OVERRIDE STUDY COMMITTEE
SUB-COMMITTEE ON FISCAL POLICIES

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The following report summarizes the findings of the Override Study Committee, Sub-Committee on Fiscal Policies. It was accepted by a unanimous vote of the Sub-Committee on January 29, 2014.

EXECUTIVE SUMMARY

Recognizing that the overall fiscal policies of the Town were reviewed by a dedicated committee in 2011, we focused our efforts on policy areas that were most directly relevant to the Override question. We reviewed the other policies at a level of reasonableness and do not see any issues that would merit a substantial reexamination of those policies.

- For 18 years the Town-School Partnership Agreement has been a successful framework for the allocation of financial resources between town and school spending priorities. The Fiscal Policies sub-committee of the OSC supports the Town-School Partnership Agreement as currently written.

- The Town School Partnership works well in part because it is not applied exclusively on a formulaic basis. The fifty-fifty split provides a starting point from which both sides then work together to reach a solution that meets all of Brookline's needs. The Town-School Partnership Agreement as written does not capture the fact that a one-time permanent increase in enrollment not only raises costs that year, but also leads to further increases in subsequent years due to steps-and-lanes salary growth. Discussions of the allocation of revenues between Town and School departments must continue to reflect this reality. We do not recommend any change at this point, but the parties should remain cognizant that the success is due to the goodwill of the parties.

- Over the last eight years, municipal spending has shifted towards schools by notably more than would have been the case had the Agreement been applied formulaically. We do not take a position here on whether the shift has been fully commensurate with increased school enrollments.

- The cost of recent and projected school enrollment growth has not been adequately captured in current budget projections. Work to develop strategies on how to satisfy the Town's revenue requirements will not be conclusive until such time as a better understanding of the true cost of enrollment growth is developed.

- The Town should utilize the opportunity created by the rate differential between taxable and tax-exempt bonds of equivalent term and risk, and between tax-exempt bonds and the higher imputed return on OPEB appropriations.

- The Town of Brookline should increase the Debt-Financed portion of the CIP, by financing the “pay-as-you-go” portion of the CIP rather than funding it from tax revenues. It is estimated that $3.0 million of capital expenditures annually will have a useful life of 10 years or more, and therefore be eligible for financing. For items bonded under this program, the initial capital expenditure, not the debt service, should be counted toward the CIP target of 7.5% of revenues.

- The funds provided by these additional borrowings (approximately $3.0 million annually) should be used to make additional payments to OPEB. The debt service associated with these funds will be an off-set against subsequent years' OPEB contributions. The goal of this funding plan is to take advantage of the difference in the cost of funds identified above, and to allow the Town to reach the ARC in the year this plan is implemented, instead of 2022.

- The unfunded OPEB liability is currently estimated at $183 million.

- One time revenue sources, such as the sale of taxi medallions, should be used to accelerate OPEB funding.

- A level payment schedule should be utilized for debt exclusion bonds and be considered for other large size borrowings.

TOWN-SCHOOL PARTNERSHIP

The Town-School Partnership (TSP) was signed by the Town Administrator and School Superintendent in 1995 and endorsed by the Board of Selectmen (BOS) and School Committee (SC). The agreement serves to:

1. increase the predictability of revenues for both parties, thereby reducing the need to notice staff of potential layoffs while awaiting the outcome of Town Meeting,

2. make each side of town government responsible for the costs under its control, and

3. share the burden of cost growth that is viewed as largely outside the control of either the BOS or SC.

All parties report that the agreement has worked well. There have been no major disagreements between the Town Administrator and Superintendent or the BOS and SC, and no major floor fights at Town Meeting.

The agreement can most easily be understood as dividing the budget into four categories

1. items that are outside the budget (revolving and enterprise funds)

2. items whose costs are shared because they are viewed as largely outside the control of the parties (examples include non-appropriated expenses, special education tuition)

3. items that are the responsibility of the Town regardless of where they are officially included (e.g. benefits for Town employees)

4. items that are the responsibility of the School Department regardless of where they are officially budgeted (e.g. benefits for School Department employees, school building maintenance

There are minor inconsistencies in the application of the agreement. For example, snow removal at schools is treated as a Town responsibility. Costs of trash collection are shared.

More importantly, revenue allocations are made prospectively and not formally adjusted retrospectively. If, for example, the School Department projects $750,000 in special education tuition growth but experiences only $400,000 of growth, there is no reallocation of the excess $175,000 in revenue (one half of the difference between $750,000 and $400,000) assigned to the School Department. Historically, this has worked to the advantage of the School Department.

After items 1 and 2 above have been addressed, the remaining revenues are split 50/50 although the share of the remaining items for which the School Department is responsible is somewhat higher than 50%. This misallocation is modest, on the order of $100,000.

The treatment of special education in the partnership formula is potentially problematic. Under the agreement, the cost of out-of-district placements is shared 50/50 but the cost of in-district special education is shared 75/25. The School Department would therefore lose money by replacing an out-of-district placement with a less expensive in-house program if the cost reduction is less than one-third. The department has not exploited this opportunity, instead consistently trying to reduce the total cost whenever both possible and appropriate.

We do not recommend modification of the agreement. The nature and magnitude of the problems are such that the parties have been able to address them with sensible adjustments after the application of the formula.

The most vexing problem is the treatment of enrollment growth. In the early days of the agreement, when Brookline was facing rapid enrollment growth, the allocation per anticipated enrollment increase included an allowance of roughly the salary cost of a newly hired teacher divided by 22 (the average class size). There was no allowance for benefits or for the fact that 22 students require more than one FTE teacher. On the other hand, enrollment growth ended shortly after the implementation of the agreement, but the School Department was not charged for the enrollment decline.

The current, much more dramatic, enrollment increases have required a more thoughtful approach to the incorporation of these increases into the revenue allocation formula. At the elementary level, for each new classroom the current formula allocates $58,000 (the average salary of a newly hired teacher) multiplied by 1.3 (to account for teachers other than the home-room teacher) multiplied by 1.25 (to account for fringe benefits). At the high school level, the formula is new students divided by 14.2 (the pupil/teacher ratio) multiplied by 1.25. Assuming an average elementary class size of 22, this represents an allocation of $4,284 per student at the elementary level and $5,105 at the high school.

Thus the formula accounts for the *initial cost associated with classroom teachers only.* Because all out-of-district special education and half of in-district special education costs are shared through other elements of the agreement, *any increase in these costs, whether initial or later*, is implicitly covered.

There are two important points:

1. The agreement makes no allowance for additional costs associated with enrollment growth such as increased materials, computers, guidance, custodial services, supervision or half of in-district special education. A review of economies of scale in education, suggests that Brookline is well past the size at which marginal cost is below average cost.[1] A consensus discussion within the Schools Sub-Committee settled on 70%-100% of average cost as a plausible range, within participants finding 80%-90% most plausible. The average cost per pupil as measured by the part of the budget for which the School Department is responsible (e.g. excluding out-of-district and half of in-district special education and excluding capital costs) is over $12,000. Clearly some of these additional costs will not be experienced immediately. Additional energy and cleaning costs will presumably be felt only or primarily after any expansion of school buildings takes place. But other expenses such as rental of additional space are immediate and some such as an increased students/guidance counselor ratio are disguised cuts.

2. Even those costs included in the agreement grow after the first year. The average starting salary is $58,000; the average teacher salary is $80,000. Eventually the cadre of additional teachers hired to handle the increased enrollment will resemble the average Brookline teacher population. Thus even if we concluded

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1 Matthew Andrews, William Duncombe, John Yinger, "Revisiting economies of size in American education: are we any closer to a consensus?," *Economics of Education Review*, Volume 21, Issue 3, June 2002, Pages 245262.

that enrollment growth necessitated only an increased number of teachers, past enrollment growth will put growing pressure on the budget long after the growth has stopped.

It is difficult to estimate the effect of past enrollment growth on the growth of the current budget. Therefore, we do not recommend a change to the Partnership Agreement. Instead, we provide a very broad range of estimates which we hope will elucidate the lagged effects of enrollment growth for Brookline's political and administrative leadership and its citizens.

We first consider point 2 above. Teacher salaries in Brookline, as elsewhere in Massachusetts, are determined almost entirely by experience and education. The typical teacher hired in Brookline has a master's degree and two prior years of experience. Such a teacher receives an annual salary increase of approximately $2,625 per year, over and above any cost of living increase, until s/he has accumulated fourteen years of experience. Thus, there will be a continued increasing cost associated with the hiring of this additional teacher for eleven years if s/he remains in the system. The $2,625 figure is too high because some teachers leave the system and are replaced, on average, with teachers with only two years prior experience. It is too low because teachers get additional increases for further education qualifications and many do. In addition, some teachers will have more or less than the average two years prior experience and will reach the maximum salary before or after eleven years. As a rough estimate, we use the $2,625 annual increase and assume that it applies to all elementary enrollment growth since 2006. The annual cost per additional student prior enrollment growth is ($2625*1.3*1.25/22) = $194. With actual enrollment growth of 1,236 since 2006, this suggests that *past enrollment growth will increase School Department costs in FY2015 by a minimum of $240,000 in addition to any costs associated with new enrollment growth.*

The estimate above is extremely conservative. Instead, we might assume that Brookline will eventually have to pay in-district special education costs proportional to the student population (only 50% of which are the responsibility of the schools), increase the purchase of books and supplies, etc. so that the cost to the School Department of each additional student will rise to its average cost. Even assuming that the adjustment period is twelve years, the annual increase in School Department costs due to past enrollment growth would be on the order of $825,000 in FY2015.

As discussed above and confirmed by the wide range of possible estimates, we do not recommend a formulaic approach to addressing the cost of past enrollment growth. Instead, we hope that this analysis informs the discussions of Brookline's political and administrative leadership and its citizens.

The table below shows the budget allocation from the perspective of the Partnership Agreement for 2006 (prior to the current enrollment surge), 2010 and 2014.

Budget Allocations under the Town-School Partnership Agreement (in $ millions)			
	2006	2010	2014

Total Budget	192.9	228.5	257.4
Excluded from General Fund	23.8	27.0	31.0
Shared Expenses (except enrollment)	40.7	48.2	45.8
Town Responsibility	66.4	75.7	86.2
School Responsibility	62.0	77.6	94.4

In 2006 after excluding enterprise and similar fund and items for which the parties share the expenses, the School Department received 48.3% of the remaining revenues. In 2014 this stood at 52.3%. Some of the growth of the School Responsibility (SR) budget reflects the decision of the voters in the 2008 override to increase school services ($1.8 million to extend the school day, $400,000 for elementary foreign language)

Between 2006 and 2014, the Town Responsibility (TR) budget grew by an average of 3.3% per year. If we impute the $2.2 million added to the SR budget in FY09 as $2.0 million in FY06 and allow the SR budget to rise at the same rate as the TR budget, we get an FY14 SR budget of $83.1, $11.3 million less than the actual allocation. Even a very generous interpretation of the allowance for enrollment growth can only account for about half of the difference. This fact, alone, should allay any concerns that the Town-School Partnership Agreement is applied formulaically.

It is much more difficult to determine at this level of analysis whether the allocation has been sufficient to account for enrollment growth. As discussed earlier, we expect that eventually enrollment growth raises cost proportionally. However, in the short run the increased costs are less than proportional. The additional allocation to the SR budget lies between the roughly $5 million first-year cost of the enrollment growth and the roughly $18 million required to accommodate growth to date at average cost per pupil.

COORDINATING PENSIONS, OPEBS AND DEBT SERVICE/CAPITAL POLICIES

It is important for Brookline to focus on and manage its total liabilities, rather than focusing on each individual element of those liabilities separately, for such items as pensions, retiree health insurance and debt. In many ways it does not matter whether in 20 years Brookline must pay $1 million to service a long-term bond or pay for some retirees' health insurance. It is the total payment that matters. The major difference among these liabilities is their predictability. Bond payments are largely predictable despite the possibility of recall. The future cost of health insurance is difficult to predict, both because inflation is unknown and the political economy of health insurance may change. Brookline has only limited ability to determine the size of its annual pension payments. The annual appropriation is determined by a committee, working under rules established by the state. The view that we are largely interested in total indebtedness and the timing of payments governs our recommendation that Town policies regarding pension and OPEB liabilities be coordinated with CIP and debt service policies.

Except in unusual circumstance, Brookline borrows in the tax-free market. The pension and OPEB funds are, however, invested in the taxable market. Since the interest rate in the taxable market is higher than the rate in the tax-free market for comparably risky bonds, this provides us with a near-arbitrage opportunity. We can increase borrowing for capital projects and use the freed-up funds to accelerate investment in the OPEB and/or pension funds.[2] In practice, our limited control over the pension appropriation makes the OPEB fund the appropriate avenue for this strategy.

Fiscal impact of increasing bonding and OPEB contributions

For purposes of illustration, below we assume that Brookline has $3 million of projects currently funded on a pay-as-you-go basis that could be bonded for ten years. Our example assumes that we pay 5% interest and purchase bonds paying 6%. We assume that the additional debt service would be financed by reducing planned payments to the OPEB fund.

If we adopted this policy for ten years, in 2024, the balance in the OPEB fund would be $17.7 million higher than under the current policy. However, if we then abandoned the policy, the need to pay the remaining debt service would decrease contributions to the OPEB fund. In 2034, when all the extra bonds would have been repaid, the net gain would be $3.1 million. Obviously, a permanent policy change would have a much more substantial impact.

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An arbitrage opportunity is one in which there is no risk of a loss and at least some possibility of a gain. Since there is some risk associated with selling Brookline bonds and buying a portfolio of AAA corporate bonds, this is not literally an arbitrage opportunity.

Since it currently chooses to invest in riskier assets, it is unlikely that the OPEB committee would choose to invest the additional contributions in AAA corporate bonds. Assuming a nominal return on investment of 7.5%, the $17.7 million figure would rise to $19.6 million and the increase in the fund balance in 2034 would be $9.1 million.

Required policy changes

1) Adopt a formal policy governing annual appropriations to the OPEB fund.
2) Revise our current capital policies so that the 1.5% provision for pay as you go capital is replaced by 1.5% for pay as you go capital *plus* contributions to the OPEB fund in excess of those required under the OPEB policy.
3) Include in the OPEB policy a provision that reduces the required OPEB provision by imputed debt service on prior years' excess contributions.
4) Revise our current capital policies so that imputed debt service on prior years' excess contributions is excluded from the 6% limit on debt service.

	FY15	FY16	FY17	FY18	FY19	TOTAL
OPEB Contribution under current policy (A)	$3,311,860.00	3,596,860	3,892,829	4,208,577	4,509,809	19,519,935
Additional bonding (B)	3,000,000	3,000,000	3,000,000	3,000,000	3,000,000	15,000,000
Debt service on additional bonding (5%, 10 Years) (C)		-450,000	-885,000	-1,305,000	-1,710,000	-4,350,000
Required OPEB contribution	3,311,860	3,146,860	3,007,829	2,903,577	2,799,809	15,169,935
Total OPEB contribution (A+B-C)	6,311,860	6,146,860	6,007,829	5,903,577	5,799,809	30,169,935
Increased fund balance - current policy	3,311,860	7,107,432	11,426,706	16,320,886	21,809,948	
Increased fund balance - proposed policy	6,311,860	12,837,432	19,615,506	26,696,014	34,097,584	

Assumes 6% return on OPEB investment

It is important to recognize that adopting these policies would not change Brookline's total liabilities but would increase bonding while reducing under-funding of OPEBs. Our discussions with town staff lead us to conclude that our level of debt even with anticipated increases for major school and other projects is relatively low and that the increased bonding envisaged under this policy would not threaten our Aaa rating.

Finally, we note that while the goal of this policy is to take advantage of the gap between the return on pre- and post-tax investments, it appears likely to allow Brookline to reach the Actuarially Required Contribution (ARC) immediately rather than in the six to eight years currently anticipated. Subject to the caveat that we are awaiting an updated actuarial report, our staff believe that a $3 million increase in our contribution would allow us to "hit the ARC" in 2015. In subsequent years, the additional contribution from the policy will be reduced by the debt service on the increased bonding. In principle the policy could lower the Town's total annual contribution to the OPEB fund and therefore reduce the contribution below the ARC. In practice, if inflation raises the amount that can be bonded each year by even a modest amount, this will not happen.

Investment of taxi medallion revenues and similar windfalls

Funds raised through episodic events such as the sale of taxi medallions (as contrasted with recurring events such as the collection of property taxes) should be invested rather than used to address current operating needs. There are three strong contenders for such investments: capital projects, pensions and OPEBs. As discussed above, there is a sense in which we should concern ourselves first and foremost with the sum of Brookline's liabilities and only secondarily with their division among bonds, pension liabilities and other liabilities. Therefore, to some extent, the choice among the potential ways of reducing liabilities is secondary and the commitment to using such funds to limit liabilities is primary.

There are plausible arguments for each way of reducing liabilities:

> *Bonding:* Using, for example, taxi medallion revenues, to pay for part of the Devotion renovation would relieve some of the pressure on the capital budget and would reduce the magnitude of any debt exclusion. It appears unlikely that devoting these revenues to school renovation projects would make it possible to avoid asking the voters to approve a debt exclusion. Therefore, we conclude that reducing bonding should not be the primary use for episodic funds.
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> *Pensions:* By paying additional monies into the pension liability fund, we can reduce payments, shorten the time to full funding or adjust the assumptions about the return on investments. However, because the fund is administered by an independent committee, the Town cannot fully determine which of these options is followed.
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> *OPEBS:* The advantages of paying additional monies into the OPEB liability fund are similar to those outlined under pensions (above). OPEB *contributions*,

however, are entirely under the control of Town government. This gives us considerably more flexibility. If, for example, poor investment performance led to an increase in the required pension liability, the Town could choose to use the one-time contribution to the OPEBs fund to justify reducing the OPEB contribution and offset some of the increase in the required pension contribution. The Town would also have the option of reducing the OPEB contribution to relieve pressure on the operating budget. For example, if $10 million of taxi medallion revenues were contributed to the OPEB account, the Town could decide to reduce the annual OPEB contribution by 2 percent of $10 million or $200,000. Under current assumptions the value of the initial $10 million would continue to grow in real terms, but the one-time revenues would, in effect, provide *permanent* support for the operating budget.

The sub-committee recommends that due to the Town’s greater control over OPEB contributions, the default allocation of episodic funds should be to the OPEB liability fund.

Debt service policies

Historically, Massachusetts communities were required to use "level principal" debt service. There was an exception that allowed for the use of level debt service for bonds authorized through a debt exclusion. Brookline used level debt service for the bonds authorized by both the Lincoln and High School debt exclusions. Although the law was recently changed to permit the use of level debt service for most debt, unlike many other communities, Brookline has not yet taken advantage of this option.

For bonds of identical principal, term, amortization period, and interest rate, a level payment debt service schedule has the benefit of lower initial payments as compared to a bond utilizing a level principal schedule. This lower initial payment provides the Town of Brookline a number of options. The lower cash flow requirement lessens the impact on the Town's operating budget in the early years of a bond. Though total payments under a level payment debt service schedule are larger than under a level principal plan, the higher payments occur in the future (after year 10 in the example below) meaning the debt is repaid with “cheaper” future dollars ,and that both inflation and natural growth in the town's revenue base will lessen the future impact on the Town's budget. Alternatively, for a given payment amount, a level debt service payment permits the Town to borrow more money than under the level principal repayment plan.

The following comparison is for a $54 million bond, with a 25 year term and amortization period at 5% interest.

	LEVEL PRINCIPAL			LEVEL DEBT			
	Principal	Interest	Total	Principal	Interest	Total	Variance (Level Princ - Level Debt)
Yr 1	$2,160,000	$2,700,000	$4,860,000	$1,131,433	$2,700,000	$3,831,433	$1,028,567
Yr 2	$2,160,000	$2,592,000	$4,752,000	$1,188,004	$2,643,428	$3,831,433	$920,567
Yr 3	$2,160,000	$2,484,000	$4,644,000	$1,247,405	$2,584,028	$3,831,433	$812,567
Yr 4	$2,160,000	$2,376,000	$4,536,000	$1,309,775	$2,521,658	$3,831,433	$704,567
Yr 5	$2,160,000	$2,268,000	$4,428,000	$1,375,264	$2,456,169	$3,831,433	$596,567
Yr 6	$2,160,000	$2,160,000	$4,320,000	$1,444,027	$2,387,406	$3,831,433	$488,567
Yr 7	$2,160,000	$2,052,000	$4,212,000	$1,516,228	$2,315,205	$3,831,433	$380,567
Yr 8	$2,160,000	$1,944,000	$4,104,000	$1,592,039	$2,239,393	$3,831,433	$272,567
Yr 9	$2,160,000	$1,836,000	$3,996,000	$1,671,641	$2,159,791	$3,831,433	$164,567
Yr 10	$2,160,000	$1,728,000	$3,888,000	$1,755,223	$2,076,209	$3,831,433	$56,567
Yr 11	$2,160,000	$1,620,000	$3,780,000	$1,842,985	$1,988,448	$3,831,433	($51,433)
Yr 12	$2,160,000	$1,512,000	$3,672,000	$1,935,134	$1,896,299	$3,831,433	($159,433)
Yr 13	$2,160,000	$1,404,000	$3,564,000	$2,031,891	$1,799,542	$3,831,433	($267,433)
Yr 14	$2,160,000	$1,296,000	$3,456,000	$2,133,485	$1,697,948	$3,831,433	($375,433)
Yr 15	$2,160,000	$1,188,000	$3,348,000	$2,240,159	$1,591,273	$3,831,433	($483,433)
Yr 16	$2,160,000	$1,080,000	$3,240,000	$2,352,167	$1,479,265	$3,831,433	($591,433)
Yr 17	$2,160,000	$972,000	$3,132,000	$2,469,776	$1,361,657	$3,831,433	($699,433)
Yr 18	$2,160,000	$864,000	$3,024,000	$2,593,264	$1,238,168	$3,831,433	($807,433)
Yr 19	$2,160,000	$756,000	$2,916,000	$2,722,928	$1,108,505	$3,831,433	($915,433)
Yr 20	$2,160,000	$648,000	$2,808,000	$2,859,074	$972,359	$3,831,433	($1,023,433)
Yr 21	$2,160,000	$540,000	$2,700,000	$3,002,028	$829,405	$3,831,433	($1,131,433)
Yr 22	$2,160,000	$432,000	$2,592,000	$3,152,129	$679,304	$3,831,433	($1,239,433)
Yr 23	$2,160,000	$324,000	$2,484,000	$3,309,736	$521,697	$3,831,433	($1,347,433)
Yr 24	$2,160,000	$216,000	$2,376,000	$3,475,222	$356,210	$3,831,433	($1,455,433)
Yr 25	$2,160,000	$108,000	$2,268,000	$3,648,983	$182,449	$3,831,433	($1,563,433)
TOTAL	**$54,000,000**	**$35,100,000**	$89,100,000	**$54,000,000**	**$41,785,817**	$95,785,817	($6,685,817)

The committee recommends level debt service payment schedules be continued for debt exclusions, and be strongly considered for other future large size borrowings.