

May 4, 2016

Presented by:
Jack Weis – Belmont
Member, Minuteman School
Committee



MINUTEMAN
A REVOLUTION IN LEARNING

Minuteman High School Building Project

Presentation to the Town of Belmont

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Agenda

1. The Revised District Membership
2. The Case for a New Building
3. What Has Been Done to Date
4. Overview of the Proposed Building
5. Financial Assumptions and Projections
6. Conclusions



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1. The Revised District Agreement

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Revised District Membership

- Towns Remaining in the District

Acton

Dover

Arlington

Lancaster

Belmont

Lexington

Bolton

Needham

Concord

Stow

- Departing Towns

Boxborough

Sudbury

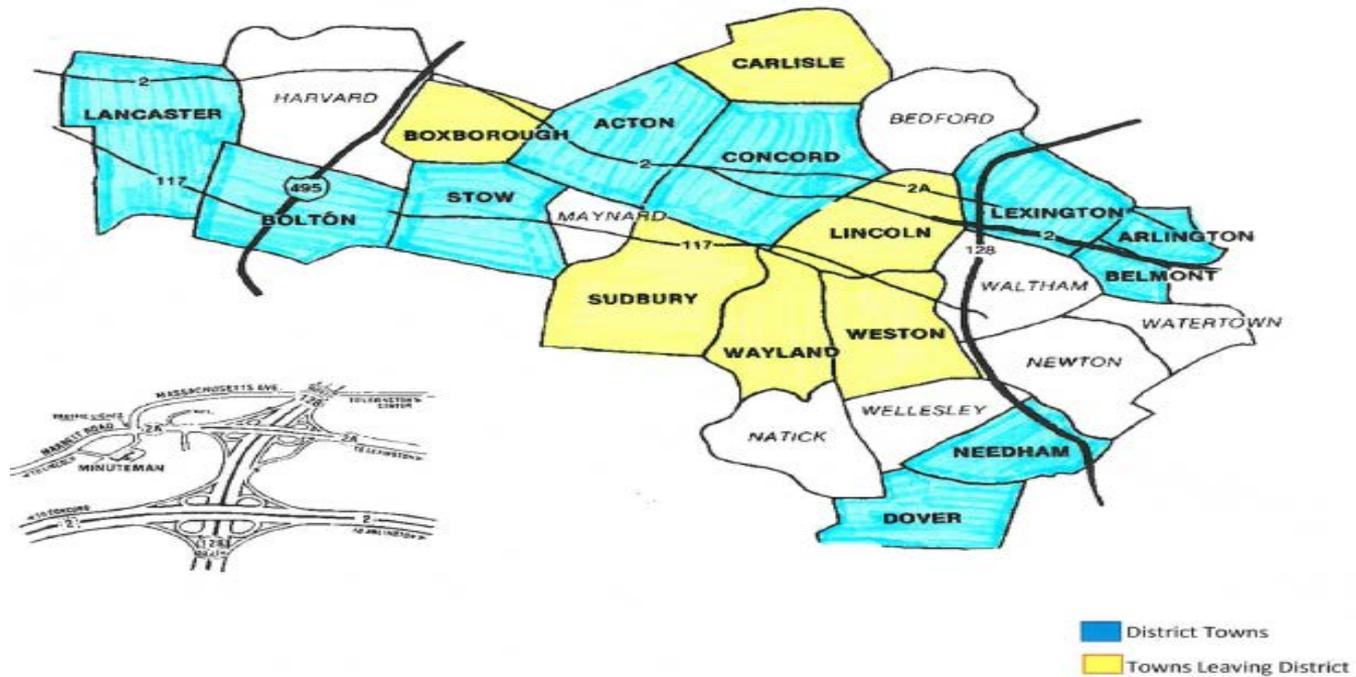
Carlisle

Wayland

Lincoln

Weston

Revised District Membership





2. The Case for a New Building

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Aging Infrastructure

- The school was built in 1974. Elements have been replaced over the years, but much of the infrastructure is at the end of its useful life.
- Examples:
 - Roof – Previously replaced in 1985, but the current roof has been repeatedly patched and is failing.

Aging Infrastructure

- Examples (continued):
 - Heating/Air Conditioning – The central heating and cooling plant was replaced in 2009, but the distribution system and temperature controls are original and are in fair to poor condition.
 - Electrical System – The main switchgear was replaced in 2009, but the distribution system is beyond its useful life.
 - Cracking throughout exterior and interior masonry veneer.

Roof Issues

- The roof has been a problem for many years and has been patched on multiple occasions.
- The roof was replaced almost 30 years ago.



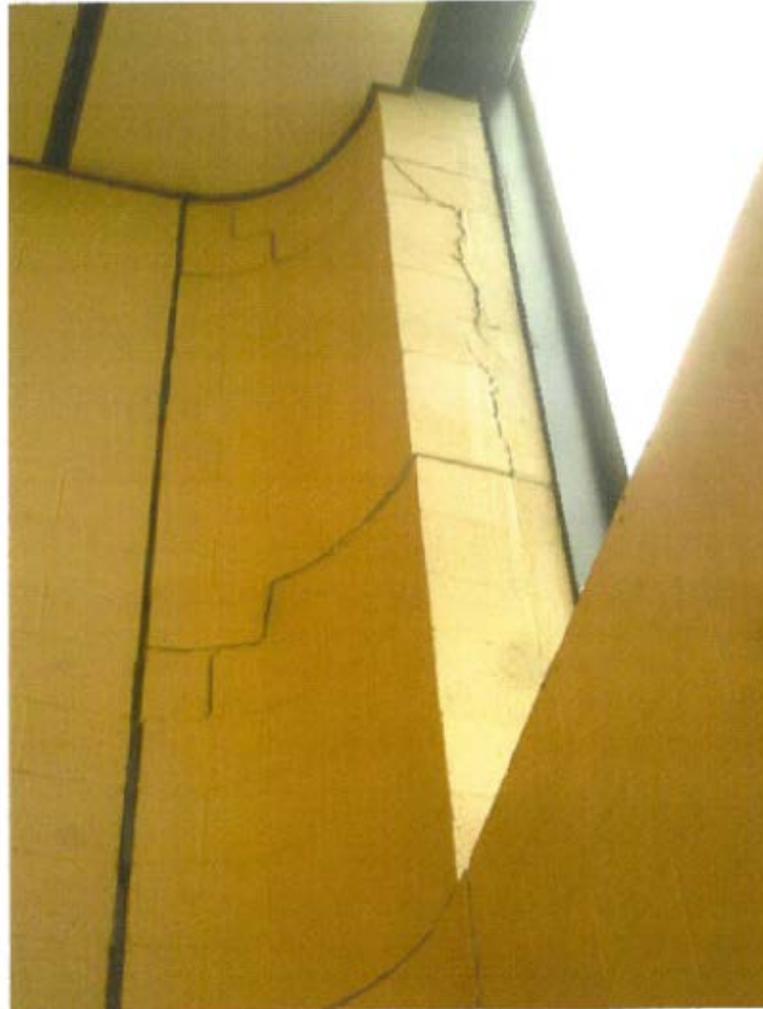
Roof Issues



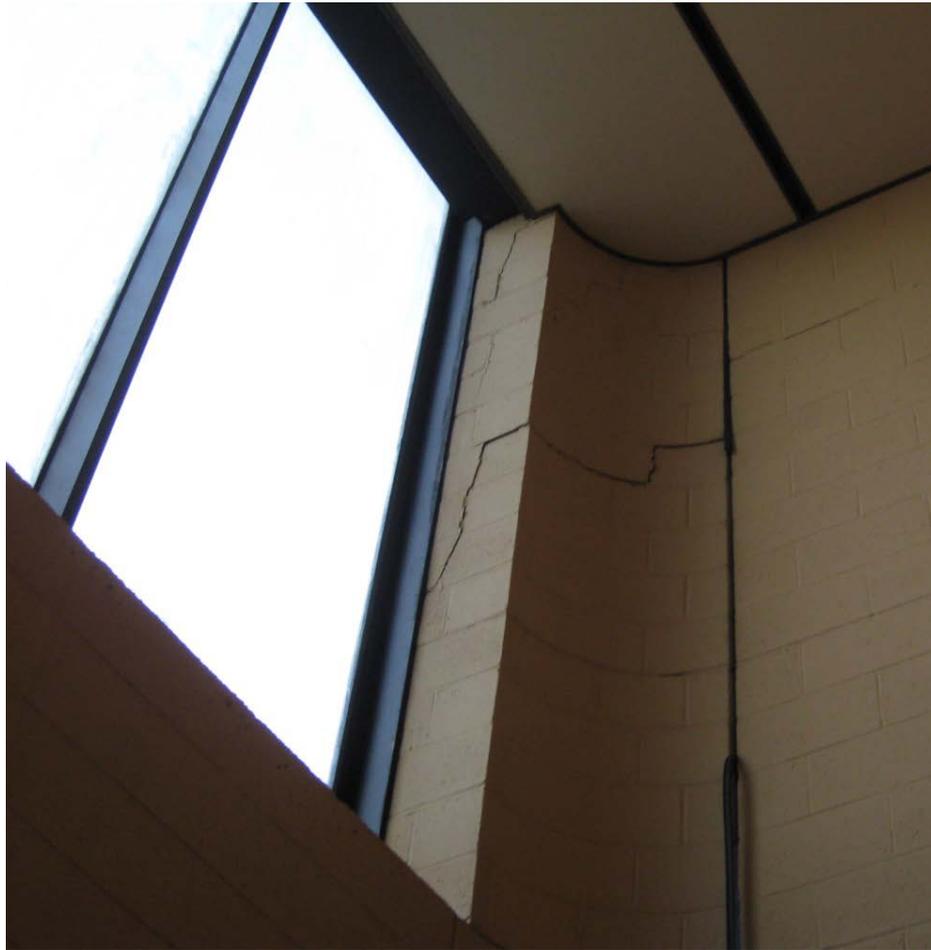
Mechanical, Electrical and Plumbing Issues



Masonry Cracks



Exterior Shell Issues



Accreditation at Risk

- In 2012, the New England Association of Schools & Colleges (NEASC) placed Minuteman's accreditation on "Warning" status solely due to the condition of the building.

Repairs Can Trigger Need for Upgrades

- When repairs exceed 33% of the structure's assessed value over a 5-year period, they trigger a requirement that 100% of the building be immediately brought into compliance with current life safety codes.
- When repairs exceed 30% of the structure's assessed value over a 3-year period, they trigger a requirement that 100% of the building be immediately brought into compliance with current handicap accessibility codes.

Repairs Can Trigger Need for Upgrades

- Current assessed value of the improvements is \$25,000,000
 - 5-year threshold for life safety codes - \$8,250,000
 - 3-year threshold for accessibility codes - \$7,500,000

Enhancing the Learning Environment

- The current Trades Hall is based on an “open classroom” design with only partial-height walls separating the various trades programs.
- Most classrooms on the upper level lack natural light.
- Many rooms throughout the building have poor ventilation.

Enhancing the Learning Environment

- The mechanical and electrical infrastructure does not support the school's current technology needs.
- The current building was designed to segregate career/technical programs from academic programs. A new building would allow for adoption of a "Career Academy Model," where vocational and academic spaces are adjacent and integrated.

Existing Trades Hall



Existing Trades Hall





3. What Has Been Done to Date

Feasibility Study – School Sizing

- The Feasibility Study began in 2010.
- In August 2011, MSBA approved a design enrollment for a building of up to 800 students (of which 460 were projected to come from members towns and 320 were projected to come from non-member towns).
- In July 2012, the MSBA directed Minuteman to consider a school of 435 students.
- In May 2014, the Minuteman School Committee voted to focus solely on a school of 628 students.

Feasibility Study – Building Alternatives

- The project design team analyzed three options – renovation of the existing building, renovation of a portion of the building with a new addition and partial demolition, and new construction.
- The projected costs and estimated construction durations of the three alternatives were as follows:
 - Renovation: \$176.5 million 5 years
 - Renovation/Addition: \$175.3 million 4 years
 - New Construction: \$144.9 million 2.75 years

Feasibility Study – Building Alternatives

- Minuteman concluded – and the MSBA agreed – that constructing a new building was the most cost-effective option.
- MSBA also stated that it would not support a building with a design enrollment of ***less than 600 students.***

Proposed Vocational Program Mix

Engineering, Construction & Trades Academy	Life Sciences and Services Academy
Advanced Manufacturing & Metal Fabrication (new)	Biotechnology
Automotive	Cosmetology
Carpentry	Culinary Arts & Hospitality
Design and Visual Communications	Early Education and Care
Electrical	Environmental Science
Multi-Media Engineering (new)	Health Occupations
Plumbing & HVAC	Horticulture and Landscaping Tech
Programming and Web Development	
Robotics Engineering Automation	

Self-Funded, Non-MSBA Renovation

- Members of the Minuteman School Building Committee developed an estimate in September 2015 that the potential repair and renovation costs to Minuteman if it chooses not to undertake an MSBA-supported new building project could be \$105.3 million.

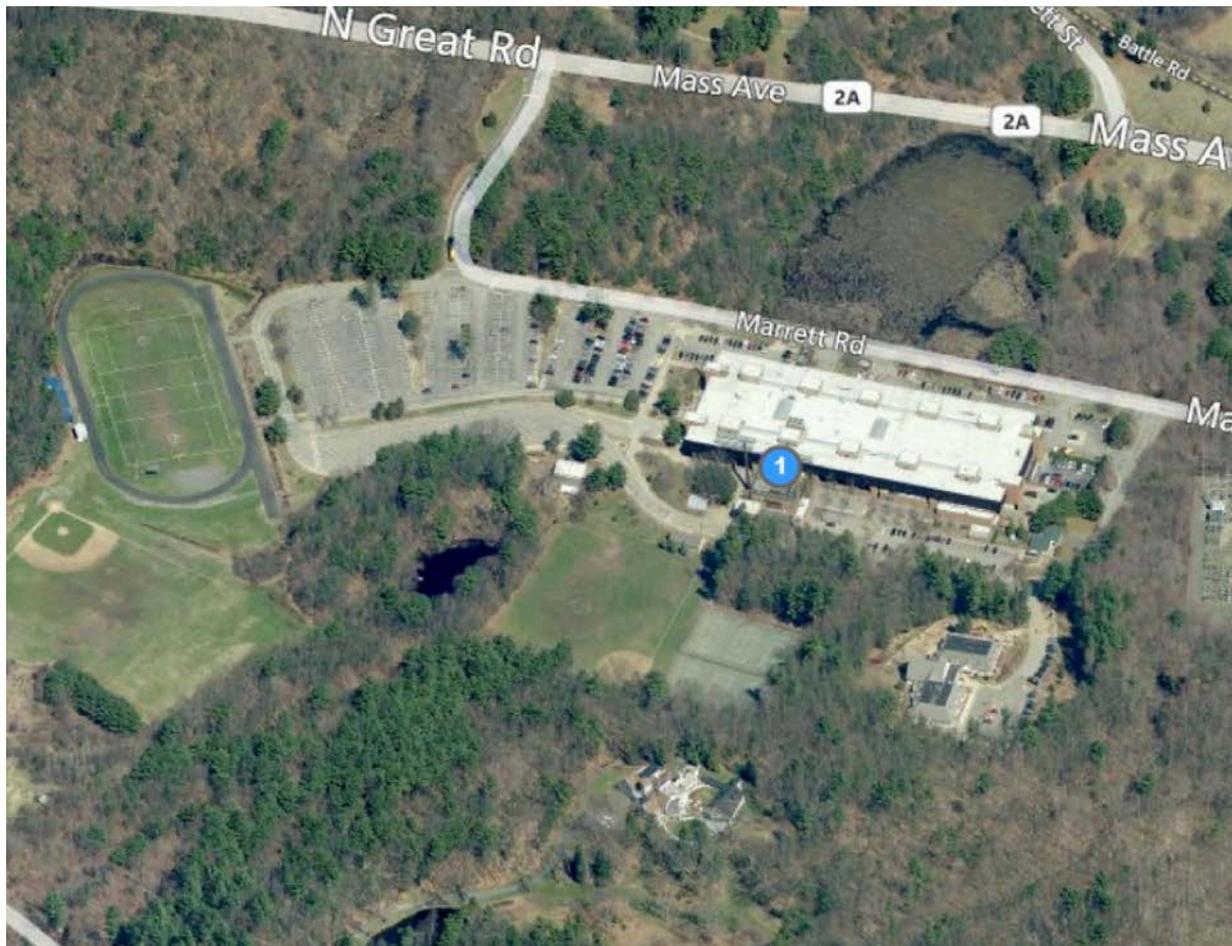


4. Overview of the Proposed New Building

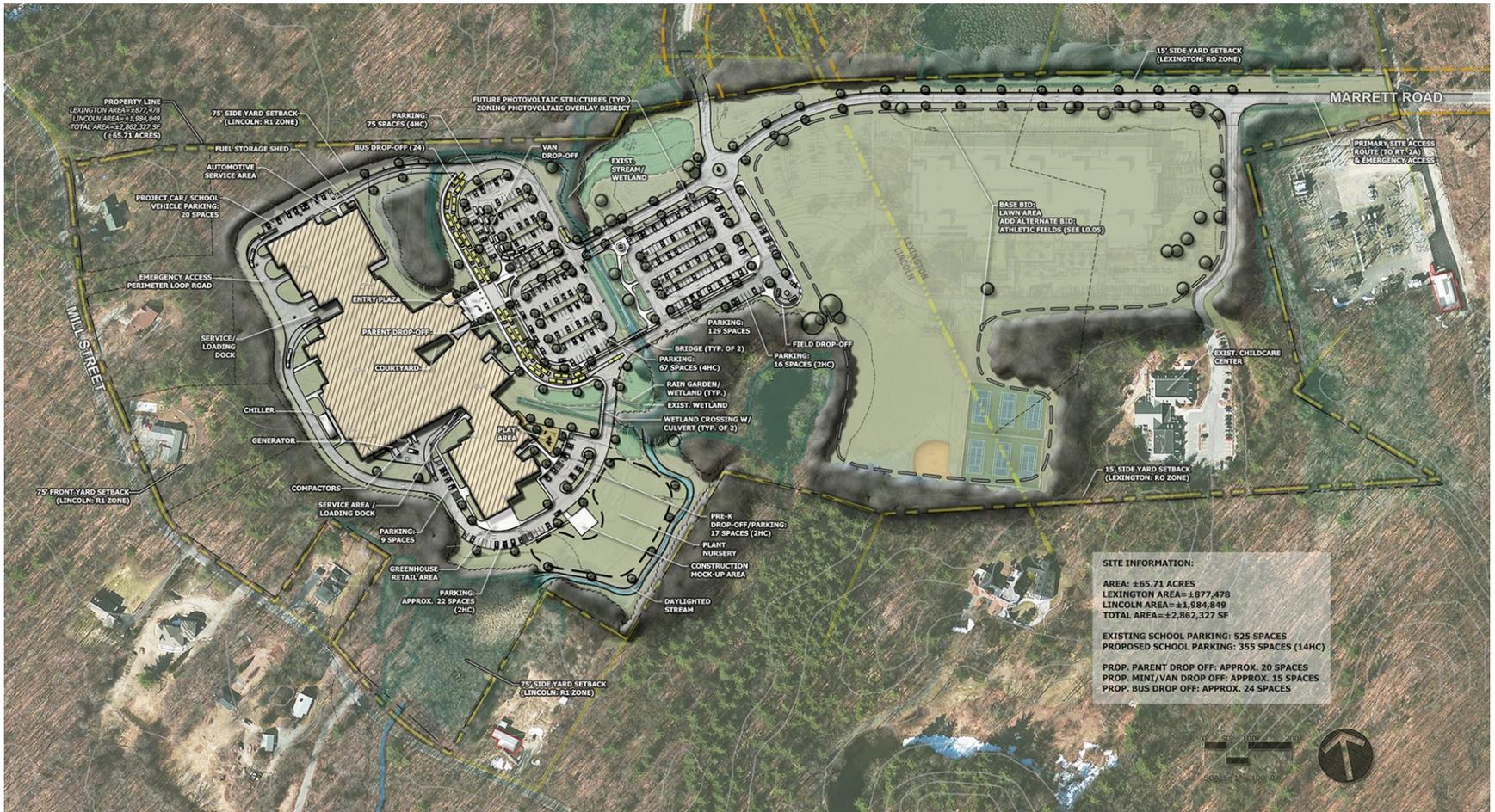
Existing School



Existing Conditions



The New Minuteman Campus



SITE INFORMATION:
 AREA: ± 65.71 ACRES
 LEXINGTON AREA=± 877,478
 LINCOLN AREA=± 1,984,849
 TOTAL AREA=± 2,862,327 SF
 EXISTING SCHOOL PARKING: 525 SPACES
 PROPOSED SCHOOL PARKING: 355 SPACES (14HC)
 PROP. PARENT DROP OFF: APPROX. 20 SPACES
 PROP. MINT/VAN DROP OFF: APPROX. 15 SPACES
 PROP. BUS DROP OFF: APPROX. 24 SPACES



Supporting Innovation and Learning



A Vision of Our Future



Modern Technical Labs



Natural Light in All Classrooms



Contemporary State of the Art



Meeting All Industry Standards



Professional Services Provided



Collaborative & Project-Based



Giving Students Their Space



Student-Managed Restaurant and Public Meeting Spaces



Engineering, Construction & Trades Academy	Shared Services & Programs	Life Sciences & Services Academy
<p>Advanced Manufacturing & Metal Fabrication 48.0501 / 48.0599</p>	<p>Nursing & Wellness Services Library & Media Center Special Education</p>	
<p>Automotive 47.0604</p>	<p>Common Planning Time</p>	
<p>Carpentry 46.0201</p>	<p>Academic Programs</p>	
<p>Design & Visual Communications 50.0401</p>	<p>Chemistry Science Physics English Language Arts Mathematics Physical Education</p>	<p>Humanities Art & Music Guidance Counseling Career Development Advanced Placement</p>
<p>Electrical 46.0302</p>	<p>Common CVTE Competencies</p>	
<p>Multi-Media Engineering 09.0701</p>	<p>Health & Safety Entrepreneurship Financial Literacy</p>	<p>Digital Literacy Career Guidance Work based Learning Internships & Coop</p>
<p>Plumbing & HVAC 46.0603 / 47.0201</p>	<p>Reading Consultancy Student Portfolios Executive Purpose Project Based Learning</p>	
<p>Programming & Web Development 11.0201</p>	<p>Health Occupations 51.0000</p>	
<p>Robotics Engineering Automation 15.0000 / 15.0403</p>	<p>Culinary Arts & Hospitality 12.0500 / 52.0901</p>	
		<p>Cosmetology 12.0404</p> <p>Early Education & Care 13.1210</p> <p>Environmental Science 15.0507</p> <p>Biotechnology 15.0401</p> <p>Horticulture & Landscaping Tech 1.0601</p>

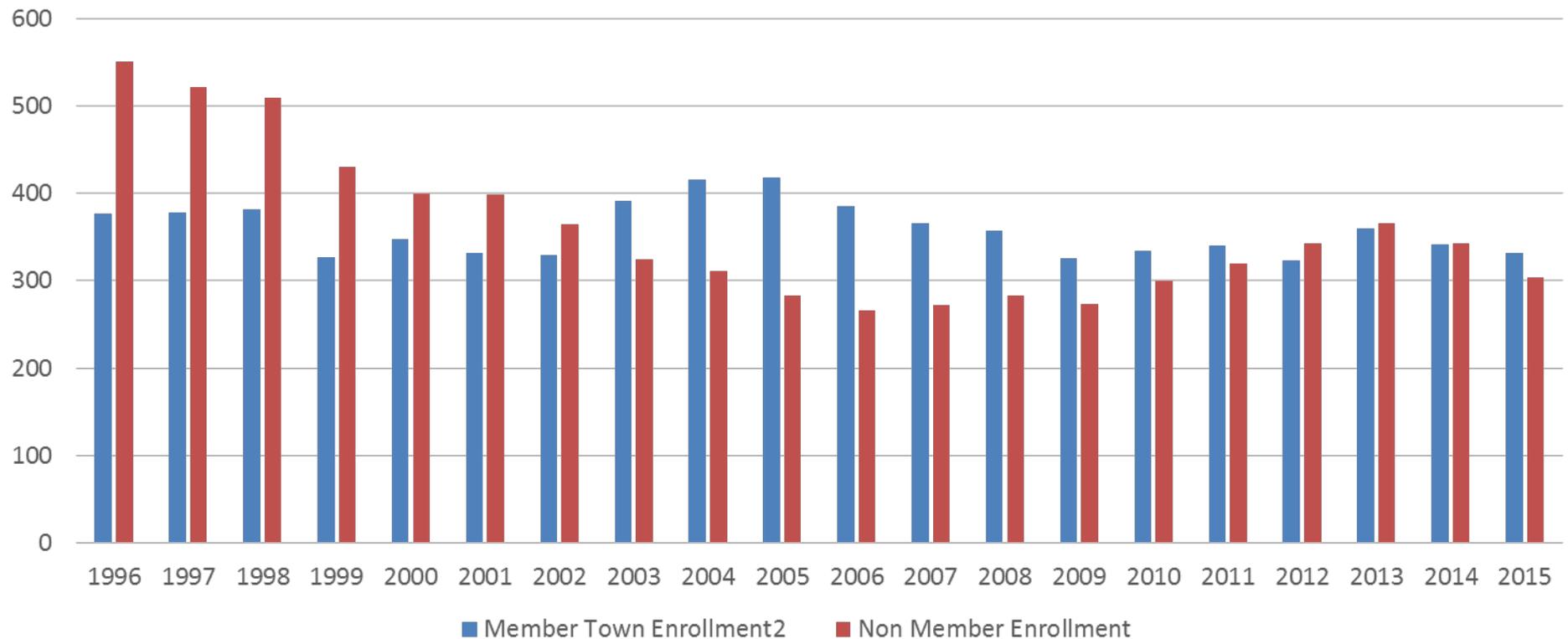


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5. Financial Assumptions and Projections

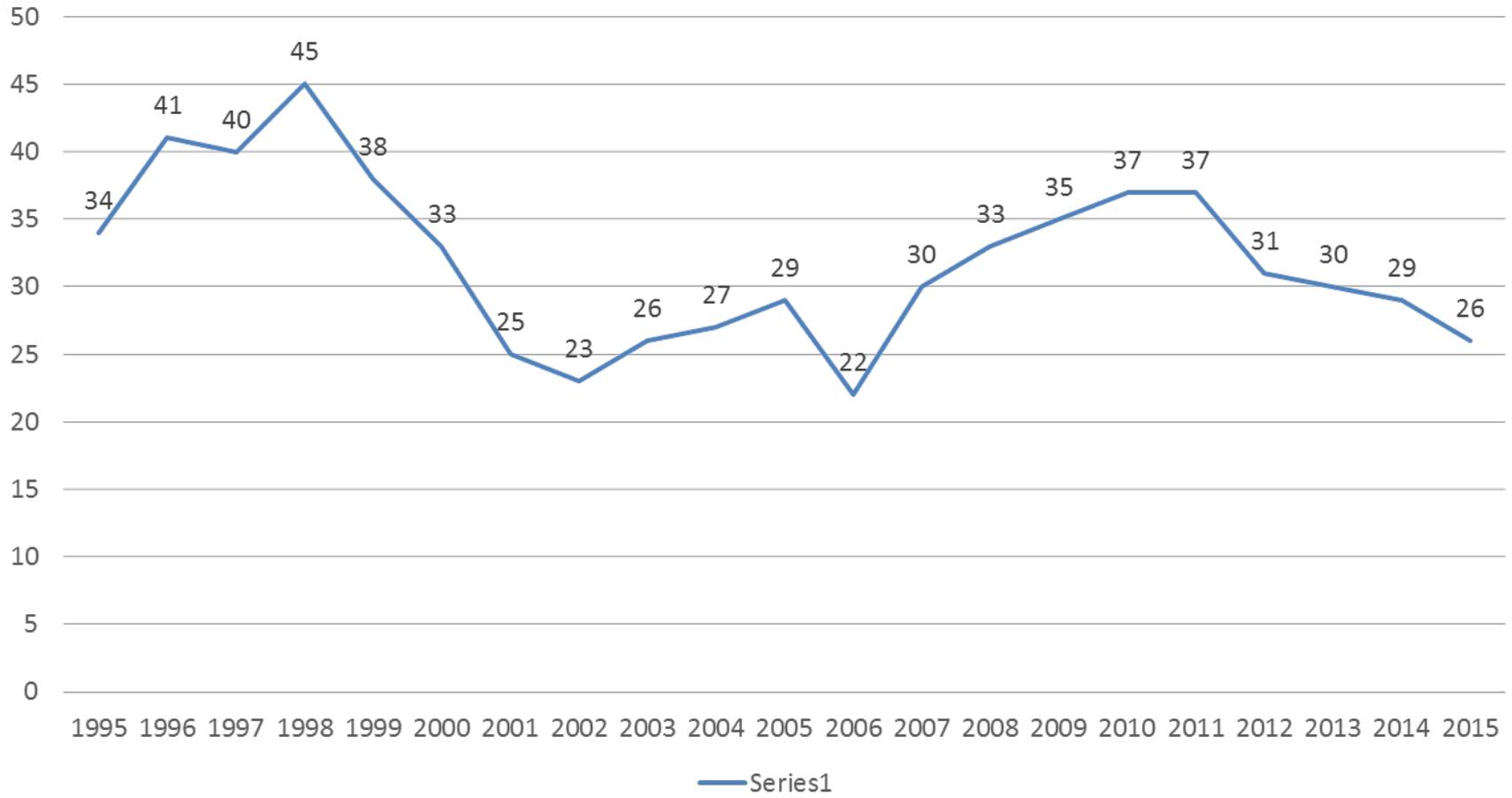
Historic Minuteman High School Enrollment

20 Year History In District/ Out of District



1. These totals reflect full-time and part-time high school students and may not align with the full time equivalent (FTE) enrollments used to determine member town assessments.
2. Member-town enrollment of the 10 remaining towns only.

Historic Belmont Participation in Minuteman High School Enrollment



Projected Future Minuteman High School Enrollment

Assumptions

Beginning with October 2014 enrollment, enrollment from all 10 member towns is expected to grow at a rate of 8% per year for 4 years.

All seats in the new building not occupied by a member-town student will be occupied by a non-member student.

Projected Future Minuteman High School Enrollment

Enrollment Projections

	<u>Actual 2015</u>	<u>Projected 2018</u>
In-District	326	458
Out-of-District	309	170
Total High School	635	628
Projected Belmont	26	39

Projected New Building Costs

- Total Project Cost – Not to exceed \$144.9 million
- State Reimbursement Rate – 44.75% of eligible costs
- Net State Reimbursement Rate – 30.46%
- State Reimbursement Amount - \$44.1 million
- Net Building Cost to Ten Member Towns - \$100.8 million

Comparison of Projected Building Costs with Other New Vocational Technical Schools

COMPLETION DATE	TOTAL COST	\$/SQ FT*
Worcester Vocational Technical High School February 2006	\$90,000,000	\$705.00
Putnam (Springfield) Voc-Tech High School July 2012	\$124,000,000	\$567.00
Essex Agricultural and Technical High School June 2014	\$134,501,368	\$477.00
Minuteman Regional Voc-Tech High School Spring 2020	\$144,922,480	\$562.00
		* Today's Dollars

Projected Debt Service on New Building

Total Debt Service Assumptions and Projections

- Assumes borrowed funds drawn down on three bond issuances with a 30-year term and with an average bond interest rates of 3.81% to 3.93%
- Total projected annual debt service on \$100.8 million = \$5,315,000

Projected Debt Service on New Building

Total Member-Town Share of Total Debt Service

- Non-member towns assumed to pay a capital fee for their students. Fee projected to equal the average debt service cost per student.
($\$5,315,000 / 628 = \$8,463/\text{student}$)
- Total projected debt service contribution from non-member towns = $\$1,440,365$ ($\$8,463 \times 170$)
Net member town share of total debt service = $\$3,874,635$.

Belmont's Projected Annual Debt Assessment

	Projected Annual Debt Assessment	Estimated Tax Per Median Home
With Projected Capital Facilities Fee	\$334,459	\$33.25
If The District Doesn't Collect Any Capital Facilities Fees	\$458,791	\$45.61

Note: The projected debt service assessments in each community are recalculated annually and will change annually based on how enrollment and the other factors in the new capital allocation formula change in each community relative to the other member communities.



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6. Conclusions

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Reasons to Support the Building Project

- It results in a new, modern school that best meets the educational needs of the students
- It secures MSBA funding and does so at a higher, grandfathered reimbursement rate.
- The new school has a design enrollment that is substantially smaller than the current school.
- Minuteman's accreditation is at risk if the building issues are not addressed.

Reasons to Support the Building Project (Continued)

- It is not clear that the alternatives if the new building is rejected lead to a better outcome for Belmont:
 - Could be faced with substantial rehab costs and no State support.
 - MSBA has indicated that it won't support a smaller school.
 - Even if MSBA subsequently approves a smaller school, the impacts of inflation on construction costs and/or higher interest rates could result in building a smaller school at a higher costs.
 - There is no ability to collect a capital facilities fee from non-member towns other than in conjunction with an MSBA building project.
- Even if no capital facilities fees are collected, Belmont's projected share of the debt service only represents about one-half of one percent (0.05%) of the Town's current operating budget.

Concerns/Reservations About the Project

- The new school is twice the size that is needed to support current member-town enrollment. Even if Minuteman achieves the forecasted 40% growth in member-town enrollment, member-town enrollment is still less than three-quarters of the school capacity. The school is therefore likely to always be dependent on non-member enrollment.
- If the projected capital facilities fees fall short of projections, the debt service burden on the member towns increases. For Belmont, the debt service burden alone could be close to \$20,000 per student, on top of an annual operating assessment of close to \$30,000 per student.

Concerns/Reservations About the Project (continued)

- The projected \$100 million cost of repairing the existing facility without MSBA assistance may be overstated or there may be ways to undertake the repairs without triggering the costs requirements to immediately comply with existing codes.
- Not proceeding with a new school potentially could lead to other paths or outcomes that have not yet been explored and that could be more cost-effective in the long-term.



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Questions?

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