

# Overview

## ARTICLE 18.

To determine whether the Town will approve the \$144,922,478 borrowing authorized by the Minuteman Regional Vocational Technical School District (the "District"), for the purpose of paying costs of designing, constructing and originally equipping a new district school to be located at 758 Marrett Road, Lexington, Massachusetts, and for the payment of all other costs incidental and related thereto (the "Project"), which school facility shall have an anticipated useful life as an educational facility for the instruction of school children of at least 50 years, and for which the District may be eligible for a school construction grant from the Massachusetts School Building Authority ("MSBA"), said amount to be expended at the direction of School Building Committee the MSBA's grant program is a non-entitlement, discretionary program based on need, as determined by the MSBA, and any Project costs the District incurs in excess of any grant approved by and received from the MSBA shall be the sole responsibility of the District and its member municipalities; any grant that the District may receive from the MSBA for the Project shall not exceed the lesser of (i) forty four and three quarters percent (44.75%) of eligible, approved project costs, as determined by the MSBA, or (ii) the total maximum grant amount determined by the MSBA; provided, however, that this approval shall be contingent upon passage of a Proposition 2 ½ debt exclusion referendum under General Laws Chapter 59, § 21C(k); to exempt the Town's allocable share of the amounts required for the payment of interest and principal on said borrowing; and provided further, that any approval of this borrowing shall be contingent upon the approval, on or before March 1, 2016, of the 2016 Amended Regional Agreement for the District by the town meetings of all 16 member towns of the District; or take any other action relative thereto.

**February 3, 2016**

Presented by:  
Minuteman School Building  
Committee



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# Minuteman High School Building Project

## Article 18

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# Overview

- What Minuteman Offers to Concord
- Why a Building Project
- MSBA Process So Far
- Proposed Project
- Vo-Tech and Traditional Costs Compared
- Cost to Concord
- Questions



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# What Minuteman Offers to Concord

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# Minuteman High School

- Concord's High School for ***Experiential*** Learning (65% to college; 35% to career)
- Offers Rigorous Academic Courses, including Advanced Placement (AP) courses
- Offers Industry-Supported Career and Technical Education in 19 Career Majors
- Offers Many State or Professional Certifications
- Offers Sports, Art and Drama
- Offers Post Grad and Community Programs

# Minuteman High School

- Concord is one of 16 towns in the Minuteman District (Subject to Regional Agmt Amendment)
- Member since Minuteman Opened in 1972
- Concord attendance varies, currently 17
- Operating and Capital costs apportioned by formula (Subject to change through Regional Agmt Amendment)
- Out-of-District students attend, space permitting; assessed op fee and, in future, cap fee



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# Why a Building Project

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# Why a Building Project?

1. Current Building Conditions Demand to be Addressed
1. Educational Program requires Updating Physical Plant
1. NEASC Accreditation is in Jeopardy Solely Due to Building Deficiencies

# Current Building Conditions

- Structural, code, and construction problems identified in multiple engineering surveys.
- Deficiencies in roof, exterior shell, electrical systems, plumbing systems, ventilation, egress, and parking lots
- Non-compliance with today's fire and building codes and ADA requirements.

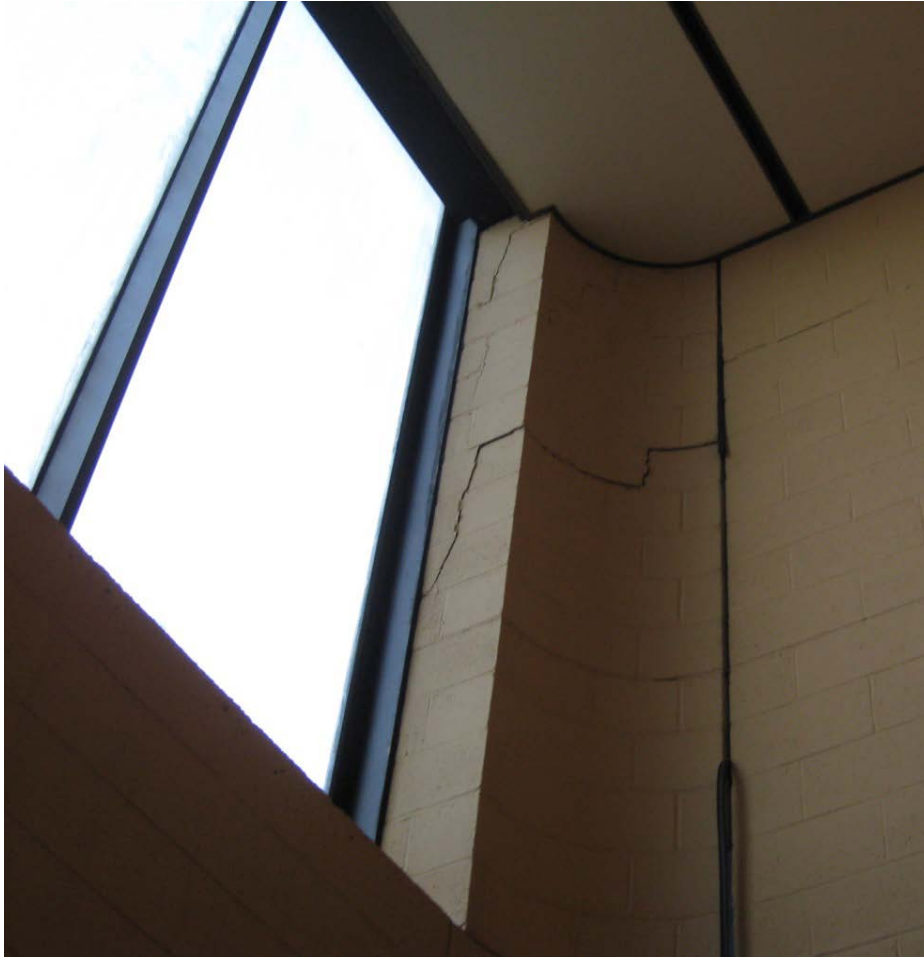
# Current Building Conditions

- Correcting deficiencies in existing building: \$100 million over several years, without state aid
- Magnitude of repair would trigger obligation to bring entire building up to all codes.

# Current Building Conditions: Site Issues



# Current Building Conditions: Exterior Shell Issues



# Current Building Conditions: Roof Issues

- Roof is almost 30 years old
- Roof has been failing for many years and has multiple repairs



# Current Building Conditions: Roof Issues

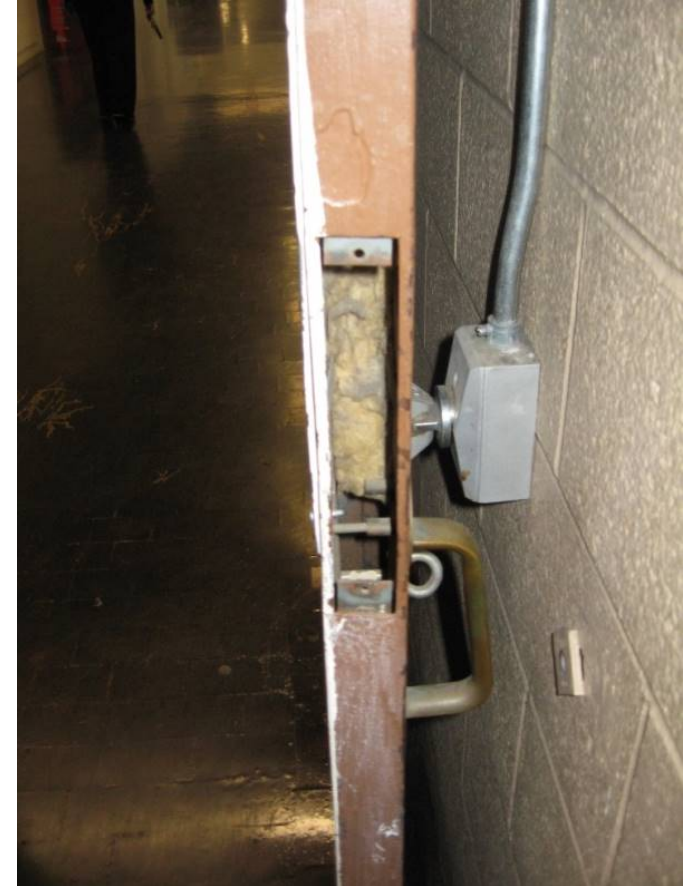


The roof continues to deteriorate.

# Current Building Conditions: Accessibility Issues



# Current Building Conditions: Egress Issues



# Current Building Conditions: Mechanical, Electrical & Plumbing Issues



# Supporting the Educational Program: Career Academy Model

- The School Committee is implementing a **Career Academy Model** to support the delivery of high-quality Career and Technical Education.
- Career Academies better serve students by creating synergy – closely **integrating** career education with rigorous academics.

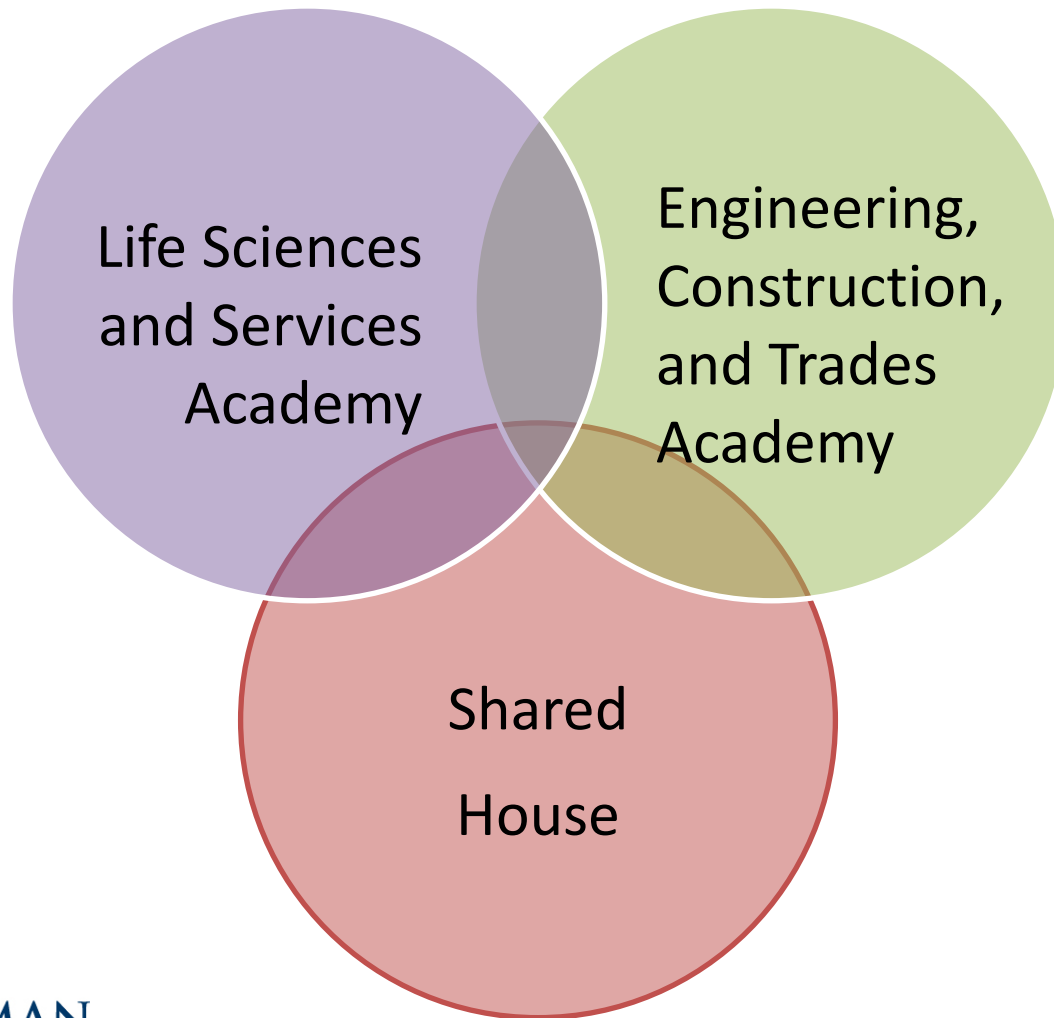
# Supporting the Educational Program: Career Academy Model

- Current building designed in late 1960s, built in 1970s in “open classroom” design (as was Peabody).
- Design, fashionable at the time, is a well documented failure for education.
- Current building design and configuration does not support current or future programming.
- Mechanical and electrical infrastructure does not support current or future technology needs.

# Supporting the Educational Program: Career Academy Model

- Existing building **separates** academic disciplines and **isolates** career/technical programs from academic programs.
- Existing building cannot accommodate a Career Academy Model that **promotes** collaboration and communication.
- Existing building cannot deliver a 21<sup>st</sup> Century education.

# Supporting the Educational Program: Career Academy Model



# Supporting the Educational Program: Career Academy Model

Engineering, Construction, & Trades Academy Programs	Shared Services & Programs		Life Sciences & Services Academy Programs
Advanced Manufacturing & Metal Fabrication 48.0501 / 48.0599	Nursing Services Library & Media Center Special Education		Culinary Arts & Hospitality 12.0500 / 52.0901
Automotive 47.0604	Common Planning Time		
Carpentry 46.0201	Academic Programs		Cosmetology & Barbering 12.0404 / 12.0402
Design & Visual Communications 50.0401	Chemistry, Science & Physics English Language Arts Mathematics Physical Education	Humanities Art & Music Guidance Counseling Career Development Advanced Placement	Early Education & Care 13.1210
Electrical 46.0302	Common Core CVTE Competencies		Health Occupations 51.0000
Multi-Media Engineering 09.0701	Health & Safety Entrepreneurship Financial Literacy	Digital Literacy Career Guidance Work based Learning Internships & Co-Op	Environmental Science 15.0507
Plumbing & HVAC 46.0603 / 47.0201	Reading Consultancy Student Portfolios Executive Purpose Project Based Learning		Biotechnology 15.0401
Programming & Web Development 11.0201			Horticulture & Landscaping Tech 1.0601
Robotics Engineering Automation 15.0000 / 15.0403			

# Accreditation in Jeopardy

- The New England Association of Schools & Colleges (NEASC) cited multiple deficiencies in the facility.
- December 2012: NEASC placed Minuteman on “Warning” status **solely** due to condition of the building.
- NEASC requires regular updates on our progress in addressing this one issue.



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# MSBA Process

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# The MSBA Process

## Modules One through Four

- 2009: MSBA Authorized Feasibility Study
- Formed School Building Committee
- Hired Consultants
  - Owner's Project Manager: Skanska
  - Architect: Kaestle Boos Associates
  - Estimator: Daedalus
- 2014: MSBA Final Extension to June 30, 2016
- 2015: Preliminary Solution options and Preliminary Cost Estimates developed

# The MSBA Process

- Spring 2015: Public Hearings in member towns
- June 2015: SBC and SC recommended New Building option, cost not to exceed \$144,922,478, as Preferred Solution
- July 2015: MSBA selected New Building as Preferred Solution
- December 2015: Schematic Design for New Building developed; budget certified by OPM

# The MSBA Process

- January, 2016: MSBA unanimously approved New Building Schematic Design, cost not to exceed \$144,922,478
- MSBA estimates state grant at \$44,139,213\*
- Additional project points could increase state grant to \$45,206,061\*
- **Expected cost to District: +/- \$100 million**

*\*MSBA letter of January 27, 2016*

# Upcoming MSBA Modules

- Module 5 (Local Approval of Funding): By June 30, 2016
- Module 6 (Construction Management)
- Module 7 (Actual Construction)
- Module 8 (Project Completion): On or before September 2020

# The MSBA Process: Funding Phase (Article 18)

- Deadline for District approval: June 30, 2016
- February 2016, School Committee expected to approve funding (2/3 vote)
- District towns vote at Town Mtg (majority vote) (debt exclusion vote with ballot following)
- School Committee's District-wide ballot option (Chapter 71, section 16(n))
- Once funded, CD's developed, CM at Risk selected, Bids solicited, Construction 2018, completion in 2.75 yrs, 2020 or 2021



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# Proposed Project

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# EXISTING CONDITIONS



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# PROPOSED SITE PLAN



# LOWER LEVEL









## LEGEND

- CLASSROOM
- LABS/ SHOP AREAS
- SPED & SUPPORT
- CORE FACILITIES
- ADMIN & TEACHER
- SUPPORT / STORAGE
- MECH, ELEC, TOILET ROOMS



# MAIN LEVEL

## LEGEND

-  CLASSROOM
-  LABS/ SHOP AREAS
-  SPED & SUPPORT
-  CORE FACILITIES
-  ADMIN & TEACHER
-  SUPPORT / STORAGE
-  CIRCULATION
-  MECH, ELEC, TOILET ROOMS



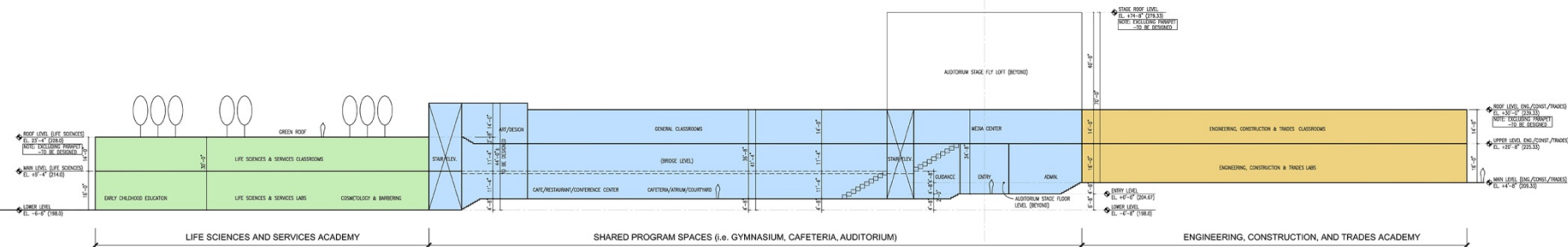
# UPPER LEVEL

## LEGEND

- CLASSROOM
- LABS/ SHOP AREAS
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# SECTION



# BIRDS-EYE VIEW



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# Voc-Tech Compared to Traditional

- By its very nature, vocational-technical education is more complex and costs more to deliver:
  - “Two schools in one” with nearly double the faculty
  - Investment in faculty with industry expertise is greater
  - Chapter 74 square footage requirements are in addition to MSBA Academic minimums
  - Safety and health requirements
  - Major equipment needs
  - Infrastructure needs to mirror current industrial and business standards

# Minuteman Compared to Other Vo-Tech Projects

- There have been several renovation projects at Voc-tech schools.
- There are only 3 comparable new construction projects.
  - Essex Agricultural and Technical High School cost \$134.5 million. Construction began in 2012.
  - Putnam Vocational Technical High School was built for \$124 million. It was completed in 2012.
  - Worcester Tech completed in 2006.
- In today's dollars, we are in line with those projects.
- We are within the cost per square foot determined by MSBA.

# Cost

## New Building Capital Assessment to Concord

- At current District Membership
- At reduced District Membership

# Current Membership

	<u>2015</u>	<u>4-yr</u>		<u>2015</u>	<u>4-yr</u>
Acton	31	25.5	Lancaster	39	29.5
Arlington	117	135.3	Lexington	49.5	46.4
Belmont*	26	29	Lincoln*	10	5.8
Bolton	9	9.8	Needham	24	26.8
Boxborough*	5	4.5	Stow	13	19.5
Carlisle	5	8.5	Sudbury*	25	20.8
Concord	15	10.3	Wayland**	2	5.3
Dover*	2	2	Weston	4	3.5

# Projected Total Member FY 2020 Assessments

16 towns      9 towns      % change

Acton	1,097,198	1,155,433	5.31%
Arlington	5,635,400	6,004,460	6.55%
Belmont	1,182,148	1,255,298	6.19%
Bolton	421,885	439,862	4.26%
Boxborough	223,007	5,137	-97.70%
Carlisle	341,643	5,137	-98.50%
Concord	590,363	627,795	6.34%
Dover	166,629	5,137	-96.92%
Lancaster	1,321,371	1,391,760	5.33%
Lexington	1,745,134	1,857,185	6.42%
Lincoln	279,576	5,137	-98.16%
Needham	958,845	1,018,379	6.21%
Stow	700,104	735,197	5.01%
Sudbury	996,678	5,137	-99.48%
Wayland	158,710	5,137	-96.76%
Weston	203,091	5,137	-97.47%
Total	16,021,782	14,521,328	



# Concord's estimated 2020 assessment breakdown

	<u>16 Members</u>	<u>9 Members</u>
Minimum Required Contribution	233,064	234,263
Transportation	32,006	36,849
<u>Other Operating Assessment</u>	<u>115,962</u>	<u>130,179</u>
S/T	\$381,032	\$401,291
<u>Debt/Capital</u>	<u>209,331</u>	<u>226,503</u>
Total Assessment	\$590,363	\$627,794

# Regular FTE Students (PG excluded)

2014      2015      2016      2017      4-yr avg.

Acton	20	25	26	31	25.5
Arlington	125	153	146	117	135.25
Belmont	31	30	29	26	29
Bolton	9	11	10	9	9.75
Boxborough	5	4	4	5	4.5
Carlisle	9	12	8	5	8.5
<b>Concord</b>	<b>7</b>	<b>7</b>	<b>12</b>	<b>15</b>	<b>10.25</b>
Dover	2	1	3	2	2
Lancaster	22	26	32	39	29.75
Lexington	53	47	50	55	51.25
Lincoln	4	5	4	10	5.75
Needham	27	34	22	24	26.75
Stow	25	22	18	13	19.5
Sudbury	15	19	24	25	20.75
Wayland	8.5	7.5	3	2	5.25
Weston	3	4	3	4	3.5

# For More Information

- Visit the Minuteman website for more information on the building project:

[www.minuteman.org](http://www.minuteman.org)

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