

Superintendent's Vocational Education Options Work Group Report

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**PRESENTATION TO BELMONT
SUPERINTENDENT**

MAY 23, 2018
(REV. 6-13-18)

Context

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- At a Special Town Meeting on October 19, 2016, the Town voted to withdraw as a member district of Minuteman Regional Vocational Technical High School (MM). The effective date of Belmont's vote to withdraw from MM as a member district is June 30, 2020.
- In light of this vote, Belmont Superintendent of Schools, John Phelan, commissioned a work group to explore and recommend options for Belmont students in career, vocational and technical education (CVTE).

Group's Charge and Formation

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- The Vocational Education Options Work Group was charged with exploring and recommending options for Belmont students in vocational and technical education, in light of Belmont's vote to withdraw from MM.
- Broad-based community participation was solicited; work group is made up of:
 - ✦ School and Town administration
 - ✦ BPS educators
 - ✦ Town Meeting members
 - ✦ Parents
 - ✦ Community members
 - ✦ Belmont representative to Minuteman School Committee

Group Members

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- All individuals expressing interest in the Work Group were invited to attend
- The group members are:

Michael Bruno	Special Education Teacher, Belmont High School
Casey Cammack	Parent
Glen Castro	Budget Analyst, Town Administrator's Office
Madeline Cronin	Community Member
Anthony DiCologero	Director of Finance, Business and Operations, Belmont School Department; Group Facilitator
Jim Gammill	Town Meeting Member; Belmont Representative to Minuteman School Committee
Mary Gavin	Town Meeting Member
Elizabeth Goss	Community Member
John Herzog	Community Member
Karl Ivester	Parent, Minuteman Advisory Council Member
Denise LaPolla	Special Education Teacher, Chenery Middle School
John Murphy	Parent
Tommasina Olson	Town Meeting Member
Joseph Quinn	Guidance Counselor, Chenery Middle School
Jim Sullivan	Parent
Gregory Wilder	Community Member

Essential Question: Why Career/Vocational Technical Education (CVTE)?

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“CVTE is a proven resource for preparing high school students and adults for skilled jobs that are in demand in a wide range of fields including STEM, advanced manufacturing, health care, automotive, welding, building trades and information technology...CVTE schools are in constant communication with local businesses through business advisory committees and co-operative placement programs.”

http://commcorp.org/wp-content/uploads/2017/01/Resources_LMI-Data-Report_Final_Jan-2017.pdf

- High Demand for workers in these fields (combination of cognitive and manual skills need for occupations in our society)
- High paid positions
- Direct students to opportunities rather than leaving them only one option of an expensive degree program
- Economic Security/Educational Value

Work Group Objectives

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- **Charge: Evaluate Career/Vocational Technical Education (CVTE) for Belmont Students**
- **Guiding Questions**
 - Where should Belmont students go for CVTE programs?
 - How should Belmont contract with CVTE providers?
- **Considerations:**
 - Quality/Completeness of Curriculum
 - Community and Connection – All Students in One Destination
 - Capacity to Satisfy Belmont Student Demand
 - Reliability of Long-Term Relationship
 - Cost of Recommendations

Overview

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- **CVTE Programs Reviewed in Greater Boston & Metro West Area**
 - Regional Programs
 - CVTE Programs offered within local school districts
- **Selection Criteria**
 - Academic, Social-Emotional, Student Life Factors
 - Space, Availability, Enrollment Factors
 - Long Term Sustainability Factors
 - Financial Factors
- **Agreement Structures**
 - Non-member status/no formal agreement with CVTE schools
 - Inter-municipal agreement (IMA) with CVTE schools
 - Reinstate as member district with MM

CVTE Programs Reviewed

- Minuteman Regional Vocational Technical High School (MM)
- Shawsheen Valley Technical High School (Shawsheen)
- SOLVED Initiative through SHORE Collaborative – local city and town high schools offering CVTE programs to students within the SHORE Collaborative communities. Communities housing CVTE programs include:
 - Cambridge
 - Medford
 - Somerville
 - Waltham
- The Work Group obtained a listing of all schools with CVTE programming from DESE, but determined a number of locations to be not viable based on distance from Belmont.

Selection Criteria

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- Academic, Social-Emotional, Student Life Factors
- Space, Availability, Enrollment Factors
- Long-Term Sustainability Factors
- Financial Factors

Selection Criteria: Academic, Social-Emotional, Student Life Factors

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- **Academic**
 - DESE Profile Data
 - Program Offerings
- **Social-Emotional**
 - Community and Connection
- **Student Life**

Selection Criteria: Academic, Social-Emotional, Student Life Factors (cont.)

Academic Factors: DESE Profile Data

CVTE Options Profile Data



	Morning Commute Time	Distance	Capacity	Level	Percentile	Enrollment	Student Teacher Ratio	% Students w/IEPs	% Economic Disadvantage	% First Language not English	4 Year Graduation Rate (%)	Plans of High School Graduates (%)		
												4 Year College	2 Year College	Work
BELMONT				2	86	1264	16.9	5.7	6.5	16.5	97.8	92.7	1.6	0.3
REGIONAL CVTE														
MINUTEMAN	12-18	7	yes	1	51	535	8.0	48.3	26.1	5.0	88.0	35.3	26.0	26.0
SHAWSHEEN	24-35	17	maybe	1	89	1336	10.3	24.0	13.1	0.9	99.1	36.0	21.6	34.5
NORTHEAST	28-40	13-23	tbd	2	40	1261	11.3	23.2	30.8	19.1	96.6	30.3	24.4	42.1
SCHOOLS WITH CVTE														
CAMBRIDGE	14-35	4	tbd	2	48	1956	11.0	16.6	27.4	25.8	92.5	69.2	16.5	4.0
SOMERVILLE	18-40	5	tbd	1	40	1259	10.2	16.9	39.6	57.4	85.0	47.4	22.9	22.2
NEWTON NORTH	16-26	5	unlikely	1	87	2126	11.6	24.6	10.4	17.5	98.2	86.1	4.3	4.9
WALTHAM	12-20	5	tbd	3	30	1586	12.4	16.8	26.0	45.0	85.7	63.6	15.1	16.4
NEIGHBORS														
ARLINGTON				1	78	1290	12.8	11.1	10.3	12.4	98.1	86.3	3.8	4.1
LEXINGTON				1	96	2185	12.6	9.9	5.6	24.1	98.1	90.3	3.6	2.0
WATERTOWN				2	31	662	10.2	21.1	23.6	36.3	87.9	68.7	12.9	10.4
STATE-WIDE, all grades								17.4	30.2	20.1	87.5	60.6	20.4	10.2

commute time and distance computed by Google, with departure from Belmont Town Hall and for arrival at 8 am on Wednesday May 9th
 capacity information -- does school have capacity to enroll Belmont students -- from conversations with school officials
 school specific data from DESE website, http://profiles.doe.mass.edu/state_report/
 note that "schools with CVTE" data are for the entire schools, not just the CVTE population




Selection Criteria: Academic, Social-Emotional, Student Life Factors (cont.)

Academic Factors: Program Offerings




AGRICULTURE & NATURAL RESOURCES

Horticulture 
 Environmental Science 


ARTS & COMMUNICATIONS SERVICES

Radio & Television 
 Graphic Communications 
 Design & Visual Communications 

BUSINESS & CONSUMER SERVICES

Cosmetology 
 Marketing / Finance 
 Business Technology 


EDUCATION

Early Education and Care 

HEALTH SERVICES

Dental Assisting 
 Health Assisting 
 Medical Assisting 






HOSPITALITY & TOURISM

Culinary Arts 
 Hospitality Management 

INFORMATION TECHNOLOGY SERVICES

Information Technology & Support 
 Programming & Web Design 



CONSTRUCTION




Carpentry 
 Electricity 
 HVAC 
 Masonry & Tile 
 Plumbing 

MANUFACTURING, ENGINEERING & TECH

Biotechnology 
 Drafting 
 Electronics 
 Engineering Technology 
 Machine Tool Technology 
 Metal Fabrication & Joining 
 Robotics & Automation 
 Telecommunications 

TRANSPORTATION

Automotive Collision Repair 
 Automotive Technology 

 Minuteman
  Shawsheen
  Cambridge
 SOLVED

Selection Criteria: Academic, Social-Emotional, Student Life Factors (cont.)

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Social-Emotional Factors: Community and Connection

- *“There are now many avenues of research pointing to the dramatic impact of one’s sense of connection to school and sense of comfort in school on Academic achievement.”*
(Poliner, 37)*
- When students are in a learning environment where they feel connected and supported they are more likely to show up, participate, take academic risks, and succeed.
- Having a consistent, reliable infra-structure of student supports and an on-going relationship between Belmont and another (CVTE) school can effectively foster the needed connection between Belmont students and their “home” CVTE school.

*Poliner, R. and Benson, J. (2017) Teaching the Whole Teen, Thousand Oaks, CA: Corwin

Selection Criteria: Academic, Social-Emotional, Student Life Factors (cont.)

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Student Life Factors

- A consistent cohort of peers from Belmont to attend school
- A stable, consistent place to attend, year after year
- A welcoming school that engages in outreach to Chenery Middle School and the larger Belmont community
- Access to clubs, activities, and after school supports
- Transportation – avoid an excessive amount of time on a bus traveling to and from school

Selection Criteria: Space, Availability, Enrollment Factors

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- **Minuteman**
 - Current enrollment is less than full capacity
 - A building project is underway which will decrease capacity to approximately 628 students
 - ✦ Other non-member districts may be seeking membership
 - ✦ Member districts have priority acceptance over students from non-member districts
- **Shawsheen**
 - Due to its trend of increasing enrollment, Shawsheen is currently unable to offer seats to non-member districts
- **SOLVED Districts**
 - Cambridge Rindge and Latin School (CRLS) is geographically the logical access point to the SOLVED districts.
 - ✦ However, CRLS has decided not to allow any out-of-district students to enroll for the 2018-2019 School Year; although CRLS is open to exploring the possibility of other solutions, if any

Selection Criteria: Long Term Sustainability Factors

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A successful CVTE program arrangement for Belmont students will be characterized by:

- Consistent placement location for advising Belmont students of CVTE opportunities
- Available capacity for Belmont students
- Priority acceptance so that Belmont students are not “locked-out” of programs annually
- Reasonable commute distance and time from Belmont
- Administration of Belmont CVTE options
 - Guidance Office: Advisement; Application; Managing student placements; Aid in known, smooth transition process for Belmont Students
 - Transportation: Procurement; Contract administration; Daily logistical concerns to be managed by receiving school – not by Belmont

Selection Criteria: Financial Factors

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- **Cost components**
 - Tuition
 - Special Education (where applicable)
 - Transportation
 - Capital
- **Change to MM cost components since 2015:**
 - DESE approval of a Capital Fee for non-member districts attending MM
 - Capital Fee is in recognition of the construction costs of the new MM facility and is an attempt to achieve a more equitable cost-sharing among member districts and non-member districts.

Selection Criteria: Financial Factors (cont.):

FY19 PER STUDENT OPERATING COST COMPARISONS

	Total	Core	Trans- portation	SPED charges	Capital (non- building)
Minuteman - actual Belmont member assessment	34,823	28,060	1,352	2,650	2,761
Minuteman - hypothetical non-member charge for Belmont	24,263	17,266	2,878	2,650	1,469
Shawsheen - if non-members were accepted for FY19	23,000	17,266	3,084	2,650	0
Cambridge - if non-local students were accepted for FY19	16,855	11,327	2,878	2,650	0

Notes: items in italic are estimates

"Core" costs for Belmont as a MM member is the actual assessment, less the amounts attributed to transportation, SPED, capital.

"Core" for the non-member scenarios are the DESE set tuitions for FY19; estimates for transportation and SPED are extra charges.

All SPED estimates based on 50% of students with IEPs, times \$5300 FY19 charge per IEP student as set by Minuteman.

Belmont non-member MM scenario includes existing capital obligations from 2016 and earlier.

Minuteman member transportation costs are partially offset by a state grant; non-members are not eligible for that grant.

Selection Criteria: Financial Factors (cont.):

SENSITIVITY OF BELMONT MM ASSESSMENT TO TOTAL ENROLLMENT

Base Case: current enrollment of 537	34,823	
Full Enrollment Scenario: +100 students (637 total)	26,902	

ESTIMATE OF AVERAGE NEW BUILDING DEBT SERVICE COSTS (\$5.024 million debt service)

Scenario 1: target enrollment of 628 students	8,000	per student	
Scenario 2: current enrollment of 537 students	9,356	per student	
Scenario 3: high side enrollment of 680 students	7,388	per student	

Note: this demonstrates how per student capital charges will vary with annual enrollment

Minuteman has not finished its long-term borrowing yet.

Here a total annual debt service cost of \$5.024 million is used as a reasonable estimate of future costs.

Once the new building is placed in service, non-member towns will pay a capital charge.

The non-member capital charge will be equal to the average member capital assessment for the debt service.

As a member, Belmont's capital assessment would be slightly higher than average based on wealth and enrollment factors.

Selection Criteria: Financial Factors (cont.):

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- **Current Funding Process (as a MM Member District)**
 - Total fee (Tuition, Special Education, Transportation, Capital) is funded through State assessment to the Town and “comes off the top” during the Town’s annual budgeting process
 - Town of Belmont Departmental budgets are left whole
 - Transportation is arranged by MM for Belmont students

Selection Criteria: Financial Factors (cont.):

- Alternate Funding Process (as a Non-member of any CVTE District) – State-level and MM processes must be performed by Belmont
 - Funds for CVTE must be identified and allocated from available revenue annually
 - A Belmont CVTE budget would need to be established
 - ✦ Significant volatility inherent in budgeting for CVTE programming at the Town departmental level, based on: Belmont CVTE enrollment and annual cost per student (tuition, SPED, transportation and capital) at respective receiving school
 - ✦ No departmental mechanism in-place to respond higher-than-anticipated costs in any given year
 - Invoices must be processed by Town of Belmont department(s)
 - Transportation contract must be procured, arranged and managed by Belmont instead of MM. Belmont will not be able to take advantage of
 - ✦ Economies of scale -- hiring one bus vs. multiple buses hired by MM
 - ✦ State grant to reimburse regional districts for partial transportation costs

Agreement Structures

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- **No agreement**
 - Belmont students enroll in CVTE schools as permitted by enrollment policies
- **Inter-Municipal Agreement (IMA)**
 - Written agreement between Belmont and a CVTE school to establish enrollment opportunities and other terms & conditions for Belmont students to attend
- **Membership in a regional CVTE school**

Agreement Structures - Pros and Cons:

No Formal Agreement

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Pro

- Potential Lower Cost – Lower cost, provided current DESE regulations for non-members tuitions in the absence of IMAs remain in place

Con

- Inconsistent placements for Belmont students (Single destination not guaranteed)
- Inconsistent program offerings
- No priority seating for Belmont students
- CVTE path for incoming Belmont students subject to change annually
- No voice in school governance (No SC representation)
- No voice in curriculum
- No support mechanism for Belmont students
- Belmont Pays Tuition, Transportation, SPED and Capital Fees as direct invoices to the Town
- Belmont procures, arranges and manages transportation contract

Agreement Structures - Pros and Cons: Inter-Municipal Agreement (IMA)

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Pro

- More secure than no agreement; more flexible than membership
- Costs strictly proportional to enrollment
- Possible cost savings (but not as much as no agreement)

Unknown/TBD

- Single Destination for Belmont Students??
- Consistency of placements??
- Priority for Seats??
- Dependent upon receptivity by potential receiving CVTE school as to whether enrolling Belmont students meets that school's needs

Con

- No voice in school governance (No SC representation)
- No voice in curriculum
- No support mechanism for Belmont students
- Belmont takes on operational functions to budget, manage and pay Tuition, SPED, Transportation and Capital Fees
- Belmont procures, arranges and manages transportation contract

Agreement Structures - Pros and Cons: Reinstate Membership to MM

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Pro

- Single CVTE Destination for all Belmont Students, consistent year after year
- Priority for Seats over non-member districts
- Governance participation with regional membership (SC representation)
- Voice in curriculum
- Existing relationships and supports for Belmont students
- Administrative & logistical efficiencies (Budgeting, Transportation)

Con

- Potential Higher Cost – if Minuteman does not reach full enrollment after new building project is completed
- Shared legal and debt service obligations, including for the new building – currently, Belmont is not responsible for the ne building debt
- Difficult to reverse decision in the future and withdraw a second time from the district

Summary of Findings

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TOWN NEEDS	NO AGREEMENT	IMA FORMAL AGREEMENT	MINUTEMAN MEMBERSHIP
Seat/Enrollment Priority	NO	TBD	YES
Consistency for Students	NO	TBD	YES
Transparent & Established Funding Mechanism	NO	NO	YES
Voice in Governance	NO	NO	YES
Voice on Curriculum	NO	NO	YES
Community Support for Students	NO	NO	YES
Overall Cost Savings	YES	TBD	NO
Administrative & Logistical Efficiencies	NO	NO	YES

Conclusions

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- From a review of the data, continuing as a member district of Minuteman provides the best path forward for the Town and Belmont students in terms of
 - Academic, Social-Emotional, Student Life Factors
 - ✦ Academic Achievement
 - ✦ Program Offerings
 - ✦ Community & Connection
 - Space, Availability, Enrollment Factors
 - ✦ Consistent, Available Capacity for Belmont Students
 - Long-Term Sustainability Factors
 - ✦ Priority Acceptance over Non-member Districts
 - ✦ Administrative and Logistical Efficiencies

Conclusions (cont.)

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- While the cost per student to attend MM as a member district is higher than other options (based on what is known or reasonably estimable at this time)
 - It is the only option that provides assurance of acceptable programmatic sustainability for Belmont students.
 - The cost per student can be mitigated by
 - ✦ Capital fee charged to non-member districts
 - ✦ Increase in MM enrollment to reduce capital costs on a per-student basis
 - ✦ External revenue generation by MM to maximize the use of its newly constructed facilities once completed, thereby reducing its operating costs

Recommendation

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Therefore, the recommendation of the Vocational Educations Options Work Group is for the Town of Belmont to reinstate its status (i.e. rescind its withdrawal) as a member district of Minuteman Regional Vocational Technical High School.

Next Steps

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- The report of the Working Group is being provided at the direction of the Superintendent for consideration by the School Committee and the School Department of the next steps
- The Working Group is available for further discussion as may requested for the by the School Committee and other Town leaders
- The full report of the Working Group and supporting documents are available on the BPS website at <http://www.belmont.k12.ma.us/bps/Administration>