APPENDIX D: ANALYSIS OF MINUTEMAN'S FY19 BUDGET

A. Minuteman Operating Cost Structure

The FY19 budget is the most up-to-date picture of Minuteman's operating costs. Using the DESE cost classification scheme and putting aside for now Minuteman's capital costs (identified by the cost codes in the 8000 series), the $18.5 million operating budget breaks down as follows:

1000 ADMINISTRATION	$ 1,439,784	9%	
2000 INSTRUCTION	9,821,058	59%	
3000 SERVICES (except Transportation)	609,223	3%	
4000 OPERATIONS AND MAINTENANCE	1,795,723	10%	
5*** BENEFITS	2,966,097	16%	
5*** LEASES AND FIXED COSTS	28,600	0%	
6000 COMMUNITY SERVICE	100,000	1%	
9000 TUITION PAYMENTS	20,000	0%	
SUB-TOTAL BASIC OPERATIONS	$ 16,780,486	91%	*
3300 TRANSPORTATION	$ 1,333,132	7%	*
7000 ASSET ACQUISITION	$ 410,360	2%	*
TOTAL OPERATING COSTS	$ 18,523,978	100%	**

Note that instruction (predominantly staff salaries) and benefits make up 75% of the operating costs.

B. Minuteman Capital Costs

There are three components of the capital costs in the FY19 budget: (a) the "ESCO" leases entered into several years ago, and all 16 of the communities that were district members up to 2017 are responsible for these expenses; (b) the debt issued to pay for the feasibility study, and again, all 16 communities are responsible for this; and (c) the debt service on the building project debt which is assessed to the 9 communities that voted to support it.

ESCO LEASES	$ 492,757	*
FEASIBILITY STUDY NOTE	86,800	*
BUILDING PROJECT DEBT SERVICE	2,056,606	*
TOTAL CAPITAL COSTS	$ 2,636,163	**

The building project debt service is almost entirely interest payment, and the project is not yet fully funded. When the building is complete, the annual debt service will be about $5 million.

C. Minuteman Non-Assessment Revenues

To fund its operations, Minuteman receives two types of revenues. The first includes grants, primarily from the state in the form of "chapter 70" aid and "chapter 71" transportation reimbursements. The second includes tuition payments by non-member communities. In addition, Minuteman has financial resources it can allocate to the budget, primarily from the "certified E&D account"; operating surpluses from past years are credited to this account.

In FY19, these non-assessment revenues total $7,340,519.

GRANTS FROM THE STATE	
CHAPTER 70 AID	$ 2,081,683
CHAPTER 71 TRANSPORTATION REIMBURSEMENT	880,412
SUB-TOTAL STATE GRANTS	$ 2,962,095 *
TUITION REVENUE	
PRIOR YEAR	$ 3,438,424
CURRENT YEAR	400,000
SUB-TOTAL TUITION	$ 3,838,424 *
DRAW FROM E&D ACCOUNT	$ 540,000 *
TOTAL NON-ASSESSMENT REVENUE	$ 7,340,519 **

D. Minuteman Assessment Revenue

Each year's budget must be balanced, so the total amount to be assessed from the member communities is the difference between the budgeted expenses and the budgeted non-assessment revenue.

There are six different schemes for allocating assessments among communities, each pertaining to different parts of the budget:

(1) "Foundation Budget": this uses the foundation budget calculations for each of the 10 current member communities and the current year October enrollment numbers. The use of foundation "minimum contribution" calculations adjusts the assessment allocations so that wealthier communities pay more than under a straight enrollment pro-rata scheme. The total amount collected under this scheme is limited by the calculation of a "state required minimum assessment" for each community.

(2) "New Agreement pro-rata": this uses the four year average of the October enrollment numbers for each of the 10 current members, and allocates assessments pro-rata on these enrollment numbers. This is the scheme used for the balance of all required assessment not collected by the five other schemes. The amounts to fund Transportation expenses (item 3300, net of chapter 71 state aid) are shown separately from the other residual assessments under this scheme.

(3) "New Agreement Capital": this also uses the four year average of the October enrollments for the 10 members, but also adjusts the allocation by relative income and property values for the communities, as well as assigning 1% of the costs to each member community regardless of enrollment or wealth. This scheme applies to budgeted expenses included in the "7000" series, such as asset acquisitions and payments into the stabilization fund.

(4) "Old Agreement Capital": this extends to all 16 communities that were members as of September 2016, and it assigns costs pro-rata based on current year enrollment, with the provision that communities with fewer than 5 students enrolled are assessed as if they had 5 students. This scheme applies only to the ESCO lease payments and the remaining payments on the feasibility note.

(5) "New Agreement Debt Service": this uses the same scheme as (3), the "New Agreement Capital", except Belmont is exempted from debt service assessments through FY 2020 pertaining to the new

building project.

(6) “Choice Adjustment”: these are small assessments for Bolton and Lancaster.

For FY19, the totals to be assessed under the six schemes (and the relevant scheme #) are:

FOUNDATION BUDGET	$ 4,825,148	(1)
CHOICE ADJUSTMENT	24,163	(6)
NEW AGREEMENT PRO-RATA		
Transportation	452,721	(2)
All Other Expenses	5,471,067	(2)
NEW AGREEMENT CAPITAL	410,360	(3)
OLD AGREEMENT CAPITAL	579,557	(4)
NEW AGREEMENT DEBT SERVICE	2,056,606	(5)
TOTAL ASSESSMENTS	$ 13,819,622	

E. FY19 Budget Recap

REVENUE	
NON-ASSESSMENT REVENUE	$ 7,340,519
ASSESSMENTS	13,819,622
	============
	$ 21,160,141
EXPENSES	
TOTAL OPERATING COSTS	$ 18,523,978
TOTAL CAPITAL COSTS	2,636,163
	============
	$ 21,160,141

F. Belmont’s Assessment

Here are Belmont’s assessment percentages under the five main assessment schemes:

(1) Foundation Budget: Belmont has 22 students enrolled out of a total member enrollment of 341, or 6.45% based just on enrollment. However, Belmont is slightly above average in terms of minimum foundation effort, and the actual Foundation Budget assessment percentage is 6.55%.

(2) New Agreement pro-rata: Belmont’s four year average enrollment is 26.5 out of a total of 334.875, or 7.84%.

(3) New Agreement Capital: Based on the same four year average numbers as in (2), and then adjusted for wealth and a fixed 1% charge, the final New Agreement Capital percentage for Belmont is 8.27%.

(4) Old Agreement Capital: Belmont’s share here is based on 22 students this year divided by a denominator of 394.5, based on enrollment from 16 communities (subject to a floor of 5 per community) — a percentage of 5.58%.

(5) New Agreement Debt Service: Belmont is exempt from this charge — 0%.

Putting it together:

FOUNDATION BUDGET	$ 4,825,148	*	6.55%	=	$ 316,175
CHOICE ADJUSTMENT	24,163	*	0%	=	0
NEW AGREEMENT PRO-RATA					
Transportation	452,721	*	7.84%	=	35,488
All Other Expenses	5,471,067	*	7.84%	=	428,863
NEW AGREEMENT CAPITAL	410,360	*	8.27%	=	33,926
OLD AGREEMENT CAPITAL	579,557	*	5.58%	=	32,320
NEW AGREEMENT DEBT SERVICE	2,056,606	*	0%	=	0
					=========
TOTAL ASSESSMENTS	$ 13,819,622				$ 846,772

Note that if Belmont were assessed on the new building debt service, its FY19 assessment for that would be $170,027.

Also note that Belmont's enrollment fell from 28 in October 2016 to 22 in October 2017, a 21.4% drop, but the four year average fell only from 28.25 to 26.25, a 7.0% drop. Assessment schemes (1) and (4) are based on current year enrollment numbers, and schemes (2), (3), and (5) are based on four year averages.

G. FY19 Assessment Per Student Comparisons

Belmont officials have been interested in understanding the per student costs. To do this calculation, I think it is most appropriate to use the two different measures of enrollment — current year, and four year average — as applicable to the specific component of assessment.

CURRENT YEAR ENROLLMENT (22):			
Foundation Budget	$ 316,175 / 22	=	$ 14,372
Old Agreement Capital	32,320 / 22	=	1,469
FOUR YEAR AVERAGE ENROLLMENT (26.25):			
New Agreement – Transportation	$ 35,488 / 26.25	=	1,352
New Agreement – All Other Expenses	428,863 / 26.25	=	16,338
New Agreement – Capital	33,926 / 26.25	=	1,292
			========
			$ 34,823

(And if Belmont were assessed for the new debt service, its per student share would have been 170,027 / 26.25 = $ 6,477.)

One relevant comparison is with the per-capita operating costs. In this particular calculation I use the total operating costs from (A) above, plus the ESCO leases from (B), and the October 2017 9-12 enrollment of 537 (330 students from member towns, 207 out-of-district):

($ 18,523,978 + $ 492,757) / 537 = $ 35,413 per student

A second relevant comparison for Belmont is what would have expected to pay if Belmont had been a declarant town, paying a non-member tuition in FY19. These are reasonable estimates of what the FY19 charges would be:

Basic Non-Member Tuition	$ 17,000
Projected per capita SPED fee	2,750
Projected per capita Transportation	2,881
Old Agreement Capital Assessment	1,469
	========
	$ 24,100

Based on the October 2017 enrollment, the comparable non-member operating costs per student would be about $10,700 less than the actual assessment.

H. Financial Impact of Full Enrollment

The current gap between the member assessment and the non-member all-in cost explains a significant portion of Belmont's 2016 Town Meeting vote to withdraw from the district. If the new building, designed for 628 high school students, is too large and high school enrollment stays at 530 or so, then the members will bear the full financial consequence of under-enrollment.

But what if enrollment grows to meet or exceed the 628 student target? How much will the gap between member and non-member costs close as a result?

This section looks at three enrollment scenarios to illustrate the link between total enrollment and per student cost for Belmont as a member, in the context of the FY19 budget numbers. In each scenario, the non-member cost comparison is the $24,100 estimate in the previous section.

*** NOTE, these are all hypothetical scenarios for the purpose of showing the sensitivity to enrollment. I ignore the lagged effects from using four year averages for some calculations as well as the practice of holding tuitions for one year in order to simplify the analysis and focus on just the impact of enrollment changes in general. Also, I assume the cost structure doesn't change, which is reasonable for the most part since no additional instructional staff would be needed with the higher enrollment levels. ****

(1) +100 member community students: what would be Belmont's projected FY19 assessment if there had been 100 more students as of October 2017 from member communities? This is the increase needed to bring enrollment to around the target of 628. Redoing the calculations of section (F) with the larger base of member students gives the following:

Scenario 1: +100 member students enrolled

FOUNDATION BUDGET	$ 4,825,148	*	5.07% =	244,480	/	22	=	11,113
CHOICE ADJUSTMENT	24,163	*	0% =	0				
NEW AGREEMENT PRO-RATA								
Transportation	452,721	*	6.04% =	27,327	/	26.25	=	1,041
All Other Expenses	5,471,067	*	6.04% =	330,246	/	26.25	=	12,581
NEW AGREEMENT CAPITAL	410,360	*	6.37% =	26,125	/	26.25	=	995
OLD AGREEMENT CAPITAL	579,557	*	4.45% =	25,784	/	22	=	1,172
NEW AGREEMENT DEBT SERV	2,056,606	*	0% =	0			=	0
				========				======
TOTAL ASSESSMENTS	$ 13,819,622			$ 653,962				$ 26,902

Under this scenario if Belmont were assessed on the new building debt service, its FY19 assessment for that would be $130,929.

(2) +100 non-member students: to illustrate the difference between the financial impact of member and non-member students, consider adding 100 students, but from non-member towns. In this case, Minuteman would receive about $20,000 per student (the base tuition plus the surcharge for SPED services). For +100 non-member students, Belmont's percentage of costs would be the same but costs to be covered by assessment would fall by $2 million.

Scenario 2: +100 non-member students enrolled

FOUNDATION BUDGET	$ 4,825,148	*	6.55%	=	316,175	/ 22	=	14,372
CHOICE ADJUSTMENT	24,163	*	0%	=	0			
NEW AGREEMENT PRO-RATA								
Transportation	452,721	*	7.84%	=	35,488	/ 26.25	=	1,351
All Other Expenses	3,471,067	*	7.84%	=	428,863	/ 26.25	=	10,365
NEW AGREEMENT CAPITAL	410,360	*	8.27%	=	33,926	/ 26.25	=	1,292
OLD AGREEMENT CAPITAL	579,557	*	5.58%	=	32,320	/ 22	=	1,469
NEW AGREEMENT DEBT SERV	2,056,606	*	0%	=	0		=	0
					========			======
TOTAL ASSESSMENTS	$ 11,819,622				$ 689,997			$ 28,850

Under this scenario if Belmont were assessed on the new building debt service, its FY19 assessment for that would be $170,027.

Scenarios 1 and 2 show that closing the gap between actual enrollment and target full enrollment will significantly lower member communities' per-student assessments, and that the decreases are greater if the incremental students come from member towns.

(3) +150 member students: what if enrollment were to grow to 680 or so, which is about the maximum feasible in the new building? Applied to the FY19 budget figures, this level of enrollment brings the member cost down to the same level as the non-member cost:

Scenario 3: +150 member students enrolled

FOUNDATION BUDGET	$ 4,825,148	*	4.55%	=	219,584	/ 22	=	9,981
CHOICE ADJUSTMENT	24,163	*	0%	=	0			
NEW AGREEMENT PRO-RATA								
Transportation	452,721	*	5.41%	=	24,509	/ 26.25	=	934
All Other Expenses	5,471,067	*	5.41%	=	296,191	/ 26.25	=	11,283
NEW AGREEMENT CAPITAL	410,360	*	5.71%	=	23,431	/ 26.25	=	893
OLD AGREEMENT CAPITAL	579,557	*	4.04%	=	23,416	/ 22	=	1,064
NEW AGREEMENT DEBT SERV	2,056,606	*	0%	=	0		=	0
					=======			=======
TOTAL ASSESSMENTS	$ 13,819,622				$ 587,131			$ 24,155

Under this scenario if Belmont were assessed on the new building debt service, its FY19 assessment for that would be $117,428.

So, summarizing the base case, the non-member scenario, and the three additional enrollment scenarios:

BASE CASE, current enrollment	$ 846,772	$ 34,823 / student
BASE CASE, est non-member cost		24,100
SCENARIO 1, +100 member students	653,962	26,902
SCENARIO 2, +100 non-member students	689,997	28,850
SCENARIO 3, +150 member students	587,131	24,155

The situation is clear: the sooner that Minuteman can achieve full enrollment, the sooner the "arbitrage" between member and non-member status will shrink or disappear.

- prepared by Jim Gammill, March 2018