

School Board Meeting:

November 28, 2022

Subject:

Enrollment Projection Report

Presenter:

**Ryan L. Tangen, Director
Finance and Operations**

SUGGESTED SCHOOL BOARD ACTION:

For Board Review Only.

DESCRIPTION:

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

Buffalo-Hanover-Montrose's 2022-23 school year's K-12 enrollment went down 57 students from the previous year. The five-year growth average is decreasing and is currently at -90 students/year. Over the five-year period, total enrollment has a net decline of 450 or 7.90%.

The enrollment as of October 1, 2022 was 5,222. This number will be different from the official October 1, 2022 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 as much as 20-30 students higher.

Open Enrollment History

The district historically loses more students than it gains in open enrollment. The downward trend continues, and the district experienced a net loss of 733 students through open enrollment and tuition for the 2021-22 school year. The total is 66 higher than the prior year's net of 667. Tuition students are resident students but attend another district through tuition agreements such as Wright Technical Center, MAWSECO, or the SW Metro Coop. The district receives the general aid for 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 (net -302) and gained the most open enrollment students from Maple Lake and Howard Lake Waverly Winsted (net +39).

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 and is primarily due to increased mobility and the decision to graduate early. The change for the 2021-22 school year in grades K-8 had a net increase of 36 and grades 9-12 experienced a net loss of 46 for a K-12 net loss of 10.

Review of 2022-23 Enrollment Projection

The 2022-23 enrollment projection of 5,219 was lower than the October 1st count of 5,222. It is important to note that the monthly count is adjusted down for post-secondary and shared time students to only include the instructional time at the school district. We are down 22 students in kindergarten, up 14 students in grades 1-5, up 27 students in grades 6-8, and down 16 students in grades 9-12 for a total difference of 3.

2023-24 Enrollment Projection

The district uses two different enrollment projection models. 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 the 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. Data from the end of year ADM history was used for the projection.

The next step is to project kindergarten students. There are five different methods from which to pick. They are as follows: hold constant, linear projection, county births, births by zip code, and a district-determined method. In reviewing the Wright County resident births, the overall number of recorded births, which predicts future kindergarten enrollment, rebounds in 2020 and 2021. Kindergarten enrollment for the next five years is based on Wright County resident births from 2017-2022 with 2021 being the most recent data available. In our growing years, we have enrolled 26-33% of the Wright County resident births. However, on October 1, 2022, we were at 20.12%. The average enrollment of county births was 20.30% over the last two years and 21.00% over the past five years. With the anticipation of the enrollment percentage returning to a higher pre-pandemic level over the next five years, the four-year average of 20.5% of enrollment of county births was used for kindergarten enrollment.

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

Cohort survival method (Ratio Prior Year) 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 twenty-four different variations of the described methods for comparisons. Additionally, the projection model has a feature that allows you to compare the current year's actual enrollment with last year's projection and determines which one of the variations would have best matched the current year's actual results. The weighted ratio 7-year model was one of the top four. Based on this information, the projection was modeled using the weighted cohort survival method options. The summary includes five cohort survival methods that gave us the high, the low, the mid-point, and two models that picked points approximately equidistant from the midpoint model. The following five were selected for detailed analysis: weighted ratio 3 years, weighted ratio 4 years, weighted ratio 5 years, weighted ratio 6 years, and weighted ratio 7 years. From the five methods, the weighted ratio 7 years model was selected. Historically, the weighted ratio 5 years model has been used but the weighted ratio 7 years model will help offset anomalies or oddities based on Covid-19 pandemic factors. Using all of those factors, the model predicts a total K-12 enrollment of 5,125 students for 2023-24, a decrease of 97 students from this year. Some additional factors that were considered when selecting a method were the current housing market, economic conditions, Wright County births, open enrollment, and the addition of another private school option for students in 2022-23. We are seeing significantly lower single-family dwelling permits for 2022 than last year for Hanover, Montrose, and Buffalo.

The future enrollment projections are portrayed by grade grouping. Even though BHM schools has historically been a stable to growing district, we continue to look at school building capacities at a time where we are seeing lower enrollment:

BHS – 2,010

BCMS – 1,425

Elementary – 3,350

The building capacities listed are optimum capacities and can be stretched a little bit. The enrollment projections show that we will have remaining building capacity at all levels for the duration of the five-year projection.

Finally, the weighted average daily membership (WADM) projection shows a decline in student aid over the 5-year projection. 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.

ATTACHMENT(S):

- Enrollment Projection November 2022