

**School Board Meeting:**

November 26, 2012

**Subject:**

Enrollment Projection Report

**Presenter:**

Gary Kawlewski

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**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 for the 2009-2010 school year and has now basically stayed at that same level. For 2012-13, Buffalo-Hanover-Montrose's K-12 enrollment increased by 8 students from the previous year. The five-year growth average is decreasing and is currently at 18 students/year or .33%. Total enrollment growth for the past five years is 91 students or 1.6%.

The enrollment as of October 1<sup>st</sup> was 5,742\*. The asterisk by the number means that this number will be different from the official October 1<sup>st</sup> 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 1<sup>st</sup> 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 306 students through open enrollment and tuition for the 2011-2012 school year. The net loss was 268 for the previous year. Tuition students are resident students but attend another district through a tuition agreement 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.

The district lost the largest portion of open enrollment students to Rockford and Delano (-205) and gained the most open enrollment students from St. Michael-Albertville (+30). 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 1<sup>st</sup> to June 1<sup>st</sup>. Most of the enrollment drops happen 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 1<sup>st</sup> enrollment report, I suspect this trend of decreasing student enrollment during the year will continue.

### Review of 2012-13 Enrollment Projection

The 2012-13 enrollment projection underestimated the enrollment of 5,739 by 3 students. As I mentioned earlier, the October 1<sup>st</sup> counts (5,742) adjust down post-secondary and shared-time students to only include the instructional time at the school district

### 2013-14 Enrollment Projection

The district uses the SchoolFinances.Com enrollment projection model. In projecting enrollments, there are three different data sets available: October 1<sup>st</sup> 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 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 1<sup>st</sup> 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 1<sup>st</sup>.

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 2008-2011. Just looking at the housing market, a lot of those births could have moved out since that time. 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, 2012, we are at 19.8%. I tried to project what kindergarten enrollment numbers would look like if I used 19.6% of the Wright County resident births enrolling at our district for the next four years. This number is slightly more conservative than the current rate for 2012. In the past, we didn't have this option available in the model and so would have to select a method that would reflect that pattern. For 2012-13, our kindergarten numbers were a little below the projection due to the options available in the model. I am hoping that our district-developed 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 year's 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 prior year, 7-year weighted average, merged, 4-year weighted average, and 4-year numeric average. From the five methods, I selected the merged method. That model predicts a total K-12 enrollment of 5,759 students for 2013-14, an increase of 17 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.

The future enrollment projections are portrayed by grade grouping. Since BHM schools is (or was) a growing district, 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 year 2014-15 and beyond. Should another middle school be built, additional space be added, or should we reconfigure the grade levels at existing buildings? There appears to be adequate time before coming to any decision.

Finally, the weighted average daily membership (WADM) projection shows a slight decline in student aid. Keep in mind, the district's enrollment history tends to decline from October 1<sup>st</sup> to June 1<sup>st</sup>. Therefore, slightly more conservative numbers will be used in the January financial forecast.

Attachments:

Attachment 1: Enrollment 2 Nov12