# Shrewsbury High School Shrewsbury, MA 



# Class Size Report 2016-2017 

Data based on enrollment numbers as of October 1, 2016

## Shrewsbury High School

Class Size Report - October 2016

This report is based on data from the week of October 1, 2016. It contains information on class size and student enrollment for the first and second semesters of the 2016-2017 school year.

## Overall Enrollment

With an increase of 124 students from last year and the largest one-year increase, high school enrollment has reached its highest level. The charts below show the ten-year enrollment trend for the high school both in the aggregate and by grade.

| Grade |  |  |  |  |  |  |  | OVERRIDE | $\begin{array}{\|c\|c} \hline 15-16 & 16-17 \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 07-08 | 08-09 | 09-10 | 10-11 | 11-12 | 12-13 | 13-14 |  |  |  |
| 9 | 419 | 393 | 421 | 401 | 414 | 408 | 420 | 432 | 413 | 513 |
| 10 | 404 | 429 | 398 | 417 | 414 | 422 | 406 | 423 | 440 | 428 |
| 11 | 423 | 390 | 415 | 390 | 413 | 417 | 421 | 410 | 412 | 441 |
| 12 | 383 | 426 | 390 | 410 | 391 | 412 | 403 | 420 | 403 | 410 |
| Total | 1629 | 1638 | 1624 | 1618 | 1632 | 1659 | 1650 | 1685 | 1668 | 1792 |



## Diversifying Student Population

From July $1^{\text {st }}$ through October $1^{\text {st }}, 2016$, eighty-eight (88) students have enrolled at Shrewsbury High School. This population continues to influence the demand for certain courses resulting in a relatively significant impact on FTEs for certain departments. These eighty-eight students came to Shrewsbury from the following locations:

- 56 from within Massachusetts
- 14 from states other than Massachusetts including:
- Arkansas
- California
- Florida
- Ohio
- Colorado
- New Hampshire
- New York
- Tennessee
- Connecticut
- Rhode Island
- 15 from countries other than the United States including:
- Brazil
- Nigeria
- Qatar
- Ghana
- Northern Mariana
- Turkey
- Haiti Islands
- Venezuela
- Israel
- Puerto Rico
- 3 students previously home-schooled


## Building/Facility Capacity

Increased enrollment impacts the master schedule, the availability of courses, class size, and building capacity. As may be expected with its highest enrollment on record, Shrewsbury High School operates at a building capacity of $96 \%$ (compared to $76 \%$ just two years ago). That is, on average, $96 \%$ of classrooms are in use during the school day (periods 1-7). This represents a significant factor when constructing the master schedule and the availability of courses throughout the school day. As a result, the majority of teachers now share classrooms and most teachers teach in more than one classroom. The chart below summarizes the number of available classrooms in each wing of the high school:

| \# of available rooms each period by hallway |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | English <br> hallway <br> A300s | Social <br> Science <br> hallway <br> B300s | Math <br> hallway <br> A200s | Science <br> hallways <br>  <br> A200s | Foreign <br> Language <br> hallway <br> B200s |  |
| Period 1 | 0 | 0 | 0 | 2 | 2 |  |
| Period 2 | 2 | 1 | 2 | 0 | 0 |  |
| Period 3 | 0 | 3 | 1 | 1 | 0 |  |
| Period 4 | 0 | 2 | 1 | 2 | 0 |  |
| Period 5 | 0 | 1 | 0 | 0 | 0 |  |
| Period 6 | 0 | 0 | 1 | 1 | 3 |  |
| Period 7 | 0 | 0 | 0 | 0 | 0 |  |
| Hallways <br> filled to xx\% | $98 \%$ | $93 \%$ | $96 \%$ | $95 \%$ | $94 \%$ |  |

## Teaching and Full-Time Equivalency (FTEs)

Although it appears as though the high school had an increase of 0.8 FTEs, this was a result of reallocations within district-wide staff:

- Science: internal shift of 0.2 FTE from science to engineering. (Net gain $=0$ )
- ITAMS: internal shift of 0.4 FTE non-teaching support to teaching staff. (Net gain = .4)
- Foreign Language: reallocation of 0.4 middle school teachers to the high school and 0.2 shift from VHS. (Net gain $=0.6$ )

Teaching FTEs by Academic Department

|  |  |  | OVER <br> RIDE |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Department--All | $\mathbf{1 2 - 1 3}$ | $\mathbf{1 3 - 1 4}$ | $\mathbf{1 4 - 1 5}$ | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 6 - 1 7}$ | $\mathbf{1 - Y e a r}$ <br> Diff. | 5-Year <br> Diff. |
| Engineering | 1.2 | 1.2 | 1.6 | 1.8 | 2.0 | +.2 | +0.8 |
| English | 13.4 | 13.4 | 16.4 | 16.4 | 16.4 | - | +3.0 |
| English Language Education | 1.2 | 1.2 | 1.9 | 1.9 | 1.9 | - | +0.7 |
| Family \& Consumer Science | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | - | - |
| Foreign Language | 10.6 | 11.0 | 12.0 | 12.0 | 12.6 | +0.6 | +2.0 |
| Health \& Phys. Ed. | 8.6 | 8.6 | 9.0 | 9.0 | 9.0 | - | +0.4 |
| ITAMS | 1.8 | 2.0 | 2.6 | 3.0 | 3.4 | +0.4 | +1.6 |
| Math | 13.8 | 13.8 | 16.8 | 16.8 | 16.8 | - | +3.0 |
| Performing Arts | 2.1 | 2.1 | 2.7 | 2.9 | 2.9 | - | +0.8 |
| Science | 13.4 | 13.4 | 17.0 | 16.8 | 16.6 | -0.2 | +3.2 |
| Social Science | 12.4 | 12.4 | 15.4 | 15.4 | 15.4 | - | +3.0 |
| Special Programs (VHS) | 0.2 | 0.2 | 0.2 | 0.2 | 0.1 | -0.1 | -0.1 |
| Visual Art | 3.4 | 3.4 | 4.4 | 4.4 | 4.3 | -0.1 | +0.9 |
| Total FTE | $\mathbf{8 5 . 1}$ | $\mathbf{8 5 . 7}$ | $\mathbf{1 0 3 . 0}$ | $\mathbf{1 0 3 . 6}$ | $\mathbf{1 0 4 . 4}$ | $\mathbf{+ 0 . 8}$ | $\mathbf{+ 1 9 . 3}$ |
| 9 - 12 Enrollment | 1659 | 1650 | 1685 | 1668 | 1792 | $\mathbf{+ 1 2 4}$ | +36 |


| Staffing (FTEs) by Academic Department |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Department--All | $\mathbf{1 2 - 1 3}$ | $\mathbf{1 3 - 1 4}$ | $\mathbf{1 4 - 1 5}$ | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 6 - 1 7}$ | $\mathbf{1 - Y e a r}$ <br> Diff. | 5-Year <br> Diff. |
| English | 13.4 | 13.4 | 16.4 | 16.4 | 16.4 | - | +3.0 |
| Social Science | 12.4 | 12.4 | 15.4 | 15.4 | 15.4 | - | +3.0 |
| Math | 13.8 | 13.8 | 16.8 | 16.8 | 16.8 | - | +3.0 |
| Science \& Engineering | 14.6 | 14.6 | 18.6 | 18.6 | 18.6 | - | +4.0 |
| Foreign Language | 10.6 | 11.0 | 12.0 | 12.0 | 12.6 | +0.6 | +2.0 |
| Academic FTEs Total | $\mathbf{6 4 . 8}$ | $\mathbf{6 5 . 2}$ | $\mathbf{7 9 . 2}$ | $\mathbf{7 9 . 2}$ | $\mathbf{7 9 . 8}$ | $\mathbf{+ 0 . 6}$ | $\mathbf{+ 1 8 . 0}$ |
|  |  |  |  |  |  |  |  |
| 9-12 Enrollment | 1659 | 1650 | 1685 | 1668 | 1792 | $\mathbf{+ 1 2 4}$ | $\mathbf{+ 1 3 3}$ |
| Average Academic <br> Student-to-Teacher Ratio | $\mathbf{2 5 . 6}$ | $\mathbf{2 5 . 3}$ | $\mathbf{2 1 . 3}$ | $\mathbf{2 1 . 1}$ | $\mathbf{2 2 . 5}$ | $\mathbf{+ 1 . 4}$ | $\mathbf{- 3 . 1}$ |

## Class Enrollment

The following table reveals the significant progress that has been made in reducing the number of over-enrolled ( 27 or more students) sections compared to four years ago. This year, however, a relatively significant number of classes (9.7\%) have over-enrolled courses due primarily to the increase in enrollment with minimal increase in staffing ( 0.6 FTEs).

| Department | \# sections at 27 or more <br> students |  |  |  | \% of over-enrolled classes |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | OVER <br> RIDE |  |  |  | OVER <br> RIDE |  |  |
|  | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ |
| English | 19 | 2 | 2 | 3 | $28 \%$ | $2 \%$ | $2 \%$ | $4 \%$ |
| For. Lang. | 12 | 5 | 2 | 5 | $22 \%$ | $8 \%$ | $3 \%$ | $8 \%$ |
| Math | 22 | 3 | 0 | 6 | $32 \%$ | $4 \%$ | $0 \%$ | $8 \%$ |
| Science/Eng. | $53^{*}$ | $0^{*}$ | $0^{*}$ | 5 | $65 \%$ | $0 \%$ | $0 \%$ | $7 \%$ |
| Soc. Sci. | 33 | 1 | 1 | 14 | $48 \%$ | $1 \%$ | $1 \%$ | $21 \%$ |
| TOTALS | $\mathbf{1 3 9}$ | $\mathbf{1 1}$ | $\mathbf{5}$ | $\mathbf{3 3}$ | $\mathbf{4 1 \%}$ | $\mathbf{3 \%}$ | $\mathbf{1 \%}$ | $\mathbf{9 . 7 \%}$ |

## Teacher Caseloads

The vast majority of SHS teachers are responsible for a caseload of between 100 and 110 students (class size average is 20-22 students per section). Although the over-ride in June 2014 significantly reduced teachers' total caseload of students and their corresponding average class size, nearly $63 \%$ of teachers this year (compared to just $33 \%$ last year) have an average class size over 21.

|  | Pre-override |  | Post-override |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Teachers' Caseload: Average Class Size | $\begin{gathered} 2013-2014 \\ \text { (three years ago) } \end{gathered}$ |  | $\begin{gathered} 2015-2016 \\ \text { (last year) } \end{gathered}$ |  | $\begin{gathered} 2016-2017 \\ \text { (this year) } \end{gathered}$ |  |
| $<19$ | 11\% | 19\% | 29.5\% | 67\% | 15.8\% | 37.3\% |
| 19.1-21.0 | 8\% |  | 37.5\% |  | 21.5\% |  |
| 21.1-23.0 | 21\% | 81\% | 22.3\% | 33\% | 36.4\% | 62.7\% |
| > 23.1 | 60\% |  | 10.7\% |  | 26.3\% |  |

## Average Class Size by Department

As the result of increased enrollment and minimal increase in teaching FTEs, the average class size for all departments increased compared to the last two years.

| Average Class Size by Department 2012-13 through 2016-17 |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | OVERRIDE |  |  |  |
| Department | 12-13 | 13-14 | 14-15 | 15-16 | 16-17 | $\begin{gathered} \hline \text { Range } \\ \text { 15-16 } \end{gathered}$ |
| English | 23.7 | 23.9 | 20.0 | 20.2 | 21.2 | 11-27 |
| English Language Learners | 7.3 | 7.0 | 7.7 | 10.5 | 11.1 | 6-18 |
| Engineering | 20.8 | 21.6 | 19.3 | 19.1 | 20.5 | 15-24 |
| Family \& Consumer Science | 22.6 | 21.6 | 21.8 | 22.1 | 22.5 | 17-25 |
| Foreign Language | 23.6 | 22.3 | 22.8 | 20.3 | 20.3 | 9-32 |
| Health | 24.2 | 24.2 | 24.3 | 24.1 | 27.5 | 22-31 |
| Instructional Technology | 20.0 | 16.0 | 16.0 | 11.0 | 12.0 | 1-22 |
| Mathematics | 23.9 | 23.5 | 20.6 | 20.3 | 22.3 | 9-28 |
| Performing Arts | 31.4 | 29.9 | 22.9 | 23.5 | 24.6 | 10-63 |
| Physical Education | 25.1 | 24.3 | 25.3 | 24.8 | 24.8 | 19-34 |
| Science | 24.4 | 24.2 | 19.8 | 20.3 | 21.4 | 10-25 |
| Social Sciences | 25.9 | 25.8 | 22.8 | 21.7 | 24.5 | 17-28 |
| Visual Arts | 18.8 | 19.6 | 16.2 | 16.9 | 17.9 | 5-22 |

## School Counseling

One of the departments most affected by an increase in enrollment is the School Counseling Department. With the addition of 124 students this year, the average student-to-counselor ratio has increased from 225:1 last year to 247:1 this year.


## Special Education \& ELL Co-Taught Courses

Expanded programming for English Language Learners and Special Education students continues with a number of co-taught sections in Mathematics and Science. In addition, co-taught programming has expanded to the English Department. This school year we have offered additional sections of co-taught Lab Chemistry, Lab Biology, Algebra and Geometry I, Algebra and Geometry II. Advanced Math I, Advanced Math II Topics, and English 12.

## Student Internships and Independent Studies

Students continue to enroll in school-based internships for credit during what would otherwise be study periods. These opportunities have helped mitigate the overall study hall numbers. School-based internships include office internships, which involve clerical duties (e.g. answering telephones, filing, reception) as well as academic internships where students work as teaching assistants in certain classrooms and provide clerical support to department directors. Enrollments for the past two years are as follows:

| Internships | 2015 - 16 | 2016 - 17 |
| :--- | :---: | :---: |
| Program | \# Students | \# Students |
| Athletic Internship | 8 | 3 |
| Banking Internship | 4 | 3 |
| Family and Consumer Science | 2 | 1 |
| English Internship | 2 | 2 |
| Foreign Language Internship | 4 | 5 |
| Guidance Internship | 17 | 7 |
| Health Internship | 2 | 0 |
| ITAMS Internship | 1 | 1 |
| Math Internship | 3 | 12 |
| Media Internship | 1 | 5 |
| Office Internship | 11 | 9 |
| Science Internship | 6 | 2 |
| Social Science Internship | 2 | 2 |
| Special Education Internship | 2 | 6 |
| Tutoring Lab Internship | 24 | 26 |
| Visual Arts Internship | 6 | 5 |
| Total | 95 | $\mathbf{8 9}$ |



