

School Board Meeting:

November 24, 2014

Subject:

Enrollment Projection Report

Presenter:

Gary Kawlewski

SUGGESTED SCHOOL BOARD ACTION:

For Board Review Only.

DESCRIPTION:

Review of K-12 Enrollment as of Oct. 1st

The school district's enrollment growth came to a halt in the 2009-2010 school year. For 2014-15, Buffalo-Hanover-Montrose's K-12 enrollment went down 20 students from the previous year. The five-year growth average is decreasing and currently at -4.2 students/year. Total enrollment decline for the past five years is -21 students or -.37%.

The enrollment as of October 1st was 5,719. This number will be different from the official October 1st seat count from the Minnesota Department of Education. For internal purposes, students considered post-secondary or shared time are adjusted down in our internal monthly enrollment reports. Once the official October 1st enrollment report is on MDE's website, the enrollment number could be 20-30 students higher.

Open Enrollment History

The district typically loses more students than it gains in open enrollment. The downward trend continued, and the district experienced a net loss of 421 students through open enrollment and tuition for the 2013-2014 school year. The net loss was 354 for the previous year. Tuition students are resident students but attend another district through tuition agreements such as Wright Technical Center or MAWSECO. The district receives the general aid on the tuition students but then forwards the aid to other tuition districts. All numbers are net of non-public school students.

The district lost the largest portion of open enrollment students to Rockford and Delano (-267) and gained the most open enrollment students from Maple Lake and St. Michael-Albertville (+49). If we take a look at individual grade levels, no grades showed net gains in open enrollment.

Fall vs. Spring Enrollment

Historically, the district's K-12 enrollment decreases from October 1st to June 1st. Most of the enrollment drop happens in grades 9-12. The percentages of enrollment drops in grades 9-12 have been pretty consistent for the last five years. The district has had only two years of enrollment growth during the school year over the last 19 years (2000-01 and 2001-02) which are not shown on this graph in the presentation. After seeing the November 1st enrollment report, I suspect this trend of losing student enrollment during the year will continue.

Review of 2014-15 Enrollment Projection

The 2013-14 enrollment projection of 5,703 was underestimated by 16 students. As I mentioned earlier, the October 1st counts (5,719) adjust down post-secondary and shared time students to only include the instructional time at the school district

2014-15 Enrollment Projection

The district uses the SchoolFinances.Com enrollment projection model. In projecting enrollments, there are three different data sets available: October 1st MARSS submission, end of year ADM, or district data. The end of year ADM data includes tuition students where the student resides in the district but attends another school. The state aid comes to the resident school district, then the other school district bills that resident school district for the state aid. Because tuition students are included in the end of year ADM data, it makes the enrollment data inflated. A similar issue occurs with the October 1st MARSS data. The enrollment data submitted to the State includes post-secondary and shared time students. The district data option is the third option and allows schools to enter enrollment history taken at any time. For example, this option could be used by entering in our enrollment history that adjusts the post-secondary and shared time students as of any date. I will be using the district data as of October 1st.

The next step is to project kindergarten students. There are now five different methods to pick from: hold constant, linear projection, county birth, zip code method and a district-determined method. In reviewing the Wright County resident births, the overall number of recorded births, which predicts future kindergarten enrollment, is down for the next three years. Keep in mind that these are Wright County resident births from 2009-2013. Just looking at the housing market, a lot of those births could have moved out since that time. We are starting to see an increase in building permits in Buffalo, Hanover, and Montrose. In our growing years, we have enrolled 26-33% of the Wright County resident births. The percentage of resident births enrolled is dropping. For October 1, 2014, we were at 19.8%. I tried to project what kindergarten enrollment numbers would look like if we averaged the last two years which is 19.8%. We would, then, stay with that percentage of the Wright County resident births enrolled at our district for the next four years. This number is the same as the 3-year average so it feels fairly accurate. For 2014-15, our kindergarten numbers were above the projection by 50 students. I believe that the all-day kindergarten offered for free was a major contributing factor. I am hoping that our district-determined method will be a little more accurate in projecting our kindergarten enrollment for the next five years.

Now we start looking at K-12 enrollment projections by looking at a variety of methods.

Cohort survival method uses a ratio computed for each grade from the previous year. This is accomplished by dividing the current enrollment in one grade by the previous grade in the previous year. Cohort ratios are calculated using 1-7 years of enrollment history. For example, a cohort ratio using five years of enrollment history would produce a ratio of the enrollment that occurred five years ago to the enrollment that occurred six years ago. In rapid growth, this methodology may produce projections that are too optimistic.

Weighted cohort survival method uses a ratio computed for each grade level from the previous year as well as by dividing the current enrollment in one grade by the previous grade in the previous year. The ratios are weighted to bias the prediction in favor of the most recent year's results. In rapid growth, this methodology may also produce overly optimistic results.

Numerical survival method uses a simple grade-to-grade progression without calculating a ratio. A multiple year average of the enrollment change is added or subtracted to the enrollment in a grade to project future enrollment. In rapid growth, this model may produce projections that are too conservative.

Weighted numerical survival method uses grade-to-grade progressions like the numerical survival method, but also employs a weighted average to give greater influence to recent years' results. In rapid growth, this methodology dampens the projections slightly.

Merged method is a combination of all previous methods.

There are eighteen different variations to pick from. I examined a combination of up to five different models at one time. The following five were selected for detailed analysis: ratio 3rd year, weighted ratio 3rd year, ratio 5th year, 1 year numeric average, and ratio 6th year. From the five methods, I selected the weighted ratio 5th year. That model predicts a total K-12 enrollment of 5,689 students for 2015-16, a decrease of 30 students from this year. Some of the factors considered when selecting a method were the current housing market, economic conditions, Wright County births, open enrollment, and budget reductions. We try to look for a mid-range option for projecting our enrollment trends

The future enrollment projections are portrayed by grade grouping. Since BHM schools has historically been a growing district and continues to be growing on a total resident population basis, we should be concerned about some of the school building capacities:

BHS – 1,935

PHX – 64

PRIDE – 25

BCMS – 1,375

Elementary – 3,200

The building capacities listed are optimum capacities and can be stretched a little bit. The enrollment projections raise some concerns for the middle school for the school years 2014-15 and 2015-16. It raises some questions about the high school for 2017-18 and 2018-19. The newly approved bond issue will address some of these concerns at the high school.

Finally, the weighted average daily membership (WADM) projection shows a slight decline in student aid. 2014-15 is the second year of the revised pupil unit weightings. Keep in mind the district's enrollment history tends to decline from October 1st to June 1st. Therefore, slightly more conservative numbers will be used in the January financial forecast.

Attachments:

Attachment 1: Enrollment Nov14