

# Masconomet Regional School District

**Masconomet High School Art Department**

GROUP VISION FOUNDATION PROGRAM AND ART PRACTICES

**Computer Science Pathway**

Business Pathway

Major in Computer Science – 4 – 11 credit LS courses

**PPS Department**

(Providing specialized) programming and academic settings to support ALL learning needs

**STEM**

**MASCONOMET REGIONAL SCHOOL DISTRICT**

**Student Activities**

**SOCIAL STUDIES**

**High School Music Department**

**Foreign Language Offerings**

**English Department**

**MATHEMATICS**

**GLOBAL EDUCATION**

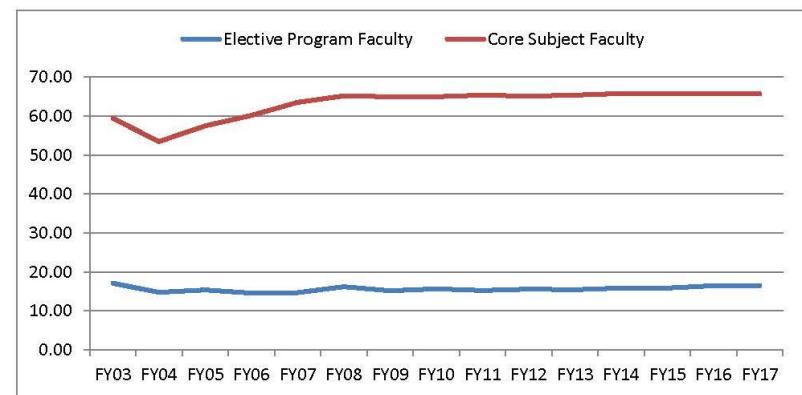
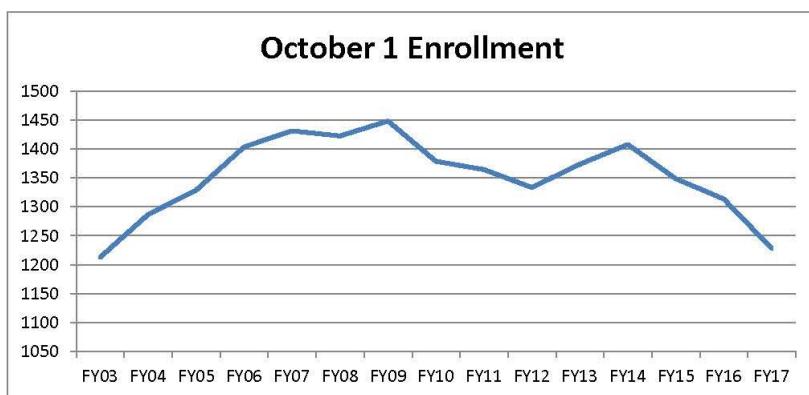
## Staffing Analysis

The Relationship of Staffing to Student Enrollment FY03-FY17

December 14, 2016

### High School Classroom Teachers & Enrollment Trends FY03 - FY17

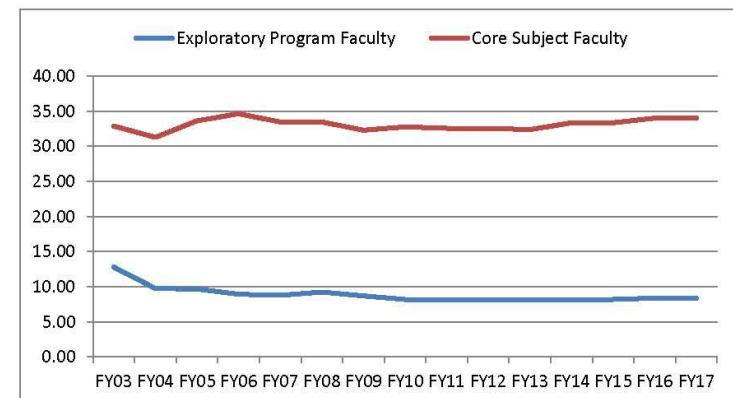
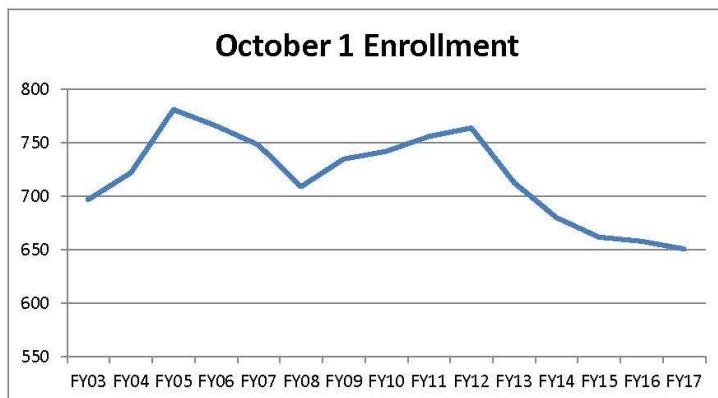
<b>Classroom Teachers by FTE</b>	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>Elective Program Faculty</b>															
Art	5.30	5.00	5.20	5.20	5.20	5.80	5.80	5.80	5.80	5.90	5.60	5.60	5.60	5.60	5.60
Business & Computer Education	7.00	5.20	5.40	4.40	4.40	4.70	4.40	4.40	4.00	4.20	4.40	4.80	4.80	5.20	5.20
Wellness	3.60	3.40	3.60	3.80	3.90	4.30	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00	4.00
Performing Arts	1.20	1.20	1.20	1.20	1.20	1.40	1.00	1.50	1.50	1.50	1.50	1.50	1.50	1.70	1.70
	17.10	14.80	15.40	14.60	14.70	16.20	15.20	15.70	15.30	15.60	15.50	15.90	15.90	16.50	16.50
<b>Core Subject Faculty</b>															
English	13.49	11.30	11.90	12.60	12.80	13.20	13.20	13.20	13.20	13.20	13.20	13.30	13.30	13.30	13.30
Foreign Language	9.80	8.40	9.20	9.80	11.00	11.40	11.20	11.20	11.40	11.20	11.40	11.40	11.40	11.40	11.40
Math	10.60	10.50	11.30	11.40	12.40	12.40	12.40	12.40	12.40	12.40	12.40	12.50	12.50	12.40	12.40
Science, Technology, & Engineering	13.84	13.00	14.00	14.40	14.80	15.20	15.20	15.20	15.20	15.30	15.30	15.40	15.40	15.40	15.40
Social Studies	11.70	10.30	11.10	12.00	12.50	13.00	13.00	13.00	13.20	13.00	13.10	13.20	13.20	13.20	13.20
	59.43	53.50	57.50	60.20	63.50	65.20	65.00	65.00	65.40	65.10	65.40	65.80	65.80	65.70	65.70
	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>October 1 Enrollment</b>	1213	1287	1329	1404	1432	1423	1449	1379	1365	1334	1374	1408	1349	1314	1228
	Low								Peak						
<b>Classroom Teachers</b>	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>Elective Program Faculty</b>	17.10	14.80	15.40	14.60	14.70	16.20	15.20	15.70	15.30	15.60	15.50	15.90	15.90	16.50	16.50
<b>Core Subject Faculty</b>	59.43	53.50	57.50	60.20	63.50	65.20	65.00	65.00	65.40	65.10	65.40	65.80	65.80	65.70	65.70
Total Faculty	76.53	68.30	72.90	74.80	78.20	81.40	80.20	80.70	80.70	80.70	80.90	81.70	81.70	82.20	82.20



### Middle School Classroom Teachers & Enrollment Trends FY03 - FY17

<b><i>Classroom Teachers by FTE</i></b>		FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>Exploratory Program Faculty</b>																
Art		2.50	1.87	2.07	2.07	2.00	2.07	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	
Business & Computer Education		1.00	1.00	0.80	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Wellness		6.10	3.70	4.10	4.16	4.10	4.17	4.30	4.30	4.30	4.30	4.30	4.30	4.50	4.50	
Performing Arts		3.20	3.20	2.70	2.70	2.70	3.00	2.40	1.90	1.90	1.90	1.90	1.90	1.90	1.90	
		12.80	9.77	9.67	8.93	8.80	9.24	8.70	8.20	8.20	8.20	8.20	8.20	8.20	8.40	
<b>Core Subject Faculty</b>																
English		7.50	7.30	7.77	7.77	7.50	7.50	7.70	7.60	7.40	7.40	7.40	7.34	7.34	7.35	
Foreign Language		6.20	5.60	6.00	6.20	6.00	6.00	5.60	5.60	5.80	5.80	5.60	5.60	5.60	5.60	
Math		6.00	5.80	6.40	7.30	7.00	7.00	7.00	7.60	7.40	7.40	7.40	7.44	7.45	8.10	
Science, Technology, & Engineering		7.20	6.80	7.27	7.20	7.00	7.00	6.00	6.00	6.00	6.00	6.00	7.00	7.00	7.00	
Social Studies		6.00	5.80	6.20	6.20	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	6.00	
		32.90	31.30	33.64	34.67	33.50	33.50	32.30	32.80	32.60	32.60	32.40	33.38	33.39	34.05	

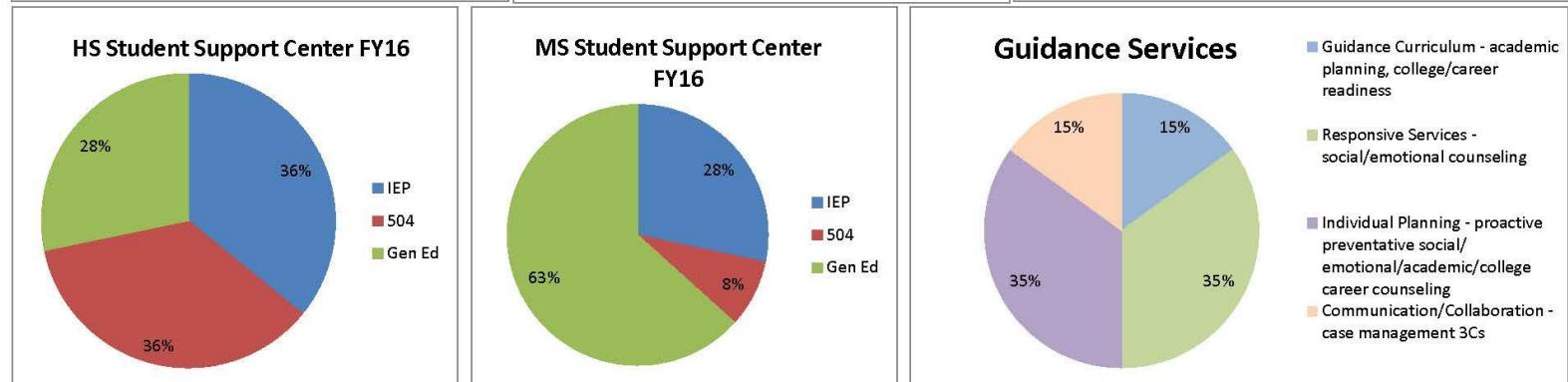
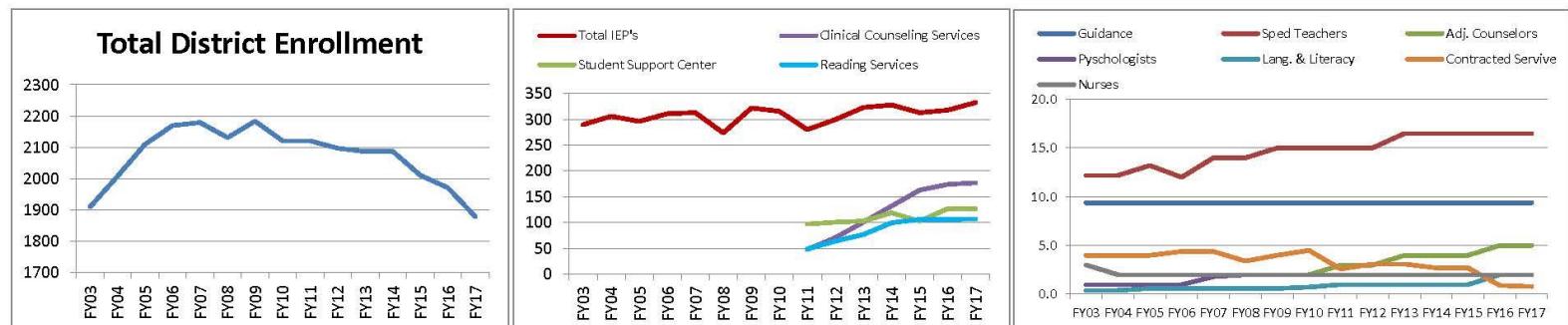
	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>October 1 Enrollment</b>	697	722	781	766	748	709	735	742	756	764	713	680	662	658	651
Peak															
<b>Classroom Teachers</b>	FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>Exploratory Program Faculty</b>	12.80	9.77	9.67	8.93	8.80	9.24	8.70	8.20	8.20	8.20	8.20	8.20	8.40	8.40	8.40
<b>Core Subject Faculty</b>	32.90	31.30	33.64	34.67	33.50	33.50	32.30	32.80	32.60	32.60	32.40	33.38	33.39	34.05	34.05
Total Faculty	45.70	41.07	43.31	43.60	42.30	42.74	41.00	41.00	40.80	40.80	40.60	41.58	41.59	42.45	42.45



### Pupil Personnel Services Professional Staff & Enrollment/ Service Delivery Trends FY03 - FY17

<b>Professional Staff by FTE</b>		FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Guidance		9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4
Special Education		12.2	12.2	13.2	12.0	14.0	14.0	15.0	15.0	15.0	15.0	16.5	16.5	16.5	16.5	16.5
Adjustment Counselors/Behavior Specialists		none	none	none	none	none	2.0	2.0	2.0	3.0	4.0	4.0	4.0	5.0	5.0	5.0
Psychologists		1.0	1.0	1.0	1.0	1.8	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
Language & Literacy Specialists		0.4	0.4	0.6	0.6	0.6	0.6	0.8	1.0	1.0	1.0	1.0	1.0	2.0	2.0	2.0
Contracted Services (Consultants)		4.0	4.0	4.0	4.4	4.4	3.4	4.0	4.5	2.6	3.1	3.1	2.7	2.7	0.9	0.8
Health (Nurses)		3.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0	2.0
<b>Total</b>		30.0	29.0	30.2	29.4	32.2	33.4	35.0	35.7	35.0	35.5	38.0	37.6	37.8	37.7	

<b>October 1</b>		FY03	FY04	FY05	FY06	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16	FY17
<b>Total District Enrollment</b>		1910	2009	2110	2170	2180	2132	2184	2121	2121	2098	2087	2088	2011	1972	1879
Total IEP's		290	306	296	311	313	274	322	316	280	300	323	328	313	318	333
Clinical Counseling Services										48	71	101	132	163	174	177
Student Support Center						Data not available				97	101	103	119	103	127	127
Reading Services										49	64	77	100	106	106	107



## Purpose

The purpose of this report is to show the historical relationship between staffing and student enrollment over the past fifteen years. The analysis looks at year-to-year comparisons and trends in three personnel categories; 1) High School Professional Staff, 2) Middle School Professional Staff, and, 3) Pupil Personnel Services Professional Staff. Student enrollment peaked in FY09 at the High School and in FY05 at the Middle School. There is a District trend of declining student enrollment.

This report will be useful in the development of the FY18 Masconomet school budget. The School Committee approved the FY17 school budget with the understanding that the administration would provide an historical analysis of the ratios of staff to students as an aid in determining the number of professional positions in the FY18 budget, all in the context of declining student enrollment.

*High School Professional Staff* breaks out classroom teachers by the core subject areas of English; foreign language; mathematics; science, technology, and engineering (STE); and social studies. Classroom teachers in the non-core subject areas are identified as art; business and computer education; wellness; and the performing arts.

*Middle School Professional Staff* breaks out classroom teachers by the core subject areas of English; foreign language; mathematics; science, technology, and engineering (STE); and social studies. Classroom teachers in the exploratory subject areas are identified as art; business and computer education; wellness; and the performing arts.

*Pupil Personnel Professional Staff* is broken out in the following categories: Guidance; Special Education; Adjustment Counselors/Behavior specialists; Psychologists; Language and Learning Specialists; Contracted Services; and Health (Nurses).

*Administration* refers to Department Heads and their included teaching component. There is no representation of this group in a graph or table. Department Head course load and supervision is determined in the Agreement between the Masconomet Administrators and the Masconomet School Committee.

*Other employee groups* are identified as non-represented administration and staff; support staff, Buildings and Grounds staff, and paraprofessionals. These groups will be discussed briefly in this report, but are not part of the formal analysis.

## High School Core Subject Faculty and Student Enrollment

Between FY03 and FY17, student enrollment at the High School fluctuated, but there is a discernable trend of declining enrollment since FY09 when enrollment peaked at 1,449. In FY14, enrollment had a small upward spike, but returned to the trend and has declined in each of the last three years. FY17 enrollment is at a fourteen year low of 1,228, exceeding the enrollment in only

FY03 in the fifteen years included in the analysis. The difference between the peak in FY09 and FY17 is 221 students across the four grades.

During the fifteen years included in the study, the number of Core Subject Full-Time Equivalent (FTE) positions rose from 59.43 to a high of 65.8 FTE in FY14 and FY15. There was a marginal reduction of .1 FTE between FY15 and FY16 and that number, 65.7 remained the same for the current year.

There was a significant reduction in this staff at the end of FY03 when FTE declined by 5.93 FTE as a result of significant budget reductions. In FY05, 4 FTE were “added back” and an additional 2.7 FTE was added in FY06. Student enrollment grew rapidly in FY03 to FY06 moving from 1,213 to 1,404, an upward trend that would continue until the peak in FY09.

Between FY03 and FY06 student enrollment increased from 1,213 to 1,404 while faculty FTE increased from 59.43 to 60.2. Between FY06 and the peak in FY09, student enrollment increased by 45 students while faculty FTE increased by 4.8. This could be described as a “restoration point” of staff to student ratio, although enrollment increased more in comparison to faculty.

Faculty FTE has remained essentially the same from FY09 to present, with an increase in FTE of .7. During this same period, student enrollment has declined from 1,499 to 1,228, a decrease of 271 students or a percentage decline of 15%.

## **How do our school's teachers and classrooms compare to the district and the state?**

General information	Our school	High Schools in our district	High Schools in MA
Teachers (#)	90.4	90.4	20,394.8
Core academic classes taught by highly qualified teachers (%)	100.0	100.0	96.4
Average class size (#)	15.8	15.8	15.9
Student : teacher ratio	14.1 to 1	14.1 to 1	12.7 to 1

Figure 1 DESE Web Site Masconomet High School Report Card 2016

The academic program has changed to address greater needs of students in general education and special education. Smaller class sizes since the peak of enrollment have allowed for the building of an inclusionary program, with far superior placements for students with disabilities, including diversity of placement options by virtue of the number of sections and as a function of class sizes.

Masconomet has been able to offer students a first-class education with many opportunities that have become taken for granted. This is as true in our core academic areas as it is in the electives.

Declining student enrollment does suggest that there are opportunities to reduce FTE in the High School core areas. This will be a prime consideration in building the FY18 school budget.

### High School Elective Program Faculty and Student Enrollment

Between FY03 and FY17, student enrollment at the High School fluctuated, but there is a discernable trend of declining enrollment since FY 09 when enrollment peaked at 1,449. In FY 14, enrollment had a small upward spike, but returned to the trend and has declined in each of the last three years. FY17 enrollment is at a fourteen year low of 1, 228, exceeding the enrollment in only FY03 in the fifteen years included in the analysis. The difference between the peak in FY09 and FY17 is 221 students across the four grades.

During the fifteen years included in the study, the number of Elective Program Full-Time Equivalent (FTE) positions declined from 17.10 in FY03 to 16.5 FTE in FY17 or declined by .6 FTE. There were minor fluctuations over the fifteen-year period.

There was a significant reduction in this staff at the end of FY03 when FTE declined by 2.3 FTE, or 13.5% as a result of significant budget reductions. The FTE increased to 16.2 in FY08 and has remained virtually the same to the present FTE of 16.5

Between FY03 and FY06, student enrollment increased from 1,213 to 1,404 while faculty FTE increased from 59.43 to 60.2. Between FY06 and the peak in FY09, student enrollment increased by 45 students while faculty FTE increased by 4.8. This could be described as a “restoration point” of staff to student ratio, although enrollment increased more in comparison to faculty.

Faculty FTE has increased 1.3 FTE since the peak enrollment year of FY09. During this same period, student enrollment has declined from 1,499 to 1,228, a decrease of 271 students or a percentage decline of 18%.

Masconomet High School offers its students a comprehensive elective program. Our students appreciate the growth opportunities that are provided for their general academic development and preparation for college and career.

### Middle School Core Subject Faculty and Student Enrollment

Between FY03 and FY17, student enrollment at the Middle School fluctuated, but there is a discernable trend of declining enrollment since FY12 when enrollment hit a “second peak” of 764 students. During the fifteen-year period of the study, Middle School enrollment peaked at 781 in FY05. FY17 enrollment is at a fifteen year low of 651 students. The difference between the second peak in FY12 and FY17 is 113 students across the two grades, approximately a 14.8% decrease.

During this period of FY12 to FY17 the Core Subject faculty FTE increased 1.45 FTE or 4%.

## How do our school's teachers and classrooms compare to the district and the state?

General information	Our school	Middle Schools in our district	Middle Schools in MA
Teachers (#)	49.7	49.7	13,823.9
Core academic classes taught by highly qualified teachers (%)	99.1	99.1	96.8
Average class size (#)	20.4	20.4	19.0
Student : teacher ratio	13.1 to 1	13.1 to 1	12.6 to 1

Figure 2 DESE Web Site Masconomet Middle School Report Card 2016

Strategic additions to the Middle School staff in mathematics and reading account for more recent additions to Middle School core area staff. This was a most necessary addition. These additions have been critical to the success of Middle School students in achieving Level 1 status and designation as a Commendation School.

### Middle School Exploratory Program Faculty and Student Enrollment

Over the period of this fifteen-year study, Middle School Exploratory faculty decreased by 4.4 FTE or 24%. There was never a restoration of the FY04 decrease. There was a sharp decline of three positions in FY04 due to significant budget reductions. The FTE has had small fluctuations since FY04.

A STEM position was added at the Middle School to meet the curriculum and MCAS demands for learning in the technology and engineering curriculum framework. This was a most necessary addition.

### Pupil Personnel Services Professional Staff and Student Enrollment

Pupil Personnel Professional Staff is broken out in the following categories: Guidance; Special Education; Adjustment Counselors/Behavior specialists; Psychologists; Language and Learning Specialists; Contracted Services; and Health (Nurses).

Between FY03 and FY17, student enrollment in the District fluctuated, but there is a discernable trend of declining enrollment since FY 09 when enrollment peaked at 2,184. The difference between peak enrollment in FY09 (2,184) and the current year is 305 students or a decline of 14%.

Pupil Services encompasses special education, related services, and student health and both developmental and clinical adjustment counseling. Demand on services is due in large part, but not restricted to, students on IEPS, 504s, or students identified as socially-emotionally at-risk. The number of Masconomet students on IEPs has increased by 43 students or 14.9%. This simple comparison masks the amount and complexity of services required to approach the needs of

students on IEPs, 504s, and at-risk students whose needs are MUCH greater than ten years ago with no end in sight of growing numbers and needs.

Increases in special education staffing and consultants are directly related to increased student needs and the requirement to provide a free and appropriate education to all students in the least restrictive environment. It is very difficult to parse out personnel into discrete categories due to the overlapping nature of the work. Guidance, for example, years ago serviced students with developmental and college counseling needs, is now deep in the work of mental health issues and psychological issues of both special education and 504 students, but also to a large degree with the general education population.

An increase of 7.7 FTE in these combined areas over fifteen years of increasing needs, compliance requirements, and obligations takes staffing in these areas off the table for discussion in regard to budget development in the judgement of the superintendent. Patricia Bullard, Director of Pupil Personnel Services, will be doing a broad presentation for School Committee in January 2017 and she will speak to efficiencies, need areas, and trends as well as answer questions.

### Administration

The course loads of Department Heads will be adjusted, per the Agreement with the School Committee, where a decline in sections taught bears a relationship to how much of the Department Head position is teaching versus supervisory time. If a course load for a Department Head is increased, to that extent a reduction can be made in FTE, or overloads paid to teachers for teaching a sixth class.

Non-represented administrator positions are not considered in this study. As a general observation, the administrative work relative to mandates, reporting, compliance, complexity and volume of student needs, and all measurable factors has not declined with the decline in student enrollment.

### Support Staff

Support staff was not included in this study for reasons similar to non-represented administrators. In FY18 budget development, there will be consideration of reallocation of FTE in this area consistent with shifts in work flows and needs.

### Paraprofessionals

Paraprofessionals were not included in this study because the great majority are directly tied to IEP required services. The several non-special education paraprofessionals provide essential services to students, for example, library aides and physical education aide (safety-related).

## MPFTs

Multi-Purpose Facilities Technicians work is unaffected by the decline in student enrollment. Despite a declining population, there is no part of the facility that needs less attention. The workload on MPFTs continues to GROW as the facilities and core systems age and the failure rate of equipment and building envelope deterioration increase.

## Conclusion

In the opinion of the superintendent, this analysis leads to the conclusion that there is one personnel area where a reduction in FTE should be considered for reduction in the FY18 budget, that being High School Core Faculty. Every consideration must be given to how any one reduction would affect the overall program and opportunities for students.

Although the enrollment decline has been similar in both schools, the Middle School is organized on the Team model, typical of most middle schools and supported by research. Consideration of a reduction to classroom positions would necessarily result in the demise of the Team model as we know it. As noted above, class sizes at the Middle School are reasonable, not low.

Our High School has consistently been a Level I high-achieving school that has not compromised the comprehensiveness of its program while at the same time becoming more inclusionary of students with disabilities and opportunities for all. Reasonable class sizes have contributed much to this success. The current data suggests that the District should seek to adjust High School core faculty FTE to decreased student enrollment consistent with the maintenance of a full academic program, maintenance of opportunities for students with disabilities, and maintenance of the signature offerings that distinguish Masconomet High School, including co-taught inclusion classes and co-taught classes in American Studies, Psychobiology, and other areas where this structure offers significant benefit to students.