## ENROLLMENT PROJECTION 2019-20

Independent School District 877 Buffalo-Hanover-Montrose

November 26, 2018

## Enrollment Projection Report

- Review of K-12 enrollment as of Oct. $1^{\text {st }}$
- Resident enrollment
- Open enrollment \& tuition
- Nonpublic enrollment
- Fall vs. spring enrollment
- Review 2018-19 enrollment projection
- 2019-20 enrollment projection



## Historical and 2019-20 Projected K-12 Enrollment as of Oct. $1^{\text {st }}$



## Historical and 2018-19 Projected K-12 Enrollment as of Oct. $1^{\text {st }}$



## Review of K-12 Enrollment as of Oct. $1^{\text {st }}$

- We are ahead of the projection for 2018-19 by 57 students.
- The five-year enrollment is a decline and currently averaging -9 students/year.
- Total enrollment decline for the past five years is -44 students or $-.77 \%$.

|  | 2014-15 | 2015-16 | 2016-17 | 2017-18 | 2018-19 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| K-12 <br> enrollment | 5,719 | 5,664 | 5,694 | 5,672 | 5,695 |
| Change over <br> prior year | -20 | -55 | 30 | -22 | +23 |
| \% change | $-.35 \%$ | $-.96 \%$ | $.53 \%$ | $-.39 \%$ | $.41 \%$ |

## Total Resident Students <br> Enrolled in ISD 877 as of June 30 ${ }^{\text {th }}$

- BHM's resident population and residents served population grew this past year. Residents served was at its highest point in the last five years but still shows a decline in percentage served vs total population.

|  | 2013-14 | 2014-15 | 2015-16 | 2016-17 | 2017-18 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Residents <br> served | 5,367 | 5,402 | 5,369 | 5,348 | 5,309 |
| Residents going <br> elsewhere | 768 | 810 | 837 | 902 | 931 |
| Total Residents | 6,135 | 6,212 | 6,206 | 6,250 | 6,240 |
| Change over <br> prior year | 54 | 77 | -6 | 44 | 10 |
| \% change | $.89 \%$ | $1.26 \%$ | $-.10 \%$ | $.71 \%$ | $-.16 \%$ |
| \% Served vs <br> Total <br> Population | $87.5 \%$ | $87.0 \%$ | $86.5 \%$ | $85.6 \%$ | $85.1 \%$ |

## Total Resident Students

## Enrolled in ISD 877 as of June 30 ${ }^{\text {th }}$



## Open Enrollment \& Tuition Net Gain/Loss as of June 30th



## 2017-18 Open Enrollment \& Tuition Gain/Loss by District as of June $30^{\text {th }}$

| District | In | Out | Net | Targeted Services, <br> Tuition, <br> Charter/Online <br> WTC - 29 <br> SW Metro - 24 <br> MAWSECO -9 <br> ISD 287-3 <br> MN Transitions - 26 <br> Jane Goodall -19 <br> Beacon Academy -12 <br> Houston (online) - $\mathbf{1 1}$ <br> Spectrum Charter -10 <br> Swan River Charter -10 <br> Parnassus Prep -9 |
| :---: | :---: | :---: | :---: | :---: |
| Rockford | 31 | -195 | -164 |  |
| Delano | 13 | -160 | -147 |  |
| Watertown-Mayer | 3 | -66 | -63 |  |
| Orono | 0 | -25 | -25 |  |
| Elk River | 23 | -42 | -19 |  |
| St. Michael-Albertville | 90 | -107 | -17 |  |
| Osseo | 9 | -25 | -16 |  |
| Becker | 4 | 0 | 4 |  |
| Anoka-Hennepin | 5 | -1 | 4 |  |
| Big Lake | 10 | -1 | 9 |  |
| Annandale | 17 | -5 | 12 |  |
| Howard Lake-Waverly-Winsted | 53 | -40 | 13 |  |
| Monticello | 45 | -20 | 25 |  |
| Maple Lake | 68 | -37 | 31 |  |

## 2017-18 Open Enrollment \& Tuition Gain/Loss by District as of June $30^{\text {th }}$

## 2017-18 Open Enrollment \& Tuition by Grade as of June $30^{\text {th }}$



## 2018-19 Resident Open Enrolled to Other Districts



## Nonpublic History

- Two nonpublic schools in the BHM district: St. Francis Xavier in Buffalo and Salem Lutheran in Greenfield.
- Both schools serve students from kindergarten through $8^{\text {th }}$ grade.
- Home school totals not graphed below were 205 on 10/1/16, 184 on $10 / 1 / 17$, and 206 on 10/1/18

|  | $09-10$ | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ | $16-17$ | $17-18$ | $18-19$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Salem | 70 | 71 | 80 | 86 | 86 | 88 | 84 | 89 | 91 | 87 |
| St. Francis | 209 | 231 | 223 | 226 | 220 | 212 | 205 | 173 | 176 | 176 |
| Total | 279 | 302 | 303 | 312 | 306 | 300 | 289 | 262 | 267 | 263 |
| \# Change | 4 | 23 | 1 | 9 | -6 | -6 | -11 | -27 | 5 | -4 |
| \% Change | $1.5 \%$ | $8.2 \%$ | $.33 \%$ | $2.97 \%$ | $-.92 \%$ | $-1.96 \%$ | $-3.67 \%$ | $-9.34 \%$ | $1.91 \%$ | $-1.50 \%$ |

## Nonpublic History



## 2017-18 Enrollment Fall vs. Spring

- Historically, the district's K-12 enrollment decreases from October 1 to June 1.
- Most of the enrollment drops happen in grades 9-12.

|  | Oct. $^{\text {1st }}, \mathbf{2 0 1 7}$ | Jun. $\mathbf{1 s t}^{\text {st }}, \mathbf{2 0 1 8}$ | Net |
| :--- | :---: | :---: | :---: |
| K | 413 | 414 | 1 |
| Gr. 1-5 | 2,048 | 2,062 | 14 |
| Gr. 6-8 | 1,354 | 1,343 | -11 |
| Gr. 9-12 | 1,857 | 1,750 | -107 |
| Total | 5,672 | 5,569 | -103 |

## Historical Enrollment Fall vs. Spring

- The district had one flat year (2006-07) of enrollment growth. All other years have declined during the year.

|  | K | Gr. 1-5 | Gr. 6-8 | Gr. 9-12 | Net |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 7 - 0 8}$ | 9 | 3 | 3 | -55 | -40 |
| $\mathbf{2 0 0 8 - 0 9}$ | 0 | 0 | -24 | -84 | -108 |
| $\mathbf{2 0 0 9 - 1 0}$ | -2 | 14 | -17 | -58 | -63 |
| $\mathbf{2 0 1 0 - 1 1}$ | 1 | -11 | -10 | -63 | -83 |
| $\mathbf{2 0 1 1 - 1 2}$ | -10 | -11 | -14 | -94 | -129 |
| $\mathbf{2 0 1 2 - 1 3}$ | -2 | -14 | 1 | -86 | -101 |
| $\mathbf{2 0 1 3 - 1 4}$ | 2 | -7 | 2 | -127 | -130 |
| $\mathbf{2 0 1 4 - 1 5}$ | -10 | 6 | -8 | -89 | -101 |
| $\mathbf{2 0 1 5 - 1 6}$ | 7 | 39 | -1 | -99 | -54 |
| $\mathbf{2 0 1 6 - 1 7}$ | 3 | -16 | 10 | -110 | -113 |
| $\mathbf{2 0 1 7 - 1 8}$ | 1 | 14 | -11 | -107 | -103 |

## Review of 2018-19 Enrollment Projection

- Last year's enrollment projection was under-estimated by 57 students.
- Our internal monthly enrollment reports adjust down post-secondary and shared time students.
- The official Oct. $1^{\text {st }}$ MARSS submission by MDE will report a higher enrollment with post-secondary and shared time students.

|  | 2018-19 <br> Projection | $\begin{gathered} \text { 2018-19 } \\ \text { Oct. } 1^{\text {st }} \end{gathered}$ | Difference |
| :---: | :---: | :---: | :---: |
| K | 370 | 391 | 21 |
| Gr. 1-5 | 2,039 | 2,062 | 23 |
| Gr. 6-8 | 1,376 | 1,381 | 5 |
| Gr. 9-12 | 1,853 | 1,861 | 8 |
| Total | 5,638 | 5,695 | 57 |

## Review of 2018-19

## Enrollment Projection by Grade



## Enrollment Projection Data

- The district uses the Schoolfinances.com enrollment projection model.
- The model allows schools to develop enrollment projections based on three different sets of data:
$\square$ October $1^{\text {st }}$ MARSS submission
$\square$ End of Year ADM is generally used for financial forecast
$\square$ District Data allows schools to enter enrollment history taken at any time, resident ADM or any other historical data by grade



## Kindergarten Projection Methods

- Hold constant maintains the 2018-19 kindergarten level.
- Linear projection is a straightforward mathematical projection based on nothing more than the past five years of data.
- County birth method uses the total number of live births in Wright County and examines what percentage of those births enroll in kindergarten. The projection is based on the average percentage of the last four years.
- Zip code method examines the zip codes in the district and uses a linear projection of live births on the last four years of data and computes the projected enrollment based on the lowest, average, and highest ratios.
- District-determined method examines county birth rates in Wright County and compares that to actual student enrollment numbers in the District and projects that percentage for the next five years.


## Kindergarten Projection Methods

| Birth <br> Year | Kdgn <br> Enroll <br> Year | Wright Co. <br> Births | Actual <br> Kdgn <br> Enrollment | \% of Wright <br> Co. Births <br> Enrolled |
| :---: | :---: | :---: | :---: | :---: |
| 2007 | 2012 | 2,183 | 433 | $19.8 \%$ |
| 2008 | 2013 | 2,095 | 378 | $18.0 \%$ |
| 2009 | 2014 | 1,943 | 417 | $21.5 \%^{\prime}$ |
| 2010 | 2015 | 1,900 | 370 | $19.5 \%$ |
| 2011 | 2016 | 1861 | 358 | $19.2 \%$ |
| 2012 | 2017 | 1830 | 413 | $22.6 \%^{\prime}$ |
| 2013 | 2018 | 1787 | 391 | $21.9 \%^{*}$ |
| 2014 | 2019 | 1799 | $399^{*}$ | $22.2 \%^{*}$ |
| 2015 | 2020 | 1764 | $392^{*}$ | $22.2 \%^{*}$ |
| 2016 | 2021 | 1785 | $396^{*}$ | $22.2 \%^{*}$ |
| 2017 | 2022 | 1758 | $390^{*}$ | $22.2 \%^{*}$ |

* Projected K enrollment based on County births-2-year average


## Kindergarten Projection Methods

- Using Oct. $1^{\text {st }}$ district data

|  | $14-$ <br> 15 | $15-$ <br> 16 | $16-$ <br> 17 | $17-$ <br> 18 | $18-$ <br> 19 | $19-$ <br> $\mathbf{2 0}$ | $\mathbf{2 0}-$ <br> $\mathbf{2 1}$ | $\mathbf{2 1 -}$ <br> $\mathbf{2 2}$ | $\mathbf{2 2 -}$ <br> $\mathbf{2 3}$ | $23-$ <br> $\mathbf{2 4}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual <br> enrollment | 417 | 370 | 358 | 413 | 391 |  |  |  |  |  |
| Hold constant |  |  |  |  | 391 | 391 | 391 | 391 | 391 |  |
| Linear <br> projection |  |  |  |  | 377 | 372 | 367 | 362 | 358 |  |
| Wright Co. <br> Ave. births |  |  |  |  |  | 340 | 318 | 319 | 322 | 318 |
| Zip code <br> method - Low |  |  |  |  |  | 399 | 392 | 396 | 390 | 388 |
| District <br> Determined <br> Method |  |  |  |  |  |  |  |  |  |  |

## Enrollment Projection Methods

- After the kindergarten enrollment projection is complete, the overall K-12 enrollment is determined by a variety of methods:
$\square$ Cohort Survival Method
$\square$ Weighted Cohort Survival Method
$\square$ Numerical Survival Method
$\square$ Weighted Numerical Survival Method
$\square$ Merged Method


## Projection Methods Comparison

- Using Oct. $1^{\text {st }}$ district data, eighteen different variations were examined.
- The following five were selected for detailed analysis:

|  | $\mathbf{1 6 - 1 7}$ | $\mathbf{1 7 - 1 8}$ | $\mathbf{1 8 - 1 9}$ | $\mathbf{1 9 - 2 0}$ | $\mathbf{2 0 - 2 1}$ | $\mathbf{2 1 - 2 2}$ | $\mathbf{2 2 - 2 3}$ | $\mathbf{2 3 - 2 4}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wt Ratio 3 <br> Years | 5,694 | 5,672 | 5,695 | 5,657 | 5,666 | 5,662 | 5,668 | 5,639 |
| Wt Ratio 4 <br> Years | 5,694 | 5,672 | 5,695 | 5,653 | 5,659 | 5,652 | 5,653 | 5,621 |
| Wt Ratio 2 <br> Years | 5,694 | 5,672 | 5,695 | 5,653 | 5,654 | 5,645 | 5,649 | 5,617 |
| Wt Ratio 5 <br> Years | 5,694 | 5,672 | 5,695 | 5,647 | 5,651 | 5,640 | 5,637 | 5,601 |
| Wt Ratio 6 <br> Years | 5,694 | 5,672 | 5,695 | 5,645 | 5,646 | 5,632 | 5,626 | 5,585 |
| Max <br> Difference |  |  | 12 | 20 | 30 | 42 | 54 |  |

## Projection Methods Comparison



## 2019-20 Enrollment Projection

- Factors considered: housing market, economic conditions, Wright County births, and open enrollment
$\square 452018$ Buffalo single family dwelling permits issued - 41 for 2017
$\square 102018$ Hanover single family dwelling permits issued - 6 for 2017
$\square 2018$ Montrose not available - 39 for 2017
■ 2-year kindergarten attendance average 22.2\%
- Weighted ratio 2 years

■ K-12 Enrollment 5,653

- Decrease of 42 students or $0.7 \%$


## 2019-20 Enrollment Projection



## 2019-20 Enrollment Projection by Grade Groupings

- With future enrollments, need to consider building capacity:
$\square$ BHS $-1,935$, PHX -64 and PRIDE -25
$\square$ BCMS - 1,425
$\square$ Elementary - 3,300

|  | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ | $\mathbf{2 0 2 1 - 2 2}$ | $\mathbf{2 0 2 2 - 2 3}$ | $\mathbf{2 0 2 3 - 2 4}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 391 | 399 | 392 | 396 | 390 | 388 |
| Gr. 1-5 | 2,062 | 2,051 | 2,028 | 2,062 | 2,104 | 2,077 |
| Gr. 6-8 | 1,381 | 1,362 | 1,393 | 1,330 | 1,281 | 1,277 |
| Gr. 9-12 | 1,861 | 1,841 | 1,842 | 1,857 | 1,873 | 1,875 |
| Total | 5,695 | 5,653 | 5,655 | 5,645 | 5,648 | 5,617 |
|  | 23 | -42 | 2 | -10 | 3 | -31 |
|  | $.41 \%$ | $-.73 \%$ | $-.04 \%$ | $-.18 \%$ | $-.05 \%$ | $-.55 \%$ |

## 2019-20 Enrollment Projection by Grade Groupings



## 2019-20 Enrollment Projection by Grade

|  | $2018-19$ | $2019-20$ | $2020-21$ | $2021-22$ | $2022-2023$ | $2023-24$ |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| K | 391 | 399 | 392 | 396 | 390 | 388 |
| 1 | 432 | 407 | 415 | 408 | 412 | 406 |
| 2 | 371 | 431 | 406 | 414 | 407 | 411 |
| 3 | 378 | 375 | 436 | 410 | 419 | 411 |
| 4 | 446 | 384 | 381 | 442 | 416 | 425 |
| 5 | 435 | 454 | 391 | 388 | 450 | 424 |
| 6 | 466 | 449 | 469 | 404 | 401 | 465 |
| 7 | 443 | 470 | 453 | 473 | 407 | 404 |
| 8 | 472 | 443 | 470 | 453 | 474 | 407 |
| 9 | 465 | 502 | 472 | 501 | 483 | 504 |
| 10 | 478 | 459 | 496 | 465 | 494 | 476 |
| 11 | 436 | 449 | 431 | 465 | 437 | 464 |
| 12 | 482 | 431 | 444 | 426 | 460 | 432 |
| Total | 5,695 | 5,653 | 5,654 | 5,645 | 5,649 | 5,617 |

## 2018-19 Actual vs. 2019-20

## Enrollment Projection by Grade



## 2019-20 Enrollment Change by Grade



## WADM Report

- The weighted average daily membership (WADM) projection shows a decline in student aid.
- Keep in mind the district's enrollment history also tends to decline from Oct. $1^{\text {st }}$ to June $1^{\text {st. }}$.

|  | 2019-20 |  | 2020-21 |  | 2021-22 |  | $\mathbf{2 0 2 2 - 2 3}$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
|  | Enroll | WADM | Enroll | WADM | Enroll | WADM | Enroll | WADM |
| HK | 53 | 53 | 52 | 52 | 52 | 52 | 52 | 52 |
| K | 399 | 399 | 392 | 392 | 396 | 396 | 390 | 390 |
| Gr. 1-3 | 1,213 | 1,213 | 1,257 | 1,257 | 1,232 | 1,232 | 1,238 | 1,238 |
| Gr. 4-6 | 1,287 | 1,287 | 1,241 | 1,241 | 1,234 | 1,234 | 1,267 | 1,267 |
| Gr. 7-8 | 913 | 1,096 | 923 | 1,108 | 927 | 1,112 | 881 | 1,057 |
| Gr. 9-12 | 1,841 | 2,209 | 1,842 | 2,210 | 1,857 | 2,228 | 1,873 | 2,248 |
| ECSE | 99 | 99 | 97 | 97 | 98 | 98 | 97 | 97 |
| MCPU |  | 12 |  | 0 |  | 1 |  | 2 |
| Total | 5,805 | 6,368 | 5,804 | 6,357 | 5,796 | 6,354 | 5,797 | 6,350 |

## Conclusion

- Uncertain economic factors make enrollment projections difficult.
- BHM's enrollment is projected to decline slightly over the next three to five years.


## 5,653



