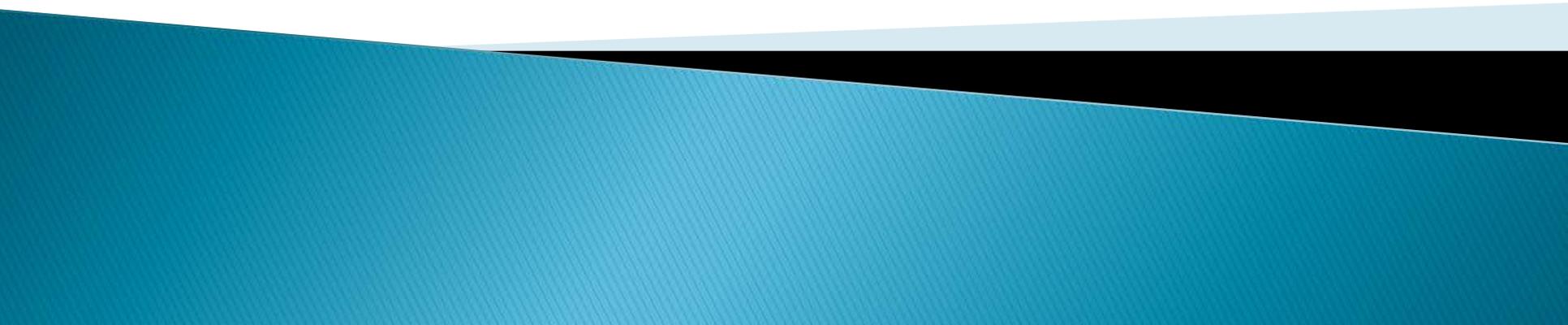


Vocational Education Advisory Committee Report

January 2016



Committee Members

- ▶ Susan Bak, Chair
 - ▶ Anne McNeece
 - ▶ Brigid Bieber
 - ▶ Gary Kushner
 - ▶ Hugh Fortmiller
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Mission Statement

The Committee's mission is to research, evaluate, analyze and recommend the best option or options for Vocational Technical Education that are both academically and financially appropriate for the Town of Boxborough and its students.



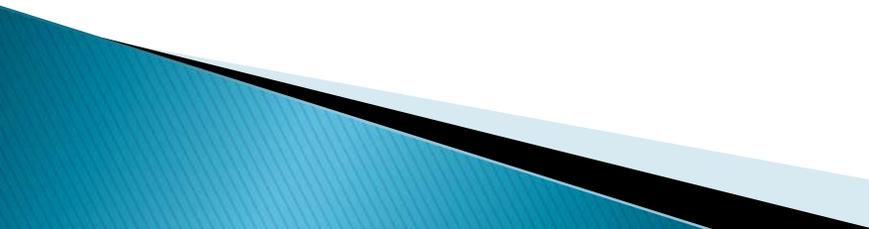
Factors to be considered by the Committee

- ▶ Location
 - ▶ Community Makeup of District
 - ▶ Academic and Vocational tech program offerings
 - ▶ Innovative Education Strategies
 - ▶ Extra-curricular programs
 - ▶ Physical plant
 - ▶ Costs
 - ▶ Pros/Cons of not being a part of a district
- 

Process used

- ▶ Identified and selected Vocational Ed schools
 - ▶ Toured and compared three schools
 - ▶ Collected and compiled data
 - ▶ Interviewed current and former MM students and parents
 - ▶ Met with the five Boxborough students currently enrolled at MM
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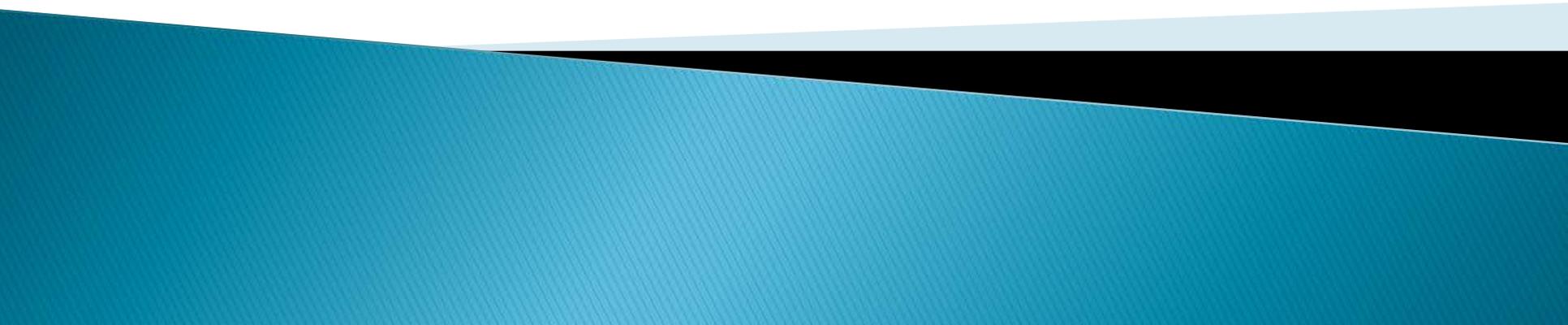
Selected schools to consider

- ▶ Schools in rural communities similar to ours
 - ▶ Schools in close proximity to Boxborough
 - ▶ Schools not heavily weighted toward one town
 - ▶ Considered: Lowell, Worcester, Lawrence and Monty Tech
 - ▶ Selected: Minuteman, Assabet, Nashoba
- 

Distance from Boxborough

School	Distance from Boxborough Town Hall
Nashoba	11.8 miles
Assabet	13.0 miles
Minuteman	13.6 miles
Lowell	20.1 miles
Worcester	26.7 miles
Monty Tech	26.7 miles
Lawrence	27.0 miles

Comparison of Schools



Programs – current

Program	Minuteman	Assabet	Nashoba
Robotics, Engineering	Yes/Yes	No /Yes	Yes/Yes
Computer Programing and Web Development	Yes	Yes	Yes
Telecommunications & Fiber-optics	To be eliminated 6/2018	No	No
Bio Technology	Yes	Yes	Yes
Environmental Science & Technology	Yes	No	No

Programs continued....

Program	Minuteman	Assabet	Nashoba
Automotive mechanics	Yes	Yes	Yes
Automotive collision	No	Yes	Yes
Electrical wiring	Yes	Yes	Yes
Metal Fabrication & Welding	Yes	Yes	No
Machine Tool Technology	No	No	Yes
Advanced Manufacturing	9/2016	Yes	No
Carpentry	Yes	Yes	Yes
Plumbing & Heating	Yes	Yes	Yes
Drafting Design Technology	No	Yes	No

Programs continued.....

Program	Minuteman	Assabet	Nashoba
Painting & Design Technologies	No	Yes	No
Design & Visual Communications	Yes	Yes	Yes
Television, Media/Theater Art	No	No	Yes
Multi-Media Engineering	9/2016	No	No
Business Technology	No	Yes	No
Banking, Marketing, Retail	*Marketing to be eliminated 6/2018	No	Yes

Programs continued....

Program	Minuteman	Assabet	Nashoba
Health Assisting	Yes	Yes	Yes
Health Technology	No	Yes	No
Dental Assisting	No	No	Yes
Early Education, Care	Yes	No	Yes
Culinary Arts & Hospitality	Yes	Yes	Yes
Cosmetology	Yes	Yes	Yes
Veterinary Assistant	No	No	Yes
Horticulture & Landscaping	Yes	No	No

Innovative Strategies

	Minuteman	Assabet	Nashoba
Dual enrollment	Yes	Yes	Yes
Girls in STEM	Yes	Yes	Yes
Co-ops	Yes	Yes	Yes
AP Offerings	Yes	Yes	Yes
Accreditation for Associates Degree	No	No	Working on it

Extra-curricular: variations among schools

- ▶ Academic teams
 - ▶ Vocational clubs
 - ▶ Music, drama, art clubs
 - ▶ Gay/Straight Alliance
 - ▶ Student Council
 - ▶ Yearbook and Newspaper
 - ▶ Sports
 - Baseball, basketball, cross-country, football, volleyball, lacrosse, hockey, soccer, cheerleading, swimming, tennis, golf.....
- 

Key Performance Indicators

Key performance indicators	Minuteman	Assabet	Nashoba
Student/teacher ratio: 2014/2015	8.5: 1	10.4:1	12.6:1
Accountability level: 2014	Level 2	Level 2	Level 1
Graduation rate: 2014/2015	90.54%	95.24%	98.08%
Academic Attainment Language Arts: 2014/2015	93.21%	92.86%	95.48%
Academic Attainment Math: 2014/2015	68.52%	76.37%	76.13%
Technical Skill Attainment: 2014/2015	98.26%	97.92%	100%
Post graduation 2013/2014			
• Career/Workforce	19%	40%	30%
• Military	6%	3%	7%
• 2 year college	22%	23%	27%
• 4 year college	54%	32%	29%

MCAS – Spring 2015

MCAS % of Students	Minuteman	Assabet	Nashoba
Advanced math	32%	36%	43%
Proficient math	41%	39%	35%
Needs improvement math	21%	20%	17%
Advanced ELA	34%	26%	22%
Proficient ELA	63%	70%	71%
Needs improve ELA	3%	4%	7%
Advanced Science/Tech/ Engineering	15%	24%	24%
Proficient Science/Tech/Engineering	55%	61%	56%
Needs improve Science/Tech/Engineer	29%	14%	18%

SAT 2014/2015

Subject matter	Minuteman	Assabet	Nashoba
Reading	476	466	439
Writing	451	437	413
Math	421	457	452

Post Graduate Opportunities

	Minuteman	Assabet	Nashoba
Accepts in District students ages 18–21	Yes	Yes	Yes
Accepts out of District students 18–21	Yes	Yes	No
Accepts adult students over the age of 21	Yes	Yes	No

Financial: In District

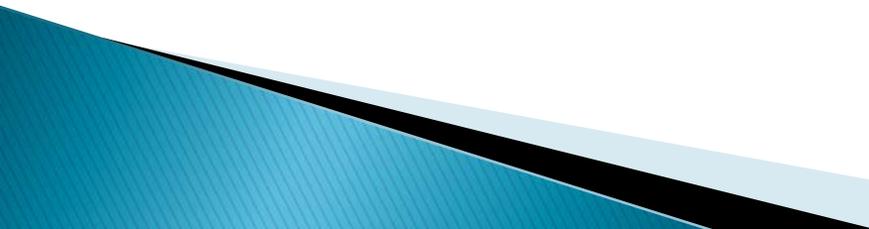
	Minuteman	Assabet	Nashoba
In-District Tuition FY2016	\$27,224	\$11,000 to \$14,000	\$10,000 to \$14,000
Cost per pupil (2013)	\$26,246	\$18,252	\$15,104
Cost of administration per pupil (2013)	\$2,203	\$951	\$774
Cost of administration % of total (2013)	8.39%	5%	5%

Financial: Out-of-District FY2016

	Minuteman	Assabet	Nashoba
Out of District Tuition (SPED & Transportation not included)	\$17,556	\$16,587	\$15,000
Charge for Capital (FY2017)	\$8,121 Per student	\$0	\$0
Cost of transportation out of district -out sourced	\$36,000	\$36,000	\$36,000
Cost to buy-in	N/A	N/A	TBD

Interviewed Minuteman Parents and Students

What MM parents & students liked best

- ▶ Hands-on learning experience
 - ▶ Balance of traditional academic learning with the skills learned in a vocational program
 - ▶ Reasonable class sizes
 - ▶ Got to know teachers well because of small class sizes
 - ▶ Flexibility of MM administration to offer credit for independent study
- 

MM Parent and Student interviews

Drawbacks of going to MM

- ▶ Pressure from peers to go to ABRHS
 - ▶ Misperception that students that go to MM are not college bound
 - ▶ Not as many AP offerings
 - ▶ Long commute
 - ▶ Does not have band or a theater program
- 

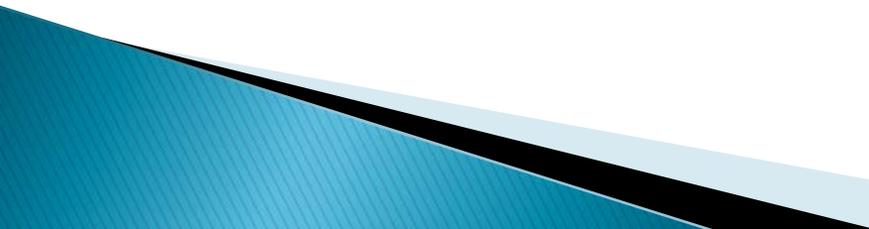
MM Parent and Student Interviews

Additional feedback

- ▶ Teachers want their students to succeed.
Available to offer extra help
 - ▶ Very happy w/ high school experience at MM
 - ▶ Involved in extracurricular activities
 - ▶ Some students were planning on college, some were undecided
 - ▶ Some were concerned that students would have struggled at ABRHS because of competitiveness
- 

Options Available to Boxborough

Options to consider

- ▶ **Stay at Minuteman**
 - ▶ **Withdraw from MM**
 - Join another District
 - Enter into an Inter-municipal Agreement (IMA) with another District
 - Go it alone – not join another District
- 

Stay at Minuteman: Amended Agreement

- ▶ Higher tuition under the amended agreement
 - All inclusive: tuition, transportation, SPED, capital
 - ▶ Representation on School Committee is pro-rated based on enrollment
 - ▶ State-of-the-art building once construction is complete if approved
 - ▶ Minimum of one student rather than five
- 

Minuteman: FY2017 Preliminary estimate

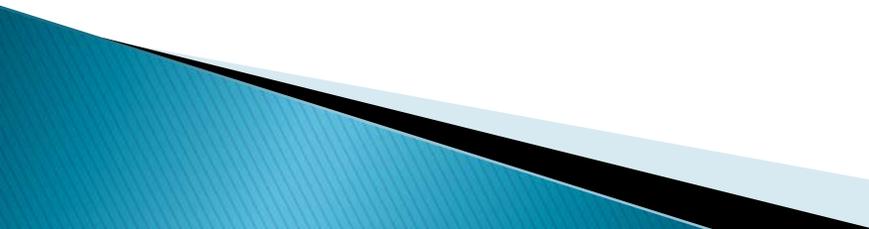
Amended Agreement	Estimated
<u>Operating Costs</u>	
Minimum required Contribution	\$108,137
Transportation	\$10,003
Operating Assessment	\$51,132
Sub-total operating	\$169,272
<u>Capital Costs</u>	
ESCO Lease	\$6,698
Enrollment Share	\$17,729
Combined Effort Share	\$9,989
Capital Base Contribution share	\$30,129
Sub-total capital	\$64,545

Minuteman FY2017 Preliminary Estimate

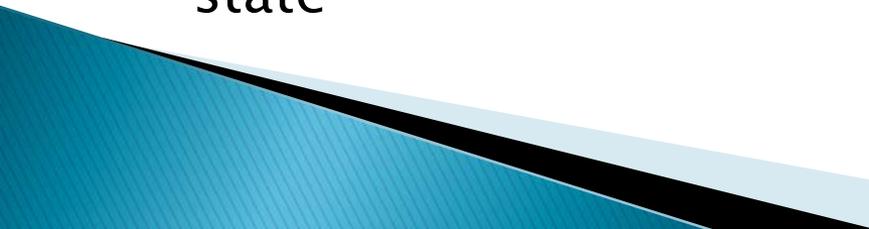
Amended Agreement	Estimated
Operating Assessment	\$169,272
Capital Assessment	\$64,545
Total Assessment	\$233,817
Per pupil cost (based on 5 students)	\$46,763

Withdraw from Minuteman

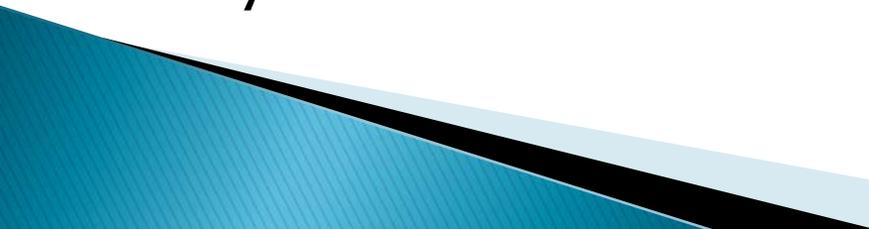
Join another District

- ▶ Assabet is unlikely to accept new member Towns into their District.
 - ▶ Nashoba will consider accepting new member Towns.
 - ▶ Member Towns would have to vote to accept Boxborough into the District. And Boxborough would have to vote to become a part of the new District
 - ▶ District agreement would have to be amended
 - ▶ Negotiate a buy-in cost to join the new District
 - ▶ Process could take several years
 - ▶ Cost per student all inclusive: tuition, transportation, SPED and capital
- 

Enter into an Inter-municipal Agreement

- ▶ Neither Assabet nor Nashoba have any inter-municipal agreements with any sending non-member Towns
 - ▶ Under an IMA the Town designates a “preferred” vocational school
 - ▶ The preferred vocational school holds a specific number of slots open for Boxborough students, provided they qualify for admission
 - ▶ Pay out-of-district tuition plus the cost of transportation plus SPED and capital (if charged)
 - ▶ No reimbursement for the cost of transportation by the state
- 

Do not join a District – go it alone

- ▶ Could designate a “preferred” school provided the Town gives clear and timely notice to students and their families well in advance
 - ▶ Students could go to a school other than a “preferred” school if the preferred school does not offer a specific program
 - ▶ Pay out-of-district tuition plus the cost of transportation plus SPED and capital (if charged)
 - ▶ No reimbursement for the cost of transportation by the state
- 

Transportation

Out-of-District

Transportation: Out-of-District

- ▶ Town responsible for transportation if not a member of a District
 - ▶ No State reimbursement for transportation
 - ▶ Options:
 1. Purchase and operate van
 2. Outsource
 3. Piggy back w/ another Town
 4. Reimburse parents for mileage
- 

Cost of Transportation

Options	Cost
Purchase and operate a van	\$25,000
Outsource	\$36,000
Piggy back with another Town	<\$36,000
Reimburse parents for mileage	\$2,643 Per student

Options to consider

- ▶ **Stay at Minuteman**
 - ▶ **Withdraw from MM**
 - Join another District
 - Enter into an Inter-municipal Agreement (IMA) with a District
 - Go it alone – not join another District
- 

What's in the best interest of the students?

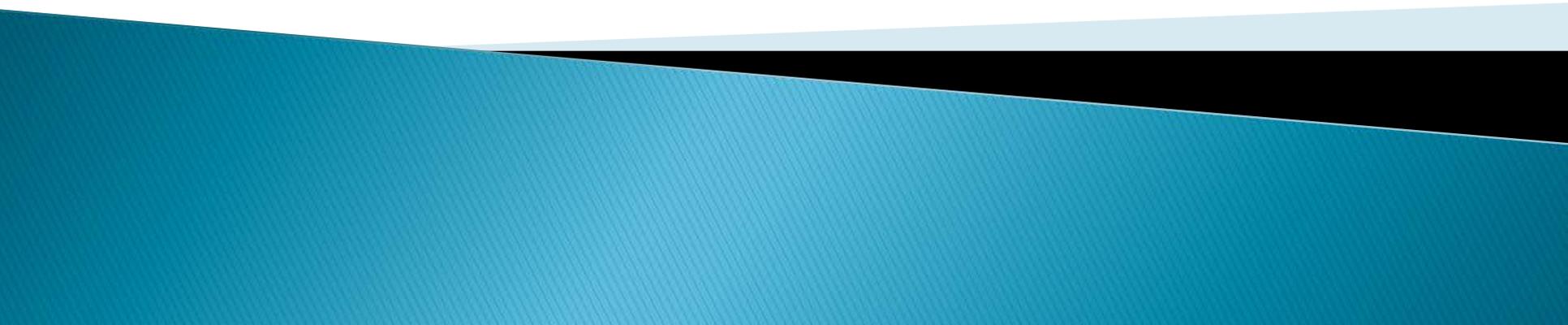
- ▶ **Town is a member of a District**
 - ▶ **Retain a voice on the School Committee**
 - ▶ **Qualified students have a guaranteed place and access to programs**
 - ▶ **No disruption**
 - ▶ **Favorable student/teacher ratio**
 - ▶ **State of the art facilities and programs**
 - ▶ **School accreditation**
- 

What's the financial impact on taxpayers?

	Minuteman In-District New Agreement	Assabet Out-of-District Estimate	Nashoba Out-of-District Estimate
Per pupil cost	\$46,763	\$28,200	\$26,700
Per household Per pupil*	\$25.14	\$15.16	\$14.36
Per household @ 5 students	\$125.70	\$75.80	\$71.80
Per thousand Per pupil*	.0458	.0276	.0261

Based on \$1.021B Town valuation
and average house valuation of \$548,990

Thank you!



Frequently Asked Questions

Options

What are the Town's Options?	<ol style="list-style-type: none"> 1. Stay at Minuteman 2. Withdraw from Minuteman <ol style="list-style-type: none"> a. Join another District b. Enter into an Inter-municipal agreement with another District c. Do not join another District – go it alone
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Option 1: Stay at Minuteman

<p><u>Question #1</u> What is the financial impact of changing the formula for non-member Towns to pay a portion of the capital costs?</p>	<p><u>Answer</u> The Department of Elementary and Secondary Education (DESE) has approved a capital fee assessment for students accepted by the District from non-member Towns.</p> <p>MM plans to assess a capital fee on non-member towns, which will reduce the burden on member Towns. Fees may vary depending on whether the student enters the Vocational school in the 9th or 10th grade. Guidelines will be issued by DESE within the next 6 months</p>										
<p><u>Question #2</u> What are the current costs per pupil and the estimated costs per pupil including the cost of capital under the new amended agreement?</p>	<p><u>Answer</u> FY2016 costs per pupil, are \$27,224 including transportation \$6,802 and capital costs of \$14,118. That figure could change based on the following factors:</p> <ul style="list-style-type: none"> • Enrollment during the transition period while the new building is under construction could move up or down • Enrollment could go down if member Towns seek to withdraw • Assumes non-member Towns will pay tuition plus a fee for capital estimated at \$8,121 <p>Estimated costs per pupil, including transportation and capital costs under the new amended agreement are:</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>Minimum required contribution</td> <td style="text-align: right;">\$108,137</td> </tr> <tr> <td>Operating Assessment</td> <td style="text-align: right;">\$15,132</td> </tr> <tr> <td>Transportation</td> <td style="text-align: right;">\$10,003</td> </tr> <tr> <td>Capital</td> <td style="text-align: right;">\$64,545</td> </tr> <tr> <td>Per pupil cost</td> <td style="text-align: right;">\$46,763</td> </tr> </table>	Minimum required contribution	\$108,137	Operating Assessment	\$15,132	Transportation	\$10,003	Capital	\$64,545	Per pupil cost	\$46,763
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Question #3

Can we estimate the number of students from the Jefferson at Beaver Brook building project who might apply to a Vocational Education school?

Answer

There is no way to accurately estimate the number of students who might avail themselves of a Vocational Education school. However, based on what we learned from the Avalon Development in Acton, we believe the impact on MM enrollment would be nominal.

Jefferson Beaver Brook

- 244 rental units
- 132 one BR units
- 106 two BR units
- 6 three BR units
- 61 affordable housing
- Builder estimated 45-50 students

Avalon Development Acton

- 296 rental units
- 60 affordable housing
- 136 students
- One student at MM

Options 2 (a) (b)

Withdraw from Minuteman and join another District **or** enter into an Inter-municipal agreement (IMA)

<p><u>Question #1</u> What Vocational schools did the committee consider and why?</p>	<p><u>Answer</u> The committee considered schools in communities that closely mirrored Boxborough’s rural environment. That meant schools located in cities like Lawrence, Lowell and Worcester were not considered. Ultimately, the committee considered two schools within close proximity to Boxborough – namely Nashoba Valley Tech and Assabet Tech.</p>
<p><u>Question #2</u> What happens to Boxborough students enrolled at MM if the Town is allowed to withdraw? Would those students be guaranteed continued enrollment at MM until graduation?</p>	<p><u>Answer</u> Yes, students enrolled at the time of withdrawal from MM would be allowed to complete their program at MM through graduation.</p>
<p><u>Question #3</u> If Boxborough applies to become a member town of Nashoba Valley Tech or Assabet Tech, would the Towns in the District have to vote to accept Boxborough into that District and would the new District have to amend their agreement?</p>	<p><u>Answer</u> Yes to both questions. However, the Administration for Assabet has indicated that the Assabet SC is not accepting new <u>member towns</u>. However, Assabet will accept Boxborough students as long as they qualify for admission.</p>
<p><u>Question #4</u> What is the likelihood that we could enter into an inter-municipal agreement with either Assabet or Nashoba? Is there any advantage to doing so?</p>	<p><u>Answer</u> Neither Assabet nor Nashoba have any inter-municipal agreements with any non-member Towns.</p> <p>The advantage would be to hold a specific number of slots open for Boxborough students, provided students qualify for admission.</p>
<p><u>Question #5</u> Would there be any upfront cost as a buy-in to join the District?</p>	<p><u>Answer</u> Yes. The upfront cost to buy-in to a new District would be negotiated between the District and Boxborough. For example, when Ayer joined the Nashoba Valley Tech District, their buy-in cost to the District was \$550K.</p> <p>Ayer had been sending approximately 60 students to Nashoba for 10 years. Nashoba valley gave Ayer “credit” for those 10 years.</p>

<p>Question #6 Would Boxborough students be allowed to participate in the R.J. Grey Junior High Technology Program called “Grey Block” sponsored by MM if Boxborough is allowed to withdraw from the District?</p>	<p>Answer Yes.</p>
<p>Question #7 Would there be an additional charge to Boxborough by ABRS for allowing our students to participate in the “Grey Block” program if Boxborough is no longer a member of the MM District?</p>	<p>Answer MM currently charges the Town \$29,221/year for the Middle School Assessment for Boxborough students.</p> <p>If Boxborough withdraws from MM, but our students continue to participate in the Middle School “Grey Block”, ABRS will charge Boxborough some fee for participation.</p>
<p>Question #8 Is either Nashoba Valley or Assabet considering any new construction or building rehab?</p>	<p>Answer Nashoba did a capital project in 2004 to rehab the existing building. They have no plans to build a new building. Nashoba has a capital plan to ensure their infrastructure is regularly maintained.</p> <p>Assabet completed a 3 year capital project in October 2015. Assabet has a capital plan to ensure their infrastructure is regularly maintained.</p>

Option 2 (c): Withdraw from MM. Do not join another District

<p><u>Question #1</u> Who would provide <u>oversite</u> of Vocational Education if the Town is not a part of a Vocational Education District?</p>	<p><u>Answer</u> The responsibility falls with the Selectmen. However, the Selectman could appoint a committee to provide oversite.</p>
<p><u>Question #2</u> Would the Town have to hire additional staff to provide administrative support to Boxborough families contemplating sending a student to a Vocational Technology school?</p>	<p><u>Answer</u> Students would continue to receive guidance and counseling at R.J. Grey. The Town would be responsible for notifying parents and students of a “preferred” technical school and managing the transportation of students to the Vocational Education School. We do not anticipate the need to hire additional staff.</p>
<p><u>Question #3</u> If Boxborough is no longer a part of the MM District, can Boxborough students apply to any Vocational Education school in the Commonwealth?</p>	<p><u>Answer</u> Yes, however the Town may designate a “preferred” vocational school, provided that “clear and timely” notice is given to students and their families “well in advance” of the application process.</p>
<p><u>Question #4</u> If Boxborough designates a “preferred” vocational school, and the school does not offer a specific program, can the student apply to a different vocational school that offers the program?</p>	<p><u>Answer</u> Yes.</p>
<p><u>Question #5</u> How do Vocational schools make their decisions about admissions?</p>	<p><u>Answer</u> Most Vocational Education schools consider:</p> <ul style="list-style-type: none"> • Academic achievement/grades • Attendance • Recommendation from RJ Grey • Discipline record • Personal interview <p>In-District students get preference over out of District students when both are equally qualified.</p>

<p>Question #6 Do in-District students get preference in selecting a program over out-of-District students?</p>	<p>Answer Once a student has been accepted at either Nashoba or Assabet, they are treated the same for program selection.</p> <p>Nashoba indicated that they have not had a problem placing all out-of-District students in their preferred program.</p>												
<p>Question #7 What is the cost of Vocational Education for an out-of-District student?</p>	<p>Answer DESE determines the tuition for out-of-District students. Additionally, the Town pays the per pupil share of capital, plus transportation plus SPED services required.</p> <table border="1" data-bbox="776 695 1430 768"> <tr> <td>Nashoba Valley</td> <td>\$15,000 + transportation + SPED</td> </tr> <tr> <td>Assabet</td> <td>\$16,587 + transportation + SPED</td> </tr> </table> <p>Neither Nashoba nor Assabet have any plans to charge out-of-District Towns for the cost of capital.</p>	Nashoba Valley	\$15,000 + transportation + SPED	Assabet	\$16,587 + transportation + SPED								
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Assabet	\$16,587 + transportation + SPED												
<p>Question #8 How would Boxborough arrange for transportation?</p>	<p>Answer We would either:</p> <table border="1" data-bbox="776 1020 1430 1167"> <tr> <td>Option 1</td> <td>Purchase & operate a used or new van</td> </tr> <tr> <td>Option 2</td> <td>Outsource</td> </tr> <tr> <td>Option 3</td> <td>Piggy back with another town(s)</td> </tr> <tr> <td>Option 4</td> <td>Reimburse parents for mileage</td> </tr> </table>	Option 1	Purchase & operate a used or new van	Option 2	Outsource	Option 3	Piggy back with another town(s)	Option 4	Reimburse parents for mileage				
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Option 4	Reimburse parents for mileage												
<p>Question #9 What is the cost of transportation?</p>	<p>Answer The State typically reimburses Regional School Districts the cost of transportation currently estimated at 60%.</p> <p>If the Town is not a member of a Regional School District, the Town pays all transportation costs. There is no reimbursement by the state. The Board of Selectmen would have to manage the transportation process. Cost estimates are based on a <u>per school basis</u>.</p> <table border="1" data-bbox="776 1560 1430 1850"> <tr> <td>Option 1</td> <td>Purchase & operate used van</td> <td>\$25,000</td> </tr> <tr> <td>Option 2</td> <td>Outsource</td> <td>\$36,000</td> </tr> <tr> <td>Option 3</td> <td>Piggy back w/ another Town</td> <td><\$36,000</td> </tr> <tr> <td>Option 4</td> <td>Reimburse parents for mileage</td> <td>\$2,643/student</td> </tr> </table>	Option 1	Purchase & operate used van	\$25,000	Option 2	Outsource	\$36,000	Option 3	Piggy back w/ another Town	<\$36,000	Option 4	Reimburse parents for mileage	\$2,643/student
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Option 4	Reimburse parents for mileage	\$2,643/student											

Question # 10

What if parents could not drive their children to school because of work schedules or because the parents did not have access to a car?

Answer

The Town would have to contract with a bus company or purchase a van to transport students.

Revised 01/10/2016

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
Logistics			
Distance from Boxborough	13.6 miles	15.52 miles	11.3 miles
Tenure of Principal	Former Asst. Princ. Interim 12/2014 Permanent 06/2015	8 years	Promoted Director of Curriculum to Principal in 2010
Tenure of Superintendent	2008	December 2014 Formerly the Principal at MM	20 years Incumbent will be retiring in 2016
Student/Teacher Ratio	8.5: 1	10.4: 1	12.6:1
Website current, up to date	Yes	Yes	Yes
Accountability level 1-5 (1 being the highest): 2014	Level 2	Level 2	Level 1
Academic Offerings			
English	23 programs including Honors & AP programs	21 course offerings including Honors & AP	10 course offerings including Honors and A&P
Math	22 programs including: Algebra (Including Honors), Pre- Calculus(Including Honors), Calculus (Including Honors & AP), Geometry (Including Honors), Trigonometry, Business Math, Consumer Math, Foundations of Career Tech Math	15 course offerings including: Algebra, Geometry, Honors Geometry, Pre-Calculus, AP Calculus, Financial Literacy, Contemporary math for the informed consumer, Numeracy, Analysis of everyday data, MCAS Math Prep	10 course offerings including: Algebra, Pre- Calculus, Calculus. Advanced placement AB Calculus, Computer Science and Statistics.
Foreign Language	9 programs: French, Latin & Spanish	Spanish 3 levels, Portugese 3 levels	Spanish 4 levels

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
Science	18 programs: Anatomy & Physiology, Biology(Including Honors), Chemistry(Including Honors), Nutrition & the Body, Physics(Including Honors), Psychology, Technology/Engineering	15 course offerings: Biology, Cellular & Evolutionary Biology Lab (and Honors) , Anatomy & Physiology, Chemistry , Honors Chemistry, Chemistry Lab, Forensics, Physics, Physics Lab, Honors Physics lab, AP Physics, Pre-engineering, MCAS Science Prep	15 course offerings include: Life Science (and Honors), Biology (and Honors), Chemistry (and Honors), Physics (and Honors), Electrical Code, Plumbing & Heating Code
Hands On Learning Opportunities in Academic Classrooms	Yes	Yes	TBD
Social Studies	13 programs: Civics, US History(Including Honors), US History & Cinema, Modern World History (Including Honors),World History 500-1800 (Including Honors)	4 year requirement. US History I, II & III, US History Honors and AP, Modern World Geopolitics, AP Government & Society, War in Film, Contemporary issues, Psychology, Economics	8 cours offerings include: World History, US History I, US History II, Government, Sociology & Psychology,
Number of AP classes in English	Literature & Composition	Language & Composition Literature & Composition	Language & Composition Literature & Composition
Number of AP classes in Math	Calculus AB & BC	Calculus AB	Calculus AB Statistics Computer Science
Number of AP classes in Foreign Languages	German (2013)	None	None
Number of AP classes in Science	Enviromental Science (2013)	Physics	Biology Physics Chemistry Physics C Mechanics

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
Number of AP classes in History	No	US History	US History
Number of AP classes in Social Sciences	No	US Government	US Government & Politics
Offers AP Computer Science (Y/N)	Yes	No	No
Industry Aligned Curriculum	Yes	Yes	Yes
Offers Internship Opportunities	Yes	Yes	Yes
Local Actual Academic Attainment Perkins Report: 2014/2015			
Academic Attainment - Language Arts	93.21%	92.86%	95.48%
Academic Attainment - Mathematics	68.52%	76.37%	76.13%
Technical Skill Attainment 2S1	98.26%	97.92%	100.00%
Completion 3S1	92.44%	97.92%	100.00%
Graduation Rates 4S1	90.54%	95.24%	98.08%
Placement 5S1	98.55%	96.53%	97.24%
Nontraditional by Gender Participation	17.33%	24.11%	21.92%
Nontraditional by Gender Completion	15.22%	21.43%	17.73%
Select Vocational Programs			
Robotics, Engineering	Yes/Yes	No/Yes	Yes/Yes
Computer Programming and Web Development	Yes	Yes	Yes
Telecommunications & Fiber-optics	To be eliminated 9/2018	No	No
Design and Visual Communications	Yes	Yes	Yes
Bio Technology	Yes	Yes	Yes
Environmental Science and Technology	Yes	No	No
Automotive mechanics	Yes	Yes	Yes
Automotive collision	No	Yes	Yes
Electrical wiring	Yes	Yes	Yes
Metal Fabrication & Welding	Yes	Yes	No
Machine tool technology	No	No	Yes
Advanced Manufacturing	Starts 9/2016	Yes	No
Carpentry	Yes	Yes	Yes

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
Plumbing & Heating	Yes	Yes	Yes
Planning & Design	No	Yes	No
Drafting Design	No	Yes	No
Television, Media/Theater Art	No	No	Yes
Multi-Media Engineering	New 9/2016	No	No
Business Technology	No	Yes	No
Banking, Marketing, Retail	*Marketing To be eliminated 9/2018	No	Yes
Health Assisting	Yes	Yes	Yes
Health Technology	No	Yes	No
Dental Assisting	No	No	Yes
Early Education, Care	Yes	No	Yes
Culinary Arts & Hospitality	Yes	Yes	Yes
Cosmetology	Yes	Yes	Yes
Veterinary Assistant	No	No	Yes
Horticulture & Landscaping	Yes	No	No
Discipline and Attendance: 2014/2015			
% of students with fewer than 10 absences/year	53.40%	61.00%	83.20%
% of students with at least 1 suspension/year	13.0%	11.90%	5.00%
Financial Implications: 2015/2016			
In district cost per student	\$ 27,224	\$11,000 - \$14,0000	\$10,000 - \$13,000
Out of district cost per student	\$17,556 + \$4,500 for SPED Does not include transportation or capital assessment	\$16,587 Does not include transportation or SPED. Does not charge for capital	\$15,000 Does not include transportation or SPED. Does not charge for capital
Student and Faculty Information			
Enrollment	624	1130	764
Boxborough Grade 9	0	N/A	N/A
Boxborough Grad 12	2	N/A	N/A

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
In District Student Body	370	757	704
Out of District Student Body	254	373	60
Faculty vacancies-academic	0.00%	0%	
Faculty vacancies-vocational	0%	0%	
Student retention rate	90.20%	90%	99.60%
4 year graduation rate (DESE Report card)	93.80%	93.60%	95.10%
Common planning time for teachers	Yes	Yes	Yes
Industry recertification of vocational instructors	Yes	Yes	Yes
Percentage of faculty deemed "high quality"	99.20%	100%	
Percentage of faculty teaching within field	98.70%	98% licensed in field	96.6% licensed in field
Enrichment			
Number of Varsity Sports Teams (Men)	Baseball, Basketball, Soccer, Cross-Country, Football, Golf, Ice Hockey, Lacrosse, Swimming, Tennis	Baseball, Basketball, Cross Country, Football, Volleyball, Track & Field, Wrestling, Soccer, Lacrosse, Ice Hockey, Golf	Baseball, Basketball, Cross Country, Football, Volleyball, Track & Field, Soccer, Lacrosse, Ice Hockey, Golf, Tennis, Wrestling
Number of Varsity Sports Teams (Women)	Basketball, Soccer, Softball +8 others	Softball, Soccer, Field Hockey, Cheerleading, Cross Country, Volleyball, Basketball, Track & Field, Lacrosse	Basketball, Cross Country, Cheerleading, Field Hockey, Soccer, Softball, Track & Field, Volleyball
Number of vocational clubs	4	None	Epicurean, Robotics, Construction, TV Media (3 clubs), Horticulture, DECA (Banking, Marketing, Retail)
Number of academic clubs	6	First Robotics, Math team, Skills USA, National Honor Society	English competition, Math, Skills USA

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
Other	Skills USA, Music, Drama, Art, Art & Poetry Magazine, Gay/Straight Alliance, Community Service, Student Council, Yearbook, Future Farmers of America	Band, Chorus, Dance, Drama, First Robotics, National Honor Society, Gay Straight Alliance, Art Club, Business Professionals of America	National Honor Society, First Robotics, Skills USA, Student Council, Music, Band, Drama, Chorus, Yearbook, Newspaper, Mock trial, Astronomy Club, Ski/Snowboard, Vicking Voice, Gay Straight Alliance
Partners and Community Outreach			
Number of industry partners	188	300	150-200
Number of Industry partners on advisory board	29	170-180	80-100
Number of university partners	Articulation agreements	50	>100
Post Graduation Plan: 2013/2014			
Career/Workforce	19%	40%	30%
Military	6%	3%	7%
2 year college	22%	23%	27%
4 year college	54%	32%	29%
Apprentice Program Opportunities		Yes	
Recruitment			
Actively recruits in-district students	Yes	Yes	Yes
Actively recruits out of district students	Yes	Yes	No
Innovation			
Describe innovative strategies to keep school sustainable	Dual enrollment, Girls in STEM, Co-Op, AP Offerings	Dual enrollment, Girls in STEM, Co-ops, AP offerings, Jr. ROTC	Dual enrollment, Girls in STEM, Co-ops, AP Offerings. Working on trying to get accreditation for an Associates Degree program.

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
MCAS - Spring 2015	*Highest % of Voc.Tech IEP Students in State (2015 = 50.8%) (95-100% IEP Participation)	35% of students are SPED	32% of students ar SPED
% of students obtaining advanced on Math	32%	36%	43%
% of students obtaining profficient on Math	41%	39%	35%
% of students obtaining Needs Improvement on Math	21%	20%	17%
% of students obtaining advanced on ELA	34%	26%	22%
% of students obtaining proficient on ELA	63%	70%	71%
%of students obtaining Needs Improvement on ELA	3%	4%	7%
% of students obtaining advanced on Science/Tech and Engineering	15%	24%	24%
% of students obtaining proficient on Science/Tech and Engineering	55%	61%	56%
% of students obtaining Needs Improvement on Science/Tech and Engineering	29%	14%	18%
Technology			
Number of chrome books or computers per student	8.75:1	1.2	2.1
Campus has wi-fi	100%	100%	100%
Workshops have modern equipment and machinery	Key areas updated: Engineering, Culinary, POS systems, Environmental, Welding Simulators, 3D Printers	All programs updated during recent \$62M renovation. Advanced Manufacturing.	Invest \$250K annually to modernize programs. Three to five year plan. Major overhaul in Cosmetology in 2006
Teachers keep class websites	No. Update "X2" which are resources & collaborative spaces for students	15-20 teachers keep websites	Yes
SAT Scores (2014-2015)			
Number of tests Taken	82	120	91

Comparison Data of Three Vocational Education School Districts

	Minuteman Lexington	Assabet Marlborough	Nashoba Westford
Reading	476	466	439
Writing	451	437	413
Math	421	457	452

Revised 1/07/2016

Transportation Estimate

1.8.16

Option 1	Purchase Used 8 Seat Van	\$3,000	New Van	Appx. \$30 K
	Insurance	\$3,000	estimate	
	7 D License	\$90	\$30 x 3	
	Pupil Plates/ I	\$50	estimate	
	Salary	\$14,400	based on 4 hours dayx180 days @\$20 hour	
	Stipends	\$1,000	stipend to have 2 p/t employees on call as subs	
	Inspections	\$70	\$35	2xyr
	Total Estimati	\$21,610	does not include gas/mileage etc. Would also need Town Staff to manage process/cori/vet drivers	

Option 2	Outsource		
	Estimated at		
	\$150-\$200		
	per day per		
	van x 180		
	days	\$27-\$36K	Would need Town Hall staff to manage process. Would need to rely on Vendor to vet staff. No worries about coverage.

	Distance From Boxborough Town Hall/ mi	54 Cents mile	2 x 180 days
Assabet Valley	13	4680	\$2,527.20
Nashoba Valley	11.8	4248	\$2,293.92
Minuteman Tech	13.6	4896	\$2,643.84