



Shrewsbury Public Schools School Committee

John Samia, Chairperson - Sandra Fryc, Vice Chairperson - Erin Canzano, Secretary
Dr. B. Dale Magee – Jon Wensky

September 9, 2015

Dear Commissioner Chester:

We respectfully ask that you not move the proposal for the Massachusetts Biotech Charter School forward to the full application stage.

We have reviewed the prospectus that the applicants submitted, and we believe this proposed charter school, which is proposed to be located in Shrewsbury, should not be advanced primarily because it would be redundant, and therefore a poor choice for investing valuable and scarce public education funding. Further, local students already have multiple similar public school options, there would be a negative financial impact on our school district, and the viability of the project as proposed is questionable.

Over the past two decades, the Commonwealth has invested millions of dollars in the Shrewsbury Public Schools and the other school districts from which the Massachusetts Biotech Charter School (MBCS) proposes to draw its students. In Shrewsbury, this includes a new high school in 2002, a renovated 7th and 8th grade middle school in 2004, and a new 5th and 6th grade middle school in 2013, as well as millions of dollars in state education aid, primarily through the Chapter 70 and Circuit Breaker programs. The Commonwealth's return on this investment has been very strong, as our students have achieved outstanding results in academics, the arts, robotics, speech and debate, and athletics, including national recognition in many cases. The Center for American Progress has twice ranked Shrewsbury in the top 2 to 3% of over 9,000 K-12 districts in the U.S. for "return on educational investment."

It would be odd if we as a local district informed the Department of Elementary and Secondary Education that, despite this investment, we wished to duplicate our efforts and invest millions of dollars in opening a separate grade 6-12 school in our community, which would draw a number of students away from our existing schools to provide an extremely similar educational experience, but with a focus on biotechnology. The DESE would rightfully question why we would choose to compromise our current economy of scale by creating an entirely new school to provide mostly the same types of educational experiences that are already so successful. The DESE would surely also note that Shrewsbury families who, for whatever reason, wish for a different public education option already have several such choices, including an existing charter school focused on STEM (the Advanced Math and Science Academy in Marlborough, where about 70 Shrewsbury students attend), a vocational technical high school that already has a well-regarded

biotechnology program (Assabet Valley Technical High School in Marlborough, where about 130 Shrewsbury students attend), and an innovative state-funded STEM high school program run in conjunction with Worcester Polytechnic Institute in Worcester (Mass Academy at WPI, a small program with a significant percentage of Shrewsbury students attending).

The following table illustrates in more detail how the proposed charter school duplicates existing educational programming and experiences that Shrewsbury students currently enjoy:

Proposed Massachusetts Biotechnology Charter School	Shrewsbury Public Schools	Notes
<p>Focus on biotechnology as an organizing element, including connections to local scientists and opportunities for internships, and encouragement of independent study focused on an area of interest within biotechnology</p>	<p>Students in middle and high school have significant opportunities to experience high-level STEM instruction, including:</p> <ul style="list-style-type: none"> • All 7th graders participate in hands-on DNA lab at UMass Medical School’s Shrewsbury campus • Research methods classes at Shrewsbury High School require authentic scientific research projects and make connections with local scientists at UMass Medical and other area organizations • Shrewsbury High School has an existing internship program for seniors • Shrewsbury High School has an existing “Senior Exhibition” independent research project course • Oak Middle School (7th & 8th grades) provides a 30 day project-based engineering design class in both grades • Shrewsbury High School offers multiple engineering courses that are part of the Project Lead the Way engineering program (WPI is our university partner for this) 	<ul style="list-style-type: none"> • A large number Shrewsbury High School students routinely win honors at both regional and state science fairs • Scientists from UMass Medical school are guest lecturers at Shrewsbury High School classes, including the school’s Bioethics class • Shrewsbury middle level girls, along with girls from Westborough, participate each year in a Women in Science conference where they learn from various local women who work in STEM fields.
<p>Opportunities for students to accelerate curriculum and access Advanced Placement courses</p>	<ul style="list-style-type: none"> • Shrewsbury middle schools employ an innovative advanced math program that provides 	<ul style="list-style-type: none"> • In recent years, Shrewsbury has been named twice to the College Board’s AP Honor Roll for expanding access to

	<p>multiple opportunities for students to participate in accelerated and enriching mathematics experiences</p> <ul style="list-style-type: none"> • Shrewsbury recently shifted its middle level math curriculum to introduce more algebra topics in grade 7 and expand algebra topics in grade 8, in line with the “accelerated pathway” approach with state curriculum frameworks • Shrewsbury High School students have ample access to Advanced Placement math and science courses • Due to the middle level advanced math program, some students are completing available AP math courses prior to senior year, so a college level mathematics modeling class has been added to the high school program of studies 	<p>Advanced Placement courses while maintaining or improving results</p> <ul style="list-style-type: none"> • Recent Shrewsbury graduates are attending the finest science and engineering colleges and universities
<p>Access to technology in the classroom with class sets of Chromebooks, option to take home a Chromebook if the family does not have digital access at home</p>	<ul style="list-style-type: none"> • As of this year Shrewsbury now provides a digital device (iPad) to all students in grades 5-12 for home use throughout the year, with no fee 	<ul style="list-style-type: none"> • Shrewsbury began its digital education initiative three years ago with the opening of the new Sherwood Middle School by providing a 1:1 learning environment for all 5th and 6th grade students; this expanded to 7th and then 8th grades, and now this year will include all high school grades as well • Shrewsbury routinely hosts other districts who are interested in the innovative instructional strategies utilizing technology that our district has adopted
<p>Opportunities for co-curricular experiences such as robotics and speech and debate</p>	<ul style="list-style-type: none"> • Shrewsbury has longstanding existing robotics teams at both the middle and high school levels • Shrewsbury has longstanding speech and debate teams at both the middle and high school levels 	<ul style="list-style-type: none"> • The Shrewsbury High School Robotics team has recently won a regional competition and just last year received the prestigious “Chairman’s Award” at the New England Regional Tournament • The Shrewsbury High School Speech & Debate team is always among the top teams in the state and was ranked in the top five nationally in both 2013 and 2014

The information above illustrates just a few areas where it is clear that Shrewsbury students already have the opportunities that this proposed charter school would provide; should the proposal advance to the full application stage, an even more detailed comparison would be provided, as other areas listed in MBCS's prospectus, such as utilizing a project based learning approach, ensuring students are globally aware and culturally proficient, providing extended year learning opportunities, and high levels of parent involvement are also hallmarks of the Shrewsbury Public Schools. Additionally, Shrewsbury students also have access to award-winning programs in the visual arts, music, and drama; a robust physical education and health program that was recently expanded and strengthened by a million dollar-plus federal grant; a highly successful interscholastic athletics program; and a commitment to community service learning that has resulted in Shrewsbury High School students completing over 62,000 hours of community service in the past four years.

Not only is it clear to us that a new charter school located in Shrewsbury is not necessary, but the existence of such a school would also threaten the delicate financial situation of our district. Two years ago, we were in the throes of a resource crisis that had pushed class sizes to unacceptable levels (at or approaching 30 students per class in virtually all middle and high school classes as well as in a significant number of elementary classes) and had resulted in years of underinvestment in curriculum and technology resources. Our community supported a significant infusion of funding by passing its first ever operational override in June of 2014, provided \$4.2 million to our schools to primarily restore cut teaching positions and add positions that were necessary to address our student population. One factor in our local district's budget is that a large amount of funding (approximately \$1 million in FY15) is diverted to charter schools each year. However, due to the fact that the state's funding formula for charter schools is not sensitive to economy of scale, our district has not had the ability to reduce staffing or overhead to counter this diversion of funds. The best way to illustrate this is by this example: If all 81 charter students projected for the current year suddenly returned to our district of over 6,000 students, we would absorb them without needing any additional funding because of our economy of scale, and because the local community has backfilled the loss of the \$1 million that is diverted to the charter schools. Conversely, one can see that if the proposed new school opened in Shrewsbury even a small number of Shrewsbury students (10 or 20 per grade) choose to attend a new grades 6-12 charter school, this would repeat the situation we have been experiencing for many years, namely the loss of significant funding without the ability to reduce costs proportionally. Our projections, illustrated in the attached spreadsheets, indicate that Shrewsbury would be likely to lose an additional \$900,000 to \$1.8 million per year once MBCS is built out, even with state reimbursement cushioning the blow. The loss of this funding would almost certainly require reductions in programming or personnel that would negatively affect the 6,000 students remaining in our district.

Finally, we ask you to consider the actual viability of the project that was submitted. While we have no doubts that the group proposing MBCS is well-intentioned, we believe that the proposal is lacking in many ways, including the absence of a true local connection with or commitment to the Central Massachusetts area (the group is entirely from Connecticut and the fact that Worcester is spelled "Worchester" several times throughout the document is telling). Further, upon inquiry, the applicant group indicated that they are looking at a vacant piece of property on Route 20 in Shrewsbury, the former Edgemere Drive-in Theater, as its potential location. It is hard to see how this location, given its condition and lack of sewer connection, could possibly be viable to have a new school building within the one-year time frame proposed in the prospectus.

The stated purpose for charter schools in Massachusetts is to "stimulate the development of innovative programs within public education" and to provide "models for replication in other public schools." The information above shows that this proposed charter school in Shrewsbury would mainly replicate innovative programs our school district already has in place. In summary, we ask that you not advance the Massachusetts Biotechnology Charter School to the full application level because 1) it is redundant as it replicates programming that is already in place in the Shrewsbury Public Schools, 2) Shrewsbury and other area students already have access to similar alternative public school choices, 3) it has the potential to have a significant negative financial effect on our district, and 4) the viability of the project as proposed is questionable.

Please don't hesitate to contact John Samia, Chair of the Shrewsbury School Committee, or Joseph Sawyer, Superintendent of the Shrewsbury Public Schools, with questions.

Respectfully,

Members of the Shrewsbury School Committee



John Samia, Chair



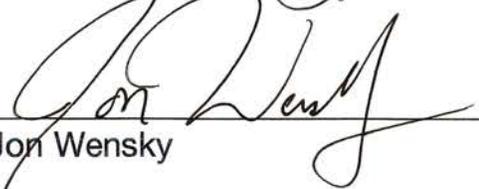
Sandra Fryc, Vice Chair



Erin Canzano, Secretary



B. Dale Magee



Jon Wensky

SHREWSBURY PUBLIC SCHOOLS
PROJECTED IMPACT OF
PROPOSED MASSACHUSETTS BIOTECHNOLOGY CHARTER SCHOOL

Low-End Estimate			Projected Enrollment by School Year								Rate/Student*	Total Cost	
FY	School Year	Year of Operation	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Total			
16	2015-2016									Avg. FY16 rate		\$ 13,275	
17	2016-2017	1	10	10						20	\$ 13,673	\$ 273,455	
18	2017-2018	2	10	10	10					30	\$ 14,083	\$ 422,488	
19	2018-2019	3	10	10	10	10				40	\$ 14,505	\$ 580,216	
20	2019-2020	4	10	10	10	10	10			50	\$ 14,941	\$ 747,028	
21	2020-2021	5	10	10	10	10	10	10		60	\$ 15,389	\$ 923,327	
22	2021-2022	6	10	10	10	10	10	10	10	70	\$ 15,850	\$ 1,109,531	
23	2022-2023	7	10	10	10	10	10	10	10	70	\$ 16,326	\$ 1,142,817	

FY	Tuition Projection	Total Cost	Increase in Tuition	Reimbursement Amount						FY Reimbursement Total	Net Cost [Total-Reim]
				100%	25%	25%	25%	25%	25%		
17	2016-2017	\$ 273,455	\$ 273,455	\$ 273,455						\$ 273,455	\$ -
18	2017-2018	\$ 422,488	\$ 149,033	\$ 149,033	\$ 68,364					\$ 217,396	\$ 205,091
19	2018-2019	\$ 580,216	\$ 157,729	\$ 157,729	\$ 37,258	\$ 68,364				\$ 263,351	\$ 316,866
20	2019-2020	\$ 747,028	\$ 166,812	\$ 166,812	\$ 39,432	\$ 37,258	\$ 68,364			\$ 311,866	\$ 435,162
21	2020-2021	\$ 923,327	\$ 176,299	\$ 176,299	\$ 41,703	\$ 39,432	\$ 37,258	\$ 68,364		\$ 363,056	\$ 560,271
22	2021-2022	\$ 1,109,531	\$ 186,204	\$ 186,204	\$ 44,075	\$ 41,703	\$ 39,432	\$ 37,258	\$ 68,364	\$ 417,036	\$ 692,495
23	2022-2023	\$ 1,142,817	\$ 33,286	\$ 33,286	\$ 46,551	\$ 44,075	\$ 41,703	\$ 39,432	\$ 37,258	\$ 242,305	\$ 900,512

Assumptions:

1. 10 S.P.S. students enroll per grade which represents approximately 2%-2.5% of total grade.
2. Tuition cost per pupil increases at rate of 3% per year.
3. Charter school reimbursement scheme remains the same.
4. Enrollment at other charter schools remains the same.

SHREWSBURY PUBLIC SCHOOLS
PROJECTED IMPACT OF
PROPOSED MASSACHUSETTS BIOTECHNOLOGY CHARTER SCHOOL

High-End Estimate			Projected Enrollment by School Year									Rate/Student*	Total Cost
FY	School Year	Year of Operation	Grade 6	Grade 7	Grade 8	Grade 9	Grade 10	Grade 11	Grade 12	Total			
16	2015-2016										Avg. FY16 rate	\$ 13,275	
17	2016-2017	1	20	20						40		\$ 13,673	\$ 546,909
18	2017-2018	2	20	20	20					60		\$ 14,083	\$ 844,975
19	2018-2019	3	20	20	20	20				80		\$ 14,505	\$ 1,160,432
20	2019-2020	4	20	20	20	20	20			100		\$ 14,941	\$ 1,494,057
21	2020-2021	5	20	20	20	20	20	20		120		\$ 15,389	\$ 1,846,654
22	2021-2022	6	20	20	20	20	20	20	20	140		\$ 15,850	\$ 2,219,063
23	2022-2023	7	20	20	20	20	20	20	20	140		\$ 16,326	\$ 2,285,634

FY	Tuition Projection	Total Cost	Increase in Tuition	Reimbursement Amount						FY Reimbursement Total	Net Cost [Total-Reim]
				100%	25%	25%	25%	25%	25%		
17	2016-2017	\$ 546,909	\$ 546,909	\$ 546,909						\$ 546,909	\$ -
18	2017-2018	\$ 844,975	\$ 298,066	\$ 298,066	\$ 136,727					\$ 434,793	\$ 410,182
19	2018-2019	\$ 1,160,432	\$ 315,457	\$ 315,457	\$ 74,516	\$ 136,727				\$ 526,701	\$ 633,731
20	2019-2020	\$ 1,494,057	\$ 333,624	\$ 333,624	\$ 78,864	\$ 74,516	\$ 136,727			\$ 623,732	\$ 870,324
21	2020-2021	\$ 1,846,654	\$ 352,597	\$ 352,597	\$ 83,406	\$ 78,864	\$ 74,516	\$ 136,727		\$ 726,112	\$ 1,120,543
22	2021-2022	\$ 2,219,063	\$ 372,409	\$ 372,409	\$ 88,149	\$ 83,406	\$ 78,864	\$ 74,516	\$ 136,727	\$ 834,072	\$ 1,384,991
23	2022-2023	\$ 2,285,634	\$ 66,572	\$ 66,572	\$ 93,102	\$ 88,149	\$ 83,406	\$ 78,864	\$ 74,516	\$ 484,610	\$ 1,801,024

Assumptions:

1. 20 S.P.S. students enroll per grade which represents approximately 4%-5% of total grade.
2. Tuition cost per pupil increases at rate of 3% per year.
3. Charter school reimbursement scheme remains the same.
4. Enrollment at other charter schools remains the same.