## ENROLLMENT PROJECTION

Independent School District 877 Buffalo-Hanover-Montrose

Tina Burkholder, Controller November 22, 2010

BHM | BUFFALO |
| :--- |
| HANOVER |
| MONTROSE |
| SCHOOLS |

Making a Difference!

## Enrollment Projection Report

- Review of K-12 enrollment as of Oct. $1^{\text {st }}$
- Resident enrollment history

- Open enrollment \& tuition history
- Nonpublic enrollment
- Fall vs. spring enrollment
- Review 2010-11 enrollment projection
- 2011-12 enrollment projection



## Historical and 2011-12 Projected K-12 Enrollment as of Oct. $1^{\text {st }}$



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

- The school district growth trend came to a halt in the 2009-10 school year and basically recovered some of what we lost the year before for 2010-11.
- The five-year growth average is decreasing and currently at 74 students/year or $1.32 \%$.
- Total enrollment growth for the past five years is 370 students or $4.27 \%$.

|  | 2006-07 | 2007-08 | 2008-09 | 2009-10 | 2010-11 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| K-12 <br> enrollment | 5,524 | 5,651 | 5,772 | 5,740 | 5,760 |
| Change over <br> prior year | 134 | 127 | 121 | -32 | 20 |
| \% change | $2.49 \%$ | $2.30 \%$ | $2.14 \%$ | $-0.55 \%$ | $0.35 \%$ |

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

- BHM's resident population displays similar trends as the school district's enrollment

|  | 2005-06 | 2006-07 | 2007-08 | 2008-09 | 2009-10 |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Residents <br> served | 5,073 | 5,239 | 5,301 | 5,396 | 5,369 |
| Residents going <br> elsewhere | 438 | 478 | 494 | 501 | 550 |
| Total Residents | 5,511 | 5,717 | 5,795 | 5,897 | 5,919 |
| Change over <br> pr yr | 76 | 206 | 78 | 102 | 22 |
| \% change | $1.4 \%$ | $3.7 \%$ | $1.4 \%$ | $1.8 \%$ | $0.4 \%$ |

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



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



## 2009-10 Open Enrollment \& Tuition Gain/Loss by District as of June $30^{\text {th }}$

| District | In | Out | Net |
| :--- | :---: | :---: | :---: |
| Delano | 10 | -92 | -82 |
| Rockford | 37 | -94 | -57 |
| Watertown-Mayer | 2 | -29 | -27 |
| Wayzata | 0 | -18 | -18 |
| Elk River | 19 | -31 | -12 |
| Orono | 0 | -6 | -6 |
| Osseo | 25 | -23 | 2 |
| Anoka-Hennepin | 12 | -4 | 8 |
| Howard Lake-Waverly-Winsted | 38 | -17 | 11 |
| Annandale | 16 | -1 | 15 |
| Maple Lake | 62 | -39 | 23 |
| Monticello | 39 | -12 | 27 |
| St. Michael-Albertville | 119 | -36 | 83 |

Other Tuition
WTC -30
MAWSECO -9
Mn Transitions - 11
Swan River Charter -14
Houston (online) -19

## 2009-10 Open Enrollment \& Tuition Gain/Loss by District as of June $30^{\text {th }}$



## 2009-10 Open Enrollment \& Tuition by Grade as of June $30^{\text {th }}$



## Nonpublic History

- Two nonpublic schools in the BHM district: St. Francis Xavier, Buffalo and Salem Lutheran, Loretto.
- Both schools serve students from kindergarten through $8^{\text {th }}$ grade.

|  | $01-02$ | $02-03$ | $03-04$ | $04-05$ | $05-06$ | $06-07$ | $07-08$ | $08-09$ | $09-10$ | $10-11$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| St. Francis | 158 | 160 | 150 | 144 | 141 | 164 | 181 | 198 | 209 | 231 |
| Salem | 83 | 87 | 84 | 78 | 80 | 74 | 70 | 77 | 70 | 71 |
| Total | $\mathbf{2 4 1}$ | 247 | $\mathbf{2 3 4}$ | $\mathbf{2 2 2}$ | $\mathbf{2 2 1}$ | $\mathbf{2 3 8}$ | $\mathbf{2 5 1}$ | 275 | 279 | 302 |
| \# Change | -29 | 6 | -13 | -12 | -1 | 17 | 13 | 24 | 4 | 23 |
| \% Change | $-10.7 \%$ | $2.5 \%$ | $-5.3 \%$ | $-5.1 \%$ | $-0.5 \%$ | $7.7 \%$ | $5.5 \%$ | $9.6 \%$ | $1.5 \%$ | $8.2 \%$ |

## Nonpublic History



## 2009-10 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 $^{\text {st }}, \mathbf{2 0 0 9}$ | Jun. 1 |  |
| :--- | :---: | :---: | :---: |
|  |  |  |  |
| st, $\mathbf{2 0 1 0}$ | Net |  |  |
| K | 434 | 432 | -2 |
| Gr. 1-5 | 2,231 | 2,245 | 14 |
| Gr. 6-8 | 1,262 | 1,245 | -17 |
| Gr. 9-12 | 1,813 | 1,755 | -58 |
| Total | 5,740 | 5,677 | -63 |

## Historical Enrollment Fall vs. Spring

- The district had a couple years of enrollment growth during the year (2000-01 \& 2001-02) and one flat year (2006-07).

|  | K | Gr. 1-5 | Gr. 6-8 | Gr. 9-12 | Net |
| :--- | :---: | :---: | :---: | :---: | :---: |
| $\mathbf{2 0 0 0 - 0 1}$ | 7 | 42 | 16 | -34 | 31 |
| $\mathbf{2 0 0 1 - 0 2}$ | 2 | 33 | 6 | -35 | 6 |
| $\mathbf{2 0 0 2 - 0 3}$ | -1 | 33 | 14 | -51 | -5 |
| $\mathbf{2 0 0 3 - 0 4}$ | 5 | -37 | -3 | -49 | -10 |
| $\mathbf{2 0 0 4 - 0 5}$ | -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 |

## Review of 2010-11 Enrollment Projection

- Last year's enrollment projection was over-estimated by 21 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.

|  | 2010-11 <br> Projection | 2010-11 <br> Oct. 1 | Difference |
| :--- | :---: | :---: | :---: |
| K | 434 | 455 | 21 |
| Gr. 1-5 | 2,232 | 2,202 | -30 |
| Gr. 6-8 | 1,286 | 1,277 | -9 |
| Gr. 9-12 | 1,829 | 1,826 | -3 |
| Total | 5,781 | 5,760 | -21 |

## Review of 2010-11

## 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 2010-11 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.


## Kindergarten Projection Methods

| Birth <br> Year | Kdgn <br> Enroll <br> Year | Wright <br> Co. Births | BHM Zip <br> Code Births | Actual <br> Kdgn <br> Enrollment | \% of Wright <br> Co. Births <br> Enrolled |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1999 | 2004 | 1,406 | 333 | 429 | $30.5 \%$ |
| 2000 | 2005 | 1,423 | 326 | 413 | $29.0 \%$ |
| 2001 | 2006 | 1,499 | 348 | 494 | $33.0 \%$ |
| 2002 | 2007 | 1,679 | 428 | 413 | $24.6 \%$ |
| 2003 | 2008 | 1,926 | 471 | 464 | $24.1 \%$ |
| 2004 | 2009 | 1,888 | 491 | 434 | $23.0 \%$ |
| 2005 | 2010 | 2,023 | 523 | 455 | $22.5 \%$ |
| 2006 | 2011 | 2,152 | 494 | $452^{*}$ | $21.0 \%^{*}$ |
| 2007 | 2012 | 2,183 | 553 | $458^{*}$ | $21.0 \%^{*}$ |
| 2008 | 2013 | 2,095 | 492 | $440^{*}$ | $21.0 \%^{*}$ |
| 2009 | 2014 | 1,943 | 463 | $408^{*}$ | $21.0 \%^{*}$ |

* Projected K enrollment based on County births


## Kindergarten Projection Methods

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

|  | $06-$ <br> 07 | $07-$ <br> 08 | $08-$ <br> 09 | $09-$ <br> 10 | $10-$ <br> 11 | $11-$ <br> 12 | $12-$ <br> 13 | $13-$ <br> 14 | $14-$ <br> 15 | $15-$ <br> 16 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Actual <br> enrollment | 495 | 413 | 464 | 434 | 455 |  |  |  |  |  |
| Hold constant |  |  |  |  |  | 456 | 459 | 462 | 465 | 468 |
| Linear <br> projection |  |  |  |  |  | 528 | 539 | 545 | 522 | 483 |
| Wright Co. <br> births |  |  |  |  |  | 438 | 464 | 446 | 411 | 416 |
| Zip code <br> method - L |  |  |  |  |  |  |  |  |  |  |

## 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, seventeen different variations were examined.
- The following five were selected for detailed analysis:

|  | $\mathbf{0 8 - 0 9}$ | $\mathbf{0 9 - 1 0}$ | $\mathbf{1 0 - 1 1}$ | $\mathbf{1 1 - 1 2}$ | $\mathbf{1 2 - 1 3}$ | $\mathbf{1 3 - 1 4}$ | $\mathbf{1 4 - 1 5}$ | $\mathbf{1 5 - 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wt Ratio 2 <br> Yrs | 5,772 | 5,740 | 5,760 | 5,717 | 5,695 | 5,698 | 5,664 | 5,644 |
| Wt Ratio 3 <br> Yrs | 5,772 | 5,740 | 5,760 | 5,736 | 5,732 | 5,753 | 5,738 | 5,734 |
| Wt Ratio 4 <br> Yrs | 5,772 | 5,740 | 5,760 | 5,754 | 5,770 | 5,808 | 5,807 | 5,818 |
| Wt Ratio 5 <br> Yrs | 5,772 | 5,740 | 5,760 | 5,764 | 5,789 | 5,836 | 5,843 | 5,862 |
| Merged | $\mathbf{5 , 7 7 2}$ | $\mathbf{5 , 7 4 0}$ | $\mathbf{5 , 7 6 0}$ | $\mathbf{5 , 7 4 8}$ | $\mathbf{5 , 7 6 3}$ | 5,798 | 5,794 | 5,801 |
| Max <br> Difference |  |  | 47 | 94 | 138 | 179 | 218 |  |

## Projection Methods Comparison



## 2011-12 Enrollment Projection

- Factors considered: housing market, economic conditions, Wright County births, open enrollment, and budget reductions
- Merged Method
- K-12 Enrollment 5,748
- Decrease of 12 students or $0.20 \%$


## 2011-12 Enrollment Projection



## 2011-12 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

|  | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 455 | $\mathbf{4 3 8}$ | 464 | 446 | 411 | 416 |
| Gr. 1-5 | 2,202 | $\mathbf{2 , 2 3 4}$ | 2,199 | 2,241 | 2,220 | 2,200 |
| Gr. 6-8 | 1,277 | $\mathbf{1 , 2 8 5}$ | 1,353 | 1,337 | 1,383 | 1,341 |
| Gr. 9-12 | 1,826 | $\mathbf{1 , 7 9 1}$ | 1,747 | 1,774 | 1,780 | 1,844 |
| Total | 5,760 | $\mathbf{5 , 7 4 8}$ | 5,763 | 5,798 | 5,794 | 5,801 |
|  |  | $\mathbf{- 1 2}$ | 15 | 35 | -4 | $\mathbf{7}$ |
|  | $\mathbf{0 . 2 0 \%}$ | $0.26 \%$ | $0.61 \%$ | $-0.06 \%$ | $0.12 \%$ |  |

## 2011-12 Enrollment Projection by Grade Groupings



## 2011-12 Enrollment Projection by Grade

|  | $\mathbf{2 0 1 0 - 1 1}$ | $\mathbf{2 0 1 1 - 1 2}$ | $\mathbf{2 0 1 2 - 1 3}$ | $\mathbf{2 0 1 3 - 1 4}$ | $\mathbf{2 0 1 4 - 1 5}$ | $\mathbf{2 0 1 5 - 1 6}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| K | 455 | $\mathbf{4 3 8}$ | 464 | 446 | 411 | 416 |
| $\mathbf{1}$ | 431 | $\mathbf{4 5 5}$ | 438 | 464 | 446 | 411 |
| $\mathbf{2}$ | 466 | $\mathbf{4 3 0}$ | 454 | 437 | 463 | 445 |
| $\mathbf{3}$ | 420 | 463 | 428 | 452 | 435 | 461 |
| $\mathbf{4}$ | 468 | $\mathbf{4 1 7}$ | 461 | 426 | 449 | 433 |
| $\mathbf{5}$ | 417 | 469 | 418 | 462 | 427 | 450 |
| $\mathbf{6}$ | 441 | $\mathbf{4 2 2}$ | 475 | 424 | 468 | 433 |
| $\mathbf{7}$ | 416 | $\mathbf{4 4 9}$ | 431 | 484 | 433 | 477 |
| $\mathbf{8}$ | 420 | $\mathbf{4 1 4}$ | 447 | 429 | 482 | 431 |
| $\mathbf{9}$ | 458 | 453 | 447 | 482 | 463 | 518 |
| $\mathbf{1 0}$ | 448 | $\mathbf{4 5 0}$ | 446 | 440 | 475 | 456 |
| $\mathbf{1 1}$ | 467 | $\mathbf{4 3 0}$ | 433 | 428 | 422 | 456 |
| $\mathbf{1 2}$ | 453 | $\mathbf{4 5 8}$ | 421 | 424 | 420 | 414 |
| Total | 5,760 | $\mathbf{5 , 7 4 8}$ | 5,763 | 5,798 | 5,794 | 5,801 |

## 2010-11 \& 2011-12 Enrollment Projection by Grade



## 2011-12 Enrollment Change by Grade



## WADM Report

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

|  | 2011-12 |  | 2012-13 |  | 2013-14 |  | 2014-15 |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Enroll | WADM | Enroll | WADM | Enroll | WADM | Enroll | WADM |
| HK | 33 | $\mathbf{3 3}$ | 35 | $\mathbf{3 5}$ | 33 | $\mathbf{3 3}$ | 31 | $\mathbf{3 1}$ |
| K | 405 | $\mathbf{2 4 8}$ | 429 | $\mathbf{2 6 3}$ | 413 | $\mathbf{2 5 3}$ | 380 | $\mathbf{2 3 3}$ |
| Gr. 1-3 | 1,348 | $\mathbf{1 , 5 0 3}$ | 1,320 | $\mathbf{1 , 4 7 2}$ | 1,353 | $\mathbf{1 , 5 0 9}$ | 1,344 | $\mathbf{1 , 4 9 9}$ |
| Gr. 4-6 | 1,308 | $\mathbf{1 , 3 8 6}$ | 1,354 | $\mathbf{1 , 4 3 5}$ | 1,312 | $\mathbf{1 , 3 9 1}$ | 1,344 | $\mathbf{1 , 4 2 5}$ |
| Gr. 7-8 | 863 | $\mathbf{1 , 1 2 2}$ | 878 | $\mathbf{1 , 1 4 1}$ | 913 | $\mathbf{1 , 1 8 7}$ | 915 | $\mathbf{1 , 1 9 0}$ |
| Gr. 9-12 | 1,791 | $\mathbf{2 , 3 2 8}$ | 1,747 | $\mathbf{2 , 2 7 1}$ | 1,774 | $\mathbf{2 , 3 0 6}$ | 1,780 | $\mathbf{2 , 3 1 4}$ |
| ECSE | 114 | $\mathbf{1 4 3}$ | 121 | $\mathbf{1 5 1}$ | 116 | $\mathbf{1 4 5}$ | 107 | $\mathbf{1 3 4}$ |
| Total | 5,862 | $\mathbf{6 , 7 6 3}$ | 5,884 | $\mathbf{6 , 7 6 8}$ | 5,914 | $\mathbf{6 , 8 2 4}$ | 5,901 | $\mathbf{6 , 8 2 6}$ |

## Conclusion

- Uncertain economic factors make enrollment projections difficult.
- BHM's enrollment is projected to remain relatively flat for at least the next three to five years.


## 5,748

