## ENROLLMENT PROJECTION 2016-17

## Independent School District 877

 Buffalo-Hanover-MontroseNovember 23, 2015

BHAL | BUFFALO |
| :--- |
| HANOVER |
| MONTROSE |
| SCHOOLS |

Making a Difference!

## 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 2015-16 enrollment projection
- 2016-17 enrollment projection



## Historical and 2016-17 Projected K-12 Enrollment as of Oct. $1^{\text {st }}$



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

■ The school district growth trend came to a halt in the 2009-10 school year and we are behind of the projection for 2015-16.
■ The five-year enrollment is a decline and currently averaging -19.2 students/year.
■ Total enrollment decline for the past five years is -96 students or $-1.67 \%$.

|  | 2011-12 | 2012-13 | 2013-14 | 2014-15 | 2015-16 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| K-12 <br> enrollment | 5,734 | 5,742 | 5,739 | 5,719 | 5,664 |
| Change over <br> prior year | -26 | 8 | -3 | -20 | -55 |
| \% change | $-.45 \%$ | $.14 \%$ | $-.05 \%$ | $-.35 \%$ | $-.96 \%$ |

## 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 \% served vs total population.

|  | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 2014-15 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Residents <br> served | 5,394 | 5,358 | 5,380 | 5,367 | 5,402 |
| Residents going <br> elsewhere | 607 | 645 | 701 | 768 | 810 |
| Total Residents | 6,001 | 6,003 | 6,081 | 6,135 | 6,212 |
| Change over <br> prior year | 82 | 2 | 78 | 54 | 77 |
| \% change | $1.39 \%$ | $.03 \%$ | $1.3 \%$ | $.89 \%$ | $1.26 \%$ |
| \% Served vs <br> Total <br> Population | $89.9 \%$ | $89.3 \%$ | $88.5 \%$ | $87.5 \%$ | $87.0 \%$ |

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



## Open Enrollment \& Tuition Net Gain/Loss as of June $30^{\text {th }}$




## 2014-15 Open Enrollment \& Tuition Gain/Loss by District as of June $30^{\text {th }}$

| District | In | Out | Net | Other |
| :---: | :---: | :---: | :---: | :---: |
| Rockford | 30 | -174 | -144 |  |
| Delano | 10 | -143 | -133 |  |
| Watertown-Mayer | 3 | -52 | -49 |  |
| Osseo | 4 | -33 | -29 |  |
| Orono | 0 | -18 | -18 | Targeted Services, |
| Elk River | 22 | -31 | -9 | Tuition, and Online |
| Wayzata | 1 | -9 | -8 | WTC-46 |
| Anoka-Hennepin | 6 | -2 | 4 | MAWSECO-13 |
| Big Lake | 7 | -2 | 5 | Mn Transitions -15 |
| Annandale | 10 | -4 | 6 | Swan River Charter -10 |
| Monticello | 33 | -26 | 7 | Houston (online) -11 |
| Howard Lake-Waverly-Winsted | 44 | -33 | 11 | Beacon Academy -9 |
| Maple Lake | 50 | -38 | 12 |  |
| St. Michael-Albertville | 88 | -76 | 12 |  |

## 2014-15 Open Enrollment \& Tuition Gain/Loss by District as of June $30^{\text {th }}$




## 2014-15 Open Enrollment \& Tuition by Grade as of June $30^{\text {th }}$



## 2015-16 Resident Open Enrolled to Other Districts

## Buffalo Hanover Montrose Schools



## 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.

|  | $06-07$ | $07-08$ | $08-09$ | $09-10$ | $10-11$ | $11-12$ | $12-13$ | $13-14$ | $14-15$ | $15-16$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Salem | 74 | 70 | 77 | 70 | 71 | 80 | 86 | 86 | 88 | 84 |
| St. Francis | 164 | 181 | 198 | 209 | 231 | 223 | 226 | 220 | 212 | 205 |
| Total | 238 | 251 | 275 | 279 | 302 | 303 | 312 | 306 | 300 | 289 |
| $\#$ Change | 17 | 13 | 24 | 4 | 23 | 1 | 9 | -6 | -6 | -11 |
| \% Change | $7.7 \%$ | $5.5 \%$ | $9.6 \%$ | $1.5 \%$ | $8.2 \%$ | $.33 \%$ | $2.97 \%$ | $-.92 \%$ | $-1.96 \%$ | $-3.67 \%$ |

## Nonpublic History




## 2014-15 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. 1 $^{\text {st }}, \mathbf{2 0 1 4}$ | Jun. 1 |  |
| :--- | :---: | :---: | :---: |
| st |  |  |  |
|  | $\mathbf{2 0 1 5}$ | Net |  |
| K | 417 | 407 | -10 |
| Gr. 1-5 | 2,126 | 2,132 | 6 |
| Gr. 6-8 | 1,398 | 1,390 | -8 |
| Gr. 9-12 | 1,778 | 1,689 | -89 |
| Total | 5,719 | 5,609 | -101 |

## 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 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 4 - 0 5}$ | -1 | 0 | 3 | -55 | -53 |
| $\mathbf{2 0 0 5 - 0 6}$ | 4 | -1 | -9 | -56 | -62 |
| $\mathbf{2 0 0 6 - 0 7}$ | -2 | -25 | 10 | -33 | 0 |
| $\mathbf{2 0 0 7 - 0 8}$ | 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 |

## Review of 2015-16 Enrollment Projection

■ Last year's enrollment projection was over-estimated by 25 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.
$\left.\begin{array}{|l|c|c|c|}\hline & \begin{array}{c}\text { 2015-16 } \\ \text { Projection }\end{array} & \begin{array}{c}\text { 2015-16 } \\ \text { Oct. 1 }\end{array} \\ \hline \text { Kt }\end{array}\right]$ Difference

## Review of 2015-16

## 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 2015-16 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 |
| :---: | :---: | :---: | :---: | :---: |
| 2004 | 2009 | 1,888 | 434 | $23.0 \%$ |
| 2005 | 2010 | 2,023 | 455 | $22.5 \%$ |
| 2006 | 2011 | 2,152 | 417 | $19.4 \%$ |
| 2007 | 2012 | 2,183 | 433 | $19.8 \%$ |
| 2008 | 2013 | 2,095 | 378 | $18.0 \%$ |
| 2009 | 2014 | 1,943 | 417 | $21.5 \%$ |
| 2010 | 2015 | 1,900 | 370 | $19.5 \%^{\prime}$ |
| 2011 | 2016 | 1861 | $367^{*}$ | $19.7 \%^{*}$ |
| 2012 | 2017 | 1830 | $361^{*}$ | $19.7 \%^{*}$ |
| 2013 | 2018 | 1787 | $352^{*}$ | $19.7 \%^{*}$ |
| 2014 | 2019 | 1799 | $354^{*}$ | $19.7 \%^{*}$ |

* Projected K enrollment based on County births


## Kindergarten Projection Methods

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

|  | $11-$ <br> 12 | $12-$ <br> 13 | $13-$ <br> 14 | $14-$ <br> 15 | $15-$ <br> 16 | $16-$ <br> 17 | $17-$ <br> 18 | $18-$ <br> 19 | $19-$ <br> 20 | $20-$ <br> 21 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual <br> enrollment | 417 | 433 | 387 | 417 | 370 |  |  |  |  |  |
| Hold <br> constant |  |  |  |  |  | 370 | 370 | 370 | 370 | 370 |
| Linear <br> projection |  |  |  |  | 374 | 363 | 352 | 342 | 331 |  |
| Wright Co. <br> Ave. births |  |  |  |  | 371 | 365 | 357 | 356 | 349 |  |
| Zip code <br> method - Low |  |  |  |  | 355 | 343 | 324 | 344 | 342 |  |
| 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 MethodNumerical Survival MethodWeighted Numerical Survival MethodMerged Method


## Projection Methods Comparison

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

|  | $\mathbf{1 3 - 1 4}$ | $\mathbf{1 4 - 1 5}$ | $\mathbf{1 5 - 1 6}$ | $\mathbf{1 6 - 1 7}$ | $\mathbf{1 7 - 1 8}$ | $\mathbf{1 8 - 1 9}$ | $\mathbf{1 9 - 2 0}$ | $\mathbf{2 0 - 2 1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 4 Yr Wt N- <br> Avg | 5,739 | 5,719 | 5,664 | 5,627 | 5,546 | 5,495 | 5390 | 5,325 |
| Wt Ratio 5 <br> Years | 5,739 | 5,719 | 5,664 | 5,630 | 5,544 | 5,485 | 5,376 | 5,304 |
| Merged | 5,739 | 5,719 | 5,664 | 5,624 | 5,535 | 5,473 | 5,360 | 5,291 |
| Ratio 2 ${ }^{\text {nd } \text { Yr. }}$ | 5,739 | 5,719 | 5,664 | 5,616 | 5,522 | 5,454 | 5,340 | 5,268 |
| Ratio Pr. Yr | 5,739 | 5,719 | 5,664 | 5,615 | 5,516 | 5,441 | 5,321 | 5,251 |
| Max <br> Difference |  |  |  | 15 | 30 | 54 | 68 | 74 |

## Projection Methods Comparison



## 2016-17 Enrollment Projection

■ Factors considered: housing market, economic conditions, Wright County births, open enrollment, budget reductions, and new programs (ADED K, Quest, STEM)

- Merged Method

■ K-12 Enrollment 5,624
■ Decrease of 40 students or $0.71 \%$

## 2016-17 Enrollment Projection



## 2016-17 Enrollment Projection by Grade Groupings

- With future enrollments, need to consider building capacity:
$\square$ BHS - 1,935, PHX - 64 and PRIDE - 25
$\square$ BCMS - 1,375
$\square$ Elementary - 3,200

|  | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8 - 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0 - 2 1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 370 | 367 | 361 | 352 | 354 | 357 |
| Gr. 1-5 | 2,136 | 2,063 | 2,017 | 1,942 | 1,891 | 1,831 |
| Gr. 6-8 | 1,330 | 1,347 | 1,308 | 1,331 | 1,291 | 1,292 |
| Gr. 9-12 | 1,828 | 1,847 | 1,848 | 1,848 | 1,824 | 1,811 |
| Total | 5,664 | 5,624 | 5,534 | 5,473 | 5,360 | 5,291 |
|  |  | -40 | -90 | -61 | -113 | -69 |
|  |  | $-.71 \%$ | $-1.60 \%$ | $-1.10 \%$ | $-2.06 \%$ | $-1.29 \%$ |

## 2016-17 Enrollment Projection by Grade Groupings



## 2016-17 Enrollment Projection by Grade

|  | $\mathbf{2 0 1 5 - 1 6}$ | $\mathbf{2 0 1 6 - 1 7}$ | $\mathbf{2 0 1 7 - 1 8}$ | $\mathbf{2 0 1 8} \mathbf{- 1 9}$ | $\mathbf{2 0 1 9 - 2 0}$ | $\mathbf{2 0 2 0} \mathbf{- 2 1}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{K}$ | 370 | 367 | 361 | 352 | 354 | 357 |
| $\mathbf{1}$ | 408 | 366 | 364 | 358 | 349 | 351 |
| $\mathbf{2}$ | 407 | 416 | 373 | 371 | 365 | 356 |
| $\mathbf{3}$ | 445 | 411 | 420 | 378 | 375 | 369 |
| $\mathbf{4}$ | 421 | 446 | 412 | 421 | 378 | 375 |
| $\mathbf{5}$ | 455 | 424 | 448 | 414 | 424 | 380 |
| $\mathbf{6}$ | 427 | 456 | 426 | 450 | 417 | 426 |
| $\mathbf{7}$ | 463 | 425 | 455 | 424 | 448 | 415 |
| $\mathbf{8}$ | 440 | 466 | 427 | 457 | 426 | 451 |
| $\mathbf{9}$ | 505 | 462 | 489 | 450 | 480 | 449 |
| $\mathbf{1 0}$ | 451 | 507 | 464 | 491 | 452 | 483 |
| $\mathbf{1 1}$ | 468 | 429 | 484 | 442 | 468 | 430 |
| $\mathbf{1 2}$ | 404 | 449 | 411 | 465 | 424 | 449 |
| Total | 5,664 | 5,624 | 5,534 | 5,473 | 5,360 | 5,291 |

## 2015-16 Actual vs. 2016-17

## Enrollment Projection by Grade



## 2016-17 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 $1^{\text {st }}$.

|  | 2016-17 |  | 2017-18 |  | 2018-19 |  | 2019-20 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enroll | WADM | Enroll | WADM | Enroll | WADM | Enroll | WADM |
| HK | 48 | 48 | 48 | 48 | 48 | 48 | 48 | 48 |
| K | 367 | 367 | 361 | 361 | 352 | 352 | 354 | 354 |
| Gr. 1-3 | 1,193 | 1,193 | 1,157 | 1,157 | 1,107 | 1,107 | 1,089 | 1,089 |
| Gr. 4-6 | 1,326 | 1,326 | 1,286 | 1,286 | 1,285 | 1,285 | 1,219 | 1,219 |
| Gr. 7-8 | 891 | 1,069 | 882 | 1,058 | 881 | 1,057 | 874 | 1,049 |
| Gr. 9-12 | 1,847 | 2,216 | 1,848 | 2,218 | 1,848 | 2,218 | 1,824 | 2,189 |
| ECSE | 104 | 404 | 101 | 101 | 98 | 98 | 98 | 98 |
| M.C.P.U |  | 11 |  | 26 |  | 19 |  | 33 |
| Total | 5,776 | 6,334 | 5,683 | 6,255 | 5,619 | 6,184 | 5,506 | 6,079 |

## Conclusion

■ Uncertain economic factors make enrollment projections difficult.

- BHM's enrollment is projected to decline over the next three to five years.


