Informational Section:

Shrewsbury Public Schools

Strategic Priorities: 2012 – 2016: Report & Recommendations to the School Committee

November 14, 2011

To: Shrewsbury School Committee
From: Joseph M. Sawyer, Ed.D.
Superintendent of Schools

All who have meditated on the art of governing mankind have been convinced that the fate of empires depends on the education of youth. ~ *Aristotle*

Shrewsbury students need a world class education.

I use the word "need" intentionally, because if our school district is to meet its stated mission to "provide students with the skills and knowledge for the 21st century" it must provide an educational experience that prepares our youth to succeed in a world that is more complex than in any time in history and where human capital – knowledge, skill, health, and values – is more important than ever for the security and prosperity of individuals, families, communities, states, and nations.

Recently, a strategy paper from the Pentagon indicated that our country's future success is dependent on making investment in the education and health of our youth America's number one priority:

Without doubt, our greatest resource is America's young people, who will shape and execute the vision needed to take this nation forward into an uncertain future.... We must embrace the reality that with opportunity comes challenge, and that retooling our competitiveness requires a commitment and investment in the future.... Inherent in our children is the innovation, drive, and imagination that have made, and will continue to make, this country great. By investing energy, talent, and dollars now in the education and training of young Americans – the scientists, statesmen, industrialists, farmers, inventors, educators, clergy, artists, service members, and parents, of tomorrow – we are truly investing in our ability to successfully compete in, and influence, the strategic environment of the future. Our first investment priority, then, is intellectual capital and a sustainable infrastructure of education, health and social services to provide for the continuing development and growth of America's youth.
~ (Porter & Mykelby, as "Mr. Y", *A National Strategic Narrative*, 2011)

In recent times, the media, think tanks, political advocacy groups, researchers, and theorists have produced innumerable books, articles, documentary films, television shows, and blog posts regarding the need for America to improve educational outcomes for its students. Of course, as with most issues, the realities are more complex than what is often reported at the surface. Take, for example, the conventional wisdom that the United States has lost substantial ground regarding educational outcomes when compared internationally. The U.S. Secretary of Education, Arne Duncan, reacted to the results from the most recent Programme for International Student Assessment (PISA) by stating, "Being average in reading and science—and below average in math—is not nearly good enough in a knowledge economy where scientific and technological literacy is so central to sustaining innovation and international competitiveness." It is difficult to disagree with this outlook when viewing the country as a whole; however, as with many issues that are seen through a national lens, there are significant differences that make up the aggregate. When the PISA results are disaggregated by income, the U.S. ranked first in the world when comparing both the subset of U.S. schools and nations where poverty rates were less than 10% and the subset where poverty rates were 10% to 25%, which is the category where Shrewsbury would be placed (Tirozzi, National Association of Secondary School Principals, 2010). The disturbing fact is that the child poverty rate in our country is over 20% and climbing (Monea & Sawhill, Brookings Institution, 2009) and this has a very high correlation with educational outcomes.

By the measures used for national and international comparisons, one can argue that Shrewsbury already has a world class school system. For the past several years, Massachusetts public schools have been considered to be among the best in the U.S. and in the world. Nationally, Massachusetts has ranked first or tied for first in all four tests of the National Assessment of Educational Progress (Grade 4 reading and mathematics and Grade 8 reading and mathematics) for the past four years (Mass.gov). In international comparisons on the Trends in International Mathematics and Science Study (TIMSS) exams, Massachusetts competes as its own "country" and on its most recent administration ranked second in the world in Grade 4 science, third in Grade 4 math, first in the world in Grade 8 science, and sixth in the world in Grade 8 math. Given that Shrewsbury consistently ranks among the top districts in Massachusetts on the Massachusetts Comprehensive Assessment System (MCAS) exams—often in the top 10%, and as high as the top 1%—and that Shrewsbury has achieved national recognition from the College Board for increasing participation with very high performance in the Advanced Placement program, one can deduce that according to such measures our students are among the highest achieving in the nation and the world.

Additionally, Shrewsbury achieves these outstanding results in an extremely cost effective manner. Recently, the Center for American Progress, a Washington D.C. think tank, ranked U.S. school districts according to a formula measuring educational "return on investment." Shrewsbury ranked among the top 2.8% of over 9,000 districts nationally with regard to the quality of education compared with funding provided. The state's measure of per pupil spending, which takes into account all town government expenditures on the educational budget, is

consistently among the lowest in the state.

We should all be justifiably proud of the quality of our schools' academic performance and the value generated for what has been invested. Our school district has numerous admirable characteristics that should be preserved going forward, and much of our efforts should be focused on maintaining our strengths. However, it would be unwise, and even perhaps disastrous, to rest on our laurels and focus our energies solely on maintaining the status quo. Indeed, our district's foundational goals articulate the importance of *continuous improvement*, and in order to do so not only requires the ongoing refinement of our current approach but also the courage to try innovative approaches that hold promise for improving the education of the young people we serve.

To that end, over the past several months the district administration has been working to fulfill your charge to recommend a set of strategic priorities for the next five years. It was made clear that this was not a request for a traditional strategic plan, of the kind that often becomes to unwieldy and cumbersome due to a surfeit of details and a kitchen sink mentality that includes too many priorities and therefore does not truly identify what is most important. Rather, this would be a set of three to five priorities where the school district would focus its attention and resources in order to help the district meet the collective purpose articulated by our mission and core values. Based on the work of Rachel Curtis and Elizabeth City, we determined that a strong strategic priority must be:

1) Broad enough to apply across the entire district, PreK-12

2) High leverage, so that if executed well it will ultimately have a significant impact on student learning

3) Motivating, so that it promotes innovation and problem solving that move the district closer to fulfilling its aspirations

4) Aligned with the other strategic priorities so that together they are coherent and mutually reinforcing

Process

Given the importance of this task, we determined that it would be crucial to not only look to the current best thinking in the fields of education and organizational management, but also to ask our stakeholders what they believed were the most important things the district should be addressing. The following process was used to gather feedback from our stakeholders:

• An online survey was conducted (paper versions were also available). Approximately 440 individuals responded to the survey, including staff members, parents, high school students, community members, business people, and public officials. The survey was analyzed by the administration for trends.

• A public forum was conducted on October 19 at Oak Middle School. While turnout was light, the two focus group conversations, which included parents, high school students, and administrators, were helpful.

• I met separately with the following groups to listen to their perspectives regarding priorities:

- Shrewsbury High School Student Council
- Oak Middle School Student Voice
- Sherwood Middle School Student Voice
- PTO presidents
- Faculty Advisory Council
- Coordinating Council (representation from each school's administration, parents, and teachers on the various school councils)

• The School Committee hosted two panel discussions: one with admissions officers from various local colleges, and one with local business leaders. These discussions centered on what kind of preparation students would need for success in post-secondary education and in the workplace.

• The various combinations of our leadership structure met multiple times to discuss strategic priorities, beginning in August. This included multiple meetings of the District Leadership Team (all administrators); the School Leadership Team (principals and Central Office administrators); and the Central Office Leadership Team.

Findings

While, as with any public process regarding education, there is a range of opinions regarding what the public schools in our community should be prioritizing, the feedback from the process outlined above coalesced around several themes:

• There is substantial appreciation for the successes of our schools, and having high performing educators is seen as a key component of that success. Our schools are seen as providing value to our students and to the community in general, and some commented on the potential for our students to further enhance the quality of life in our town through various types of community service while enhancing their education through what they learn through such experiences.

• Given economic challenges, there are concerns regarding the ability to maintain the current level of resources and to ensure that students have reasonable class sizes and access to a sufficient range of academic programming and instructional tools, especially technology.

• With regard to technology, the fact that our district has not been able to keep up with the demands for updated hardware has made accessing many new learning tools extremely difficult to impossible in many cases. The field of education is rapidly adapting to the availability of more interactive technologies,

including access to web based learning tools such as tutorials, videos, and online resources that require high bandwidth and updated computers; the use of interactive white boards, projectors, and document cameras in classrooms to aid instruction; new "apps" for education through devices such as the iPad; online coursework (such as Virtual High School), etc. Ensuring student and staff access to learning opportunities that require updated technology was a recurrent topic.

• Many cited the need for all students to be able to have engaging and challenging learning experiences that prepare them for success in their current schooling and beyond high school. This included students who struggle with learning, students who are working above grade level expectations, and students in the proverbial middle. While current levels of success on the MCAS tests and other traditional measures are appreciated, many commented on the need to provide students with skills that are not necessarily measured through standardized tests, such as the ability to communicate effectively with different audiences, think critically and solve complex problems, be innovative and creative, function as a collaborative team member, etc.

• The health and wellbeing of students was often cited as being of great importance, especially with regard to the social and emotional climates of our schools. While there is not evidence that bullying or other antisocial behaviors are seen as major issues in our schools, there is an understanding that it does exist and that today's young people face not only the traditional challenges regarding the pressures to engage in inappropriate and unhealthy behaviors (e.g., substance abuse), there are also new challenges with respect to so-called "cyberbullying" using online communications and social networking. Further, there are internal concerns relative to an increase in the number of students who have significant emotional or mental health issues. While the numbers of such students are relatively small compared to the whole population, the amount of time and resources required to address students with these issues is significant. Not only do we want to be as proactive as possible to minimize the impact of such issues on the individual students, but also to minimize the impact on our educational program and on our fiscal resources. The need for our students to be physically healthy was also cited, given the concerns in our society relative to increased childhood obesity and the desire to ensure sufficient physical activity for young people.

Recommendations

The leadership team considered the findings above in the context of our ongoing work to determine how best educational and organizational practices should be implemented in our school district. The strategic priorities recommended below have gone through several iterations, and we believe that they fit the criteria listed earlier regarding application across all grades, being high leverage, being motivating, and being aligned with one another.

It is important to stress that these strategic priorities, and the five year goals that accompany them, are not hierarchical (i.e., no one is considered more important than another, but that they are to be seen as complementary). Further, it is

important to recognize that the purpose of these priorities and goals is to establish the *what* and the *why* for the next five years, but not the *how*. In other words, this is an attempt to articulate a vision for what our schools should collectively aspire to provide to our students, not a blueprint for how to get there—that will be the work to be done over the next five years to reach these aspirations. As with any worthy goals, these present ambitious challenges that will require hard work, adequate resources, and new, innovative approaches to meet them, but at the same time are not so difficult to achieve that they seem out of reach. They are, in no particular order:

1) Increase Value to the Community

- Continue our school district's reputation for excellence.
- Provide the personnel, resources, and infrastructure needed to ensure the quality of education necessary for our students to meet the challenges of the 21st century.
- Serve community needs through volunteerism.

Five Year Goals

A) Continue to achieve results that consistently place Shrewsbury among top performing school districts.
B) Prepare students to be successful with the next generation of assessments that will measure 21st century skills.
C) Raise $2.5 million in new, supplemental funding through a capital campaign, competitive grants, and/or sponsorships.
D) Provide 50,000 hours of student community service.

2) Engage & Challenge All Students

- Ensure that all students participate in rigorous learning experiences that require the application of knowledge and skills, with an emphasis on writing.
- Empower students to meet future college, military, and workplace demands in a globally connected environment by building proficiency at the 21st century skills of communication, critical thinking, collaboration, and creativity.

Five Year Goals

A) All students will participate in learning projects that require real world problem solving with clear benchmarks for proficiency.
B) Full implementation of the *Shrewsbury Writing Project* to ensure students achieve high levels of proficiency in written communication across all content areas.
C) All educators will participate in collaborative professional development in teaching 21st century skills and successfully apply this in the classroom.
D) 90% of students, parents, and educators will agree that student learning experiences are engaging and that students participate in appropriately challenging coursework that meets their needs.

3) Enhance Learning through Technology

• Provide staff and students access to the technology needed to strengthen teaching and learning in ways that are not possible with traditional tools in order to help students master 21st century skills.
• Utilize technology to provide better access to information and interactive media, a wide range of assessment and feedback tools, and the ability to make learning connections locally, nationally, and globally.
• Educate students to use technology productively and responsibly.

Five Year Goals

A) All Preschool – Grade 4 core classrooms will employ interactive technology daily to improve learning.
B) All students in Grades 5-12 will utilize individual digital devices daily to improve learning.
C) All educators will participate in collaborative professional development in the use of educational technology and successfully apply this in the classroom.

4) Promote Health & Wellbeing

• Reinforce respectful, positive school cultures in order to empower members to act with kindness, empathy, and compassion.
• Communicate and model the importance of proper nutrition, exercise, and healthy living habits.
• Ensure a systematic response to students who are struggling with social, emotional, and/or mental health issues.

Five Year Goals

A) 90% of students, parents, and educators will agree that their schools' social and emotional cultures are healthy.
B) 75% of students will participate in at least sixty minutes of physical activity each day (both during and outside of school).
C) Develop a comprehensive approach to support students experiencing significant social, emotional, and/or mental health issues.

Rationale

Unquestionably, there are many more worthy priorities or goals that our district could set for the coming five years. The recommendations above reflect what we believe are the most crucial topics to address that will, if accomplished, have a multiplier effect that improves student success across many facets of their educational experience.

We believe that focusing efforts on *increasing value to the community* captures the importance of why a strong public education system is so crucial to the quality of

life and economic viability of our community and beyond. Providing the resources for the world class education our students need to prosper in the 21st century will require a commitment from everyone in the community, and we believe it is wise to seek financial assistance outside of the traditional sources of funding in order to maximize our investment in our students. We also believe that by increasing the amount of community service our students provide we will not only generate increased value from the deeds themselves, but also provide meaningful, real world learning experiences that are engaging to our students.

Engaging and challenging all students is paramount for our young people to maximize their learning. We are preparing students for jobs that don't yet exist, in organizations that are "flatter" than ever and require members to collaboratively solve problems by working across human networks that are often global in nature. Therefore, it is crucial that our students "learn how to learn" through experiences that teach them to apply knowledge and skill creatively to novel situations that, like most complex problems, don't have a single "right answer." We believe that emphasizing communicating through writing across different content areas is important because one cannot be a good writer without being a good thinker, and having strong writing skills will be a key component for students to have an adequate range of options for post-secondary education and employment. To that end, we believe continuing to develop and fully implementing the work we have begun with the *Shrewsbury Writing Project* is extremely important. We must maintain high expectations for learning content and skills while devising new ways for students to apply them that prepare them for a 21st century world that is hyper-connected and changing rapidly.

The use of technology is what is largely responsible for the pace of change in our world, and it is tempting to believe that merely providing updated tools will help transform schools the way other sectors have been. However, it is important that we do not fall into the trap of using technology for technology's sake, which is why we have titled this priority *enhancing learning through technology*. The educational landscape is changing rapidly, with more and more opportunities for learning through online resources, through interactivity in classrooms, through new applications on devices, and through means of communication that are simply not possible in a traditional classroom setting. New technologies help educators engage students in ways that are personalized and provide instant feedback, by giving access to all of the world's catalogued knowledge at one's fingertips, and while providing structures for collaboration and publishing that have the potential to empower students like never before. We believe that we must explore the potential of utilizing interactive technology in the early grades and providing access to learning through individual devices in the upper grades to find out how these tools can enhance the ways in which we engage and challenge students and to find the best ways to help our students use technology productively and responsibly.

Of course, great teaching and the best technology will not have the impact we desire if our young people are not healthy, which is why *promoting health and wellbeing* is a priority. This refers to all kinds of health, including physical, social,

and emotional. It is well established that frequent exercise and good nutrition enhances educational outcomes, and it is incumbent upon our schools to provide our students and their families with knowledge about the importance of establishing healthy lifestyles early on. We are fortunate to be a recipient of the Carol M. White Physical Education Program federal grant for almost $1.4 million over the next three years which will help us meet a goal of significantly increasing the amount of physical activity for our students. We must also attend to the social and emotional needs of our students by continuing our work to ensure positive school cultures where issues such as bullying are minimized and positive behaviors are promoted. Additionally, it behooves us to create a comprehensive approach to be as proactive as possible in helping the small number of students who present with significant social, behavioral, and/or mental health issues given the impact such challenges have on the individual and the school environment.

Finally, in order to implement these strategic priorities well, we must ensure that our educators are provided with high quality professional development to learn more about these topics, with adequate time to work together on determining how to best introduce these ideas into the classroom, and strong professional and collaborative cultures where educators have the room to innovate and influence one another in how to best achieve our goals. Given the professionalism and motivation our educators routinely demonstrate, I am confident that if we provide them with the tools and the time, they will rise to the occasion and help our students meet the challenges we are setting forth.

Conclusion

I believe we are at an important inflection point in American education, and that in order for us to meet our obligations to provide Shrewsbury's young people with an education that will truly prepare them for success over the next several decades, we should adopt the strategic priorities outlined above. Making them a reality will be a challenge for our district and our community, but being successful will provide us with the satisfaction of taking an already excellent school district and making it exceptional. To do so will not only provide our community's children with the tools necessary to live a good life, but it will enhance the quality of living in our town and continue to provide exceptional value to all who reside here. The stakes are indeed high. As Thomas L. Friedman and Michael Mandelbaum write in their recent book, *That Used to Be Us: How America Fell Behind in the World It Invented and How We Can Come Back*, education is the key to individual and national prosperity:

Because of the merger of globalization and the IT revolution, raising math, science, reading, and creativity levels in American schools is the key determinant of economic growth, and economic growth is the key to national power and influence and well as individual wellbeing. In today's hyper-connected world, the rewards for countries and individuals that can raise their educational achievement levels will be bigger than ever, while the penalties for countries and individuals that don't will be harsher than ever. There will be no personal security without it. There will be no national security without

it. That is why it is no accident that President Obama has declared that "the country that out-educates us today will out-compete us tomorrow."

In Shrewsbury, let's make sure our children get the world class education they need to prosper in the future. It's in everyone's best interest.

School Committee Meeting
October 12, 2011

Report to the School Committee:

2011 Massachusetts Comprehensive Assessment System (MCAS) and Adequate Yearly Progress (AYP) Results

By Mary Beth Banios
Assistant Superintendent of Schools

Report to the School Committee:
2011 Massachusetts Comprehensive Assessment System (MCAS) and Adequate Yearly Progress (AYP) Results

Introduction

The Massachusetts Comprehensive Assessment System (MCAS) is the annual set of exams administered to students in grades three through ten. The MCAS serves multiple purposes:

- to provide data as to the performance of individual students, sets of students, schools, and the school district relative to the state's academic standards;
- to determine whether high school students qualify for a diploma under Massachusetts law; and
- to hold schools and school districts accountable for meeting the performance expectations set forth by the federal No Child Left Behind Law, as one key measure of "Adequate Yearly Progress" (AYP).

The MCAS results from the tests of spring 2011 show that Shrewsbury students continued to demonstrate high levels of academic success. This report will provide an overview of these results, a summary of the district's ratings relative to AYP, and an explanation of how the district uses MCAS data in its ongoing efforts for continuous improvement.

MCAS Test Information

This table shows the three subject areas tested and which tests are administered at which grade level.

	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9/10
English Language Arts/Reading	●	●	●	●	●	●	●
Mathematics	●	●	●	●	●	●	●
Science and Technology			●			●	●

The table below shows the four levels of performance as reported on MCAS

General MCAS Performance Level Definitions	
PERFORMANCE LEVEL	DESCRIPTION
Advanced (In Grade 3, called Proficient Plus)	Students at this level demonstrate a comprehensive and in-depth understanding of rigorous subject matter and provide sophisticated solutions to complex problems.
Proficient	Students at this level demonstrate a solid understanding of challenging subject matter and solve a wide variety of problems.
Needs Improvement	Students at this level demonstrate a partial understanding of subject matter and solve some simple problems.
Warning (In Grade 10, called Failing)	Students at this level demonstrate little or no understanding of the subject matter and could not apply their knowledge to solve problems.

Each MCAS exam consists of a mix of test items that include the following:

Multiple choice: Students select from four possible answers; these can be stand-alone questions or questions related to a reading passage or other informational item.

Short answer: These are only included on Mathematics tests; they require students to respond to a problem with a numerical solution or a very brief statement, and are judged as to whether the solution is correct or incorrect.

Open response: These require students to generate a comprehensive response to a prompt, by providing one or two paragraphs of narrative and/or a chart, table, diagram, illustration, or graph, as appropriate. Answers are judged on a scale according to a scoring rubric, typically on a point scale from 0-4.

Long composition: These are given in grades 4, 7, and 10; students write a composition in response to a prompt over two, back-to-back sessions (one for planning their response and writing a draft and one for their final draft). They are judged in two areas: topic development and Standard English conventions.

All Shrewsbury students must participate in the MCAS tests for their grade level. A very small percentage of special education students have disabilities that are so severe that the traditional MCAS is neither a fair nor accurate measure of their learning; these students participate in an alternative MCAS assessment that requires their teachers to create portfolios of work related to the curriculum standards that are submitted to the state department of education for scoring. These scores are included in the district's results.

This report is broken down into three main sections, each providing information and data related to 2011 MCAS testing results. The first section focuses on performance results, how Shrewsbury students performed in terms of achievement scoring. The second section concerns student growth. Student growth, which was utilized on a full scale for the first time in Massachusetts in 2010, provides

a metric for how students 'grow' in comparison to peers with similar testing histories. Finally, the third section focuses on adequate yearly progress.

The information in this report is meant to provide a macro view of MCAS results for the entire district. Over the coming weeks the Department of Elementary and Secondary Education will be making available a wide range of in-depth reports that will allow for more detailed analysis which will help us guide and modify instruction as needed.

Performance Results – English Language Arts

The performance results section is broken down by subject area and each section includes the following components:

1. Five-year history of Shrewsbury's MCAS results in English Language Arts
2. Combined Performance in Advanced/Proficient Categories
3. District-Wide Gains In the Advanced Category
4. District Subgroup Performance
5. District % Advanced/Proficient Comparison

1. Five-year history of Shrewsbury's MCAS results in English Language Arts

Summary

District-wide performance in English language arts was very strong in 2011. Out of the seven grades participating in MCAS testing, five grades demonstrated an increase in the percentage of students scoring in the advanced and proficient categories. Of the two grades that did not increase their percentage, one, Grade 8, maintained their performance, with 91% of students scoring in advanced or proficient. The 6th grade was the one grade level that did not increase or maintain their percentage; however, this grade had only a small decline of 1%.

	Grade 3 Reading			
	Proficient Plus	Proficient	Needs Improvement	Warning
2007	25	51	22	2
2008	28	48	20	3
2009	26	53	18	3
2010	33	48	17	2
2011	**27**	**57**	**13**	**3**

	Grade 4 English Language Arts			
	Advanced	Proficient	Needs Improvement	Warning
2007	30	51	18	2
2008	20	54	23	3
2009	36	44	16	3
2010	38	46	14	3
2011	**42**	**43**	**11**	**4**

	Grade 5 English Language Arts			
	Advanced	Proficient	Needs Improvement	Warning
2007	27	53	17	4
2008	22	58	17	3
2009	36	45	15	3
2010	33	45	18	4
2011	**32**	**54**	**11**	**3**

	Grade 6 English Language Arts			
	Advanced	Proficient	Needs Improvement	Warning
2007	16	67	13	3
2008	26	59	12	3
2009	38	48	12	2
2010	30	57	9	4
2011	**40**	**46**	**12**	**3**

	Grade 7 English Language Arts			
	Advanced	Proficient	Needs Improvement	Warning
2007	17	69	11	3
2008	24	63	10	3
2009	26	60	11	3
2010	32	57	9	2
2011	**34**	**56**	**9**	**1**

	Grade 8 English Language Arts			
	Advanced	Proficient	Needs Improvement	Warning
2007	22	68	7	4
2008	24	65	7	3
2009	36	55	7	2
2010	32	59	7	2
2011	**45**	**46**	**6**	**2**

	Grade 10 English Language Arts			
	Advanced	Proficient	Needs Improvement	Failing
2007	48	44	8	1
2008	50	43	6	1
2009	53	38	7	3
2010	47	43	7	2
2011	**59**	**37**	**2**	**2**

2. Combined Performance in Advanced/Proficient Categories

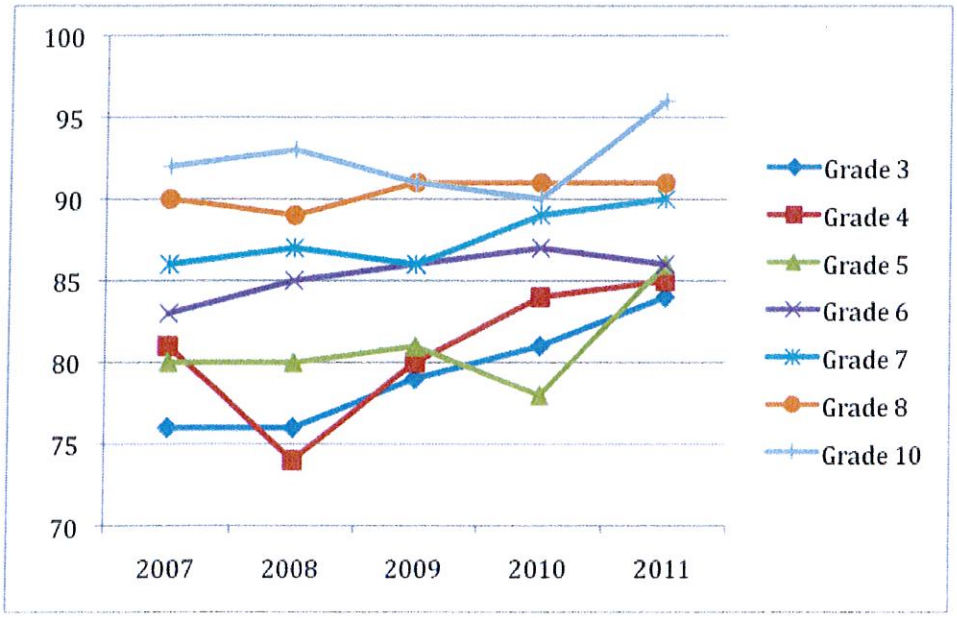
Summary

Looking at the five-year trends in percentage of students scoring in the advanced and proficient categories, all grade levels have increased their percentage of students scoring in these two highest categories. Shrewsbury students consistently score significantly above the state average in both the advanced and proficient categories.

Achievement Comparison - ELA

Grade and Subject	Shrewsbury % Adv/Pro. 2007	Shrewsbury % Adv/Pro. 2008	Shrewsbury % Adv/Pro. 2009	Shrewsbury % Adv/Pro. 2010	Shrewsbury % Adv/Pro. 2011	% Change 10-11	State Avg. 2011 %Adv/Pro.
Grade 3 ELA	76	76	79	81	84	+3	66
Grade 4 ELA	81	74	80	84	85	+1	47
Grade 5 ELA	80	80	81	78	86	+8	59
Grade 6 ELA	83	85	86	87	86	-1	58
Grade 7 ELA	86	87	86	89	90	+1	51
Grade 8 ELA	90	89	91	91	91	0	52
Grade 10ELA	92	93	91	90	96	+6	75

% Scoring Advanced/Proficient ELA 2007-2011



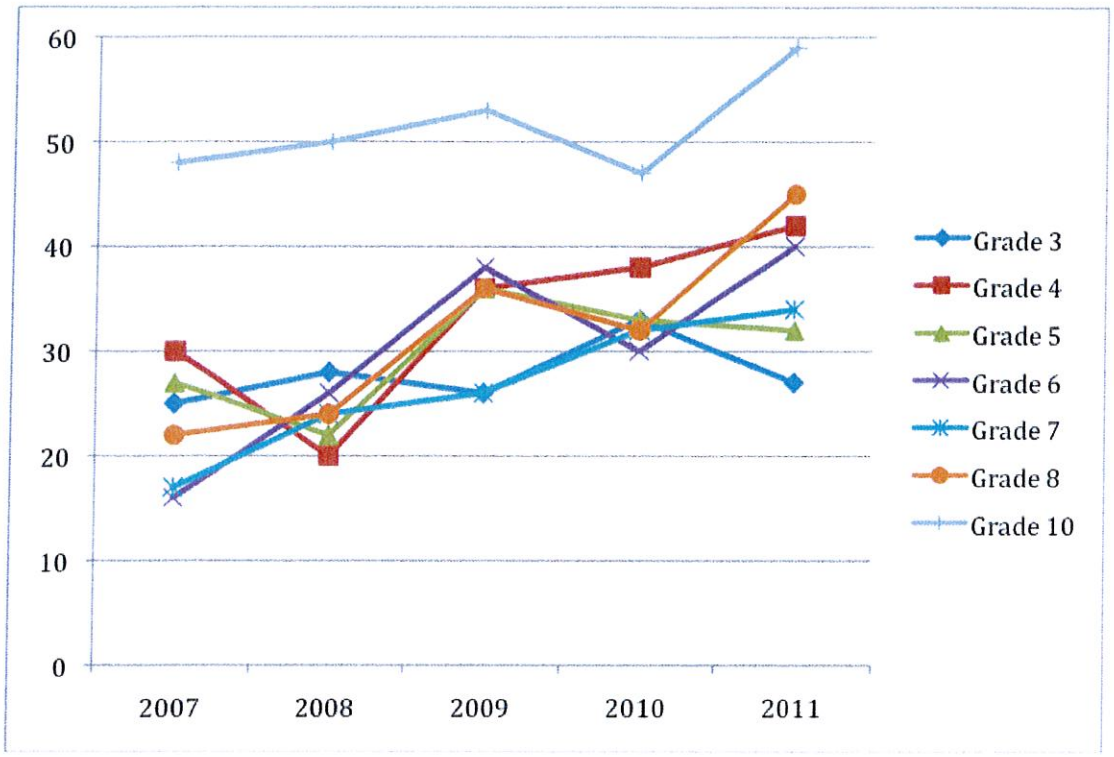
3. District-Wide Gains In the Advanced Category

Summary

In ELA there was a significant increase in the percentage of students scoring in the advanced category. Five out of the seven grade levels saw an increase, including a 10 percentage point gain in grade 6, a 13 point gain in grade 8, and a 12 point gain in grade 10. Two grade levels, third and fifth, showed a small decline in the advanced category.

Test	% of students Advanced 2007	% of students Advanced 2008	% of students Advanced 2009	% of students Advanced 2010	% of students Advanced 2011	% Change 10-11
Gr 3 ELA	25	28	26	33	27	-6
Gr 4 ELA	30	20	36	38	42	+4
Gr 5 ELA	27	22	36	33	32	-1
Gr 6 ELA	16	26	38	30	40	+10
Gr 7 ELA	17	24	26	32	34	+2
Gr 8 ELA	22	24	36	32	45	+13
Gr 10 ELA	48	50	53	47	59	+12

% Students Scoring Advanced in ELA 2006-2011



4. District Subgroup Performance –ELA

Summary

All NCLB subgroups showed growth in the 2011 MCAS. Significant growth was demonstrated by the Limited English Proficiency subgroup with an increase of 10% of students scoring in the advanced and proficient categories.

AYP Subgroup (2010)	Shrewsbury % Adv/Pro 2009	Shrewsbury % Adv/Pro 2010	Shrewsbury % Adv/Pro **2011**	% Change 10-11	State Avg. %Adv/Pro 2011
All Students (3,270)	85	86	89	+2	69
Stud. w/Disab. (549)	48	48	55	+7	30
LEP/FLEP (160)	60	60	70	+10	33
Low-Income (465)	68	68	72	+4	49
African Am/Black (60)	84	69	74	+5	50
Asian (517)	92	88	93	+5	77
Hispanic/Latino (156)	73	74	77	+3	45
White (2,467)	85	88	89	+1	77

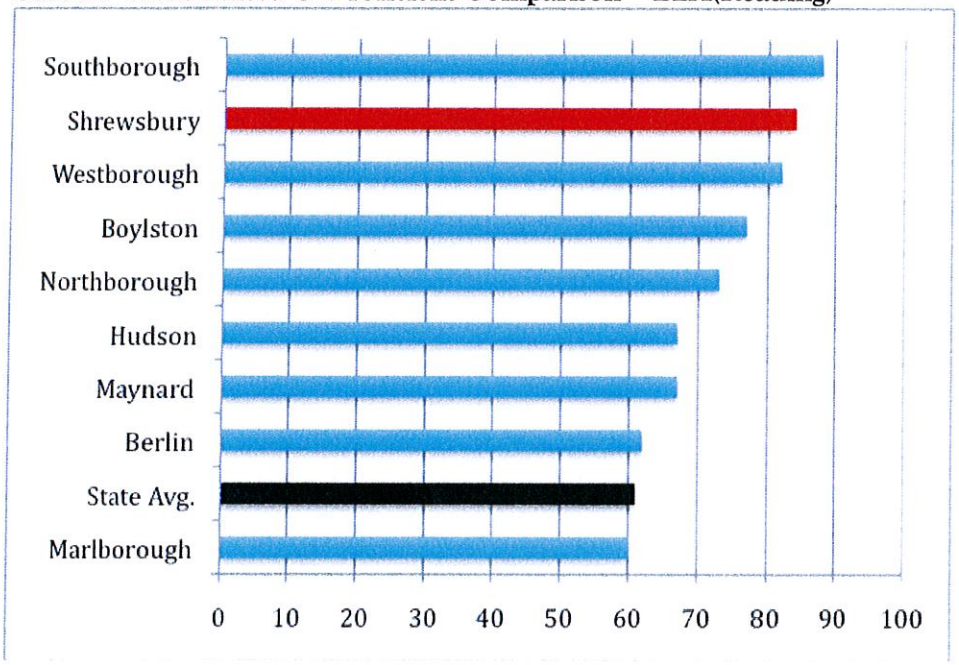
5. District % Advanced & Proficient Comparison - ELA

Summary

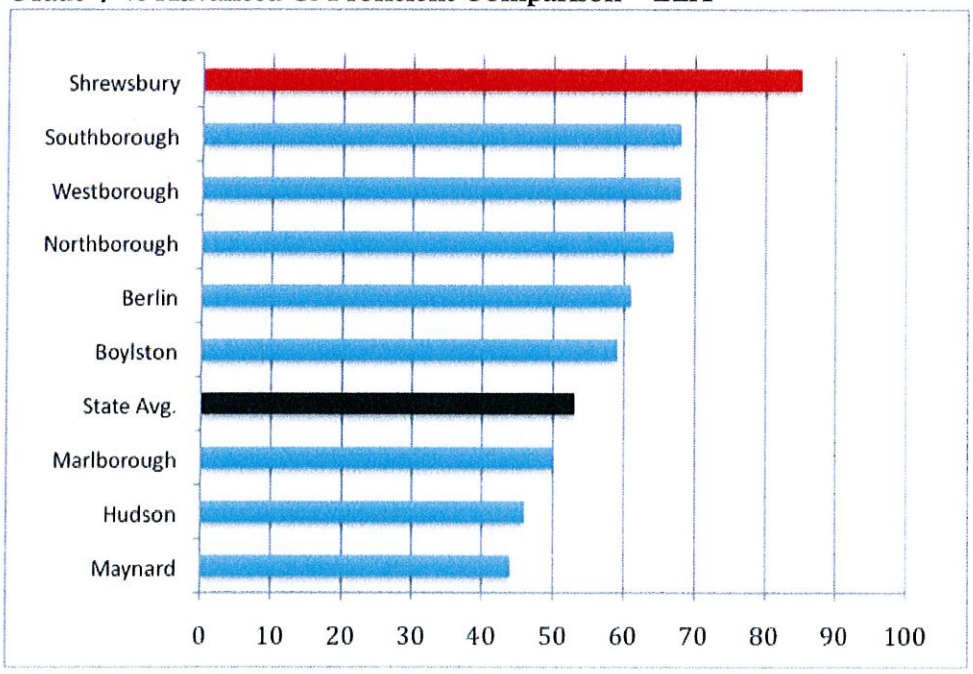
The following graphs illustrate Shrewsbury grade level performance (2011) in the area of combined advanced and proficient percentiles in comparison to districts within the Assabet Valley. The following graphs focus on achievement in the area of ELA.

Shrewsbury's ranking ranges from first (grades four and five) to fifth (grade eight). The third and seventh grades were the second highest in achievement and the tenth ranked third in Assabet Valley.

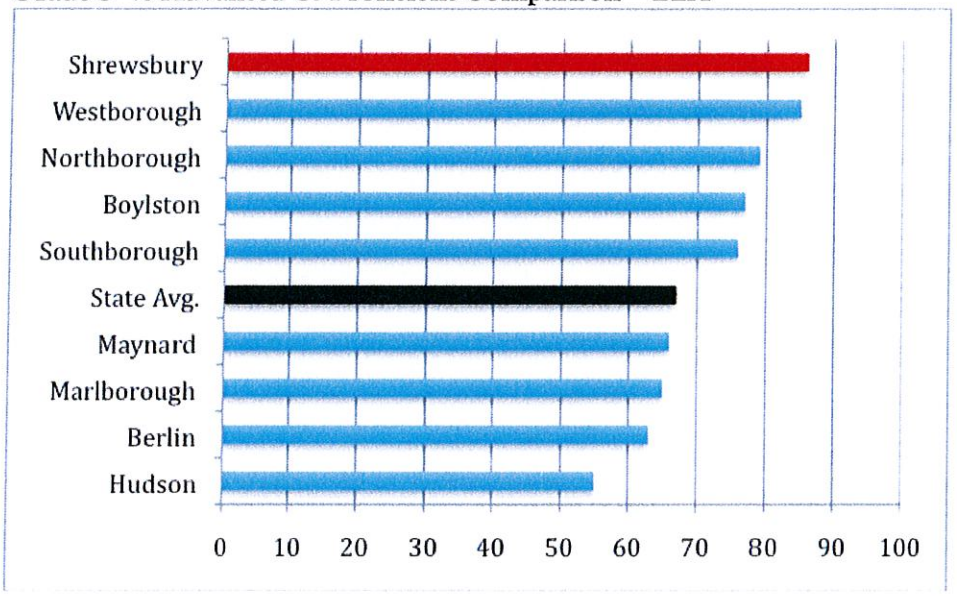
Grade 3 % Advanced & Proficient Comparison - ELA(Reading)



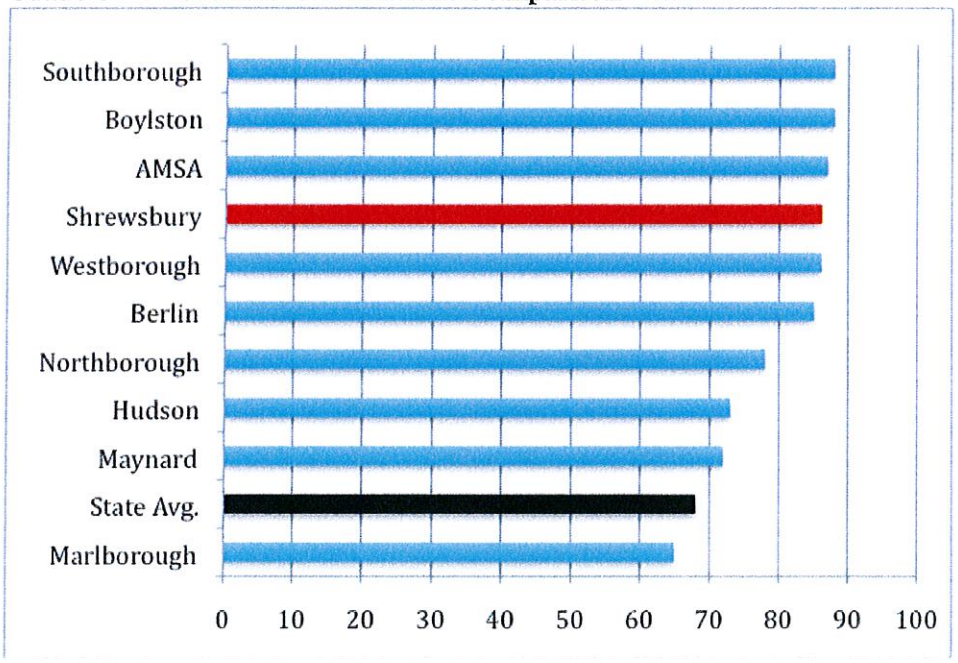
Grade 4 % Advanced & Proficient Comparison - ELA



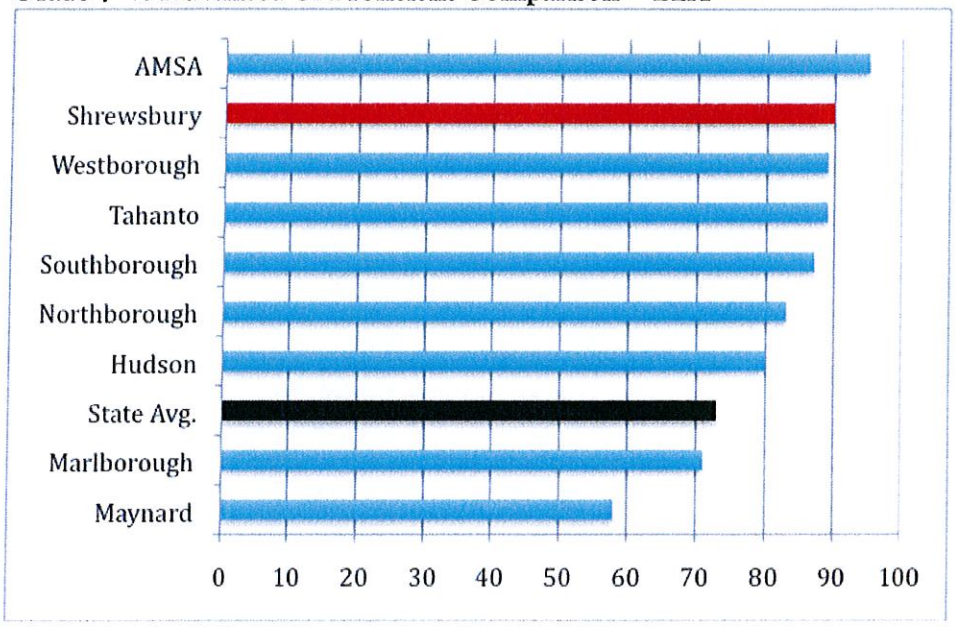
Grade 5 % Advanced & Proficient Comparison - ELA



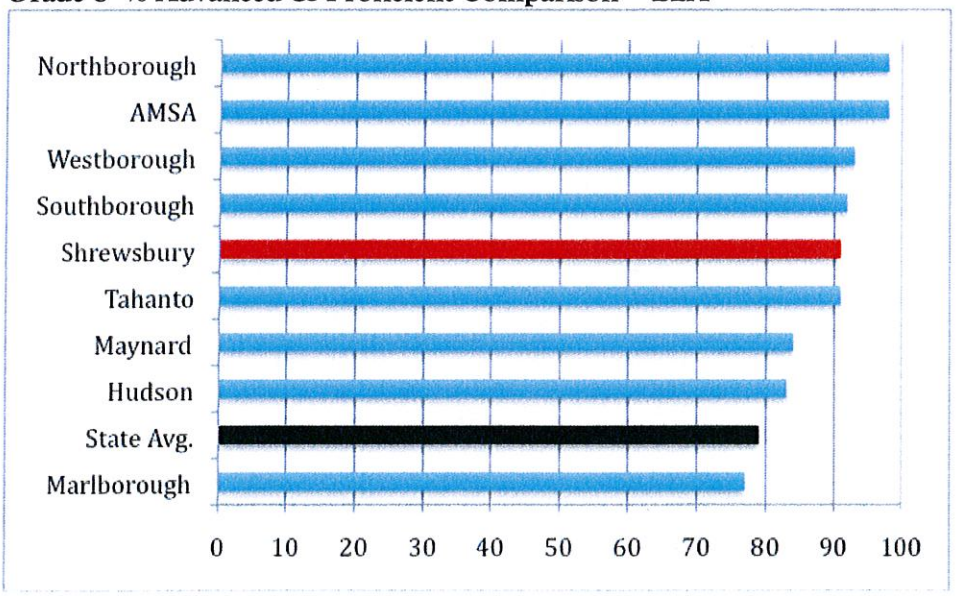
Grade 6 % Advanced & Proficient Comparison - ELA



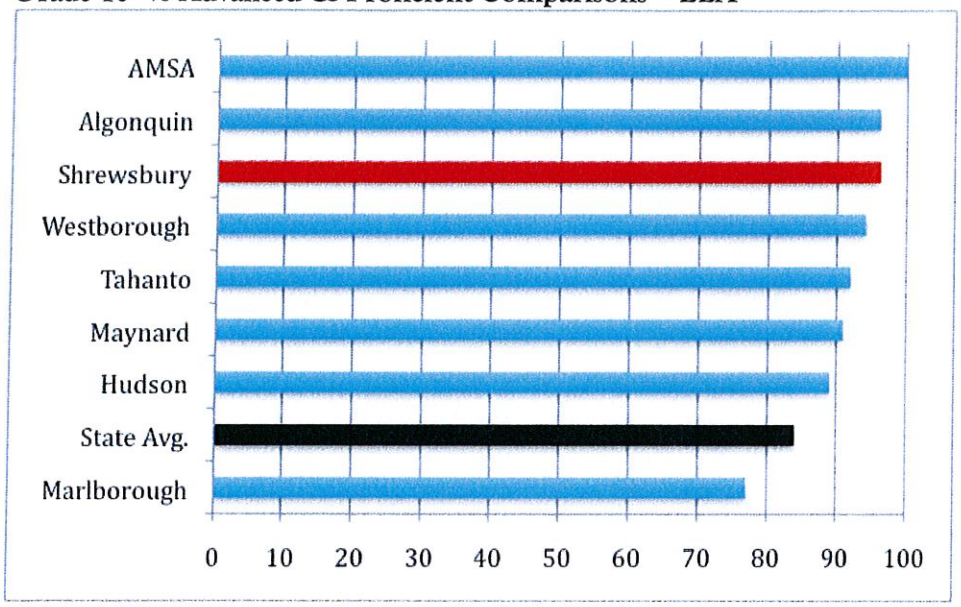
Grade 7 % Advanced & Proficient Comparison – ELA



Grade 8 % Advanced & Proficient Comparison – ELA



Grade 10 % Advanced & Proficient Comparisons - ELA



Performance Results - Math

The performance results section is broken down by subject area and each section includes the following components:

1. Five-year history of Shrewsbury's MCAS results in math
2. Combined Performance in Advanced/Proficient Categories
3. District-Wide Gains In the Advanced Category
4. District Subgroup Performance
5. District % Advanced/Proficient Comparison

1. Five-year history of Shrewsbury's MCAS results in Math

Summary

On balance, the district had very similar results on the MCAS as it did during the 2010 administration. Both this year's and last year's performance in mathematics demonstrated a high level of achievement overall. It should be noted that Shrewsbury's 4th grade math scores were in the top 3% in the state, and its 3rd grade math scores were in the top 5% in the state.
There was a large drop (25%) in the number of 3rd graders who scored in the advanced category, this will bear watching as we move forward.

	Grade 3 Mathematics			
	Advanced	Proficient	Needs Improvement	Warning
2007	37	44	13	6
2008	47	32	15	6
2009	45	39	12	5
2010	59	29	9	4
2011	**34**	**52**	**25**	**10**

	Grade 4 Mathematics			
	Advanced	Proficient	Needs Improvement	Warning
2007	28	39	28	6
2008	48	32	16	3
2009	37	37	22	4
2010	45	36	15	4
2011	**41**	**38**	**18**	**4**

	Grade 5 Mathematics			
	Advanced	Proficient	Needs Improvement	Warning
2007	38	35	20	7
2008	42	32	19	7
2009	43	33	16	8
2010	46	30	16	8
2011	**46**	**32**	**16**	**7**

	Grade 6 Mathematics			
	Advanced	Proficient	Needs Improvement	Warning
2007	37	33	21	9
2008	48	35	12	6
2009	48	34	13	5
2010	58	27	9	6
2011	**54**	**28**	**12**	**6**

	Grade 7 Mathematics			
	Advanced	Proficient	Needs Improvement	Warning
2007	34	37	20	9
2008	30	36	24	9
2009	38	37	16	9
2010	36	46	11	7
2011	**43**	**34**	**17**	**6**

	Grade 8 Mathematics			
	Advanced	Proficient	Needs Improvement	Warning
2007	27	36	24	13
2008	36	32	20	12
2009	39	29	21	10
2010	46	29	18	6
2011	**46**	**29**	**16**	**9**

	Grade 10 Mathematics			
	Advanced	Proficient	Needs Improvement	Failing
2007	64	25	10	2
2008	60	30	7	2
2009	65	23	8	5
2010	69	19	9	3
2011	**70**	**22**	**3**	**3**

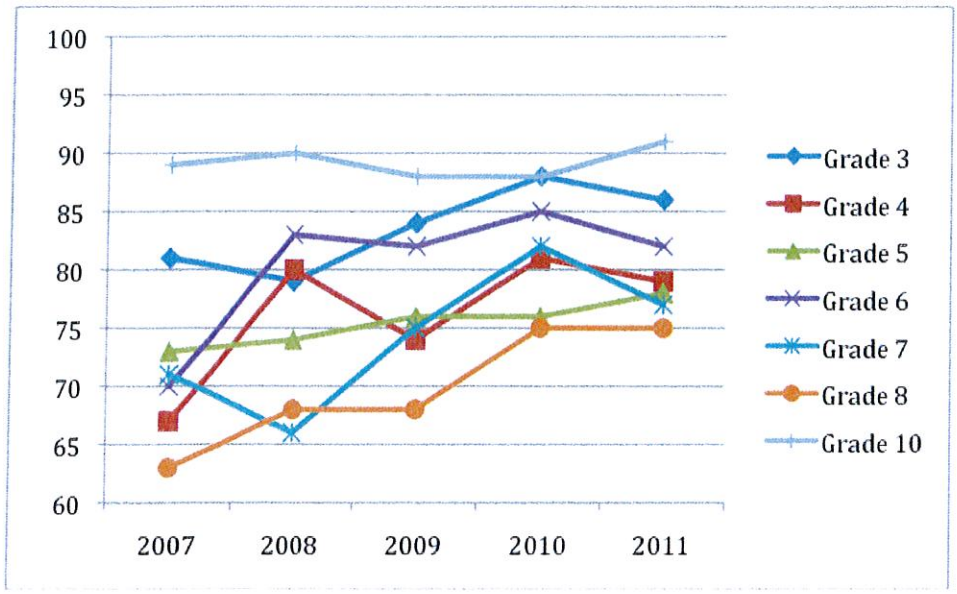
2. Combined Performance in Advanced/Proficient Categories

Summary

The gains in the advanced/proficient categories made across the grade levels were maintained again this year. Both Grades 5 and 10 posted their highest number of students in the advanced/proficient categories this year.

Grade and Subject	Shrewsbury % Adv/Pro. 2007	Shrewsbury % Adv/Pro. 2008	Shrewsbury % Adv/Pro. 2009	Shrewsbury % Adv/Pro. 2010	Shrewsbury % Adv/Pro. 2011	% Change 10-11	State Avg. 2011 %Adv/Pro
Grade 3 Math	81	79	84	88	86	-2	66
Grade 4 Math	67	80	74	81	79	-2	47
Grade 5 Math	73	74	76	76	78	+2	59
Grade 6 Math	70	83	82	85	82	-3	58
Grade 7 Math	71	66	75	82	77	-5	51
Grade 8 Math	63	68	68	75	75	0	52
Grade 10Math	89	90	88	88	92	+4	77

% Students scoring Advanced/Proficient Math 2007-2011

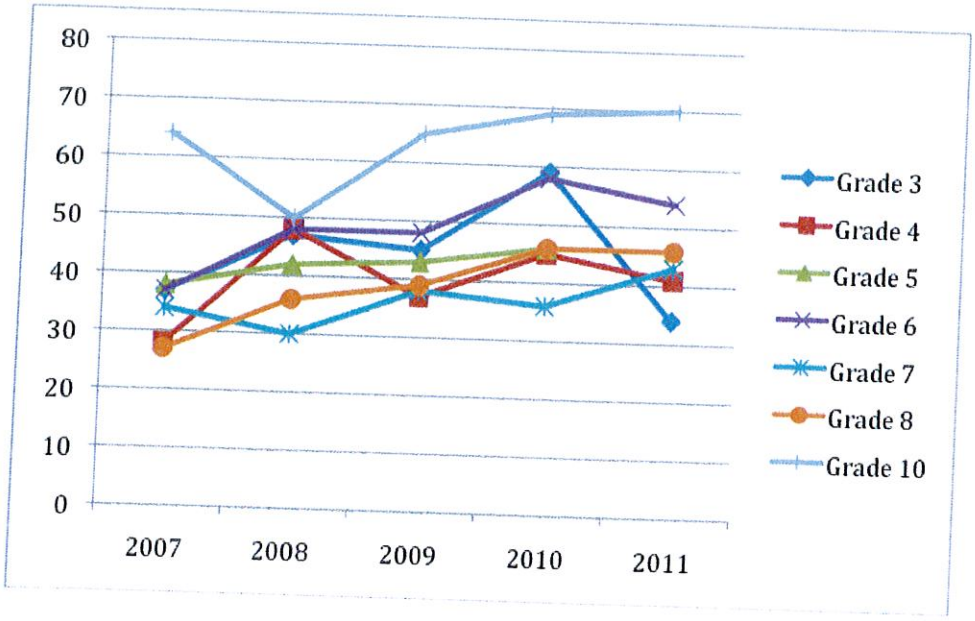


3. District-Wide Gains In the Advanced Category – Mathematics

Overall the gains that have been made in the advanced category in mathematics were maintained in 2011. However, there was a sharp decline in the number of students in grade three who scored in the advanced category. This bears watching to see if it becomes a trend, or is just a one time aberration.

Test	% of students Advanced 2007	% of students Advanced 2008	% of students Advanced 2009	% of students Advanced 2010	% of students Advanced **2011**	% Change 09-10
Gr 3 Math	37	47	45	59	34	-25
Gr 4 Math	28	48	37	45	41	-4
Gr 5 Math	38	42	43	46	46	0
Gr 6 Math	37	48	48	58	54	-4
Gr 7 Math	34	30	38	36	43	+7
Gr 8 Math	27	36	39	46	46	0
Gr 10 Math	64	50	65	69	70	+1

% Students Scoring Advanced in Math 2007-2011



4. District Subgroup Performance – Mathematics

Summary

NCLB subgroup performance in math remained relatively stable from 2010. Shrewsbury continues to be significantly above the state average in all subgroup categories.

AYP Subgroup (2010)	Shrewsbury %Adv/Pro 2009	Shrewsbury %Adv/Pro 2010	Shrewsbury %Adv/Pro 2011	%Change 10-11	State Avg %Adv/Pro 2011
All Students (3,280)	78	82	81	-1	58
Stud. w/Disab. (532)	35	41	40	-1	22
LEP/FLEP (161)	57	64	65	+1	33
Low-Income (432)	52	64	60	-4	37
African Am/Black (71)	62	63	62	-1	34
Asian (368)	93	93	93	0	77
Hispanic/Latino (133)	58	63	60	-3	34
White (2,451)	77	82	81	-1	65

5. District % Advanced & Proficient Comparison - Math

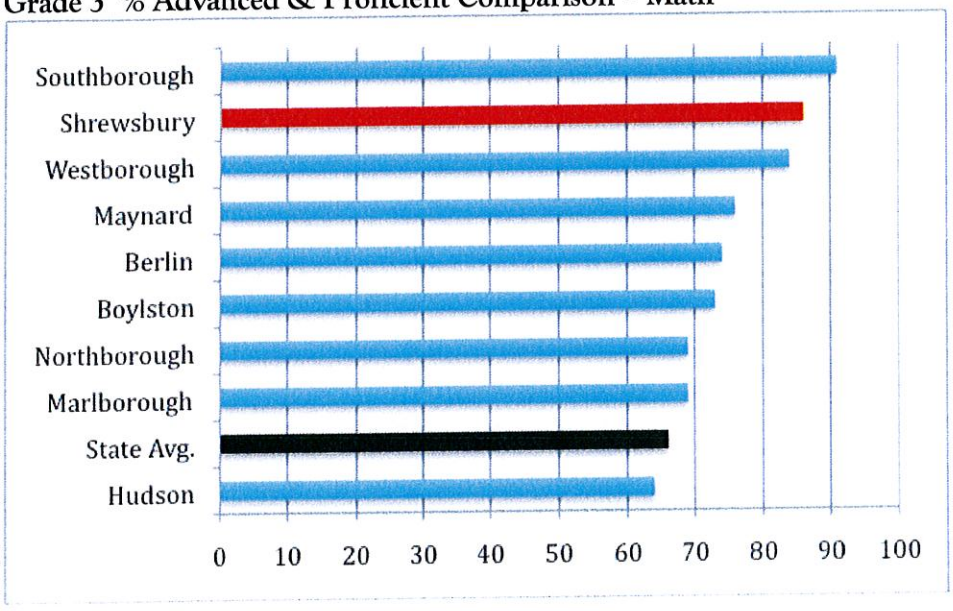
Summary

The following graphs illustrate Shrewsbury grade level math performance (2011) in the area of combined advanced and proficient percentiles in comparison to districts within the Assabet Valley.

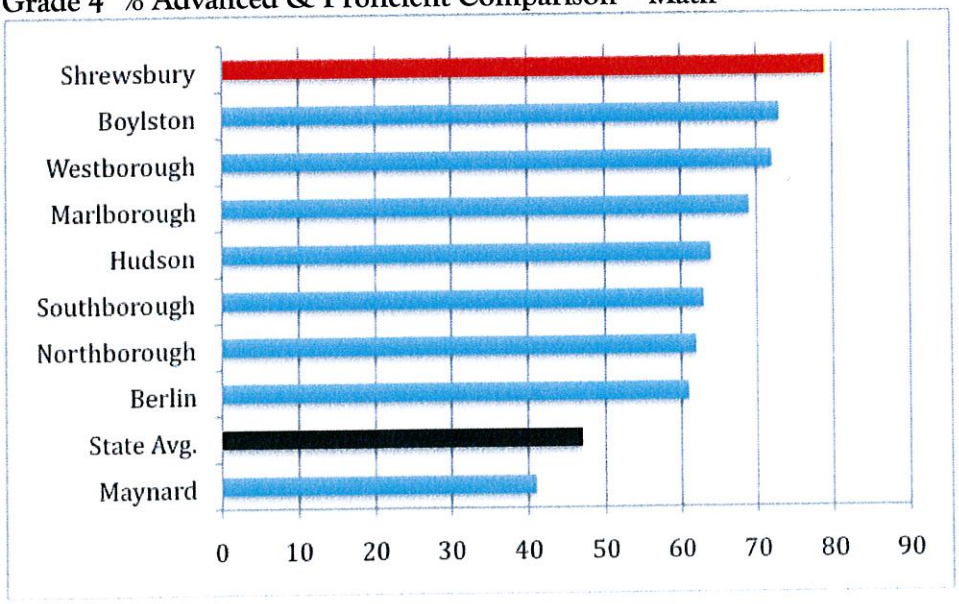
In the area of math, Shrewsbury demonstrated a high rate of achievement performance. Ranking within the top three across all grade levels. Grades four, five, and six all ranked first in the Assabet

Valley, grades three, seven, and eight also did exceptionally well with the second highest rankings in their respective grade levels. Grade ten ranked third highest within the Assabet Valley. Comparisons are being made with public school districts in the Assabet Valley Collaborative, as well as the Academy of Math and Sciences, given its proximity to Shrewsbury. It should be noted that the population of AMSA is different than most public schools. Families need to take the initiative to apply to this school, and are looking for a strong math/science focus for their child. Additionally, AMSA serves relatively few students with learning disabilities or English language learners.

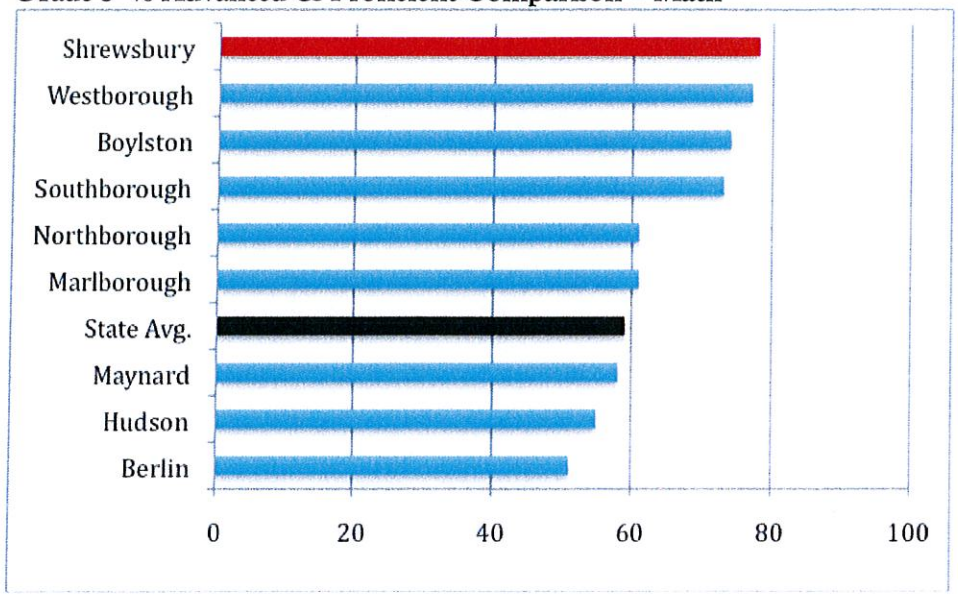
Grade 3 % Advanced & Proficient Comparison – Math



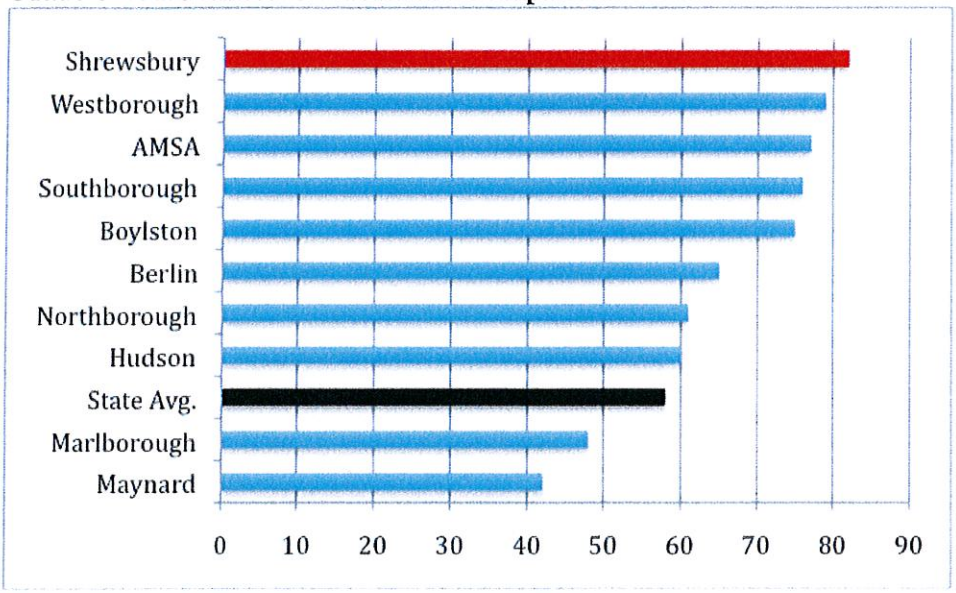
Grade 4 % Advanced & Proficient Comparison – Math



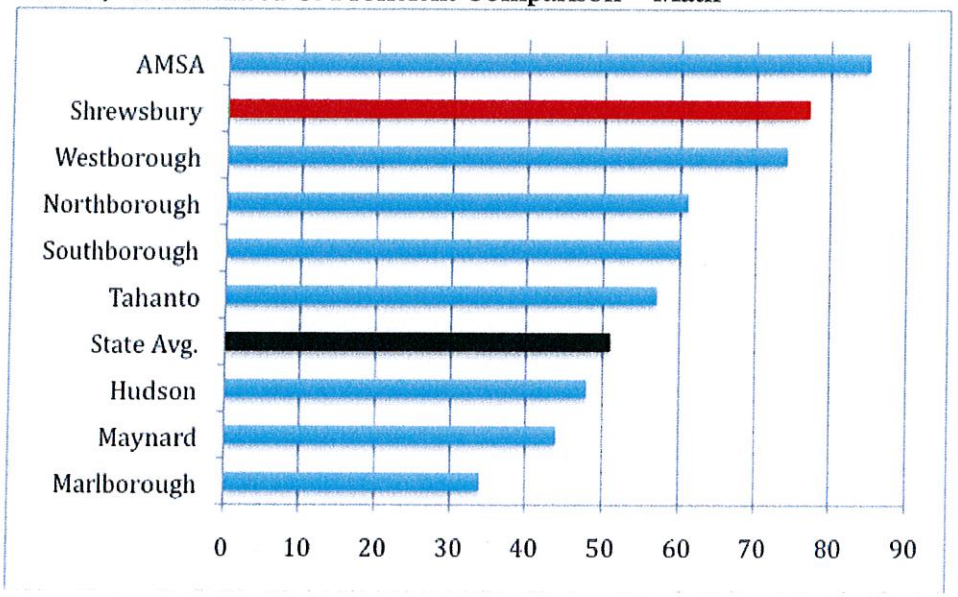
Grade 5 % Advanced & Proficient Comparison - Math



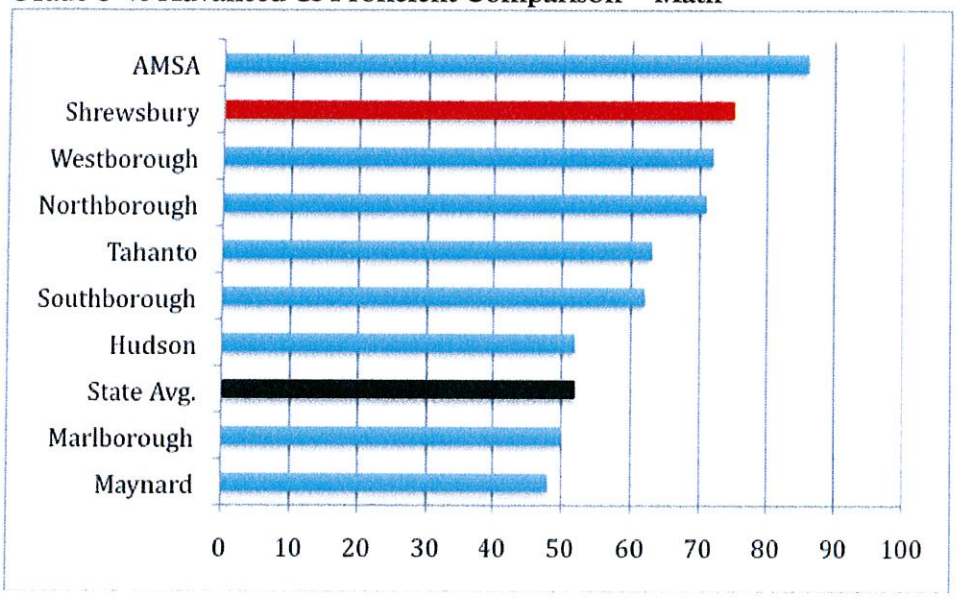
Grade 6 % Advanced & Proficient Comparison - Math



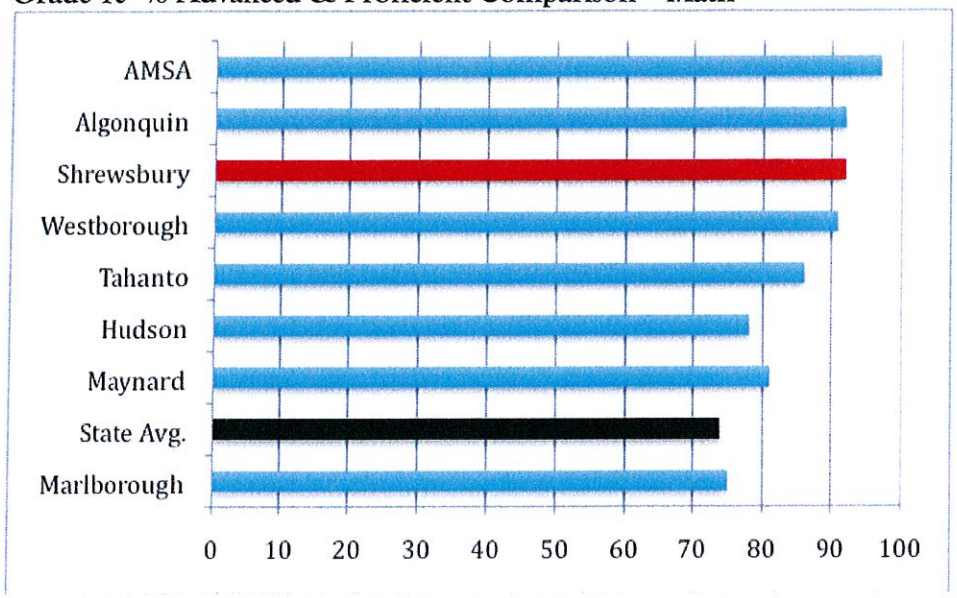
Grade 7 % Advanced & Proficient Comparison – Math



Grade 8 % Advanced & Proficient Comparison – Math



Grade 10 % Advanced & Proficient Comparison - Math



Performance Results - Science & Technology

This is the fourth year for state reporting of data for the high school tests in this subject, which are now part of the graduation requirement that started with the Class of 2010. Due to the fact that science and technology is only tested in grades 5,8, and 9/10 there is no growth data produced for this testing area. Aggregate subgroup data is also not provided by DESE.

1. Five-year history of Shrewsbury's MCAS results in Science & Technology

Summary

Grade 8 and 10 scores have remained relatively consistent from 2010 to 2011. There was and additional drop in advanced Grade 5 scores. Given that Grade 8 continues to have 38 students not meeting the proficient benchmark and the downward trend in the 5th grade advanced scores, science as a whole for the district warrants further study.

	Grade 5 Science & Technology			
	Advanced	Proficient	Needs Improvement	Warning
2007	25	47	22	5
2008	42	39	16	2
2009	36	38	22	4
2010	36	43	17	4
2011	28	45	23	4

	Grade 8 Science & Technology			
	Advanced	Proficient	Needs Improvement	Warning
2007	5	35	47	12
2008	7	52	33	8
2009	11	49	32	8
2010	13	49	33	6
2011	**12**	**49**	**33**	**5**

	Grade 9 & 10 Science			
	Advanced	Proficient	Needs Improvement	Warning
2007	N/A	N/A	N/A	N/A
2008	25	52	21	2
2009	43	37	10	10
2010	35	46	17	2
2011	**34**	**49**	**15**	**2**

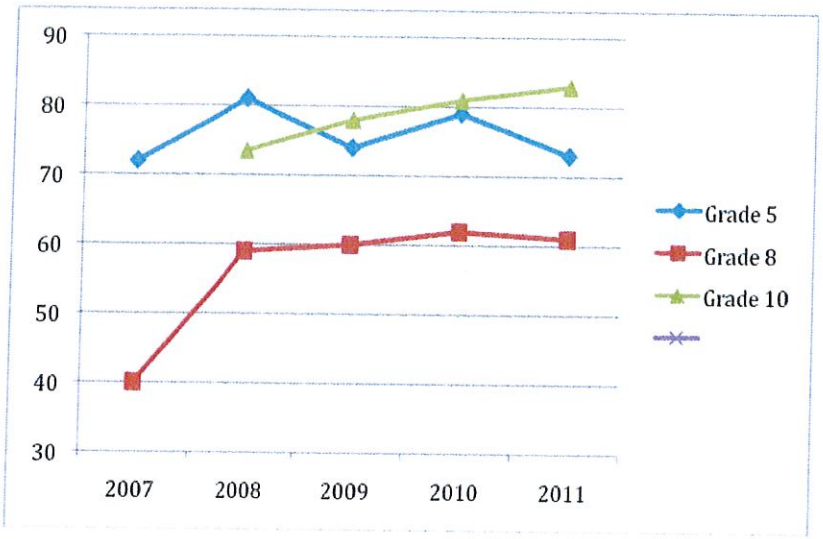
2. Combined Performance in Advanced/Proficient Categories

Summary

The percentage of students scoring in the advanced and proficient categories in science and technology has increased steadily in grades 8 and 10 over the past five years. This year there was a small dip in the 5th and 8th grade scores.

Grade and Subject	Shrewsbury % Advanced /Proficient 2007	Shrewsbury % Advanced /Proficient 2008	Shrewsbury % Advanced /Proficient 2009	Shrewsbury % Advanced /Proficient 2010	Shrewsbury % Advanced /Proficient 2011	% Change from 10-11	State Avg. 2011 %Adv/Pro.
Grade 5 Science/Tech	72	81	74	79	73	-6	50
Grade 8 Science/Tech	40	59	60	62	61	-1	39
Grade 10 Science/Tech	N/A	73.5	78	81	83	+2	67

% Students scoring Advanced/Proficient Science & Technology 2007-2011



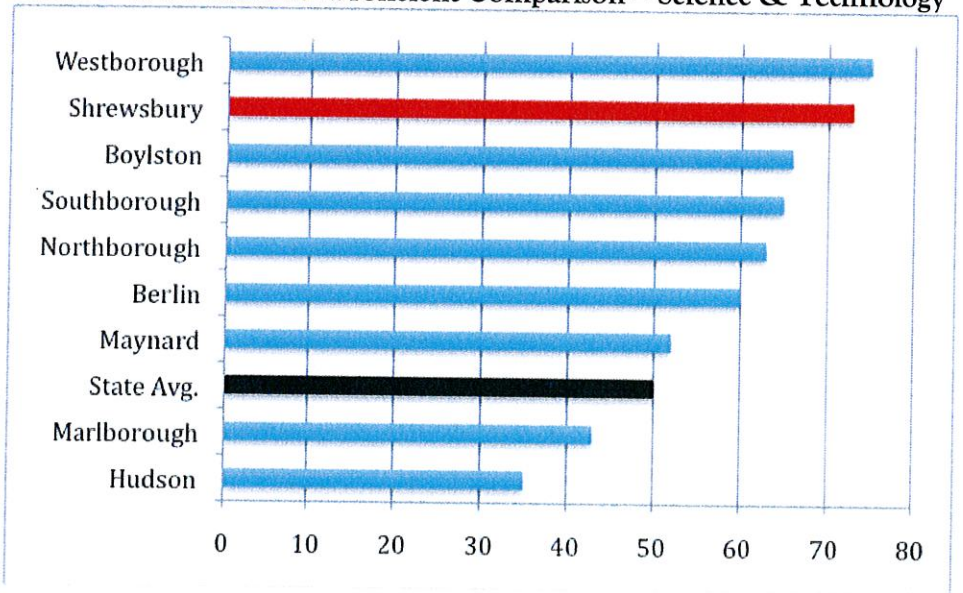
3. District % Advanced & Proficient Comparison – Science & Technology

Summary

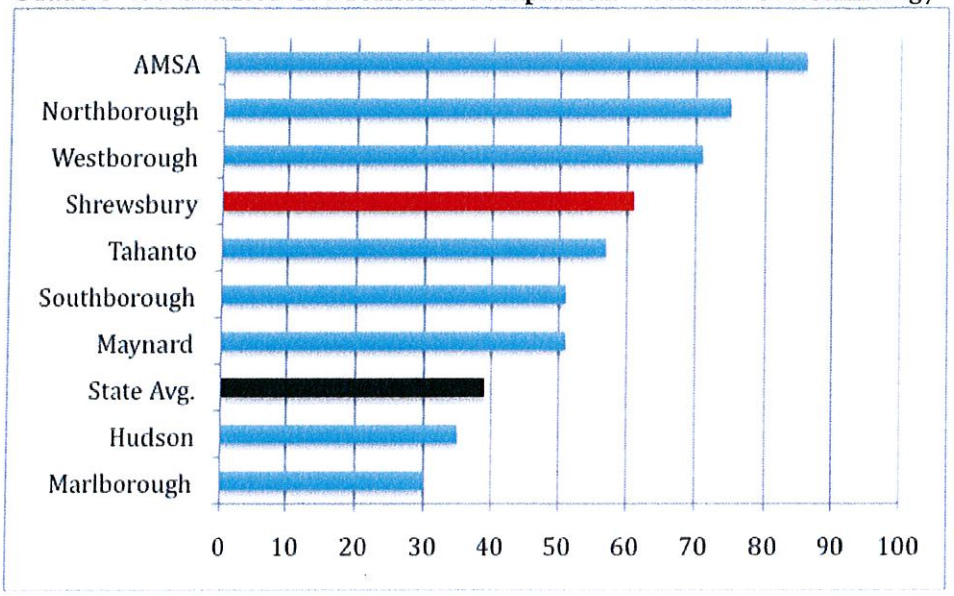
The following graphs illustrate Shrewsbury grade level performance (2011) in the area of combined advanced and proficient percentiles in comparison to districts within the Assabet Valley. The following graphs focus on achievement in the area of science & technology.

In the area of science & technology, Shrewsbury fifth graders continued to rank second within the Assabet Valley. Grade eight continued to rank fourth, and Grade 10 continued to rank fifth.

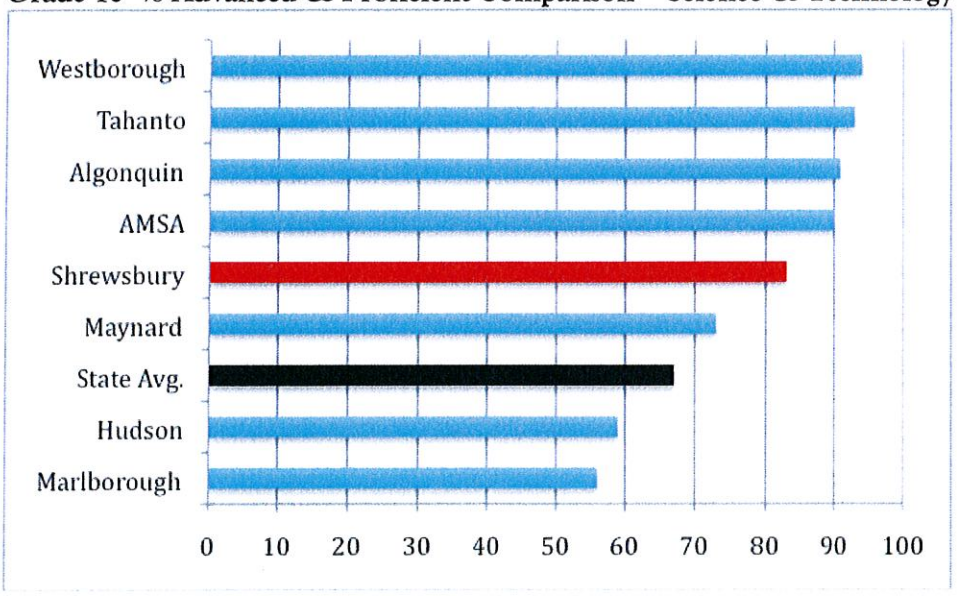
Grade 5 % Advanced & Proficient Comparison – Science & Technology



Grade 8 % Advanced & Proficient Comparison – Science & Technology



Grade 10 % Advanced & Proficient Comparison – Science & Technology



Growth Model Results

Due to the fact that growth model results are still relatively new, this report continues to contain more detailed information about this new system of measurement. Following this introduction is a breakdown of results for ELA and mathematics. Analysis includes data regarding changes from 2010 by grade level, district sub-group data, a scatter plot visual, and a series of bar graphs that illustrate Shrewsbury's growth performance in comparison to other districts within the Assabet Valley.

Introduction

In the past, MCAS result have been provided in absolute measures and provided insight into how individual students, as well as groups of students, perform in terms of state curriculum standards. Attempting to quantify individual and cohort growth based on traditional MCAS data has been highly speculative. Massachusetts has now begun utilizing a growth model system to measure growth.

By utilizing a growth model system, the state is trying to do a better job answering the question "How much academic progress did a student or group of students make in one year as measured by MCAS?" This new measure of student growth should provide us with additional information that may very well help us better answer this question within the district and build on the exceptional instruction being provided.

The use of growth model percentiles will help the state (and districts) put MCAS achievement into greater context. MCAS achievement scores answer one central question: how did a student fare relative to grade level standards in a given year. MCAS student growth percentiles add another layer of understanding, providing a measure of how a student changed from one year to the next relative to other students with similar MCAS test score histories.

The term 'growth model' describes a method of measuring student growth by tracking their progress on MCAS from one year to the next. Students are tracked by comparing their individual performance on MCAS testing to the performance of their 'academic peers,' those students who have similar MCAS score histories. Student growth percentiles range from 1 to 99, higher numbers represent higher levels of growth and lower numbers represent lower levels of growth.

The growth model method operates independently of MCAS performance levels. Therefore, all students, no matter what their scores were on past MCAS tests, have an equal chance to demonstrate growth at any of the 99 percentiles on the next year's test. Growth percentiles are calculated in ELA and mathematics for students in grades 4 through 8 and for grade 10. The state's growth model requires at least two years of MCAS results to calculate growth percentiles, therefore no results are available for grade 3.

Individual Student Examples

The growth model measures change in performance rather than absolute performance. This change is measured in percentiles that provide values that express the percentage of cases that fall below a certain score. For example:

- A student with a growth percentile of 80 in 5th grade mathematics grew as much or more than 80 percent of her academic peers (students with similar score histories) from the 3rd and 4th grade math MCAS to the 5th grade math MCAS. Only 20% of her academic peers grew more in math than she did.

- A student with a growth percentile of 33 in 8th grade ELA grew as well or better than 33 percent of his academic peers (students with similar score histories) from the 6th and 7th grade ELA MCAS to the 8th grade ELA MCAS. This student grew less than 67% of his academic peers.

Aggregate Growth Percentiles

While student growth percentiles enable educators to chart the growth of an individual student compared to that of academic peers, student growth percentiles can also be aggregated to better understand growth at the subgroup, school, or district level.

The most effective way to report growth for a group is through the use of the median student growth percentile (the middle score if one ranks the individual student growth percentiles from highest to lowest). A typical school or district in the commonwealth would have a median student growth percentile of 50.

When using student growth percentiles, it is important to be aware that the statistic and interpretation does not change. For example, if we look at the student growth percentile of low-income status students at the district level we see that this group's median student growth percentile is 56. This means that this particular group of students, on average, achieved higher than their academic peers – a group of students with similar MCAS test score histories. It does not mean that our low-income students improved more than 56 percent of other low-income status students, nor does it mean that this particular group of students improved more than 56 percent of non low-income status students, it simply means that in comparison to other students with similar score histories, our low-income status students improved more than 56 percent of their academic peers.

Growth Model Results - ELA

1. Growth Comparison - ELA

Summary

The overall student growth percentile medians for the district, and individual grade levels, is very high in ELA. There were some minor fluctuations in the data this year, but overall, we continue to see strong results in this area.

Grade and Subject	Shrewsbury Median Student Growth Percentile 2009	Shrewsbury Median Student Growth Percentile 2010	Shrewsbury Median Student Growth Percentile 2011	% Change 2010-2011
Grade 3 ELA	N/A	N/A	N/A	N/A
Grade 4 ELA	76	76	83	+7
Grade 5 ELA	58	48	44	-4
Grade 6 ELA	63	54	60	+6
Grade 7 ELA	57.5	64	58	-6
Grade 8 ELA	66	56	56	0
Grade 10 ELA	62	56	57	+1
All Grades ELA	64	59	60	+1

2. District Subgroup Growth – ELA

Summary

District-wide growth among NCLB subgroups between 2010 and 2011 indicate a strong positive increase in performance in ELA. Of note, is the 21.5% increase in the growth of Limited English Proficiency Students.

AYP Subgroup	Shrewsbury Median Student Growth Percentile 2009	Shrewsbury Median Student Growth Percentile 2010	Shrewsbury Median Student Growth Percentile 2011	% Change
All Students	64	59	61	+2
Stud. w/Disab. (549)	40	41	51	+10
LEP/FLEP (132)	51	51	72.5	+21.5
Low-Income (370)	45	46	56	+10
African Am/Black (70)	48	46	54	+8
Asian (368)	60	59	72	+13
Hispanic/Latino (137)	46	47	59	+12

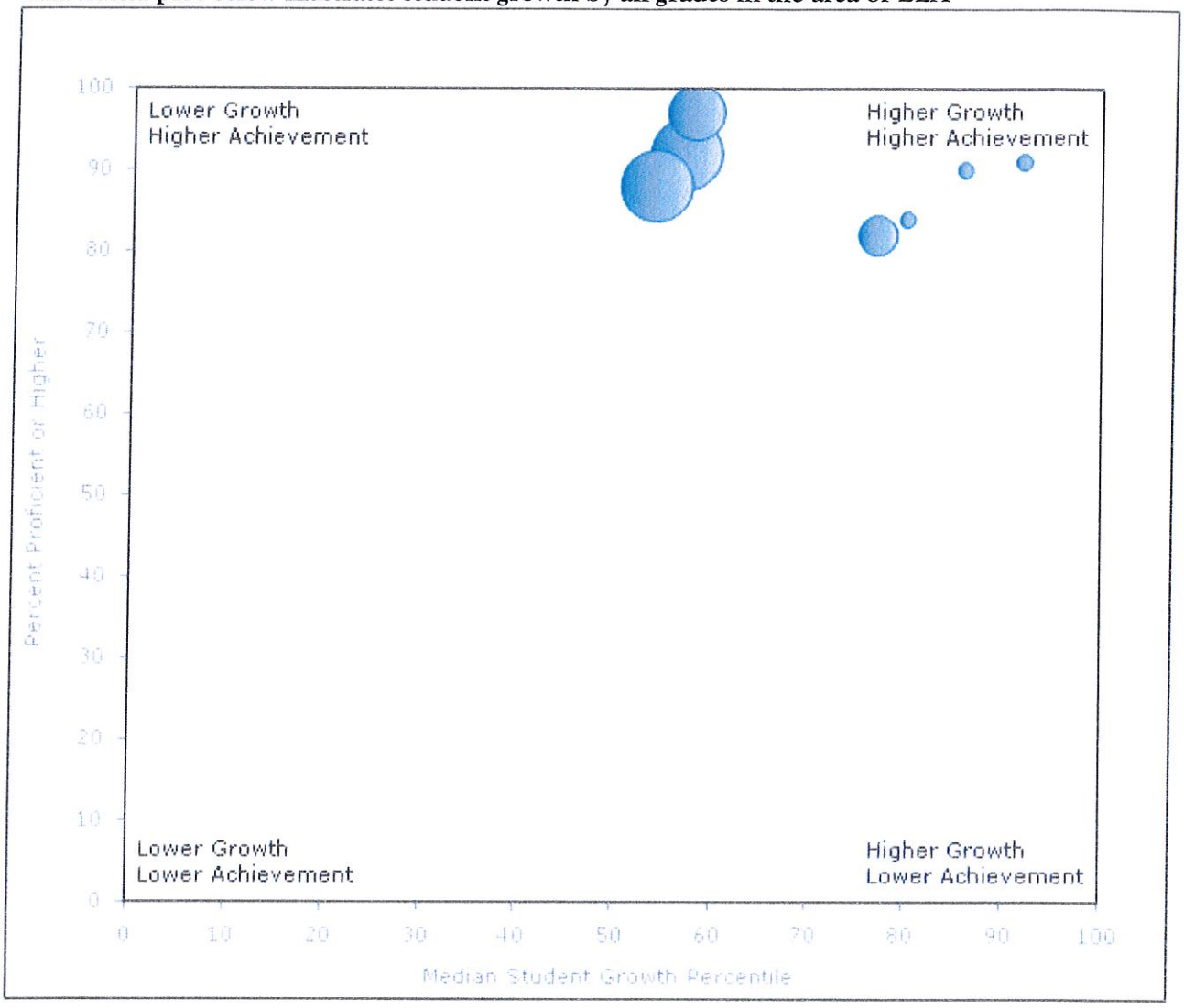
3. Scatter Plot - ELA

Scatter plots allow for a graphic illustration of growth percentiles in the context of absolute performance. The vertical axis represents student achievement and the horizontal axis represents student growth. Therefore, placement in the upper right quadrant represents higher growth and achievement than peers/groups with similar score histories. The X in the center of the chart represents the statewide growth median.

Colorado has been utilizing growth models longer than any other state. At the state level they use the illustration below to put scatter plot results into greater context.

Sustaining	**Excelling**
Underperforming	**Improving**

The scatter plot below illustrates student growth by all grades in the area of ELA



School	Median SGP	% At/Above Proficient	Included in SGP
Calvin Coolidge	80.0	84	76
Floral Street School	77.0	82	200
Oak Middle School	57.0	92	861
Sherwood Middle School	54.0	88	880
Shrewsbury Sr. High	58.0	97	370
Spring Street	92.0	91	83
Walter J Paton	86.0	90	92

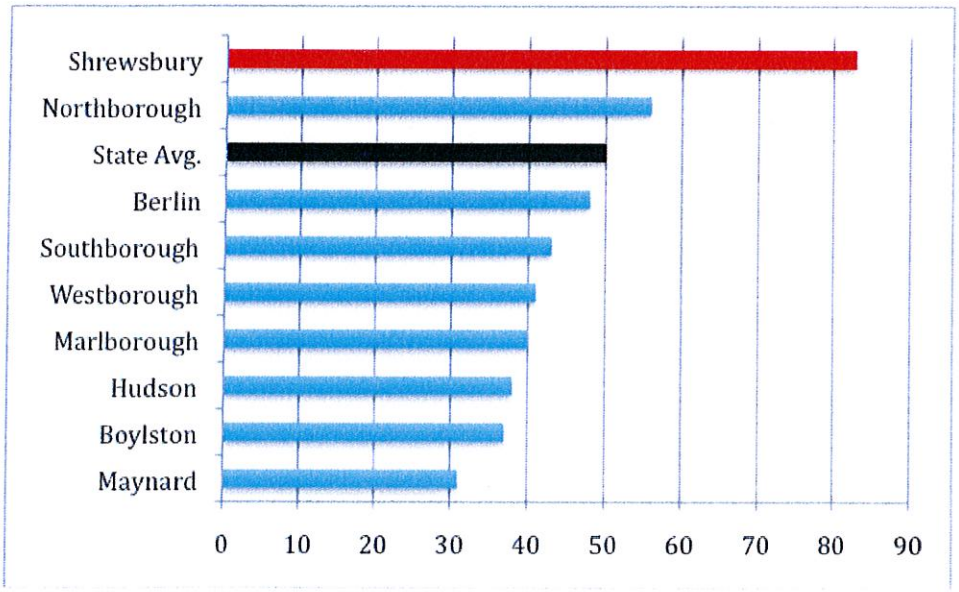
4. District Growth Comparison – English Language Arts

Summary

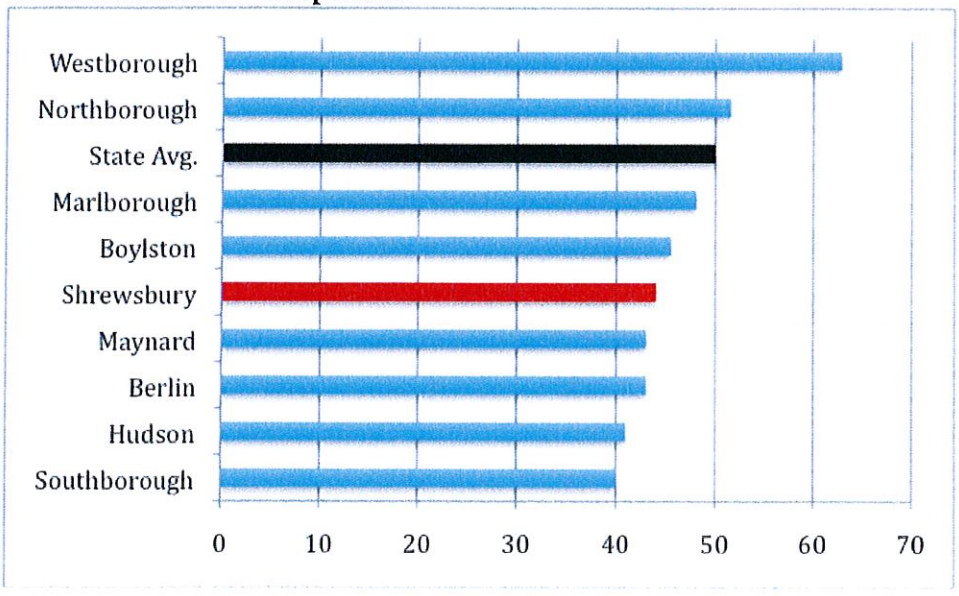
The following graphs illustrate Shrewsbury grade level performance (2011) in the area of student growth percentiles in comparison to districts within the Assabet Valley. The following graphs focus on growth in the area of ELA.

Grade four continues to highest district-wide growth percentile in the Assabet Valley. Grades ten, seven, and six ranked third within the Assabet Valley. Grades five and eight ranked fifth among all Assabet Valley Districts.

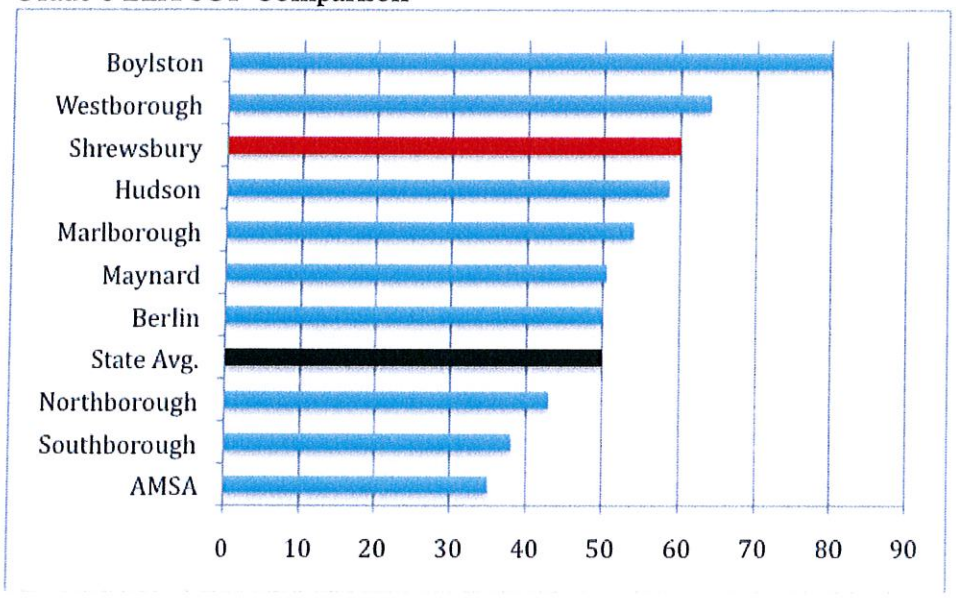
Grade 4 ELA SGP Comparison



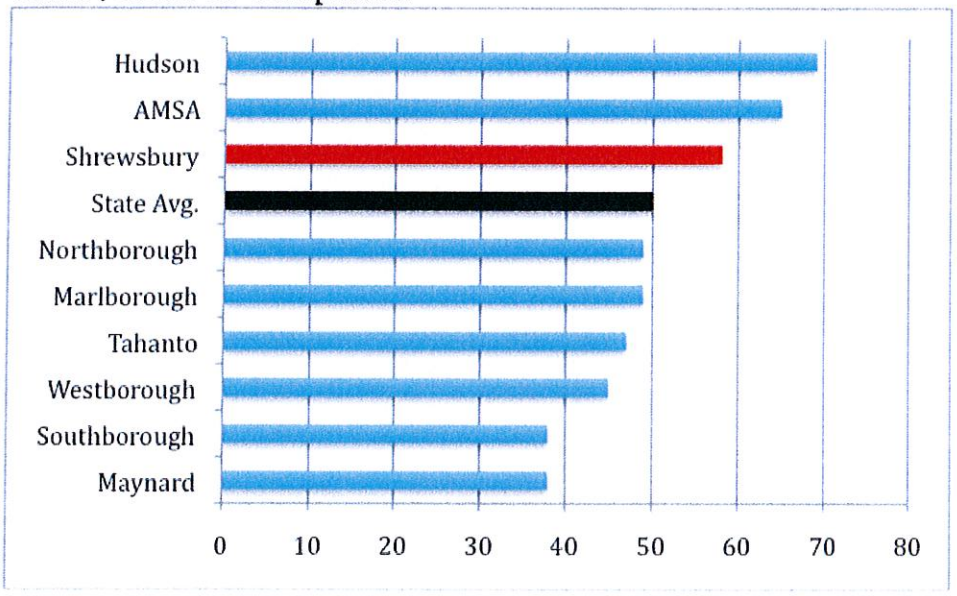
Grade 5 ELA SPG Comparison



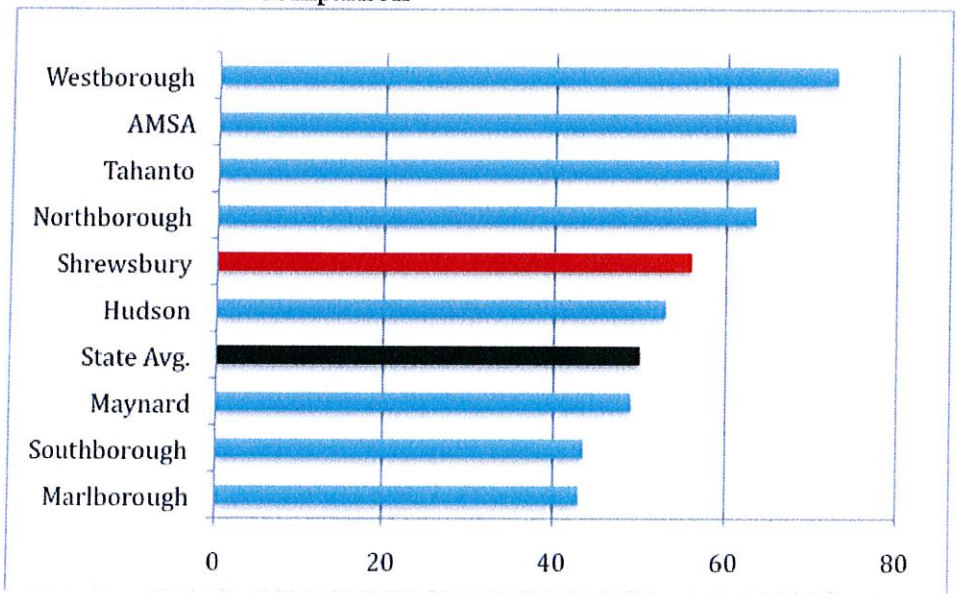
Grade 6 ELA SGP Comparison



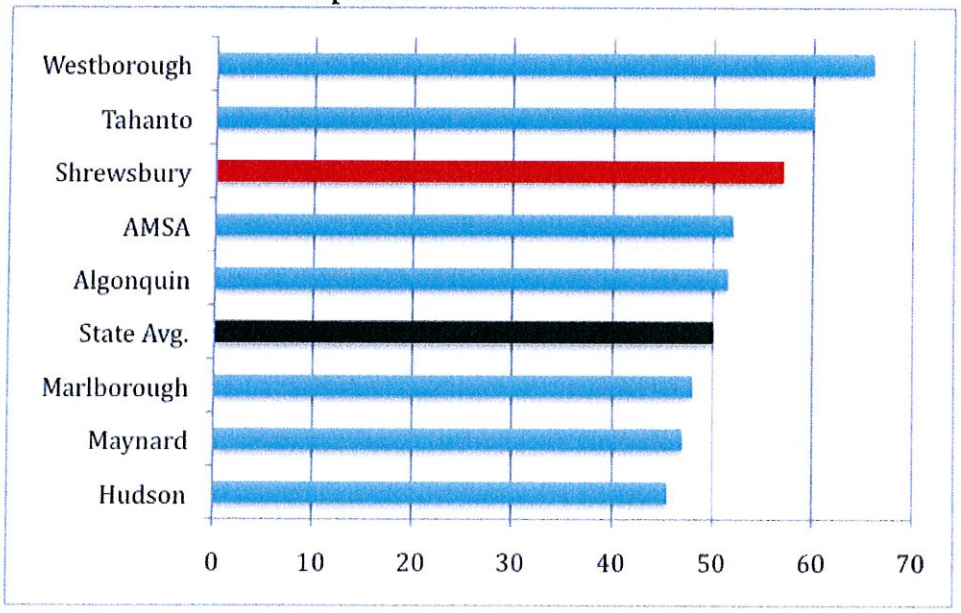
Grade 7 ELA SGP Comparison



Grade 8 ELA SGP Comparison



Grade 10 ELA SGP Comparison



Growth Model Results - Math

1. Growth Comparison - Mathematics

Summary

Overall the district-wide growth percentiles are strong in math again this year when compared to state scores. When compared to our own growth percentiles from 2010, we did see some declines in five out of the six grade levels. This will bear watching to see if it develops into a trend.

Grade and Subject	Shrewsbury Median Student Growth Percentile 2009	Shrewsbury Median Student Growth Percentile 2010	Shrewsbury Median Student Growth Percentile **2011**	% Change
Grade 3 Math	N/A	N/A	N/A	N/A
Grade 4 Math	69	67	62	-5
Grade 5 Math	50	53	37	-16
Grade 6 Math	69	66	65	-1
Grade 7 Math	60	66	55	-11
Grade 8 Math	62	59	50	-9
Grade 10 Math	50	51	57	+6
All Grades Math	60	60	55.5	-4.5

2. District Subgroup Growth - Mathematics

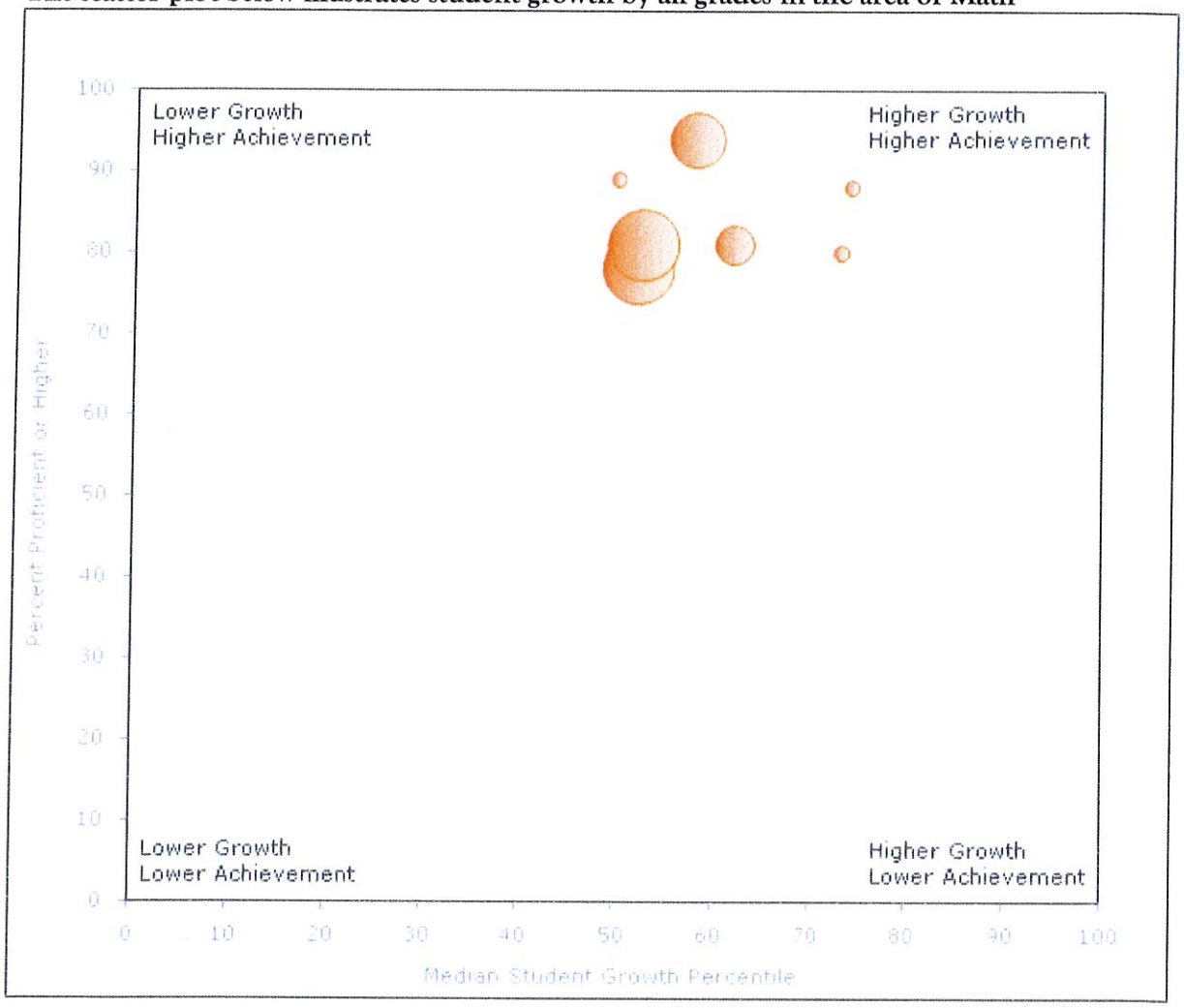
Summary

NCLB subgroup mathematics growth performance was mixed in 2011 with subgroups. Four grade levels demonstrated a decrease from 2010 with a 22.5 percent decrease with the Hispanic/Latino subgroup. LEP/FLEP, African American/Black, and Asian subgroups all demonstrated an increase in growth performance in 2011.

AYP Subgroup	Shrewsbury Median Student Growth Percentile 2009	Shrewsbury Median Student Growth Percentile 2010	Shrewsbury Median Student Growth Percentile **2011**	% Change
All Students	60	60	55.5	-4.5
Stud. w/Disab. (553)	57	51	47	-4
LEP/FLEP (164)	64	55	66	+11
Low-Income (468)	49	54.5	50	-4.5
African Am/Black (59)	52	49.5	55	+5.5
Asian (521)	68	71	73	+2
Hispanic/Latino (155)	56	68	45.5	-22.5

3. Scatter Plot - Mathematics

The scatter plot below illustrates student growth by all grades in the area of Math



School	Median SGP	% At/Above Proficient	Included in SP
Calvin Coolidge	73.0	80	76
Floral Street School	62.0	81	201
Oak Middle School	52.0	78	861
Sherwood Middle School	52.5	81	880
Shrewsbury Sr High	58.0	94	375
Spring Street	74.0	88	84
Walter J Paton	50.0	89	92

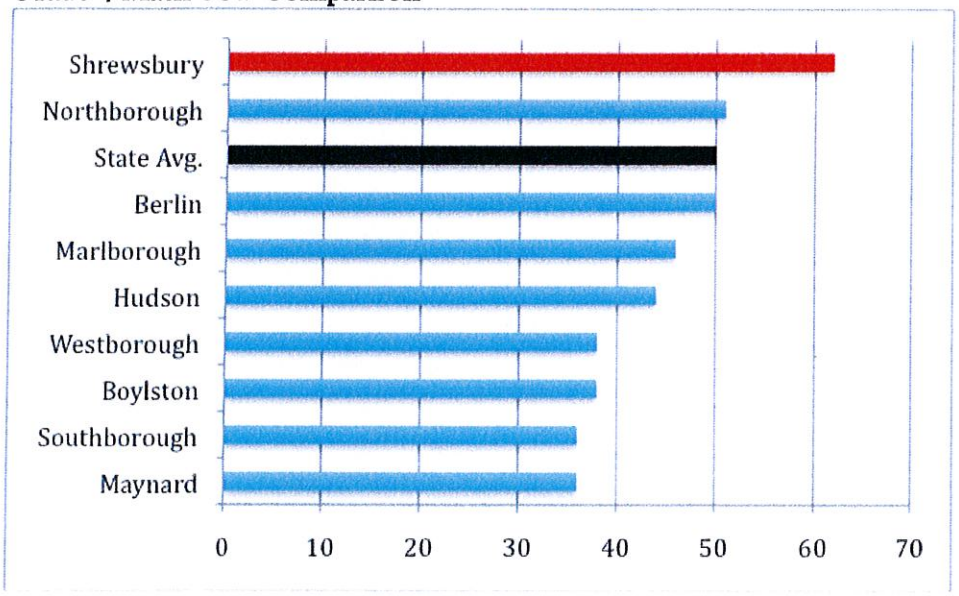
4. District Growth Comparison – Mathematics

Summary

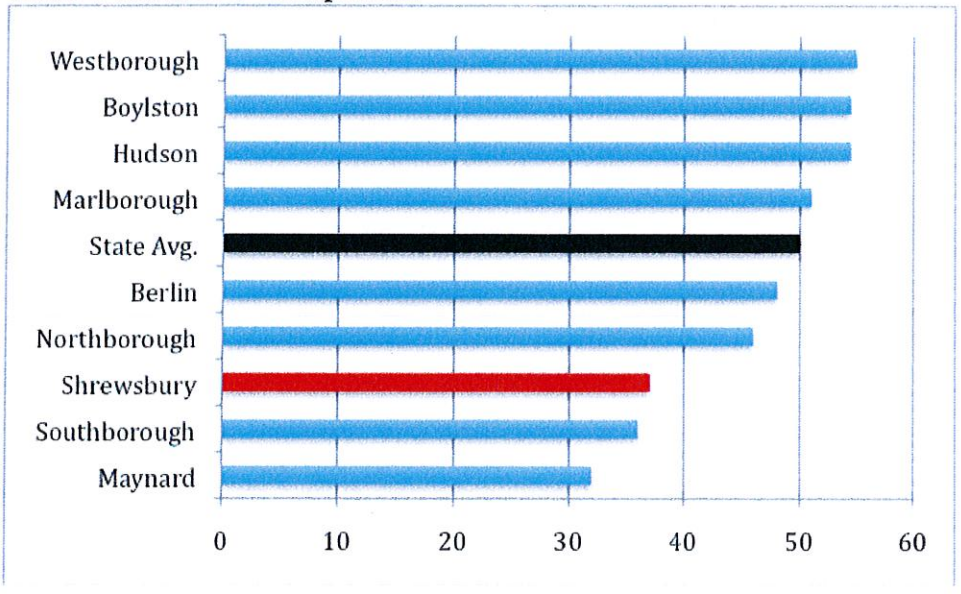
The following graphs illustrate Shrewsbury grade level performance (2011) in the area of student growth percentiles in comparison to districts within the Assabet Valley. The following graphs focus on growth in the area of mathematics.

Grades four continued to have the highest growth percentiles among school districts within the Assabet Valley. Grade six ranked second and grade ten ranked third highest. Grade seven ranked sixth, and grade five and eight ranked seventh in terms of math growth percentile among Assabet Valley Schools.

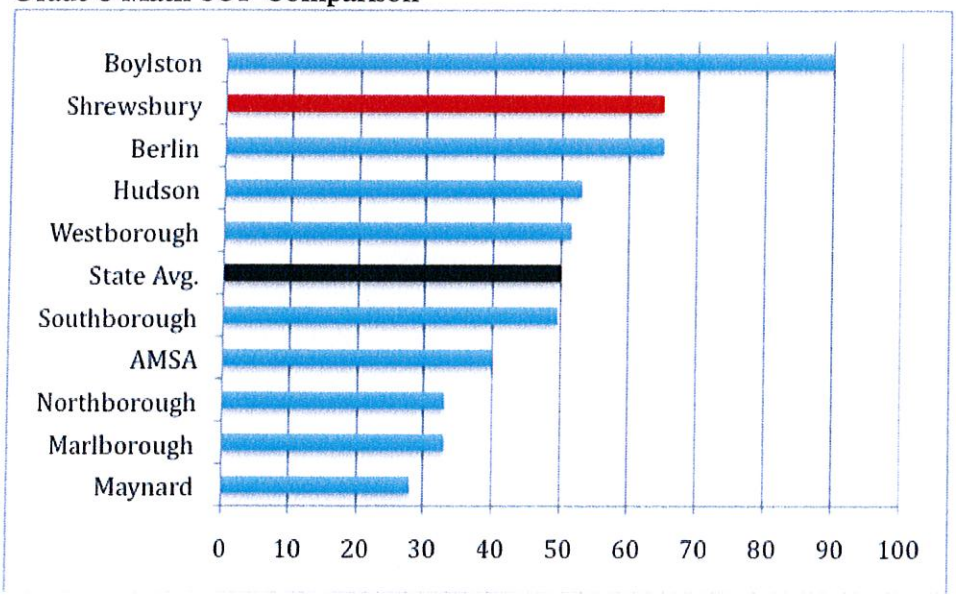
Grade 4 Math SGP Comparison



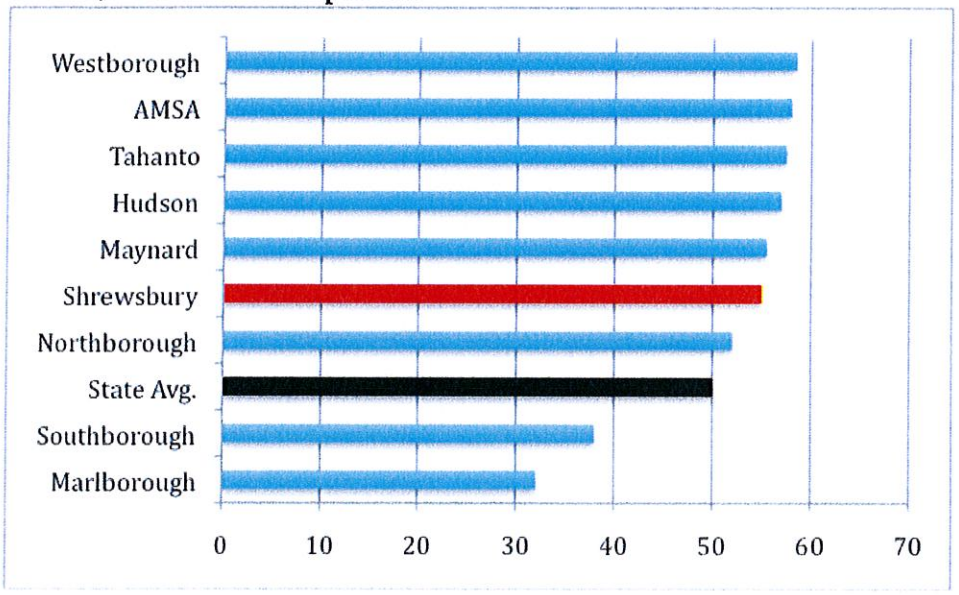
Grade 5 Math SGP Comparison



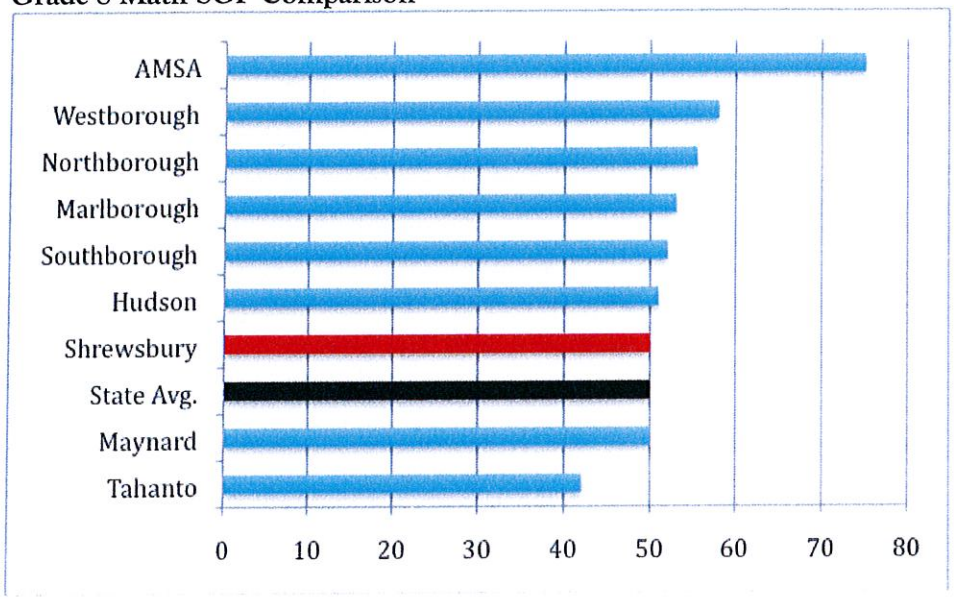
Grade 6 Math SGP Comparison



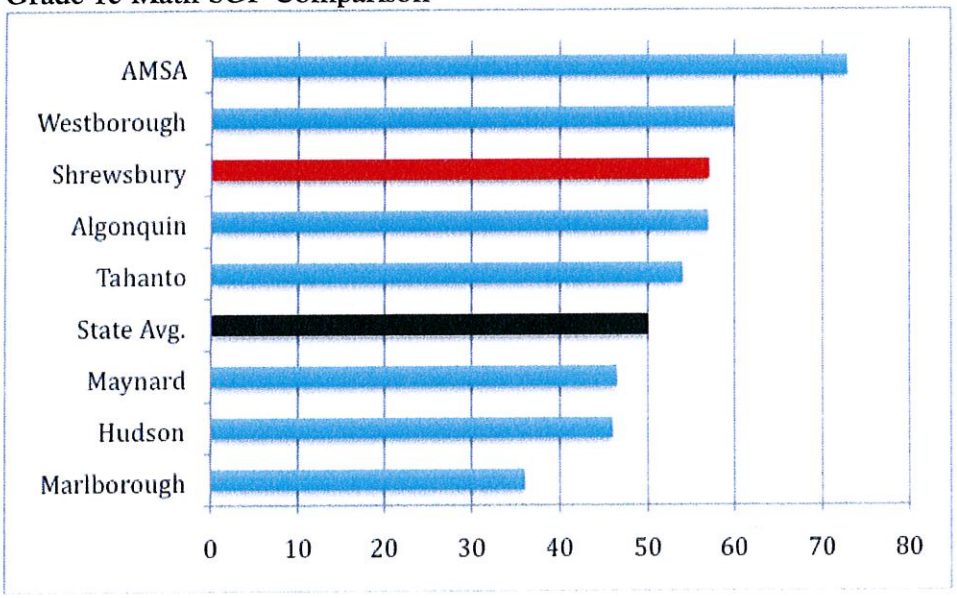
Grade 7 Math SGP Comparison



Grade 8 Math SGP Comparison



Grade 10 Math SGP Comparison



Adequate Yearly Progress

Adequate Yearly Progress (AYP) is a measure of the extent to which a student group demonstrates proficiency in English language arts and mathematics. AYP reports are issued each year by the Department of Elementary and Secondary Education (DESE) to show the progress schools and districts are making toward the federal mandate of the No Child Left Behind law of having all students reach proficiency by the year 2014.

AYP determinations are made separately for English language arts and for mathematics. For each subject there are multiple AYP determinations - for all students ("the aggregate") and for student subgroups. Student groups for whom AYP determinations are made include students with disabilities,

students with limited English proficiency, economically disadvantaged students (eligible for subsidized school lunch program), and African American/Black, Hispanic, Asian, White, and Native American students. Students are counted in each student group to which they belong, so a student may count towards the AYP determination multiple times.

AYP measures student performance against specific expectations each year. To receive an affirmative AYP determination, schools and districts must meet the MCAS participation benchmark requiring all students to be tested, an attendance or graduation benchmark, and either the DESE's *performance* target or the school or district's unique *improvement* target, which are benchmarked against the goal of proficiency for all by 2014.

Schools and districts that do not make AYP for two or more consecutive years must follow a required course of action to improve school performance. A school or district's "accountability status" defines that course of action. Accountability status designations include Improvement, Corrective Action and Restructuring.

In order to avoid being designated with one of the above labels:

- Schools must achieve AYP in both English language arts and mathematics for all student groups for two or more consecutive years.

- Districts must achieve AYP for at least one grade span in both subjects for two consecutive years. (District AYP determinations are based on three grade spans: grades 3-5, 6-8, and 9-12)

Adequate Yearly Progress – Aggregate

The table below illustrates **aggregate AYP status** for the district and for each school participating in MCAS testing. Performance levels are based on 2011 CPI: Very High (90 - 100); High (80 - 89.9); Moderate (70 - 79.9); Low (60 - 69.9); Very Low (40 - 59.9); and Critically Low (0 - 39.9.

	AYP for aggregate in ELA	AYP for aggregate in Math
District	Yes	Yes
Coolidge	Yes	Yes
Floral Street	Yes	Yes
Paton	Yes	Yes
Spring Street	Yes	Yes
Sherwood	Yes	Yes
Oak	Yes	No
SHS	Yes	Yes

As indicated above, the district made AYP for aggregate school population. All seven schools made AYP for the aggregate in ELA, and six out of the seven schools made AYP for the aggregate in Math.

Adequate Yearly Progress – Subgroups

The table below provides information as to the **subgroup AYP status** for the district. The DESE groups individual grade levels into grade-spans. These grade spans are grouped 3-5, 6-8, and 9-12. A three-year history of subgroup AYP, as well as identification of subgroups failing to make AYP is provided below.

English Language Arts

Grade Spans	2009	2010	2011	2011 Subgroups not making AYP in ELA
3-5	No	No	No	Special Education & Low Income
6-8	Yes	Yes	No	Special Education & Low Income
9-12	No	Yes	Yes	None

Math

Grade Spans	2009	2010	2011	2011 Subgroups not making AYP in Math
3-5	No	Yes	No	Special Education & Low Income
6-8	No	Yes	No	White, Special Education, Low Income, & Hispanic/Latino
9-12	No	Yes	Yes	None

The table below provides information as to the **subgroup AYP status** for each individual district school participating in MCAS testing along with the identified subgroup that did not meet AYP performance and/or improvement benchmarks in 2010.

	AYP for all Subgroups in ELA	2011 Subgroups not making AYP in ELA	AYP for Subgroups in Math	2011 Subgroups not making AYP in Math
Coolidge	Yes	None	Yes	None
Floral Street	No	Special Education, Low Income, Asian or Pacif. Isl.	No	Special Education, Low Income
Paton	Yes	None	Yes	None

Spring Street	Yes	None	Yes	None
Sherwood	No	Special Educ. Low Income	No	LEP Hispanic
Oak	No	Hispanic	Yes	Special Education, Low Income, White
SHS	Yes	None	Yes	None

Adequate Yearly Progress

Summary

It is important to put the AYP information into context, by noting that 82% of all schools, and 91% of all districts in Massachusetts did not make AYP in 2011. The Commissioner of Education is actively considering a waiver for Massachusetts to opt out of the AYP classifications for 2012.

Sherwood Middle School and Floral Street School did not meet AYP in 2011, not because of their overall performance (which was quite strong, as it was at all of our schools), but rather because of the performance of segments of their student population. Oak Middle School did not meet AYP in 2011 because of the performance of subgroups in ELA and the aggregate and subgroup populations in math. Despite these classifications, Oak Middle School's overall performance continues to be quite strong as well. As an example, the Oak's 7th grade math scores were in the top 8% of all school districts across the Commonwealth.

It should be noted that only when a subgroup reaches a size of forty or more the state's accountability mechanism is activated, which is not the case at the other elementary schools, which, in some cases, might have similar designations if their groups were larger. Further, the AYP benchmarks continue to rise, which has resulted in over 57% of all Massachusetts schools now being sanctioned in some form through NCLB. While the district and the schools involved are taking this situation seriously and are redoubling efforts to improve, it is with the knowledge that, by a host of measures, Floral Street School, Sherwood Middle School, and Oak Middle School, like their Shrewsbury counterparts, are outstanding schools. It would be unwise to overreact to these designations given this context.

Summary of 2011 MCAS Results and Action Steps

The MCAS and AYP results from 2011 indicate that Shrewsbury remains a very high performing school district. While recent years have challenged the system due to resource limitations, several elements have contributed to this success:

- Strong, talented teachers that focus on constantly improving teaching and learning
- Strong personnel practices that help to maintain and hire talented teachers

- On-going use of data to revisit, and when necessary, revise curriculum and instructional strategies
- On-going attention to helping all student achieve to their highest levels
- Professional collaboration around the sharing of effective practices, the identification of learning challenges, and the developing of solutions to learning challenges

The above factors have all helped provide the high quality education necessary for students to succeed. These, combined with a high level of parental support and hard work on the part of our students, make Shrewsbury a school district where students demonstrate high levels of academic performance.

Looking Forward

During the 2012-2014 school years, students will be tested on material that overlaps between the 2004 ELA and Math state frameworks and the new Common Core frameworks. During the 2014-2015 school year it is anticipated that there will be a new assessment based only on the expectations identified in the Common Core. The Common Core framework ties in strongly to our work on developing our students' 21st Century Skills. Even as we begin to prepare for the next generation of state assessments, our primary focus continues to be on setting high expectations for our students, and ensuring that the proper supports are in place to help students meet these expectations. When we do this, measures of success should be strong, regardless of the test.

Areas of focus for the coming year that are designed to have a direct impact on student performance and growth both now and in the future:

- On-going support of the Shrewsbury Writing Project, designed to develop a cohesive Pre K-12 approach to helping our student become strong communicators

- On-going exploration around ways to integrate technology into the curriculum in support of improved student learning

- Continued support of the professional learning communities collaboration model across the district, with an emphasis on exploring how we might add additional collaboration time at SHS.

- Expansion of best practices focused on meeting the needs of advanced learners across grade levels and subject areas

- Expanding our use of identification and intervention strategies that will promptly and effectively address student needs. This continuing effort should directly impact our ability to help students move from warning and needs improvement into proficiency and advanced categories

- Embedding Common Core alignment work into initiatives/projects that are taking place in the district (Shrewsbury Writing Project, Technology Initiative at Sherwood, NEASC Accreditation at SHS)

- Explore beginning the K-12 Science Curriculum Review Process for the 2012-2013 school year. This will give time for the Science Common Core curriculum to be published and to be available as a resource during the review process.

Shrewsbury High School
Testing Report

Class of 2011

presented to the School Committee
November 16, 2011

Todd Bazydlo, Principal
G. Gregory Nevader, Interim Assistant Principal

Shrewsbury High School Testing Report
Class of 2011

Table of Contents

Summary Statements

SAT (formerly referred to as the SAT I or SAT Reasoning Test):

Page 4 **Average Scores—1600 scale and 2400 scale (Figures 1 and 2)**

- Based on the 1600 scale, Shrewsbury's SAT scores dropped five points from 1099 to 1094. Despite the decrease, these scores remain well above the state and national averages of 1040 and 1011, respectively.
- Based on the 2400 scale, Shrewsbury's SAT scores dropped five points from 1638 to 1633. Once again, despite the decrease, these scores remain well above the state and national averages of 1549 and 1500, respectively.

Page 5-6 **SAT: Individual Critical Reading, Math, and Writing scores**

- On each individual section, Shrewsbury's scores fluctuated slightly:
  - Critical Reading score increased by 5 points. **(Figure 3)**
  - Math score decreased by 10 points. **(Figure 4)**
  - Writing score remained unchanged. **(Figure 5)**

Page 7 **SAT: Critical Reading, Math, and Writing scores by Gender (Figure 6)**

- Consistent with state and national trends, Shrewsbury females score higher on the Writing section of the SAT while Shrewsbury males score higher on the Critical Reading and Math sections of the SAT.

Page 8 **SAT: Participation Rates—Local School Districts (Figure 7)**

- All students at Shrewsbury High School are encouraged to take the SAT in preparation for college admissions. For the Class of 2011, over 94% of seniors took the SAT, a particularly high percentage compared to most other high schools locally, statewide, and nationally. In addition, this is a particularly high percentage for a school with an enrollment of over 1600 students.

Page 9 **SAT: Comparison of Local School Districts (Figure 8)**

- Shrewsbury students in the Class of 2011 ranked sixth out of twelve comparable high schools in the region.

Pages 10-11 **SAT: Shrewsbury High School One-Year and Five-Year Comparisons (Figure 9)**

- Despite the decrease in SAT scores from the previous year, Shrewsbury has experienced a noticeable improvement compared to just 5 years ago, increasing 18 points in Critical Reading, 7 points in Math, and 5 points in Writing.
- With an overall increase of 25 points over the past 5 years, Shrewsbury has made strong gains in achievement. **(Figure 10)**

Subject Test Scores:

Page 12-18 **Summary of SAT Subject Tests (Figures 11 - 17)**

- Overall, Shrewsbury students score considerably higher on the SAT Subject Test compared to students in Massachusetts and the nation. Individual Subject Test scores are summarized over the next several pages.

- Students taking the Biology Subject Test have an option to take the test with an emphasis on Molecular Biology or Ecological Biology. The majority of students at Shrewsbury elect to take the Ecological Subject Test, and scores outpaced state and national averages by 39 and 64 points, respectively.

ACT:

Pages 19-20 **ACT Participation Rates and Mean Scores (Figure 18)**

- As a whole, Massachusetts has one of the lowest participation rates in the country. However, Shrewsbury has seen a significant increase in the number of students electing to take the ACT in addition to the SAT. Of the 393 students in the Class of 2011, 101 students (26%) took the ACT—nearly double the number of students who took the test just two years ago.
- The average ACT score for the Shrewsbury's Class of 2011 is 24.2 (based on a scale of 1 – 36). This score is equivalent to about 1120 on the SATs.

Advanced Placement Exams:

Page 21 **Appropriate Grade Levels for AP Courses**

- The College Board does not recommend students in the 9th grade for AP courses. Instead, students should "develop the necessary skills and conceptual understandings in foundational courses prior to enrolling in AP."
- Nationally, 85% of all AP Exams were taken by juniors and seniors.
- Of all students taking AP Exams nationally, 32.6% of students take three or more exams; of all students at SHS taking AP courses, 50.6% of Shrewsbury students take three or more exams.

Page 22 **Participation Rates (Figure 19)**

- The number of exams administered increased considerably to an all-time high of 516. Meanwhile, the number of students taking AP exams decreased by two students from an all-time high of 274 to 272 (juniors and seniors combined).
- Forty-one percent (41%) of the students in the Class of 2011 took at least one AP exam.

Page 23 **Average Scores—Shrewsbury High School and Nationally (Figure 20)**

- Scored on a scale of 1 – 5, the average AP Exam scores of Shrewsbury students are particularly impressive. All but one of the thirteen AP courses at Shrewsbury had an average score above 3.7—and eight out of thirteen had an average score above 4.0.
- Two years ago, the AP program at Shrewsbury was expanded to include AP Human Geography. It is not uncommon for scores to be lower than state and national averages during the first 2-3 years of implementing a new AP course; however, the mean score for Shrewsbury students has already surpassed the state and national mean scores.

Page 24 **AP Exams: Comparison of Local School Districts (Figure 8)**

- Most colleges award students scoring a 3 or higher with college credit. Shrewsbury students in the Class of 2011 ranked second out of twelve comparable high schools in the region when comparing the percentage of students earning a score of 3 or higher.

Pages 25-26 **Exam Results—Shrewsbury High School**

- The percentage of students in the Class of 2011 scoring 3 or above improved slightly to 93%.
- Nine out of 13 AP courses offered at Shrewsbury had at least 90% of their students scoring at a 3 or above.
- Forty-four percent (44%) of the exams administered resulted in a score of 5—the highest possible score available. **(Figure 21)**

Page 26 **Scholars**

- Eighty-four of the 162 seniors (52%) who took AP exams were named AP Scholars. One student was name a National Scholar, granted to students who receive an average grade of 4 on all AP exams taken **and** a grade of 4 or higher on five or more exams.

PSAT/NMSQT

Page 27 **National Merit Scholarship Program**

- The number of students recognized by the National Merit Scholarship Corporation has remained constant for the past six years. Four students were named National Merit Finalists and one student from the Class of 2010 was named a Scholarship Recipient, winning a $2500 scholarship from the National Merit Scholarship Program.

Final Comments

Page 28 **Final Overview of the 2010 – 2011 School Year**

SAT I—1600 Scale
Critical Reading and Math Combined

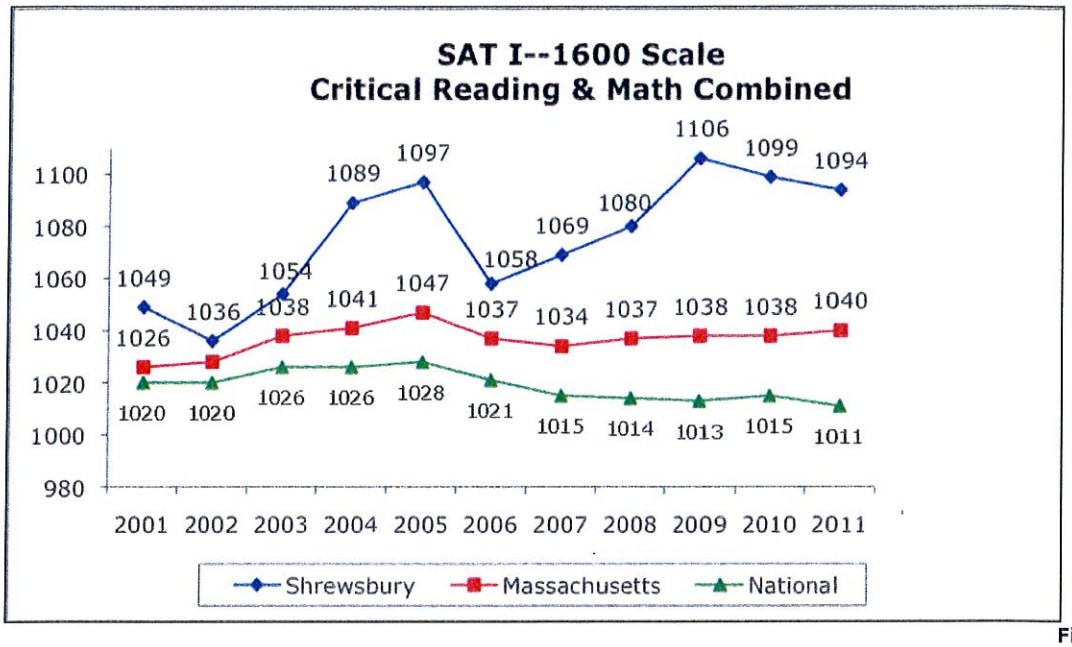


Figure 1

SAT I—2400 Scale
Critical Reading, Math, and Writing Combined

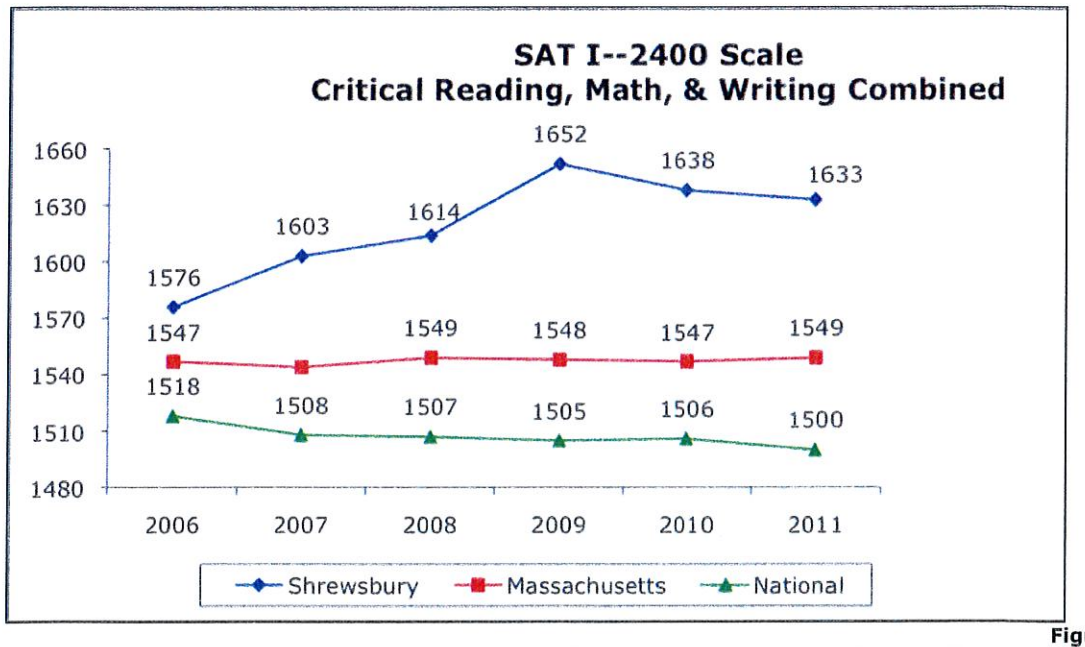


Figure 2

Critical Reading & Math Sections

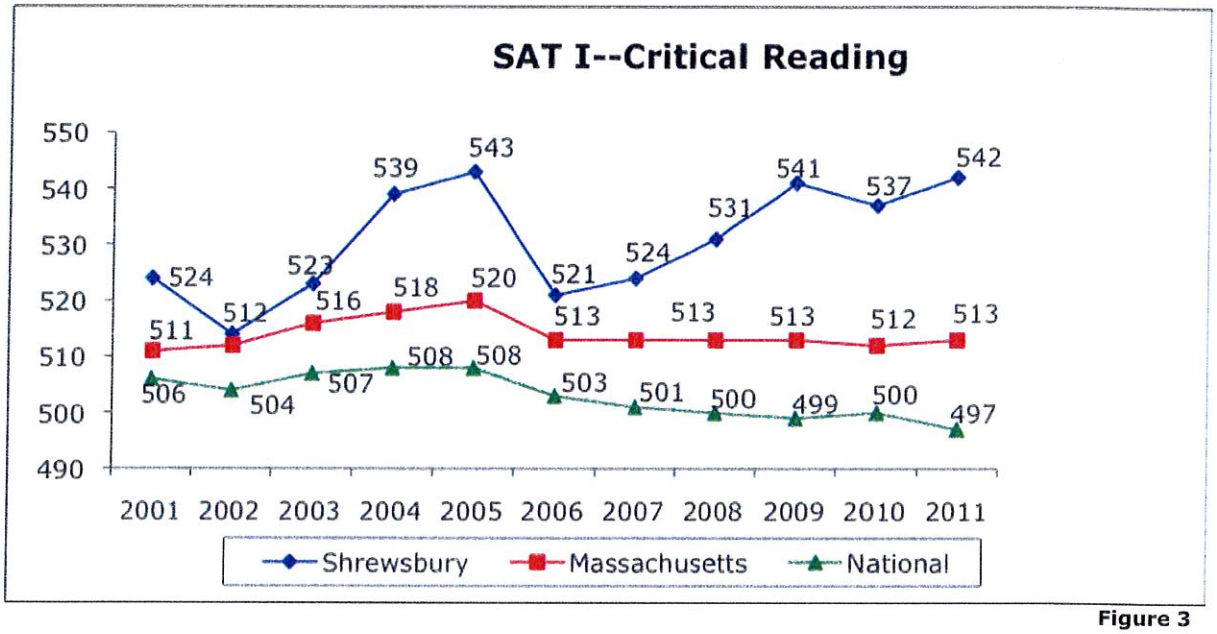


Figure 3

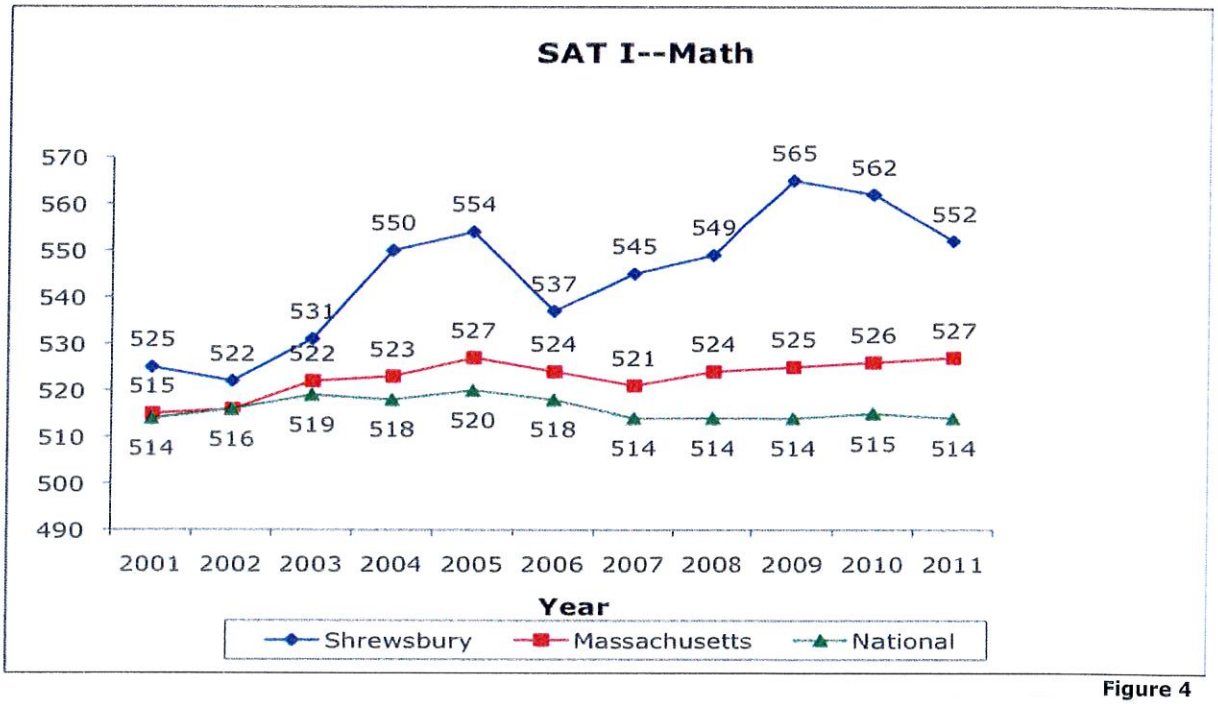


Figure 4

Writing Section

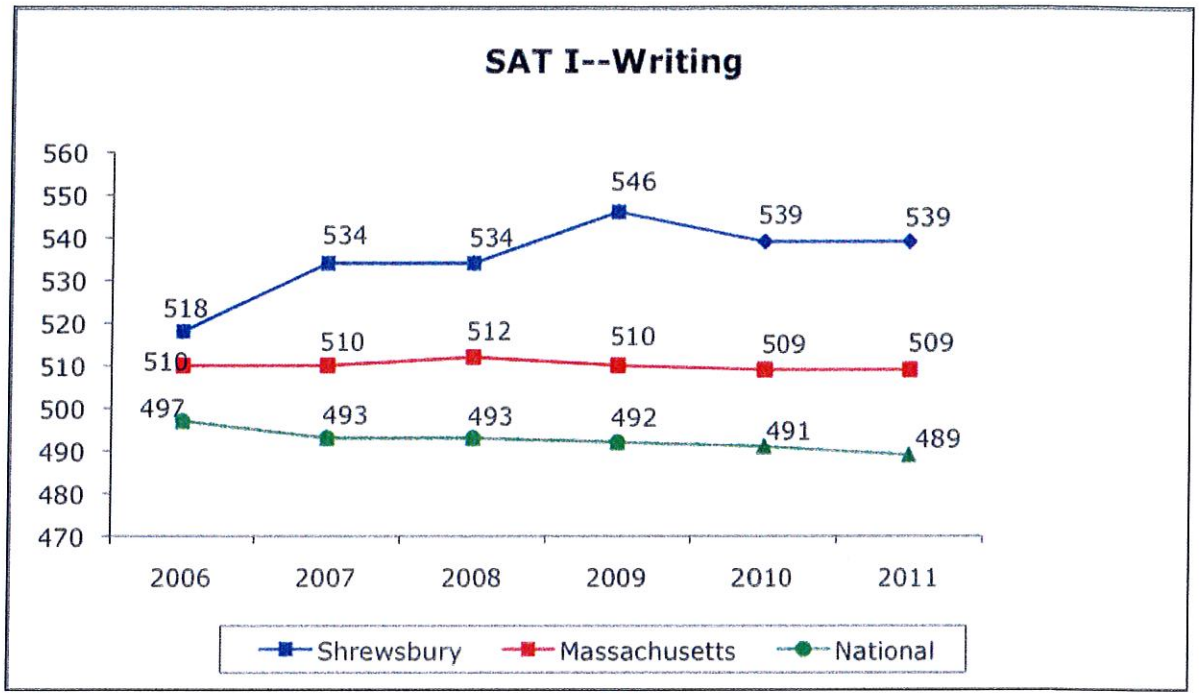


Figure 5

Critical Reading, Math, and Writing Scores by Gender
Shrewsbury High School, Massachusetts, and Nationally

Critical Reading	SHS	Massachusetts	National
Males	553	518	500
Females	534	509	495
Male-to-Female Difference	+19	+11	+5
Math	**SHS**	**Massachusetts**	**National**
Males	570	544	531
Females	540	512	500
Male-to-Female Difference	+30	+32	+31
Writing	**SHS**	**Massachusetts**	**National**
Males	530	502	482
Females	545	514	496
Male-to-Female Difference	-15	-12	-14

SAT—Critical Reading Scores by Gender
Shrewsbury High School

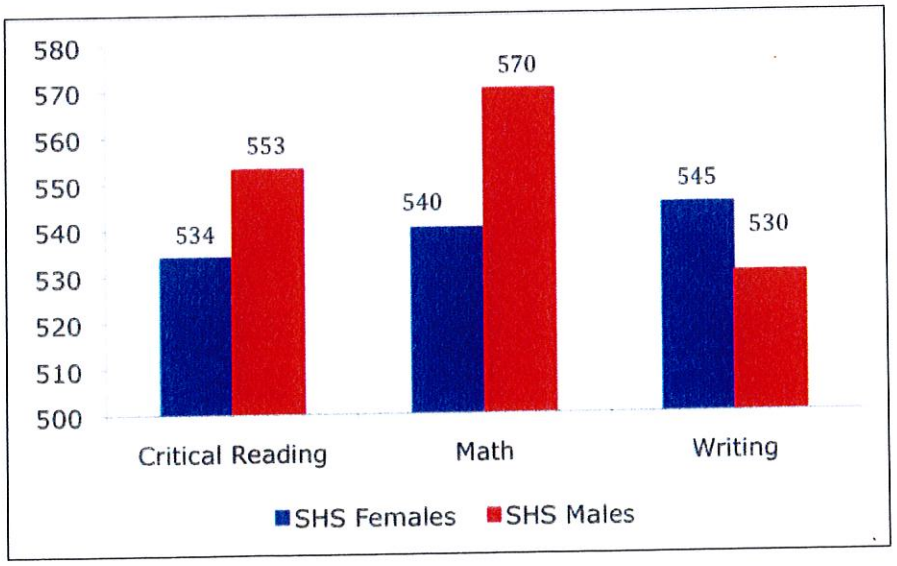


Figure 6

SAT Participation Rates
Local School Districts

School	# of Tests Taken	2011 Class Size	Participation Rate (%)
Westboro	278	280	99.3%
Franklin	380	400	95.0%
Hopkinton	244	258	94.6%
Chelmsford	359	381	94.2%
Shrewsbury	370	393	94.1%
Algonquin Regional	331	352	94.0%
Wachusett Regional	444	487	91.2%
Tahanto Regional	61	70	87.1%
Hudson	211	243	86.8%
Nashoba Regional	195	226	86.3%
Marlborough	208	241	86.3%
Maynard	67	84	79.8%

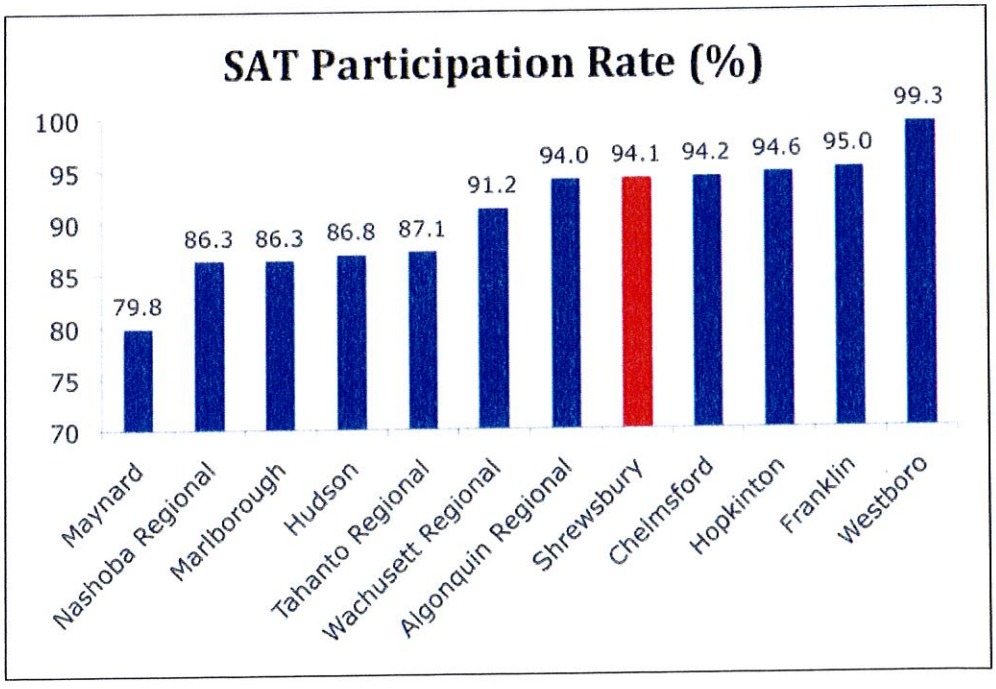


Figure 7

SAT Mean Scores

Local School Districts

School	# of test takers	Critical Reading	Math	Combined CR and Math	Writing	Total--all three sections
Westboro	278	576	605	1181	575	1756
Hopkinton	244	562	593	1155	559	1714
Algonquin	331	563	575	1138	557	1695
Nashoba	195	558	575	1133	545	1678
Tahanto	61	558	543	1101	553	1654
Shrewsbury	370	542	552	1094	539	1633
Franklin	380	540	554	1094	534	1628
Chelmsford	359	540	546	1086	527	1613
Wachusett	444	532	546	1078	525	1603
Maynard	67	513	524	1037	507	1544
Marlborough	208	499	520	1019	485	1504
Hudson	211	502	512	1014	513	1527

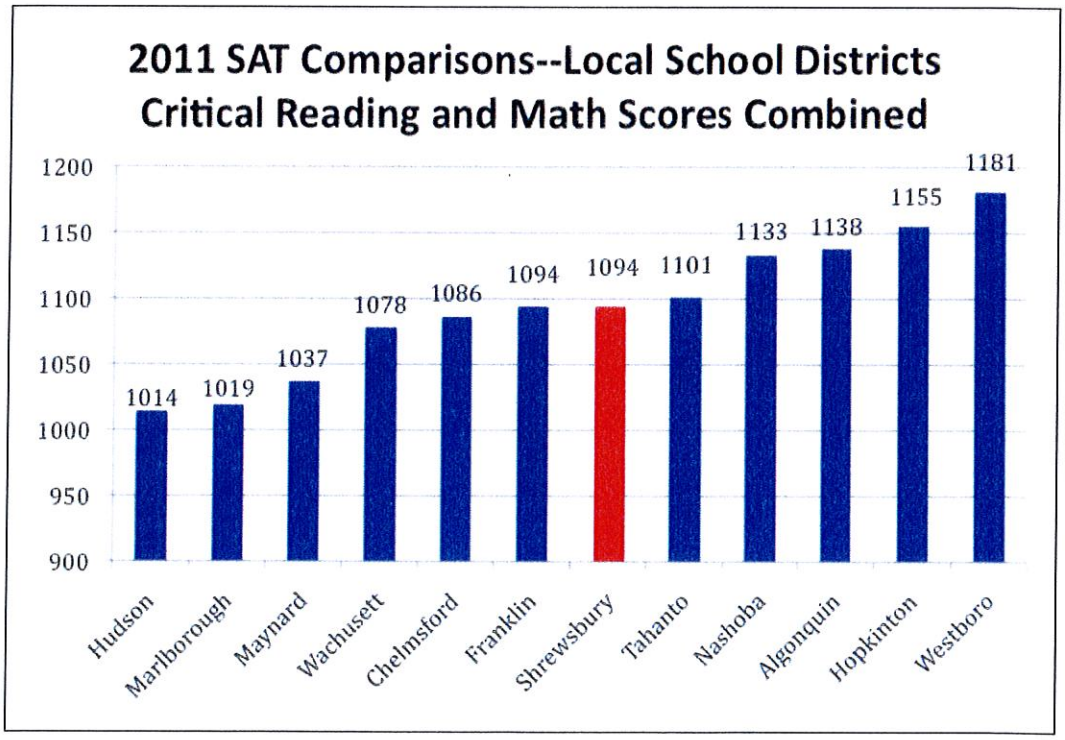


Figure 8

Shrewsbury High School
One-Year and Five-Year Comparisons

SAT:	2010 Scores	2011 Scores	One-Year Differential	2007	5-Year Trend
Critical Reading	537	542	+5	524	+18
Math	562	552	-10	545	+7
1600 Total	1099	1094	-5	1069	+25
Writing	539	539	0	534	+5
2400 Total	1638	1633	-5	1603	+30

SAT Scores—Shrewsbury High School
One-Year Comparisons and Five-Year Trends

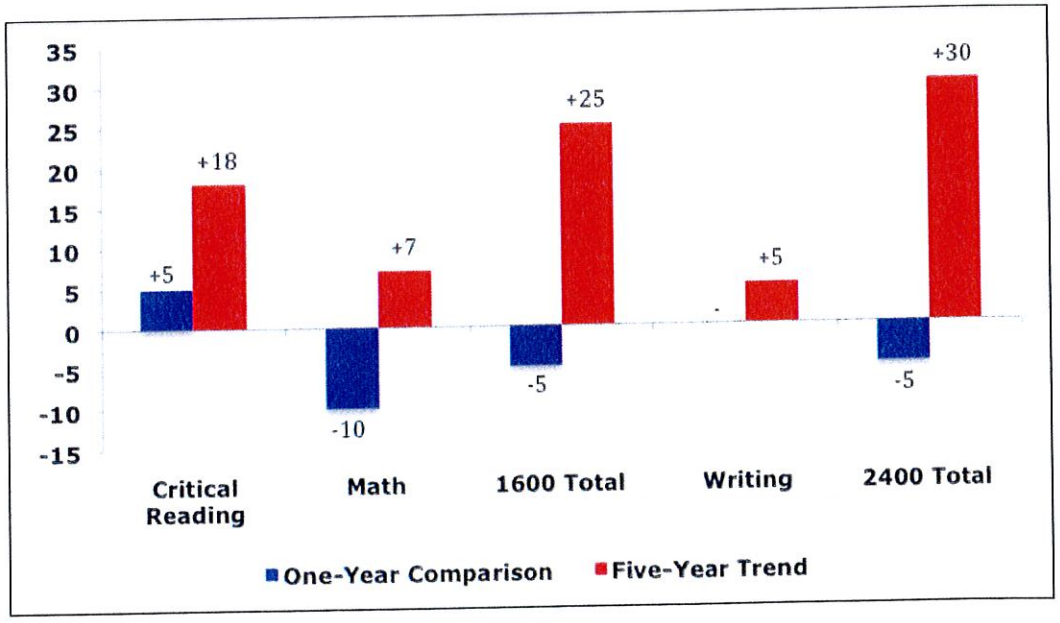


Figure 9

SAT Mean Scores
One-Year and Five-Year Comparisons

Local School Districts

School	2010 Combined CR and Math	2011 Combined CR and Math	One-Year Differential	2007 Combined CR and Math	5-Year Trend
Tahanto	1065	1101	36	1048	+53
Hopkinton	1147	1155	8	1110	+45
Westboro	1146	1181	35	1141	+40
Algonquin	1136	1138	2	1108	+30
Nashoba	1147	1133	-14	1106	+27
Franklin	1089	1094	5	1067	+27
Shrewsbury	1099	1094	-5	1069	+25
Chelmsford	1090	1086	-4	1062	+24
Maynard	985	1037	52	1028	+9
Wachusett	1063	1078	15	1079	-1
Hudson	1015	1014	-1	1025	-11
Marlborough	1058	1019	-39	1046	-27

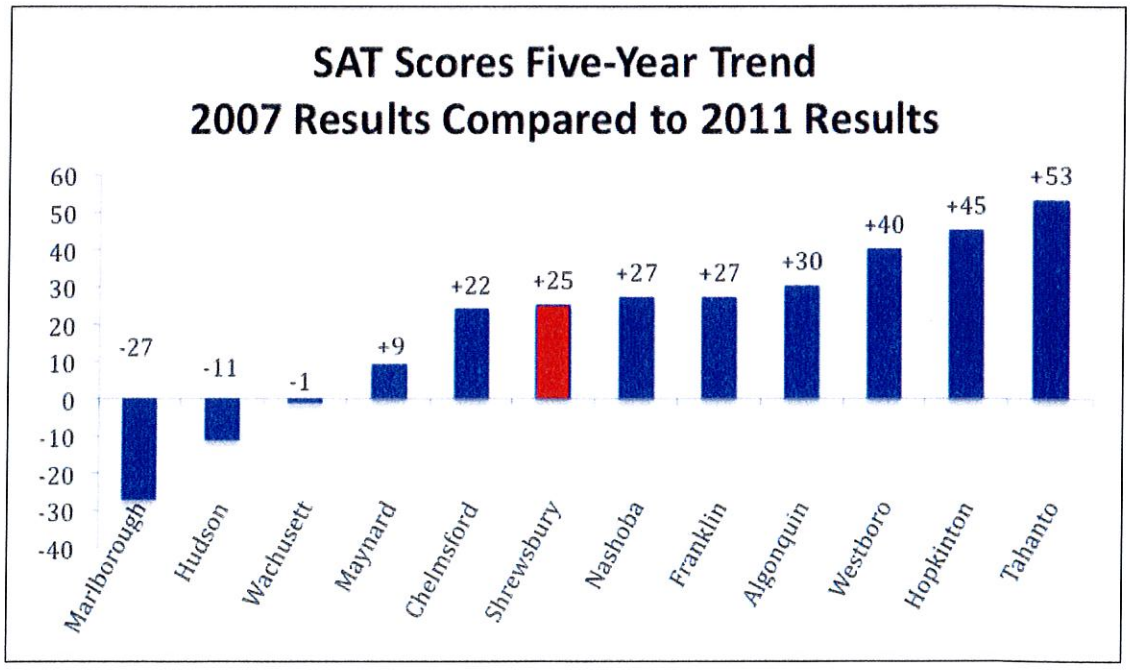


Figure 10

SAT Subject Tests

Most colleges do not require the Subject Tests; in fact, only 40 - 50 colleges in the United States requires students to submit SAT Subject Tests as part of the application process. Subject Tests offer colleges a way to gauge a student's knowledge of particular subjects. Most colleges requiring students to submit their Subject Test scores require two or three Subject Test scores.

Each SAT Subject Test is one hour in length, and students may take one, two, or three Subject Tests on each test date.

Along with several different language tests, SAT Subject Tests are offered in the following areas:

- **English:**
  - Literature
- **Mathematics**
  - Math I
  - Math II
- **Science:**
  - Biology—Ecological
  - Biology—Molecular
  - Chemistry
  - Physics
- **History:**
  - World History
  - U.S. History

Summary of Subject Test Scores

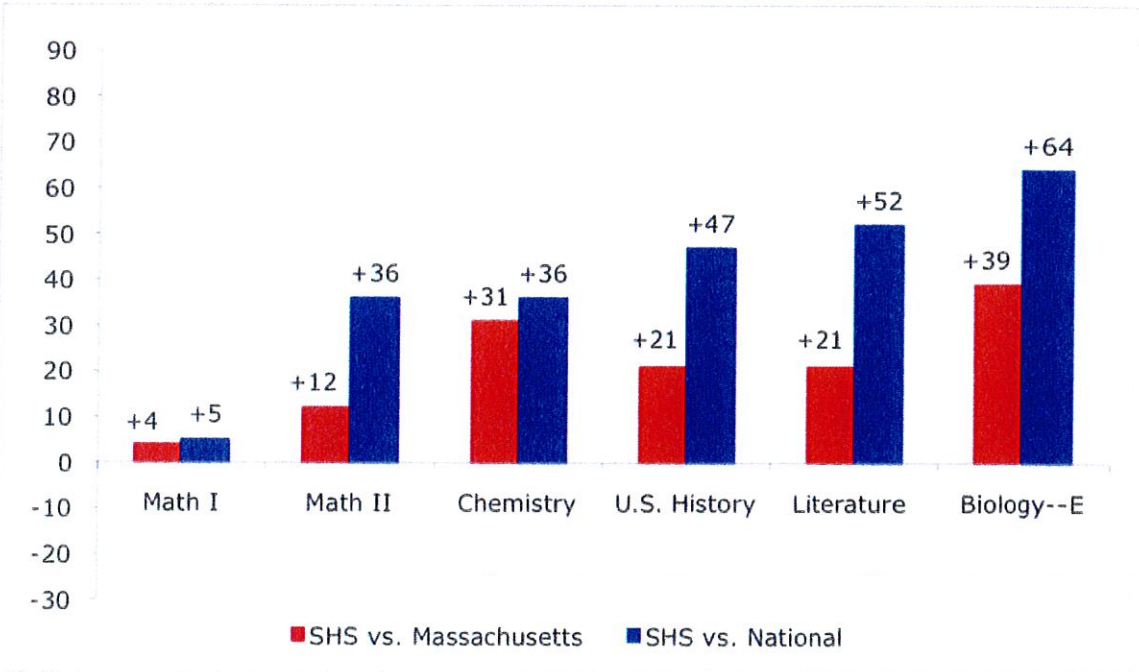


Figure 11

Shrewsbury High School

Literature

Percent by Score Interval by Reference Group

Literature	2011			2010		
SAT Score Interval	SHS	MA	National	SHS	MA	National
700 - 800	10%	22%	17%	10%	21%	18%
600 - 699	46%	35%	28%	34%	36%	29%
500 - 599	23%	38%	29%	48%	28%	28%
400 - 499	10%	13%	21%	8%	13%	20%
300 - 399	-	2%	5%	-	3%	5%
200 - 299	-	-	-	-	-	-
Mean (Average Score)	628	607	576	593	607	580
Number Tested	30	6,346	120,024	29	6,286	123,408
75th Percentile	690	680	660	640	680	670
50th Percentile	660	620	580	580	620	580
25th Percentile	540	540	490	530	540	490

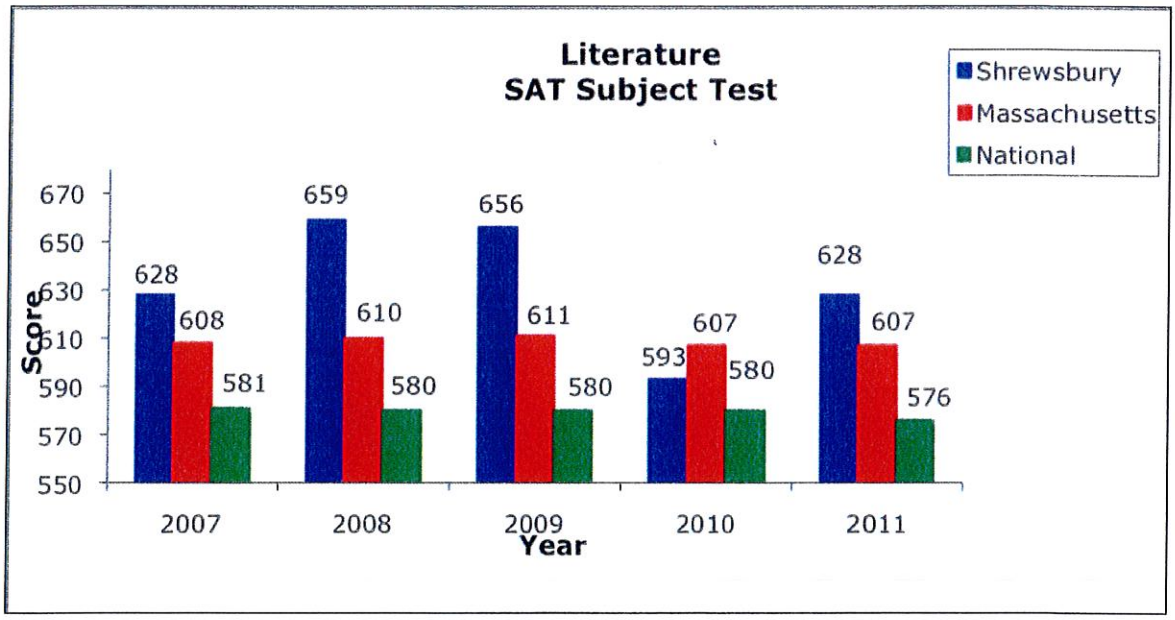


Figure 12

Shrewsbury High School

U.S. History

Percent by Score Interval by Reference Group

U.S. History	2011			2010		
SAT Score Interval	SHS	MA	National	SHS	MA	National
700 - 800	42%	31%	27%	44%	30%	25%
600 - 699	36%	35%	30%	33%	34%	31%
500 - 599	12%	24%	25%	18%	25%	23%
400 - 499	9%	9%	15%	6%	10%	17%
300 - 399	-	1%	3%	-	1%	4%
200 - 299	-	-	-	-	-	1%
Mean (Average Score)	655	634	608	659	627	601
Number Tested	55	6,388	126,681	52	5,909	123,229
75th Percentile	720	710	700	720	710	690
50th Percentile	650	640	620	680	640	610
25th Percentile	600	560	520	600	560	510

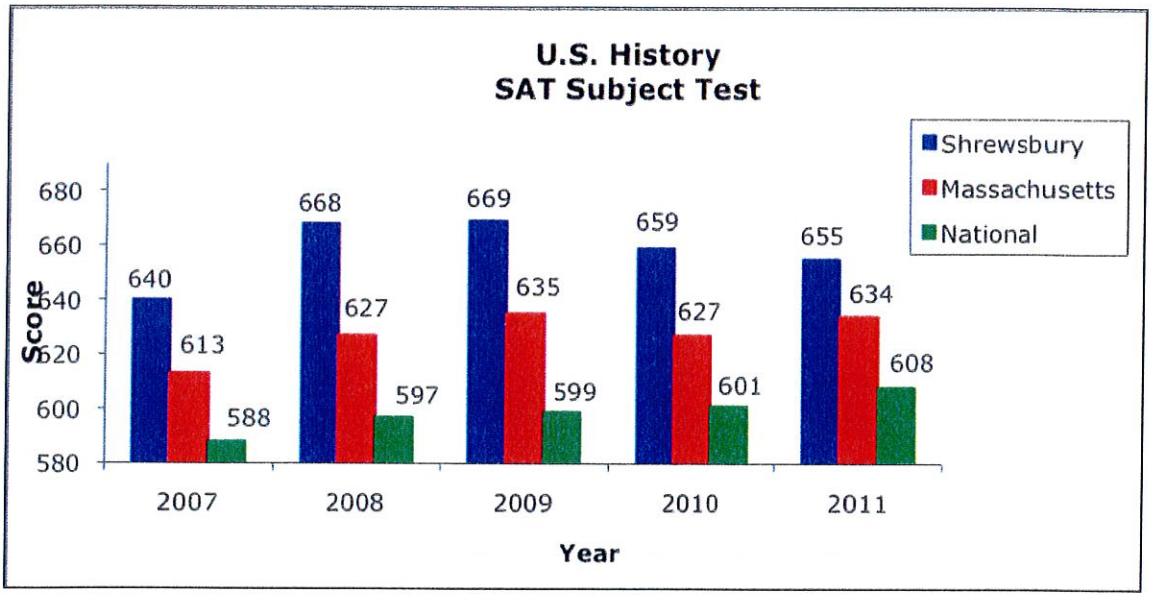


Figure 13

Shrewsbury High School

Math I

Percent by Score Interval by Reference Group

Math I	2011			2010		
SAT Score Interval	SHS	MA	National	SHS	MA	National
700 - 800	16%	18%	22%	35%	18%	22%
600 - 699	38%	40%	38%	37%	42%	37%
500 - 599	40%	32%	27%	25%	30%	26%
400 - 499	5%	10%	12%	3%	9%	12%
300 - 399	-	1%	3%	-	1%	4%
200 - 299	-	-	-	-	-	-
Mean (Average Score)	614	609	610	637	608	605
Number Tested	37	7,579	82,827	65	7,625	85,109
75th Percentile	660	680	690	700	670	680
50th Percentile	600	620	620	640	610	620
25th Percentile	550	550	550	570	550	540

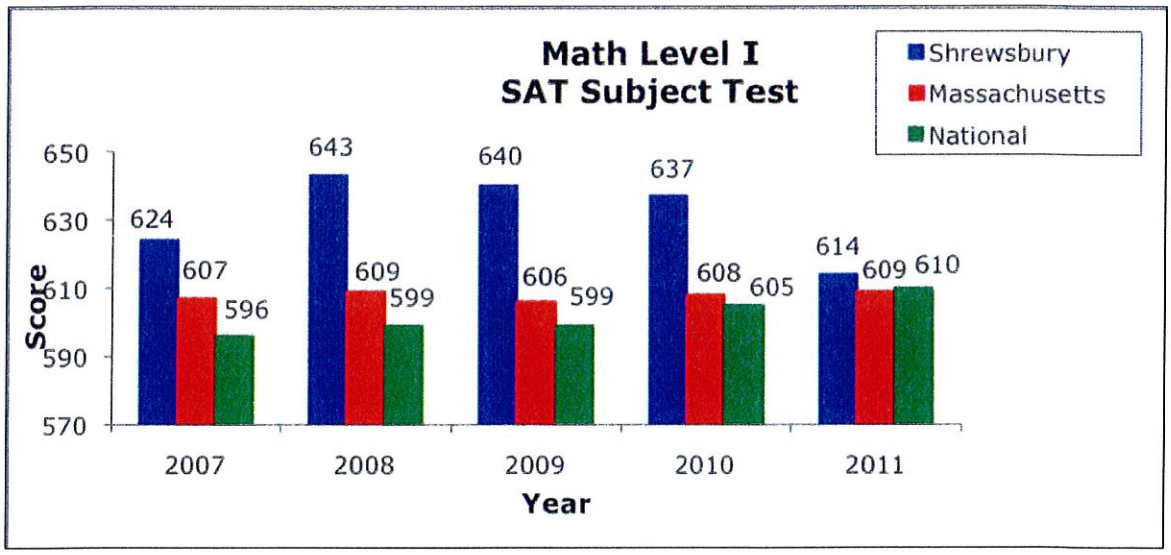


Figure 14

Shrewsbury High School

Math II

Percent by Score Interval by Reference Group

Math II	2011			2010		
SAT Score Interval	SHS	MA	National	SHS	MA	National
700 - 800	45%	45%	40%	53%	43%	38%
600 - 699	48%	36%	30%	41%	35%	30%
500 - 599	6%	16%	22%	6%	19%	23%
400 - 499	-	2%	8%	-	3%	8%
300 - 399	-	-	1%	-	-	-
200 - 299	-	-	-	-	-	-
Mean (Average Score)	690	678	654	698	673	649
Number Tested	46	7,215	176,472	36	6,774	163,713
75th Percentile	750	750	750	760	750	750
50th Percentile	670	680	660	700	670	650
25th Percentile	620	610	570	620	610	570

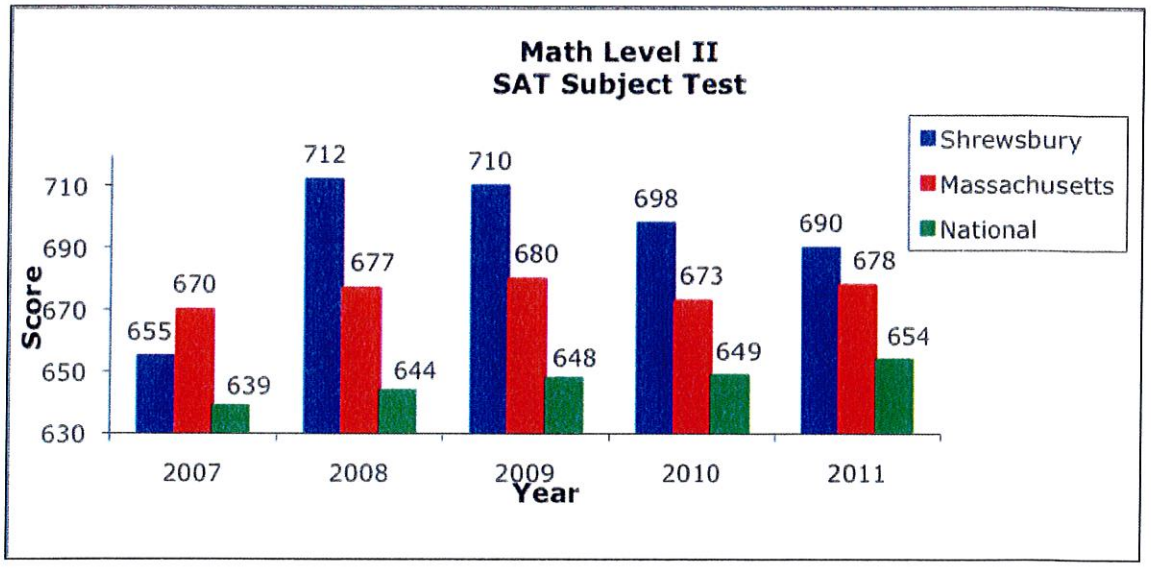


Figure 15

Shrewsbury High School

Biology—Ecological

Percent by Score Interval by Reference Group

Biology-E	2011			2010		
SAT Score Interval	SHS	MA	National	SHS	MA	National
700 - 800	47%	30%	24%	-	31%	35%
600 - 699	32%	36%	33%	-	40%	36%
500 - 599	10%	24%	26%	-	23%	19%
400 - 499	11%	8%	13%	-	6%	8%
300 - 399	-	2%	4%	-	1%	3%
200 - 299	-	-	-	-	0%	0%
Mean (Average Score)	668	629	604	-	624	601
Number Tested	19	2,482	40,076	3	2,644	41.739
75th Percentile	-	710	690	-	710	720
50th Percentile	-	640	610	-	650	650
25th Percentile	-	560	530	-	580	580

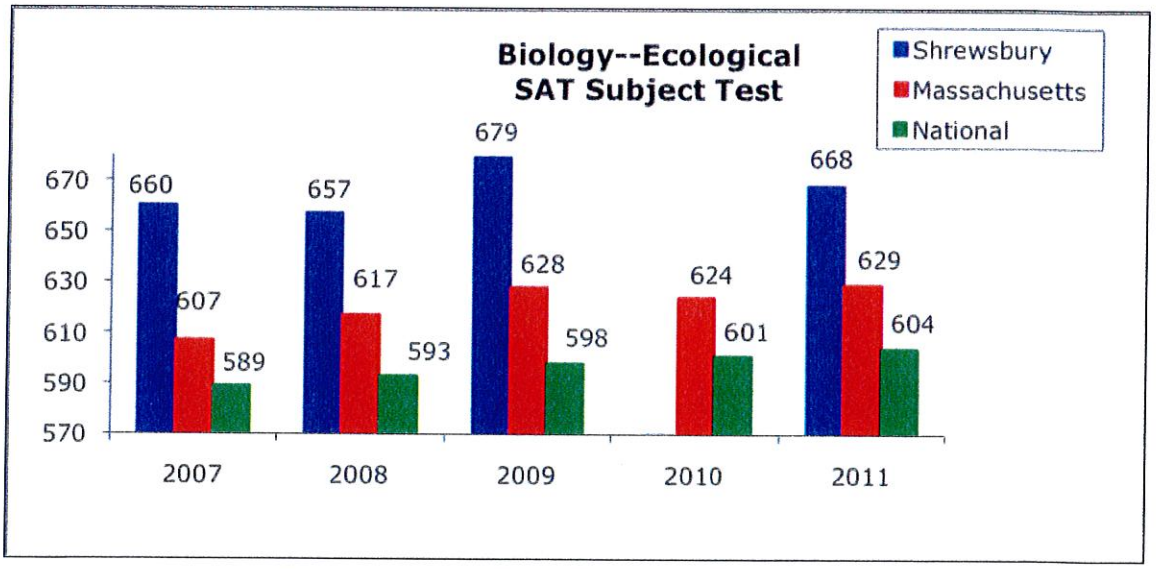


Figure 16

Shrewsbury High School

Chemistry
Percent by Score Interval by Reference Group

Chemistry	2011			2010		
SAT Score Interval	SHS	MA	National	SHS	MA	National
700 - 800	43%	34%	39%	14%	36%	40%
600 - 699	38%	33%	30%	40%	31%	28%
500 - 599	19%	23%	20%	47%	22%	20%
400 - 499	-	8%	10%	0%	10%	12%
300 - 399	-	1%	1%	0%	1%	2%
200 - 299	-	-	-	0%	0%	0%
Mean (Average Score)	679	643	648	617	642	644
Number Tested	21	4,136	76,077	15	3,674	67,891
75th Percentile	740	720	740	-	730	740
50th Percentile	660	650	660	-	650	660
25th Percentile	600	570	570	-	570	560

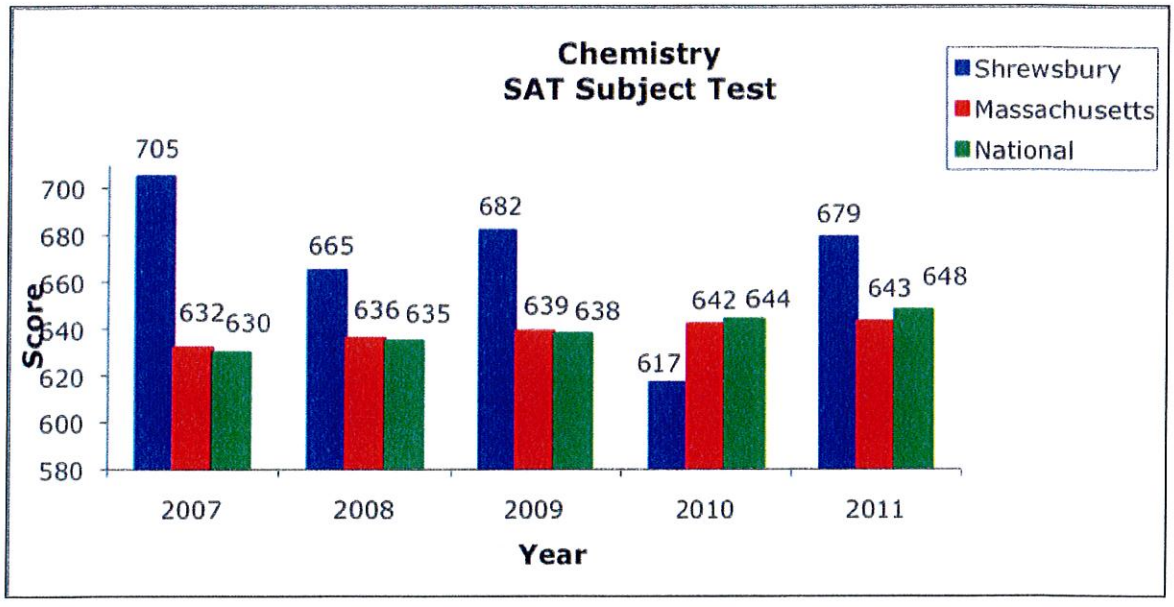


Figure 17

ACT

The ACT measures critical skills in English, mathematics, reading, writing, and science. ACT used to stand for American College Testing Program, but that name has been dropped and today it's officially just the ACT (pronounced A-C-T).

Students receive six different scores—a composite score along with an individual score in English, Math, Reading, Science Reasoning, and Writing.

ACT STRUCTURE			
Section	**Time**	**# of Ques.**	**Scoring**
English	45 mins.	75	1 – 36
Math	60 mins.	60	1 – 36
Reading	35 mins.	40	1 – 36
Science Reasoning	35 mins.	40	1 – 36
Writing (Optional)	30 mins.	1 essay	2 – 12

Students may take the ACT™ more than once, and similarly to the relatively new SAT-reporting policy, students may specify which test date's score you'd like colleges to see.

Shrewsbury High School
Score Results

Although growing in popularity, Massachusetts has one of the lowest ACT participation rates in the country. Historically, most schools in the mid-West and West encourage students to take the ACT. At the same time, most high schools in New England and the East Coast encourage students to take the SAT. On a national basis, 1.7 million students took the SAT last year and 1.6 million students took the ACT.

Of the 393 students in the Class of 2011, 101 students took the ACT with the following results in each section:

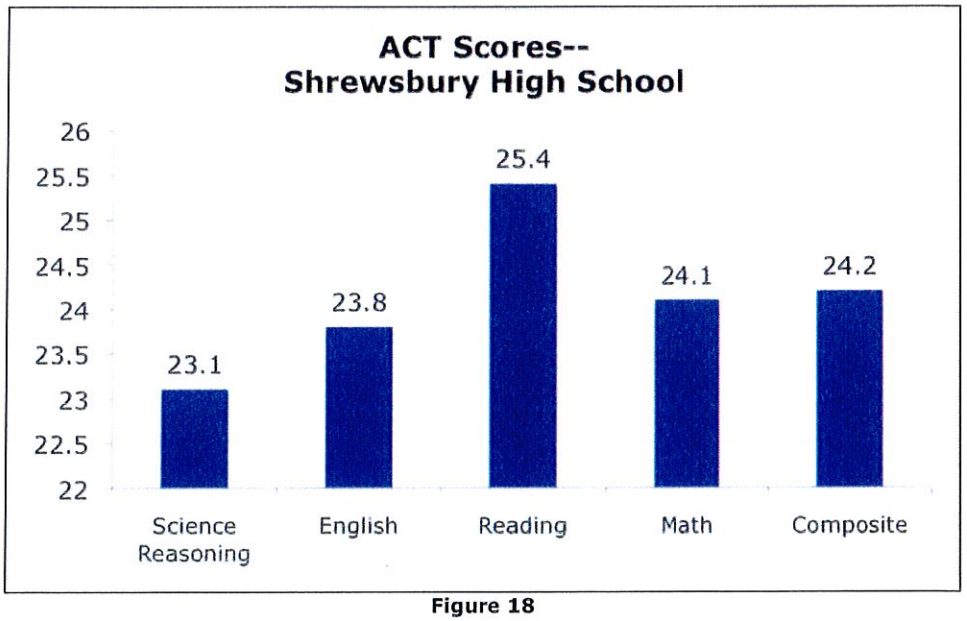


Figure 18

SAT – ACT Conversion Chart

SAT to ACT		ACT to SAT	
SAT score Critical Reading + Math	**ACT Composite Score**	**ACT Composite Score**	**SAT score Critical Reading + Math**
1600	36	36	1600
1540-1590	35	35	1560
1490-1530	34	34	1510
1440-1480	33	33	1460
1400-1430	32	32	1420
1360-1390	31	31	1380
1330-1350	30	30	1340
1290-1320	29	29	1300
1250-1280	28	28	1260
1210-1240	27	27	1220
1170-1200	26	26	1190
1130-1160	**25**	**25**	**1150**
1090-1120	**24**	**24**	**1110**
1050-1080	23	23	1070
1020-1040	22	22	1030
980-1010	21	21	990
940-970	20	20	950
900-930	19	19	910
860-890	18	18	870
820-850	17	17	830
770-810	16	16	790
720-760	15	15	740
670-710	14	14	690
620-660	13	13	640
560-610	12	12	590
510-550	11	11	530

Shrewsbury's composite ACT average score of 24.21 converts to approximately 1120 on the SATs (26 points higher than Shrewsbury's SAT average of 1094).

Advanced Placement Program

The Advanced Placement (AP) Program consists of a series of college-level courses and exams for secondary school students. Satisfactory completion of an AP Exam makes it possible for a student to earn college credit or advanced standing in college prior to arrival on the college campus. AP Exams are rigorous, multiple-component tests that are administered each May.

Of the 393 students in the Class of 2011, 162 students (41.2% of the class) took at least one AP Exam. Overall, an all-time high of 516 exams were administered to students in 2011.

The following AP courses were offered during the 2010 - 2011 school year:

- Biology
- Calculus AB
- Calculus BC
- English Language
- English Literature
- French Language
- Human Geography
- Physics
- Psychology
- Spanish Language
- Statistics
- Studio Art
- U.S. History

Appropriate Grade Levels for AP Courses

The College Board's policy related to the appropriate grade levels for AP courses reads as follows:

> "The AP Program recognizes the autonomy of secondary schools and districts in setting the AP course participation policies that best meet their students' unique needs and learning goals. At the same time, AP courses are specifically designed to provide challenging, college-level coursework for willing and academically prepared high school students. Student performance on AP exams illustrate that in many cases, AP courses are best positioned as part of a student's 11th and 12th grade academic experience. Some subject areas, however, such as Word History and European History, can be successfully offered to academically prepared 10th grade students.
>
> Educators should be mindful of the following when considering offering AP to younger students. AP courses are rarely offered in 9th grade, and exam results show that, for the most part, 9th grade students are not sufficiently prepared to participate in a college-level course. Therefore, the College Board believes these students would be better served by coursework focusing on the academic building blocks necessary for later, successful enrollment in college-level courses. Many college admissions officers support this position, feeling that students should not be rushed into AP coursework, but should instead develop the necessary skills and conceptual understandings in foundational courses prior to enrolling in AP. AP coursework completed in 9th grade is not often deemed credible by the higher education community."

National Participation Rate in the AP Program

Of all students taking AP exams, the percentage of students at each grade level is indicated below. In other words, last year, 85% of all AP Exams were taken by juniors and seniors.

12th grade	53.5%
11th grade	31.5%
10th grade	12.5%
9th grade	<2%

Number of AP Exams per Student—SHS and Nationally

- The figures below show the cumulative number of exams individual students (from the Class of 2011 at Shrewsbury High School and nationally) took during their high school career from the years 2008 to 2011.

# of Exams Taken by Students	Class of 2011 National %	Class of 2011 Cumulative % National	SHS # of Students Taking Exams	Class of 2011 SHS %	Class of 2011 Cumulative % SHS
1	45.7%	45.7%	46	28.4%	28.4%
2	21.7%	67.4%	34	21.0%	49.4%
3	12.6%	80.0%	21	13.0%	62.4%
4	7.7%	87.7%	24	14.8%	77.2%
5	4.7%	92.4%	19	11.7%	88.9%
6 or more	7.6%	100%	18	11.1%	100%

Advanced Placement Participation Rates
Shrewsbury High School

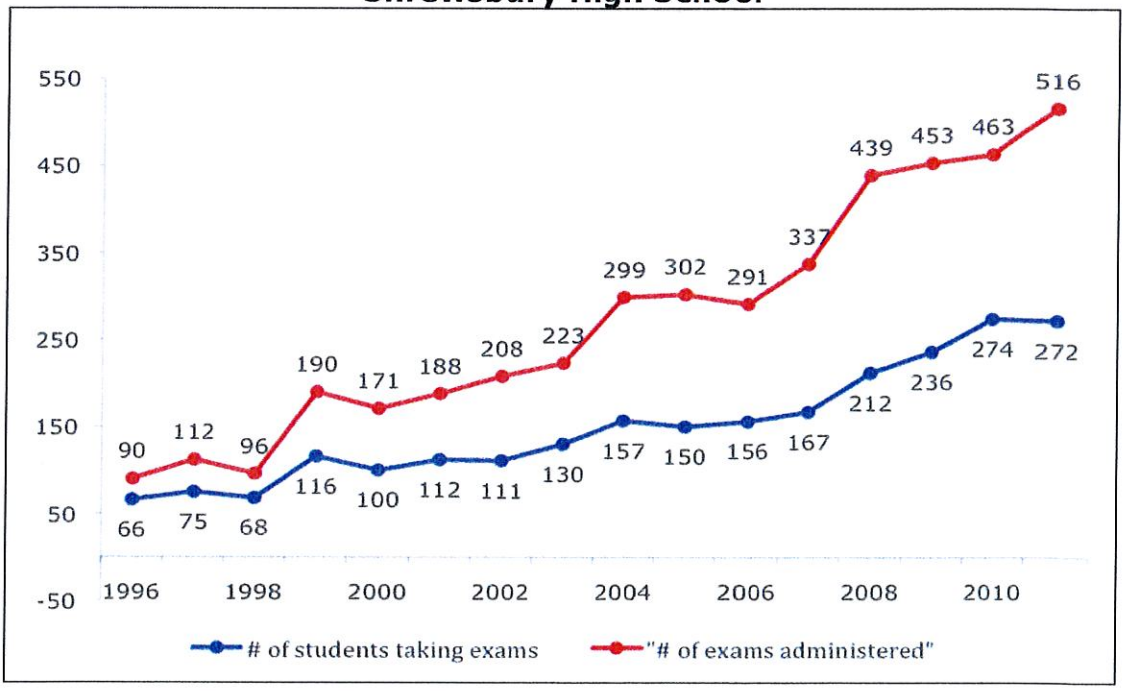


Figure 19

Advanced Placement Exams

Average Scores
Shrewsbury High School, Massachusetts, and Nationally

	# of Tests Taken	SHS	Mass	National
Physics B	13	4.8	3.5	2.9
Psychology	104	4.6	3.5	3.1
Spanish Language	12	4.4	3.4	3.2
English Language	73	4.2	3.3	2.9
Biology	48	4.1	3.1	2.7
English Literature	23	4.1	3.3	2.8
Statistics	51	4.0	3.1	2.8
US History	53	4.0	3.4	2.8
Studio Art	10	3.8	3.4	3.1
Calculus AB	35	3.8	3.1	2.8
Calculus BC	35	3.8	4.2	3.8
Human Geography	27	3.7	3.6	2.6
French Language	13	3.6	3.1	2.8

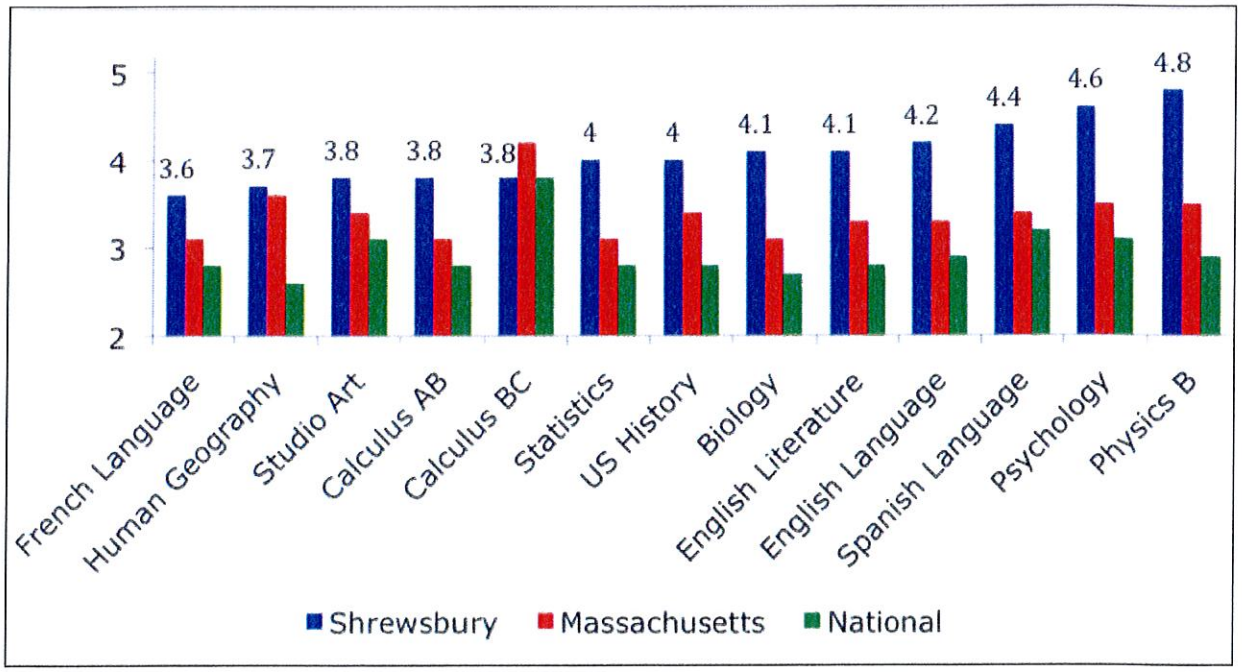
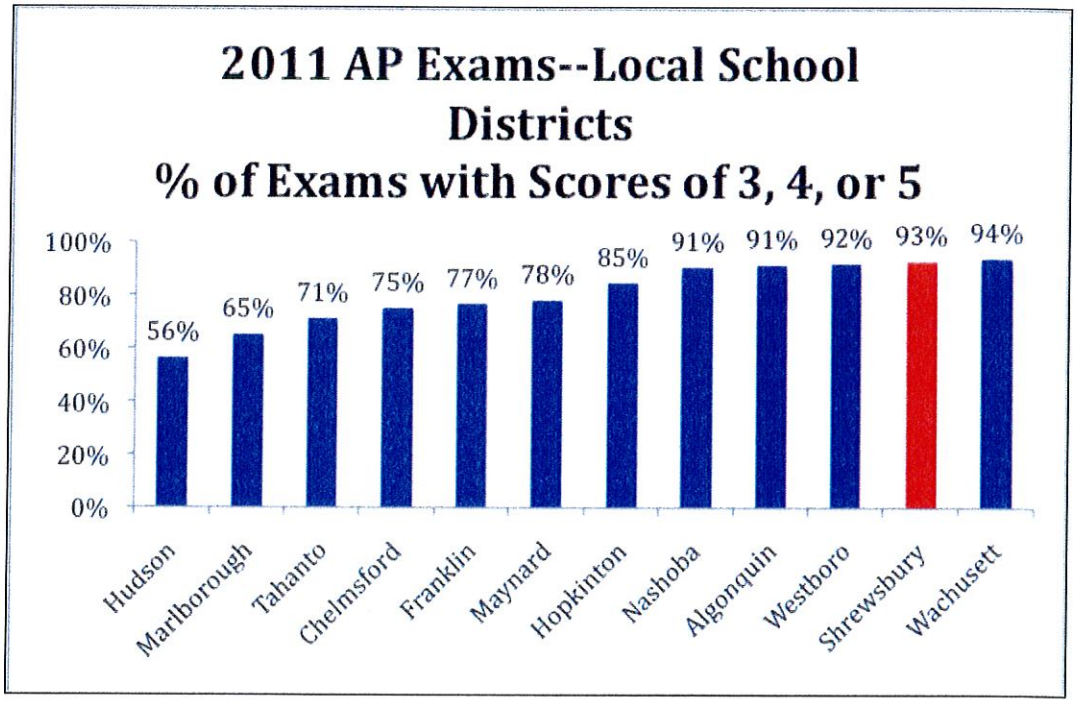


Figure 20

AP Exam Scores

Local School Districts

School	# of test takers	Total Exams Taken	Number of Exams with Scores of 3, 4, or 5	% of Exams with Scores of 3, 4, or 5
Wachusett	221	367	344	93.7%
Shrewsbury	272	516	478	92.6%
Westboro	188	323	297	92.0%
Algonquin	274	461	421	91.3%
Nashoba	245	412	373	90.5%
Hopkinton	361	694	587	84.6%
Maynard	40	68	53	77.9%
Franklin	216	421	323	76.7%
Chelmsford	257	461	346	75.1%
Tahanto	58	104	74	71.2%
Marlborough	179	409	266	65.0%
Hudson	209	380	214	56.3%



2011 Advanced Placement Exam Results

	5	4	3	2	1	# of tests administered	% scoring 5	% scoring 4 or above	% scoring 3 or above	2010 % scoring 3 or above
Art Drawing	2	4	4	0	0	10	20%	60%	100%	100%
Biology	21	16	6	3	2	48	44%	77%	90%	83%
Calculus AB	13	7	11	2	2	35	37%	57%	89%	98%
Calculus BC	13	8	9	3	2	35	37%	60%	86%	93%
English Language	30	30	11	2	0	73	41%	82%	97%	98%
English Literature	10	6	6	1	0	23	43%	70%	96%	91%
French Language	2	5	5	1	0	13	15%	54%	92%	89%
Human Geography	5	12	6	4	0	27	19%	63%	85%	67%
Physics B	10	3	0	0	0	13	77%	100%	100%	not offered
Psychology	67	28	9	0	0	104	64%	92%	100%	97%
Spanish Language	6	5	1	0	0	12	50%	92%	100%	100%
Statistics	20	19	6	6	0	51	39%	77%	88%	79%
US History	22	16	10	5	0	53	42%	72%	91%	89%
Totals	**221**	**159**	**84**	**27**	**6**	**497**	**44%**	**76%**	**93%**	**92%**

Students took the following exams but the related class was not specifically offered at the high school (unless through VHS):

	5	4	3	2	1	Total # of test takers	% scoring 5	% scoring 4 or above	% scoring 3 or above	2010 % scoring 3 or above
Chemistry	0	0	0	1	1	2	**0%**	**0%**	0%	91%
***Computer Science A**	0	1	0	0	3	4	**0%**	**25%**	25%	100%
Latin: Vergil	1	0	1	0	0	2	**50%**	**50%**	100%	-
***Macroeconomics**	0	3	1	0	0	4	**0%**	**75%**	100%	-
***Microeconomics**	0	0	3	0	0	3	**0%**	**0%**	100%	-
Physics C: Elect. & Magnet.	1	0	0	0	0	1	**100%**	**100%**	100%	100%
Physics C: Mechanical	1	0	0	0	0	1	**100%**	**100%**	100%	100%
***US Government & Politics**	1	0	0	0	0	1	**100%**	**100%**	100%	100%
World History	1	0	0	0	0	1	**100%**	**100%**	100%	-
Totals	**5**	**4**	**5**	**1**	**4**	**19**	**26%**	**47%**	**74%**	**-**

*** = Students took the AP Exam after completing the AP course through VHS.**

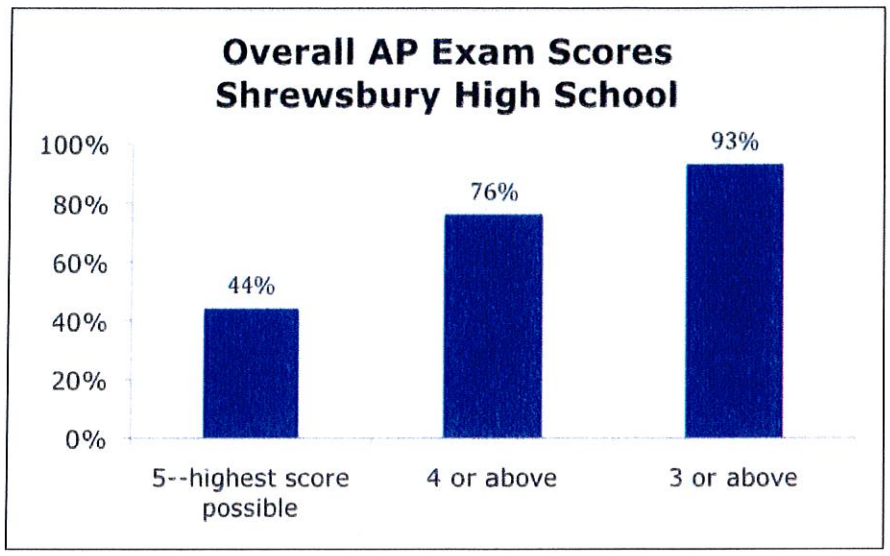


Figure 21

Advanced Placement Scholars

The AP Program offers several AP Scholar Awards to recognize high school students who have demonstrated college-level achievement through AP courses and exams. Although there is no monetary award, in addition to receiving an award certificate, this achievement is acknowledged on any AP Score Report that is sent to colleges the following fall.

Award Levels

AP Scholar: Granted to students who receive scores of 3 or higher on three or more AP Exams.

AP Scholar with Honor: Granted to students who receive an average score of at least 3.25 on all AP Exams taken, **and** scores of 3 or higher on four or more of these exams.

AP Scholar with Distinction: Granted to students who receive an average score of at least 3.5 on all AP Exams taken, **and** scores of 3 or higher on five or more of these exams.

National AP Scholar: Granted to students in the United States who receive an average score of at least 4 on all AP Exams taken, **and** scores of 4 or higher on eight or more of these exams.

Year	AP Scholar	AP Scholar w/Honors	AP Scholar w/Distinction	AP National Scholar	Total # of AP Scholars
2011	31	27	25	1	84
2010	31	15	19	3	68
2009	23	17	38	4	82
2008	30	20	32	3	85
2007	21	11	16	2	50
2006	20	11	16	2	50
2005	15	12	26	4	58

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PSAT/NMSQT

The Preliminary SAT/National Merit Scholarship Qualifying Test (PSAT/NMSQT) is a program cosponsored by the College Board and National Merit Scholarship Corporation (NMSC). It's a standardized test that provides firsthand practice for the SAT. It also gives students a chance to enter the NMSC scholarship programs and gain access to college and career planning tools.

Similarly to the SAT, the PSAT/NMSQT measures:

- Critical reading skills
- Math problem-solving skills
- Writing skills

Shrewsbury High School

Year	Commended	Finalist	Scholarship Recipient	Hispanic Recognition Program
2011	12	1	1	-
2010	16	4	1	-
2009	17	3	1	-
2008	18	2	1	-
2007	14	3	1	-
2006	10	3	-	1
2005	15	2	-	-
2004	8	2	1	-
2003	8	2	1	2
2002	5	3	-	-
2001	4	1	-	-

National Merit Scholarship Program

Program Recognition: Of the 1.5 million juniors who take the PSAT, the top 2%-3% with the highest combined scores (Critical Reading + Mathematics + Writing Skills) qualify for recognition in the National Merit Scholarship Program.

Commended Students: students who score in the top 2% - 3% of all test takers.

Semifinalists: students who score in the top 1% - 1.5% of all test takers. To ensure that academically able young people from all parts of the United States are included in this talent pool, Semifinalists are designated on a state-by-state basis. That is, semifinalists are the highest scoring entrants in each state. To be considered for a National Merit Scholarship, Semifinalists must advance to Finalist standing in the competition by meeting high academic standards.

Finalists: Most students (approximately 90%) who complete the Semifinalist application process will be named National Merit Finalists.

Scholarship Recipients: All winners of Merit Scholarship awards (Merit Scholar® designees) are chosen from the Finalist group, based on their abilities, skills, and accomplishments–without regard to gender, race, ethnic origin, or religious preference. A variety of information is available for NMSC selectors to evaluate–the Finalist's academic record, information about the school's curricula and grading system, two sets of test scores, school official's written recommendation, information about the student's activities and leadership, and the Finalist's own essay.

2010 – 2011
School Year

- **PSAT:**
  - In the past, the PSAT at Shrewsbury was offered to all juniors as well as those sophomores enrolled in Honors English. Two years ago, the Guidance Department offered all sophomores the opportunity to take the PSAT which has resulted in a significant increase in the number of students who took the test.

- **ACT:**
  - The ACT and SAT are two different standardized tests that measure completely different skills. While the SAT is an aptitude test (a problem-solving test), the ACT is curriculum-based. That is, students either know the answers or they don't—they can't sit there and try to solve the problem. As a result, there are certain students who will naturally score higher on the ACT than on the SAT. This past year, the Guidance Department made a concerted effort to encourage students to take both the ACT and SAT resulting in a significant increase in the number of students who took the ACT.

  - Shrewsbury High School was approved as a test center for the ACTs which will increase the test's exposure to our students. Guidance counselors will continue to encourage students to take both assessments.

- **SAT:**
  - Shrewsbury High School was approved as an expanded test center, and the SAT is now offered at the high school in October, November, March, May, and June. As a result, it will be much more convenient for students to take the SAT more than once resulting in more familiarity with the test and improved scores.

  - Shrewsbury High School offers an SAT Prep Class throughout the year. For the past few years, Shrewsbury has offered two classes in the spring and one class in the fall with total annual enrollments of 115 - 125 students. This year, in order to keep the program solvent, the enrollment fee for the course was increased from $150 to $300. Despite the increase, this cost is an affordable option to test preparation compared to most local, regional, and national test preparation companies.

- **Advanced Placement Courses:**
  - As the number of students taking AP Exams continue to increase, we have had a more difficult time securing an appropriate test center that can hold over 100 students at a time. Although we have used Charles River Labs as well as facilities at UMass facilities, these options are no longer available to us. This past year, we used the India Center in Shrewsbury at a cost of $1,000. We continue to explore other options including the Veterans Inc. location on South Street in Worcester. The cost is $250 per day / $125 per half day.

Shrewsbury High School
Future Plans Report

Class of 2011

Presented to the School Committee
October 26, 2011

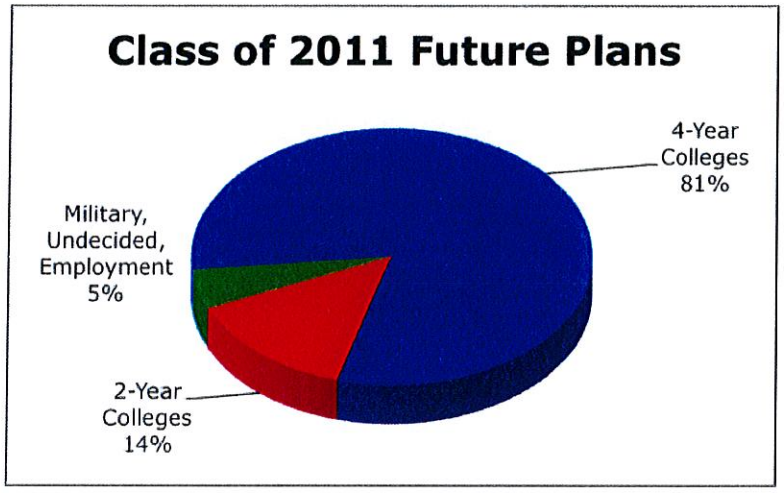
Todd Bazydlo, Principal
G. Gregory Nevader, Interim Assistant Principal

Future Plans

The Class of 2011 enjoyed a successful post-secondary planning year.

- 393 students graduated in the Class of 2011 with the following plans:
  - 81% attended 4-year colleges
  - 14% attended 2-year colleges or technical schools
  - 5% entered the employment field, enlisted in the military, or were undecided

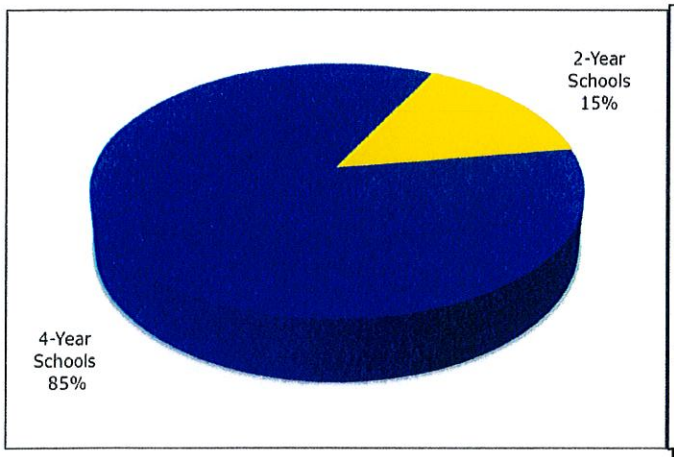
*This number does not include 5 students who were granted a Certificate of Attainment (rather than a high school diploma).

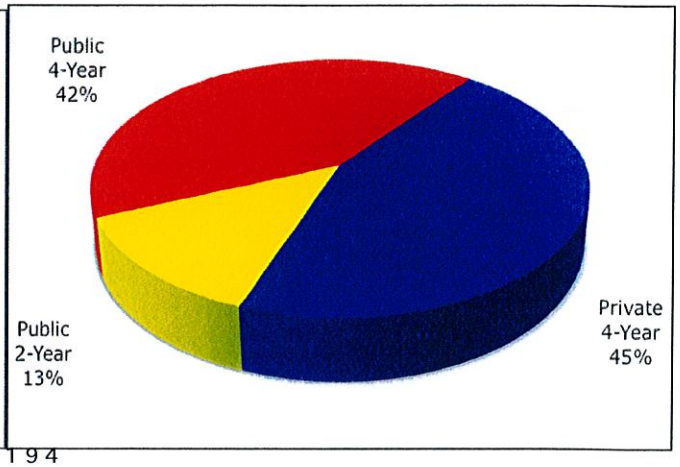


- The Guidance Department processed over 2,300 college applications to 361 different colleges and universities.

Public and Private 2- and 4-Year Matriculations

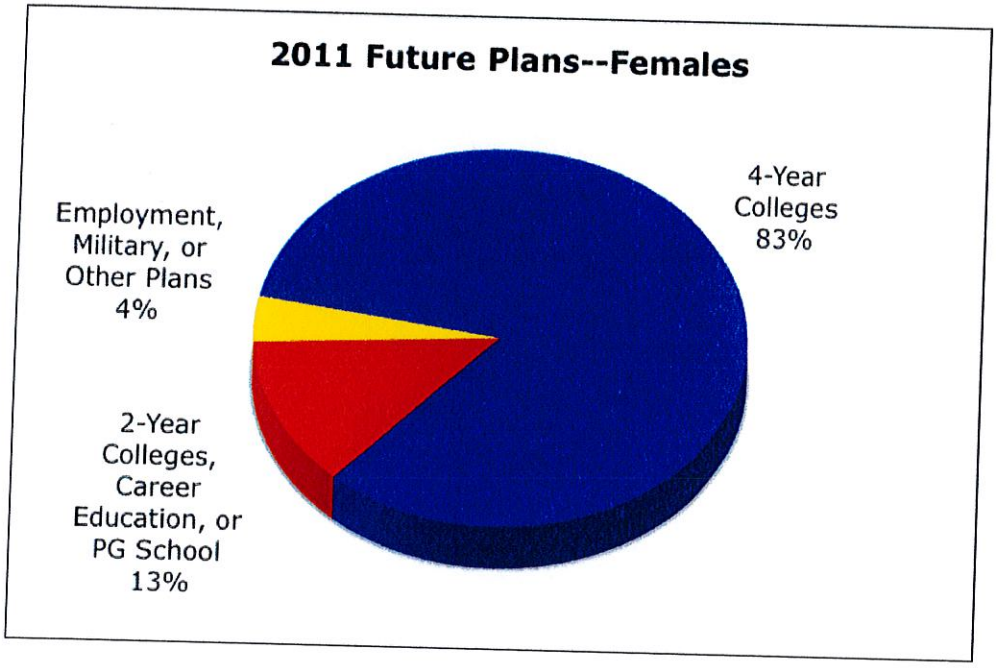
- Of the 393 students graduating in the Class of 2011, a total of 374 (95%) continued their education at 2- and 4-year colleges and universities.
- Of these 374 students, 85% attended 4-year colleges and 15% attended 2-year colleges or technical schools.
- Of these 374 students, 55% attended public colleges and universities; 45% attended private colleges and universities.

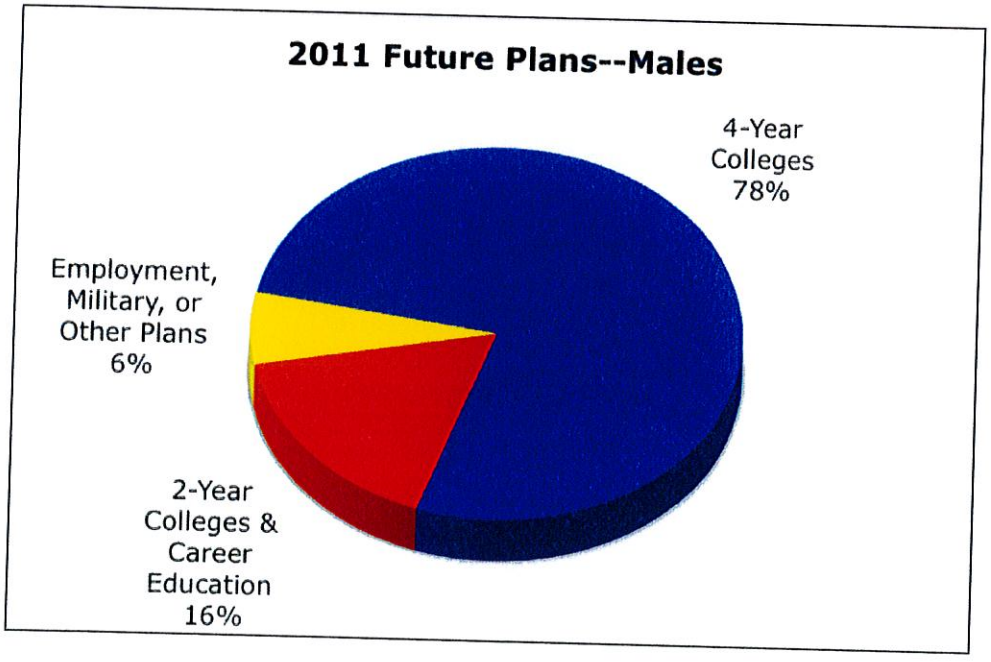




Future Plans by Gender

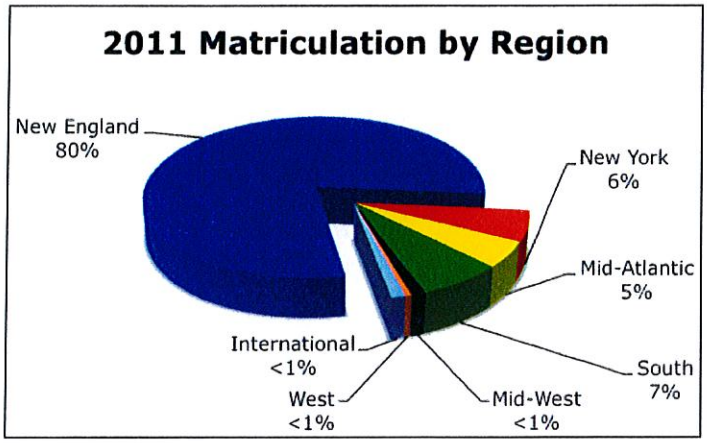
	Male	Female	Total
4-Year Colleges	123	194	317
2-Year Colleges	23	26	49
Career Education	4	4	8
Employment	5	7	12
Military	3	0	3
Other Plans	2	2	4
Totals	**160**	**233**	**393**





Geographic Breakdown by Matriculation

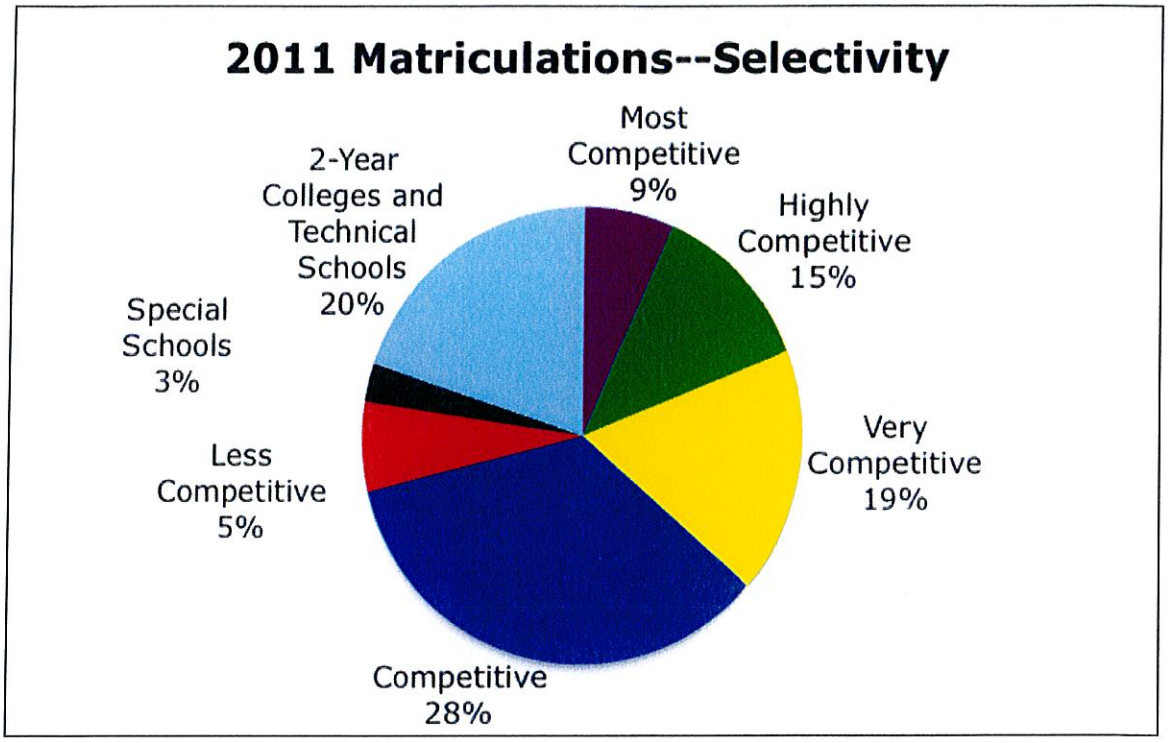
- Seniors in the Class of 2011 were accepted to 261 different colleges and universities in 32 different states and Canada.
- Seniors in the Class of 2011 enrolled in 131 different colleges and universities in 22 different states and Canada.



	Private		Public	
	2-Year & Technical	4-Year	2-Year	4-Year
New England				
Massachusetts	2	78	44	105
Rhode Island	-	15	-	4
Connecticut	1	10	-	7
New Hampshire	-	8	-	10
Vermont	-	2	-	2
New York	1	18	-	2
Mid-Atlantic				
District of Columbia	-	6	-	-
Virginia	-	1	-	-
New Jersey	-	3	-	-
Pennsylvania	1	1	-	2
Maryland	-	2	-	2
South				
Florida	-	2	-	1
South Carolina	-	-	-	5
Alabama	-	-	-	3
North Carolina	-	5	-	2
Texas	2	2	-	-
Georgia	-	-	-	2
Tennessee	-	-	-	1
Midwest				
Indiana	-	-	-	1
Missouri	-	1	-	-
Ohio	-	-	-	2
West				
Idaho	-	2	-	-
Canada	-	4	-	-
Totals	7	96160	44	151

Geographic Breakdown—Acceptances 2010 & 2011

Geographic Breakdown—Matriculations 2010 & 2011



Barron's Selectivity Categories
Class of 2011
Students Enrolled at the Following Colleges & Universities

Most Competitive:

Even superior students will encounter a great deal of competition for admissions to the colleges in this category. In general, these colleges require high school rank in the top 10% to 20% and grade averages of A to B+. Median freshman test scores at these colleges are generally between 655 and 800 on the SAT I and 29 and above on the ACT. In addition, many of these colleges admit only a small percentage of those who apply.

American University of Antigua Coll. of Medicine
Brandeis University (5)
Columbia University (2)
Cornell University
George Washington University
Georgetown University
Harvard University
Holy Cross, College of
McGill University (2)
New York University (3)
Rensselaer Polytechnic Institute
Rhode Island School of Design
Tufts University
Villanova University
Wake Forest University
Wesleyan University

Highly Competitive:

Colleges in this group generally look for students with grade averages of B+ to B and accept most of their students from the top 20% to 35% of the high school class. Median freshman test scores at these colleges generally range from 620 to 654 on the SAT I and 27 or 28 on the ACT. These schools generally accept between one third and one half of their applicants. To provide for finer distinctions within this admissions category, a plus (+) symbol has been placed before some entries. These are colleges with median freshman scores of 645 or more on the SAT I or 28 or more on the ACT, and colleges that accept fewer than one quarter of their applicants.

+American University
Babson College
Bentley University
+Boston University (4)
Clark University (2)
Clemson University
Connecticut, University of (6)
Elon University
Emerson College (3)
Fordham University (2)
+Georgia Institute of Technology
North Carolina State University
Northeastern University (7)
Ohio State University
Quinnipiac University (2)
Syracuse University
University of Maryland, College Park
University of Pittsburgh, Pittsburgh
+Wheaton College
+Worcester Polytechnic University (7)

Very Competitive:

The colleges in this category generally admit students whose averages are no less than B- and who rank in the top 35% to 50% of their graduating class. They generally report median freshman test scores in the 573 to 619 range on the SAT I and from 24 to 26 on the ACT. These schools generally accept between one half and three quarters of their applicants. The plus (+) has been placed before colleges with median freshman scores of 610 or higher on the SAT I or 26 or higher on the ACT, and colleges that accept fewer than one third of their applicants.

Alabama, University of (2)
Brigham Young University, Idaho (2)
Bryant University (3)
Catholic University of America
Eckerd College
Elms College
Fairfield University
Hofstra University
Iona College
Massachusetts—Amherst, University of (33)
New Hampshire, University of (5)
Penn State University, University Park
Rochester Institute of Technology
Seton Hall University
St. Edwards University (TX)
State University of New York, Albany (2)
Towson University
+University of South Carolina, Columbia (2)
University of Vermont (2)
Washington College (MD)

Competitive:

This category is a very broad one, covering colleges that generally have median freshman test scores between 500 and 572 on the SAT I and between 21 and 23 on the ACT. Some of these colleges require that students have high school averages of B- or better, although others state a minimum of C+ or C. Generally, these colleges prefer students in the top 50% to 65% of the graduating class and accept about 75% of their applicants. Colleges with a plus (+) are those with median freshman SAT I scores of 563 or higher or median freshman ACT scores of 24 or higher, and those that admit fewer than half of their applicants.

Assumption College (5)
Bridgewater State University
Coastal Carolina University
Colby-Sawyer College
Curry College (2)
Dallas Baptist University
+Endicott College (3)
Evangel University
Fitchburg State College (6)
Framingham State College (13)
Franklin Pierce University (2)
High Point University (2)
Jacksonville University
Johnson and Wales University (2)
Keene State College (4)
Kent State University
Marist College
Massachusetts College of Liberal Arts
Massachusetts—Boston, University of (5)
Massachusetts—Dartmouth, University of (9)
Massachusetts—Lowell, University of (7)
Merrimack College
Newbury College
Norwich University
Plymouth State University
Rhode Island, University of (3)
Roger Williams University (10)
Sacred Heart University
Smith College
Southern Connecticut State University
Southern New Hampshire University (4)
Springfield College
St. Anselm College
Suffolk University (2)
University of North Carolina, Charlotte
University of South Florida
University of Tennessee
Utica College
Wentworth Institute of Technology (2)
Western New England College
Westfield State College (4)
Wheelock College
Worcester State College (17)

Less Competitive:

Included in this category are colleges with median freshman test scores generally below 500 on the SAT I and below 21 on the ACT; some colleges that require entrance examinations but do not report median scores; and colleges that admit students with averages generally below C who rank in the top 65% of the graduating class. These colleges usually admit 85% or more of their applicants.

American International College
Anna Maria College (3)
Becker College (2)
Centenary College (2)
Dean College (6)
Green Mountain College
Nichols College
Rhode Island College
Salem State College (5)
University of Southern Indiana

Special Schools:

Listed here are colleges whose program of studies are specialized—professional schools of art, music, health fields, the military, etc. In general, the admissions requirements are not based primarily on the academic criteria, but on evidence of talent or special interest in the field.

Art Institute of Boston
Berkleee College of Music (2)
Maryland Institute College of Art
Massachusetts College of Art and Design
Massachusetts College of Pharmacy & Health Sciences (4)
Parsons New School for Design

2-Year Colleges and Technical Schools:

Nashua Community College
Porter & Chester Institute (3)
Recording Connection Audio Institute
Quinsigamond Community College (63)
Springfield Technical Community College
Toni and Guy Hairdressing Academy (3)

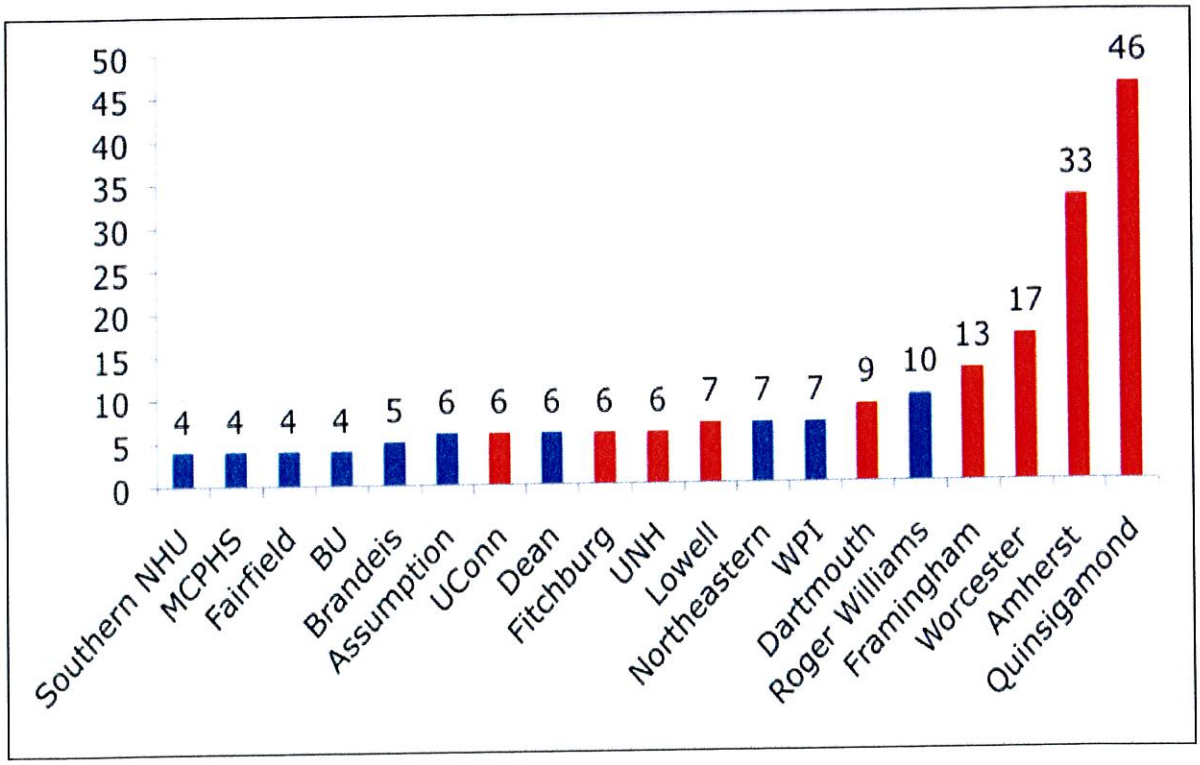
Top 10 Most Popular Schools Enrolled—Private

1. Roger Williams—10
2. Northeastern University—7
   Worcester Polytechnic Institute—7
3. Assumption College—6
   Dean College—6
4. Brandeis University—5
5. Boston University—4
   Fairfield—4
   Massachusetts College of Pharmacy and Health Sciences—4
   Southern New Hampshire University—4

Top 9 Most Popular Schools Enrolled—Public

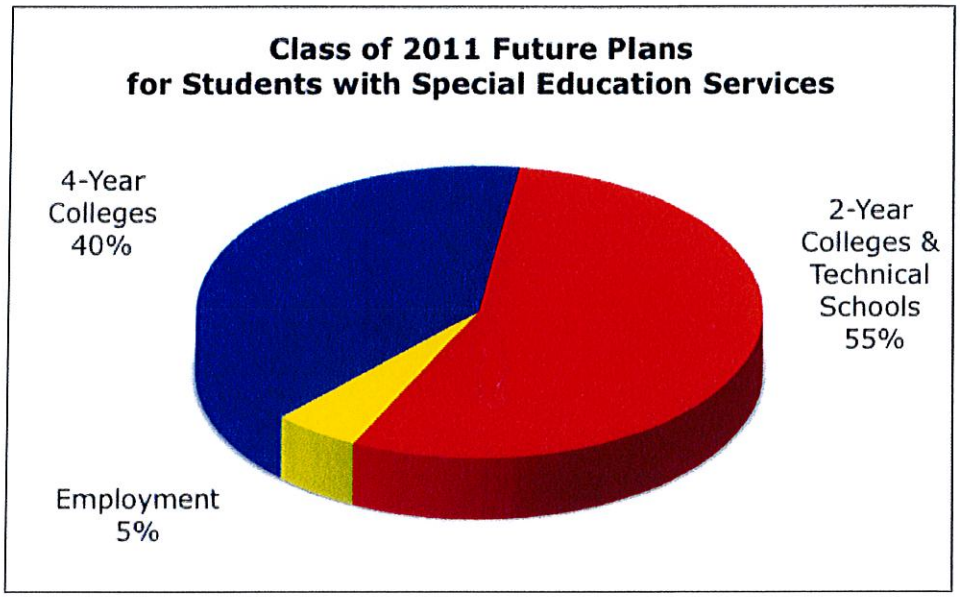
1. Quinsigamond Community College—46
2. Massachusetts, University of—Amherst—33
3. Worcester State University—17
4. Framingham State University—13
5. Massachusetts, University of—Dartmouth—9
6. Massachusetts, University of—Lowell—7
7. Fitchburg State University—6
   Connecticut, University of—6
   New Hampshire, University of—6

Top 10 Private and Public Enrollments

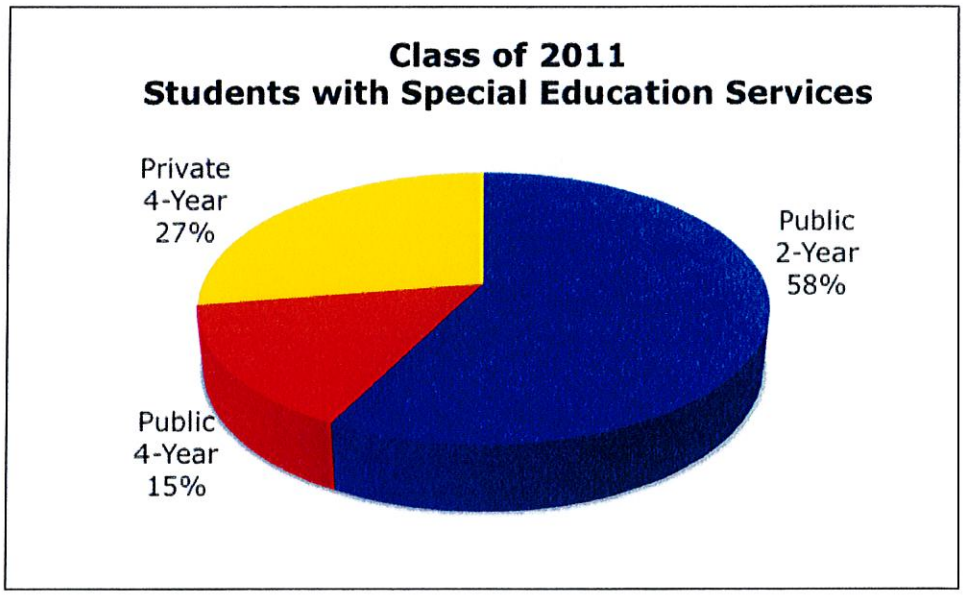


Class of 2011
Students with Special Education Services

- Forty-two students (10.6%) in the Class of 2011 received special education services. Of these 42 students:
  - 40% attended 4-year colleges
  - 55% attended 2-year colleges & technical schools
  - 5% entered the employment field



- Of these 42 students, 73% attended public colleges and universities; 27% attended private colleges and universities.



SHREWSBURY PUBLIC SCHOOLS
GLOSSARY OF TERMS

ABA technician: a paraprofessional staff member who provides services to students with autism spectrum disorders using "applied behavioral analysis" techniques.

ARRA Funds: American Recovery and Reinvestment Act signed into law in February 2009. These funds are federal stimulus funds awarded to create new jobs and maintain existing ones. The district received stimulus funds via SFSF and IDEA grant awards for the 4th quarter in FY2009, FY2010, and FY2011. ARRA funds have been preserved and will be used in FY12 to offset the budget.

AYP: Adequate yearly progress. Under No Child Left Behind (NCLB), each state is required to develop and implement measurements for determining whether its schools and districts are making adequate yearly progress (AYP) toward the goal of 100 percent of students achieving standards in reading/language arts and math. It sets the minimum level of proficiency that the state, its school districts, and schools must achieve each year on annual tests and related academic indicators.

Child-specific aide: a paraprofessional who is assigned to a single child with significant disabilities to assist in a student's basic needs throughout the day and help adapt curriculum.

Instructional aide: a paraprofessional staff member who provides educational support to students. Instructional aides may provide small group academic support and also supervise bus arrival/departure, lunch, and recess periods.

Chapter 70 aid (a/k/a state aid for education): a state-legislated funding mechanism to ensure fair and adequate minimum per student funding. The funding formula is predicated upon a minimum (foundation) budget for each district, a required local contribution, and a balance of funding from the state.

Circuit-breaker program: the state reimbursement program that funds a portion of extraordinary costs associated with special needs students. The FY11 rate is 40% of costs exceeding $37,768.

Curriculum Frameworks: curriculum guidelines developed by the Massachusetts Department of Education for all content areas that establish the skills and content students should master in grades PreK-12. Mastery of framework contents is tested by the MCAS assessments in grades 3-11.

ELL/ESL: English Language Learner/English as a Second Language (English is not the student's native language)

FTE: Full time equivalent. Positions are reported to the Massachusetts Department of Education (DOE) based on the measurement of an employee's work schedule. An FTE of 1.0 indicates that a person is equivalent to a full-time employee; while an FTE of 0.5 signals that the employee is only half-time.

MCAS: Massachusetts Comprehensive Assessment System. The Massachusetts Comprehensive Assessment System (MCAS) is designed to meet the requirements of the Education Reform Law of 1993. This law specifies that the testing program must

- test all public school students in Massachusetts, including students with disabilities and limited English proficient students;
- measure performance based on the Massachusetts Curriculum Framework learning standards;
- report on the performance of individual students, schools, and districts.

The 2011 MCAS tests include reading/language arts, mathematics, and science/technology.

Out-of-district transportation: school bus or van transport provided to students with special needs, as required by state and federal laws, to state-approved special education schools typically located in central or eastern Massachusetts.

Paraprofessional: staff members who assist teachers/specialists with classroom instruction or assist in the preparation or reproduction of instructional materials or operation and maintenance of instructional equipment, or performance of other teaching-related duties. ABA technicians, child-specific aides, and instructional aides make up the majority of our paraprofessional staff.

Site-based management funds: an allocation of funds at each school used by principals and directors to meet school and program needs. Funds are typically used to purchase classroom supplies, office supplies, equipment, and support professional development.

Student with special needs: a student with a disability who has an Individualized Educational Plan (IEP), as required by state and federal law. Students who have an IEP may require: specialized instruction, speech and language therapy, occupational or physical therapy, a child specific aide, a placement at a special education school, or special transportation services.

Title I Program: federally funded program based on average poverty rates that provides funds for reading and math support for students in grades K-4 who may be working below grade level. In FY11, Coolidge School and Floral Street School receive Title I funds.

Vocational Program: a program offered at Assabet Valley Regional Vocational Technical High School in Marlboro that provides a host of vocational educational/training programs. State law requires that students residing in Shrewsbury may elect this option; tuition rates are set by the state and paid by the town of Shrewsbury.