
Per Capita Income (\$000) in 1988	.010** (.0013)
Residential Property Tax Rate, FY1990 (%)	-.095** (.026)
"Price" of Public Spending via Property Tax, FY1989	-.0012 (.0090)
New Growth, FY1983-90, as Percent of FY1990 Levy Limit	-.0021** (.00076)
Excess Capacity as a Percent of FY1990 Levy Limit	-.035** (.011)
Percentage Increase in Equalized Property Tax Rate, FY1983-90	.0011** (.00030)
Community Population Greater Than 5,000 in 1980	-.067** (.012)
City Government	-.095** (.028)
R-squared	.30
Adjusted R-squared	.28
Number of Observations	528

Note: 70 votes are excluded from the regression because of missing data. See Appendix Table A.5 for definitions of variables.

*Estimated coefficient is significantly different from zero with 90 percent confidence.

** Estimated coefficient is significantly different from zero with 95 percent confidence.

Source: Author's estimates based on data provided by Massachusetts Department of Revenue's Division of Local Services.

igned for general government, controlling for other differences.¹² Health and welfare proposals gained 5 percentage points over general government.

These "purpose" results should be interpreted with caution. Voters probably do place a high value on schools, public safety, and public works, and over half of the override questions were designated for these "basic" areas of local government spending. But from one point of view, the designation of an override's purpose is arbitrary in the sense that money is fungible once in the public coffers, and the voters do not directly approve the purposes to which funds raised within the Proposition 2½ limit are put. While community officials have generally used the "purpose" designation in a nonarbitrary way to indicate what projects will not be funded if the proposal fails, stories are often told about "purpose" designations chosen solely to maximize chances of the override passing, with the money freed up within the remainder of the budget being used to accomplish a different purpose.¹³ Furthermore, designated spending proposals in some communities may elicit efforts from specific lobbying groups that affect turnout and the composition of those who turn out, tilting the vote in favor of passage.

Override Size and Ballot Characteristics

Override proposals that will raise the levy limit by a large percentage are less likely to pass than small ones. Furthermore, the presence of other override proposals on the ballot reduces the favorable vote on any one override by 6 percentage points. It is worth noting, however, that when several overrides share a ballot, the probability of something passing is higher than when only one override is offered (as noted in the page 9 box on the "menu" approach). Previous attempts to raise the levy limit had a nonlinear relationship with the favorable vote in FY1991. The longer ago the first override or exclusion attempt was made, the less likely were voters to approve an individual override in FY1991, but having zero previous attempts also had a negative effect on the outcome.

Demand and "Need" Variables

As in the earlier analysis of override proposals across all communities, residents of higher-income communities were considerably more likely to vote in favor of individual FY1991 overrides. And high property tax rates, which reduce post-tax income, also reduce taxpayers' willingness to raise property taxes. But the percentage change in a community's property tax rate from FY1983 to FY1990 is positively associ-

ated with the yes vote: where tax rates fell the least, residents were most likely to approve an FY1991 override. (This could reflect reverse causation—communities most able or willing to pass overrides in previous years may have had the smallest declines in effective property tax rates and may have still been more able and willing to pass overrides for FY1991.) Furthermore, just as in the earlier community analysis, both new growth and excess capacity apparently reduce the need for overrides.

Unexplained Differences in Vote Outcome

Finally, even after controlling for all these economic determinants and ballot characteristics, override proposals were less likely to pass in large cities and towns (about half the communities had populations over 5,000 in 1980), and especially cities, than in smaller places with town government. Indeed, a large city with average resident characteristics and override "needs" would definitively vote down (31 percent in favor) a "typical" override, while an otherwise similar small town would almost pass it (47 percent). Given that the regression technique controls for a variety of other differences between large cities and small towns, this finding reinforces the notion that city voters have more difficulty with overrides. In addition to the consensus and trust explanations discussed earlier, this result may occur because the income and tax rate variables do not fully

Certain types of communities are much less likely to pass overrides than others, and they are precisely the places with which the state must concern itself—low-income, larger towns and cities with higher tax rates.

capture the dearth of resources that constrains the choices of bigger towns, and especially cities.

In sum, the determinants of both demand for local public services and the likely "need" for an override in a community had the expected effects on

the probability of passage for specific override proposals affecting the FY1991 levy limit. On the one hand, this suggests that the override process works well—voters' likely preferences are indeed reflected in the outcome. On the other hand, however, the findings confirm a fundamental problem with the override process.

Certain types of communities are much less likely to pass overrides than others, and they are precisely the places with which the state must concern itself—low-income, larger towns and cities with higher tax rates. While their voters can hardly be expected to want overrides (which would raise tax rates even higher), some of these communities are in need of additional revenues from some source. During the 1980s, the Commonwealth increased its aid to local governments, targeting some of the increment on these "needier" communities.¹⁴ But those aid funds are now scheduled for steady decline, and certainly cannot be counted on to offset the particular strictures the override process places on these communities' ability to raise revenue.

V. Conclusions

A majority of voters in many communities do appear to "get what they want" from the override process, given the constraints of Proposition 2½. Both the pattern of override attempts in FY1991 and the probability of passing individual override proposals reflect in a reasonably robust fashion the resident and community characteristics that relate to the demand for local public services and the need for an override (as distinct from other means) to meet that demand. But these relationships explain only a modest fraction of the intercommunity variation and leave open such questions as whether overrides that might pass are not proposed to the voters. And the analyses indicate that cities and/or larger towns systematically have fewer overrides proposed and a lower probability of passage (for those that do make it onto the ballot) than would otherwise be expected. Their voters are therefore less likely to be satisfied with outcomes than voters with similar characteristics in smaller places (unless some other unobserved difference systematically reduces voter desire for overrides in larger places).

What the Commonwealth's residents appear to have wanted (and obtained) in the 1980s was more modest growth in property taxes than in the prior decade. This was possible without significant service

disruptions and quality deterioration, in large part because the state increased its aid to localities. Some communities, however, raised their property tax levies quite substantially. Communities not proposing and not passing overrides generally had lower incomes and property values and higher tax rates than those passing overrides. Indeed, smaller towns ended the decade with higher service levels but not higher tax rates than bigger places. These patterns suggest that Proposition 2½ and its override process (even though combined with substantial growth in "equalizing" state aid to cities and towns in the 1980s) have not helped to undo the basic difficulty with property tax financing of local services—that disparities in tax bases translate fairly directly into disparities in tax rates and service levels. Just as in the absence of Proposition 2½ and its override process, the public sector outcomes in poorer communities are constrained by lack of local resources.

Over the next few years local aid is scheduled to decline, reducing the cushion that softened the impact of real declines in property taxes during the 1980s. As was the case in FY1990 and FY1991, these cuts will undoubtedly lead to increased pressure for overrides, and a greater number being proposed and passed, particularly as new growth has also slackened. For communities with the resources and political will to make up the losses by passing overrides, local service levels may be maintained, but more of the bill will be paid by local residents through the property tax. Even these communities, however, may find themselves with lower vote margins when the needed overrides involve much larger dollar amounts than in previous years.

But other communities, specifically those least able to raise sizable amounts of revenue through the property tax, will find it much more difficult to make up for the aid losses (and declines in new growth) through overrides. Their voters may feel unable to afford the tax increases required to maintain service levels. Also, given the importance of earlier tries in attempting and passing FY1991 overrides, other communities that have not needed to resort to overrides in the past may be at a disadvantage when they find themselves at their levy limits for the first time and in need of more revenues. Recognizing some of these potential difficulties, several proposals have been made to loosen Proposition 2½ (see the box) in order to minimize possible service disruptions and give local governments more flexibility to respond to the planned reductions in local aid.

Whether through more overrides or a looser

Proposals to Loosen Proposition 2½: Lessons from History

Several studies (notably the "Report of the Governor's Task Force on Local Finance" chaired by John Hamill) have suggested that the "automatic" annual increase in the levy limit reflect the inflation rate rather than being a constant 2.5 percent per year. If the levy limit automatically rose by the inflation rate, real service levels could be maintained without overrides (if other revenue sources were also growing at about the rate of inflation). But voters would retain a tight grip, through the override process, on any attempts to increase services or to respond to significant cuts in aid with a local tax increase. The calls to loosen Prop 2½ have gained urgency as the magnitude of aid cuts looms large. Even residents in favor of keeping local revenues growing slowly recognize the need for more short-term local flexibility to respond to large local aid losses.

The average annual inflation rate for state and local governments nationwide (the GNP price deflator for state-local government purchases) for the 1987-89 period was 4.5 percent. Thus, any communities passing overrides that represented an increase in the levy limit in excess of 2.0 percent (equals 4.5 minus 2.5) would still have needed to vote an override to obtain the same revenues. But communities passing smaller overrides could have increased their levies by that much without voting an increase in the levy limit if the levy limit had automatically risen by the inflation rate.

Of the 75 communities that passed overrides in FY1990, all but two enacted increases in the levy limit of more than 2.0 percent (to be added to the automatic 2.5 percent increase). Indeed, 48 voted levy limit increases of more than 5.0 percent. For FY1991, only 11 of the 95 communities passing overrides raised their levy limits less than 2.0 percent; and 65 raised them more than 5.0 percent. Thus it would appear that the major effect of loosening Prop 2½ in this way, if any, would be felt by communities not currently passing overrides.

The 296 communities that were taxing at 99 percent or more of their levy limits in FY1990 would be likely to increase their property tax revenues faster than 2.5 percent if Proposition 2½ were loosened; one-third had not passed an override or exclusion through FY1991. Whether all communities currently near their limits would raise taxes by the maximum amount (whatever local officials could "get away with" under the looser limit), is not the foregone conclusion that many taxpayers presumably fear. Until new growth and local aid began shrinking in the late 1980s, most communities were not so close to their levy limits (see Table A.1). Thus local officials might again exercise restraint beyond what Proposition 2½ requires, if the size of the aid cuts and slowdown in new growth did not overwhelm the "looser" limit.

Of course, if the override process worked perfectly, such a loosening would not be necessary, since overrides could handle the necessary adjustments to declining aid dollars. But the analysis in this paper suggests that the process may not serve all communities well, especially larger towns and cities. It is also worth noting that reductions in aid proposed for FY1992 amount to at least \$110 million and may go higher. To cover these aid losses with property tax revenues would require statewide property tax increases of more than 2 percent, with bigger increases in the communities most dependent on aid and facing the biggest cuts.

Because of the way the Administration has proposed making the cuts (as of April 1991), some communities' aid will rise, while others, notably the largest cities and towns, face sizable reductions. Replacing aid with property tax revenues would require a property tax increase of more than 3.5 percent, on average, in the largest communities (population over 50,000), or more than 6.5 percent if a projected \$75 million increase in "lottery" aid does not materialize.

Proposition 2½, the remaining years of the 1990s are likely to bring increases in property taxes in Massachusetts and a widening of the property tax gap between Massachusetts and other states that narrowed so noticeably in the 1980s. Even as average

property taxes rise, interlocal disparities in spending are likely to increase, unless the local aid distribution is changed to concentrate the shrinking resources on those places least able to raise revenues locally through the property tax.

Table A.1
Statewide Property Tax Trends

Fiscal Year	Property Tax Revenue	Levy Limit	Excess Capacity (Limit minus Levy)	Number of Communities Close to Levy Limit ^a	Ceiling (2.5% of Value)	Override Capacity ^b	Local Aid ^c	Total Local Revenues
Millions of Current Dollars, except Number of Communities								
1983	2,959	n.a.	n.a.	n.a.	n.a.	n.a.	1,726	5,807
1984	2,995	n.a.	n.a.	n.a.	n.a.	n.a.	1,860	6,012
1985	3,126	3,198	72	135	3,787	598	2,072	6,456
1986	3,309	3,394	84	143	4,621	1,242	2,245	6,950
1987	3,536	3,638	102	123	5,369	2,325	2,625	7,658
1988	3,805	3,902	97	167	7,050	3,193	2,836	8,269
1989	4,122	4,205	83	202	8,965	4,826	2,967	8,930
1990	4,465	4,502	38	296	10,592	6,184	2,745	9,339
Percentage Change from Previous Year								
1984	1.2	n.a.	n.a.	n.a.	n.a.	n.a.	7.8	3.5
1985	4.4	n.a.	n.a.	n.a.	n.a.	n.a.	11.4	7.4
1986	5.9	6.1	17.7	5.9	22.0	107.9	8.3	7.6
1987	6.9	7.2	20.8	-14.0	28.5	87.2	16.9	10.2
1988	7.6	7.2	-5.2	35.8	18.8	37.3	8.1	8.0
1989	8.3	7.8	-14.2	21.0	27.2	51.2	4.6	8.0
1990	8.3	7.1	-54.5	46.5	18.1	28.1	-7.5	4.6
1991 (est.) ^d	7.5	7.1	-32.4	1.7	-4.8	-12.7	-5.3	3.3

n.a. = not available.

^aTax levy equal to 99 percent or more of levy limit.

^bOverride capacity is defined as the ceiling minus the levy limit that would apply in the absence of capital and debt exclusions.

^cLocal aid includes direct aid from the state to cities, towns, and regional school districts.

^dEstimated changes for FY1991 based on data available for 272 communities.

Source: Massachusetts Department of Revenue, Division of Local Services, Municipal Data Bank, machine readable data files.

Table A.2
Override and Exclusion Attempts by Massachusetts Cities and Towns

Fiscal Year ^a	Number of Communities Attempting				Number of Communities Passing				Percentage of Communities Attempting That Passed at Least One ^b		Number of Communities Never Having Attempted		
	Overrides		Exclusions		Overrides		Exclusions		Override	Exclusion	Override	Exclusion	Either
	First Attempt	Total Attempts	First Attempt	Total Attempts	First Win	Total Wins	First Win	Total Wins					
1983	50	50	34	34	21	21	17	17	42	50	301	317	275
1984	30	47	31	38	9	16	27	30	34	79	271	286	229
1985	6	24	32	52	3	14	27	44	58	85	265	254	208
1986	5	23	18	48	4	13	16	40	57	83	260	236	197
1987	24	58	30	79	14	34	25	63	59	80	236	206	168
1988	14	63	25	99	14	41	28	86	65	87	222	181	143
1989	20	74	18	80	28	65	20	75	88	94	202	163	124
1990 ^c	31	87	13	71	40	80	14	66	92	93	171	150	106
1991	67	181	35	132	34	95	18	74	52	56	104	115	58

^a This table assumes that exclusion votes taken in a given calendar year (1985, for example) first affect the levy limit in the following fiscal year (1986).

^b Communities often vote on several override or exclusion proposals. The passage rates of individual proposals are considerably lower than those reported here, which indicate the fraction of communities voting on one or more proposals that passed at least one.

^c Unsuccessful override and exclusion attempts may have been underreported in FY1990.

Source: Massachusetts Department of Revenue, Division of Local Services, "A Report on Proposition 2½ Referenda Questions," May 1989, "Update: Proposition 2½ Referenda Questions FY90," May 1990, and "FY91 Referenda Question Summary," printout January 1991; and author's calculations.

Table A.3

Average Community Characteristics by Community Size

	Number of Communities	Increase in Levy FY1981–FY1990 (percent)	Percent of FY1990 Levy Limit Attributable to		Property Tax Rate, FY1990(%) ^a	Cost-Adjusted Per Capita Spending, FY1989(\$) ^b	Property Value Per Capita, FY1990(\$) ^c
			Overrides and Exclusions	New Growth			
All Cities and Towns	351	63.6	7.9	18.7	1.20	1,322	98,536
Population Size in 1980:							
Under 2,000	72	86.4	16.2	16.7	1.26	1,472	156,653
2,000–4,999	53	80.2	11.3	19.7	1.18	1,358	100,226
5,000–9,999	75	72.8	8.5	20.4	1.16	1,288	87,903
10,000–19,999	72	49.8	3.8	18.8	1.19	1,240	76,975
20,000–49,999	58	44.0	1.7	18.7	1.19	1,287	79,595
50,000 and over	21	12.9	0	16.9	1.30	1,206	59,217

^aEqualized tax rate.^bPer capita spending in FY1989 divided by cost index used in additional assistance aid formula; spending reflects all local aid, including regional school aid attributed to member communities, for consistency.^cEqualized property value in FY1990 divided by 1988 population.

Source: See Appendix Tables A.1 and A.2.

Table A.4

Override Patterns by Community Size

	Number of Communities	Excess Capacity as % of Levy Limit, FY1990	Percent of Communities Not Having Attempted Through FY1990		Percent of Communities Attempting in FY1991		Percent of Communities Attempting that Passed One or More in FY1991	
			Overrides	Exclusions	Overrides	Exclusions	Overrides	Exclusions
All Cities and Towns	351	1.0	48	43	52	38	52	56
Population Size in 1980:								
Under 2,000	72	2.4	21	42	63	49	67	71
2,000–4,999	53	.7	23	26	62	45	48	58
5,000–9,999	75	.4	40	30	55	47	51	51
10,000–19,999	72	.4	68	42	50	32	50	52
20,000–49,999	58	.9	78	60	36	24	38	29
50,000 and over	21	1.3	90	90	24	5	40	100

Source: See Appendix Tables A.1 and A.2.

Table A.5
Variable Definitions and Means

Variable	Definition	Average Value in	
		Attempt/ Pass Analysis (N = 306)	Favorable Vote Analysis (N = 528)
Favorable Vote Fraction	Ratio of yes votes to total votes for each override proposal	n.a.	.423
Override Attempted	Dummy = 1 if community attempted override for FY1991	.507	n.a.
Override Passed	Dummy = 1 if community passed override for FY1991	.26	n.a.
Per Capita Income, 1988	In thousands of dollars	14.8	14.8
Residential Property Tax Rate, FY1990	Tax rate on residential property, %	1.01	.908
"Price" of Public Spending via Property Tax, FY1989	Dollar cost to average single family homeowner of raising community property taxes \$1 per capita. Equals average single family tax bill divided by tax levy, multiplied by population	2.21	2.03
New Growth, FY1983-90, as % of FY1990 Levy Limit	Certified new growth FY1983-90 compounded at 2.5% annually to FY1990 divided by FY1990 levy limit, expressed as %	18.9	17.4
Excess Capacity as % of FY1990 Levy Limit	One hundred minus property tax levy as % of levy limit	.863	.179
Number of Override Attempts pre-FY1991	Number of override proposals put before community voters, 1983-90	1.9	3.50
Population Greater than 5,000 in 1980	Dummy = 1 if community population exceeded 5,000 in 1980	.654	.619
City Government	Dummy = 1 if community has city form of government	.118	.038
Override Purpose Is Schools, Public Safety, or Public Works	Dummy = 1 if declared purpose is one of these "basic" local services	n.a.	.525
Override Purpose Is Health or Welfare	Dummy = 1 if declared purpose relates to health and welfare	n.a.	.055
Proposed Override Amount Relative to Levy Limit	Dollar amount of override divided by FY1990 levy limit	n.a.	.0467
Other Override or Exclusion Proposals Share Ballot	Dummy = 1 if override ballot contains additional override or exclusion proposals	n.a.	.848
Second or Later Override Attempt for FY1991	Dummy = 1 if this override is not on first FY1991 ballot	n.a.	.176
Number of Years since Community's First Override or Exclusion Attempt	1991 minus fiscal year of first attempt to raise levy limit	n.a.	4.89
Community Made No Override or Exclusion Attempts before FY1991	Dummy = 1 if no attempts made to raise levy limit before FY1991	n.a.	.309
Increase in Equalized Property Tax Rate, FY1983-90	Expressed as %	n.a.	-34.2

n.a. = not available.

¹ Census of Governments data; 1980s refers to fiscal years 1980 through 1989.

² These data, which allow comparison with other states, are published by the U.S. Bureau of Census in the Census of Governments and are not available after FY1989. The Massachusetts Department of Revenue's Division of Local Services provides the more current and disaggregated information used in the analysis that follows.

³ Researchers Romer and Rosenthal (1978, 1982) have found that a budget-maximizing agenda-setter can obtain majority voter approval for higher spending than voters actually prefer when the fallback option (what occurs if the referendum does not pass) is very unattractive. The agenda-setter chooses the highest spending package that can gain approval compared with the fallback, and any vote outcome that is not a bare majority passage indicates that the agenda-setter has made a mistake. But given the repeated and incremental nature of many communities' override attempts and passes from year to year, this budget-maximizing strategic behavior is not likely to be key in Massachusetts cities and towns.

⁴ Town Meetings are the legislative arm of town government in Massachusetts, while Selectmen are the administrative arm. Town Meetings in some communities are open to all residents and hence quite directly reflect the views of a majority of those who attend. Residents of other (usually larger) towns elect representatives to Town Meeting. Of the 351 communities in Massachusetts, 39 are cities, 46 have representative town meetings, 263 have open town meetings and the remainder are towns with other legislative arms, such as a Town Council.

⁵ Ladd and Wilson (1981) found that 65 percent of respondents to their survey regarding possible effects of Proposition 2½ expected it to "make local governments more efficient," and 85 percent of those voting in favor of Proposition 2½ had those expectations.

⁶ One observer of the national political scene argues that "government by initiative" in California and elsewhere reflects exactly this distrust between voters and local officials—voters may not be against public spending, but rather are opposed to letting their elected representatives decide how public funds should be spent (Schneider 1991).

⁷ This explanation was suggested by Peter Fortune. It is certainly the case that the owners of *new* residential property in most Massachusetts communities during and soon after the 1984–87 real estate boom faced much higher housing costs than long-standing residents. Communities with considerable new

growth, if it were residential, would have a higher fraction of such potential voters, more inclined to vote against any additional increase in costs, such as property taxes.

⁸ Andrew Reschovsky suggested this explanation based on the diversity of population in bigger communities.

⁹ For example, the group of communities that have never voted on an override or exclusion includes subsets with high and low excess capacities, while excess capacity is less spread out within the groups of communities that attempted to pass overrides; such differences in range or dispersion make interpretation of group averages difficult. Furthermore, the FY1990 excess capacity figures shown in Table 2, for example, are actually the consequence of votes (or decisions not to vote) during the 1980s as well as the recent counterpart of measures that served as inputs into the officials' and voters' decisions during the decade.

¹⁰ In addition to these conceptual reasons for analyzing override and exclusion referenda separately, several practical considerations arose: (1) exclusion votes are recorded according to the calendar year in which they occur because the fiscal year in which they will have their first effect may not be known at the time of the vote; (2) the size of the impact of an exclusion proposal on the levy limit is not known at the time of the vote because it depends on the actual interest rate and amount borrowed (or spent in the case of capital expenditure exclusions).

¹¹ This calculation uses the range from about one standard deviation below the mean to about one standard deviation above; community income per capita ranged from about \$8,700 to \$41,500 in the 306 cities and towns included in the regression.

¹² These three categories of spending—education, public works and public safety—were combined in the regression because earlier versions indicated very similar coefficients for the three purpose variables when included separately.

¹³ The only requirement is that "the appropriation for the purpose of the override is at least the amount stated in the question"; such earmarking applies only in the first year. See Massachusetts Department of Revenue, Division of Local Services, "Proposition 2½ Referenda Questions: Requirements and Procedures."

¹⁴ See Bradbury and Browne (1990). Interestingly, a measure of state aid funds per capita, which might be expected to have effects similar to private income in raising the probability of passage, had virtually no effect on vote outcomes in an analysis not reported here.

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