## North Reading Public Schools Enrollment

The school district central office staff recently completed enrollment projections for the next ten years, and presented the results at the October $27^{\text {th }}$ School Committee meeting. The process of projecting enrollments in North Reading Public Schools has become a science. Efforts are made annually to project enrollments by grade and school for a ten-year period. The data used to calculate this information includes birth records, census information, housing developments and area private school enrollments. We find that we are able to predict the upcoming year's totals within a $1 \%$ or less variance. Enrollment trends over time by the ratio of the number of children in one grade in one year compared to the number of children who complete the year and enroll in the next grade the following year. Fluctuations in such data from year to year create a pattern from which an average completion rate can be calculated to predict enrollment. Basically, percentages are calculated from past enrollment data to determine a reliable percent increase or decrease in enrollment between any two grades. Adjustments to the percentages are made based on the most up-to-date information regarding the real estate market, housing developments, building permits and school building projects to predict enrollment more accurately.

North Reading's total student enrollment has been cyclical. In the early fifties enrollment grew quickly from 900 to 1,841 students. The1960's saw the numbers rise to 3,217. In the 1970's enrollment grew as high as 3,461 . Then in 1980 's enrollment decreased to 1,926 only to rise again during the 1990's, peaking at 2,319 . The period since then has seen a growth back to 2,812 in 2008 with a steady decline since then. Currently, student enrollment stands at 2,560.


There are two factors at work which will have the greatest effect upon future enrollment. First, there has been a steady decline in the number of births to North Reading residents over the past decade. In the decade from 1999-2008, North Reading averaged 164 births per year; more recently births have ranged
from 120 to 150 births annually, averaging about 24 fewer per year. The second factor is the strong possibility of an increase in new families with school age children moving into North Reading. There is evidence of this in North Reading over the past few years, on average 161 single-family homes were sold between 2003 and 2007 - compared to only 100 homes in 2009 when the real estate market slowed due to the economic recession. However, the pace has increased significantly in recent years; 181 homes were sold in 2013, the most since 2004. The pace in 2014 seems to be on the same trend through August, with 170 homes sold.


Districtwide enrollment is expected to decline over the next decade. However, one should realize that it is very likely these patterns will not last as long as ten years. All projections are most reliable in year's \#15 , and less reliable in year's \#6-10. As soon as the economy and real estate situations improve it will impact these projections. This is why it is so important to revise enrollment projections on an annual basis as part of the budget process.


The above graph shows projected in-grade combinations over the next ten years. Over the next three years, K-5 enrollments are forecasted to remain relatively stable, Grades $6-8$ is expected to decrease by 100 students; and the high school level to increase by about 29 students all within the next three years. The opening of the new building has also resulted in a higher completion ratio of $8^{\text {th }}$ grade students moving into ninth grade as well. Next year it is anticipated the high school will have an additional 18 students. As the district prepares for next school year's budget, these projections will play a vital role in the development of the budget. As the projections illustrate, there will be a need to focus new staffing requests at the high school level to protect class sizes and student loads per teacher. A more detailed enrollment projection report and presentation can be found by visiting the school district website's business office budget link.

