Short-Term Enrollment Projections- October 2013

The preliminary school year 2013-2014 enrollment numbers indicate that the total ACPS student enrollment has increased 3.9\% compared to school year 2012-2013. The total average annual growth between September 2006 (FY 2007) and September 2013 (FY 2014) for the division is $4.02 \%$. The highest percentage increase is seen in middle school at $7.9 \%^{*}$ followed by high school at $5.2 \%$ and elementary school at $2.3 \%$.

## Actuals vs. Projected

The two charts below show actual enrollment compared to the projected enrollment for that fiscal year.

## Actual vs. Projected By Grade (FY12-14)

For the current school year (FY14), projections were higher than fall enrollment in all elementary grades except $5^{\text {th }}$ grade and under in all secondary grades except $10^{\text {th }}$ and $12^{\text {th }}$. The biggest differences were in the over-projection at kindergarten and the under-projection at $9^{\text {th }}$ grade.

| $\begin{aligned} & \stackrel{\rightharpoonup}{0} \\ & \stackrel{\pi}{6} \end{aligned}$ | FY2012 <br> Final Projected | $\begin{gathered} \text { FY2012 } \\ \text { 10/1/2011 } \end{gathered}$ | Projection Error | FY2013 <br> Final Projected | $\begin{aligned} & \text { FY2013 } \\ & \text { 10/1/2012 } \end{aligned}$ | Projection Error | FY2014 <br> Final Projected | $\begin{gathered} \text { FY2014 } \\ \text { 10/1/2013 } \end{gathered}$ | Projection Error |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PK | 236 | 282 | +19.5\% | 295 | 276 | -6.4\% | 295 | 285 | -3.4\% |
| K | 1,303 | 1,361 | +4.5\% | 1,420 | 1,516 | +6.8\% | 1,578 | 1,418 | -10.1\% |
| 1 | 1,276 | 1,287 | +.9\% | 1,356 | 1,345 | -.8\% | 1,484 | 1,462 | -1.5\% |
| 2 | 1,129 | 1,106 | -2.\% | 1,234 | 1,223 | -.9\% | 1,270 | 1,255 | -1.2\% |
| 3 | 1,089 | 1,061 | -2.6\% | 1,071 | 1,098 | +2.5\% | 1,212 | 1,181 | -2.6\% |
| 4 | 1,019 | 1,028 | +.9\% | 1,042 | 1,048 | +.6\% | 1,085 | 1,063 | -2.\% |
| 5 | 950 | 953 | +.3\% | 999 | 996 | -.3\% | 1,013 | 1,013 | +.\% |
| 6 | 785 | 804 | +2.4\% | 870 | 871 | +.1\% | 897 | 946 | +5.5\% |
| 7 | 761 | 760 | -.1\% | 750 | 775 | +3.3\% | 828 | 872 | +5.3\% |
| 8 | 736 | 747 | +1.5\% | 713 | 765 | +7.3\% | 758 | 784 | +3.4\% |
| 9 | 747 | 784 | +5.\% | 760 | 813 | +7.\% | 807 | 892 | +10.5\% |
| 10 | 794 | 803 | +1.1\% | 814 | 847 | +4.1\% | 861 | 845 | -1.9\% |
| 11 | 770 | 713 | -7.4\% | 788 | 789 | +.1\% | 809 | 832 | +2.8\% |
| 12 | 721 | 655 | -9.2\% | 617 | 673 | +9.1\% | 716 | 714 | -.3\% |
| Grand Total | 12,316 | 12,344 | +.23\% | 12,729 | 13,035 | +2.4\% | 13,613 | 13,562 | -.37\% |

*Modified since 10/29 meeting to reflect Jefferson-Houston grades 6-8 in middle school growth percentage.

## Actual vs. Projected By Grade (FY12-14)

For the current school year (FY14), the biggest differences in actual enrollment versus projected enrollment were all at elementary schools on the east side: Jefferson-Houston, Matthew Maury, and Mt. Vernon. The over projection occurred at kindergarten and the under-projection at $9^{\text {th }}$ grade. Projections at the secondary level were all under, most significantly at F.C. Hammond 1 and F.C. Hammond 3.

| School Name | FY2012 <br> Final Projected | $\begin{gathered} \text { FY2012 } \\ \text { 10/1/2011 } \end{gathered}$ | Projection Error | FY2013 <br> Final Projected | $\begin{gathered} \text { FY2013 } \\ \text { 10/1/2012 } \end{gathered}$ | Projection Error | FY2014 <br> Final Projected | $\begin{gathered} \text { FY2014 } \\ \text { 10/1/2013 } \end{gathered}$ | Projection Error |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Charles Barrett Total | 360 | 391 | +8.6\% | 416 | 402 | -3.4\% | 442 | 446 | +.9\% |
| Cora Kelly Total | 375 | 353 | -5.9\% | 404 | 365 | -9.7\% | 367 | 373 | +1.6\% |
| Douglas MacArthur Total | 644 | 643 | -.2\% | 646 | 693 | +7.3\% | 715 | 704 | -1.5\% |
| George Mason | 457 | 472 | +3.3\% | 466 | 495 | +6.2\% | 525 | 512 | -2.5\% |
| James K. Polk | 620 | 626 | +1.\% | 675 | 656 | -2.8\% | 708 | 690 | -2.5\% |
| Jefferson Houston | 362 | 364 | +.6\% | 389 | 372 | -4.4\% | 385 | 356 | -7.5\% |
| John Adams | 862 | 814 | -5.6\% | 871 | 820 | -5.9\% | 883 | 874 | -1.\% |
| Lyles-Crouch | 369 | 415 | +12.5\% | 422 | 427 | +1.2\% | 457 | 437 | -4.4\% |
| Matthew Maury | 377 | 395 | +4.8\% | 404 | 422 | +4.5\% | 461 | 418 | -9.3\% |
| Mount Vernon | 736 | 713 | -3.1\% | 763 | 774 | +1.4\% | 836 | 768 | -8.1\% |
| Patrick Henry | 491 | 531 | +8.1\% | 601 | 586 | -2.5\% | 621 | 586 | -5.6\% |
| Samuel Tucker | 676 | 689 | +1.9\% | 674 | 722 | +7.1\% | 729 | 740 | +1.5\% |
| William Ramsay | 758 | 741 | -2.2\% | 778 | 829 | +6.6\% | 870 | 831 | -4.5\% |
| ES Total | 7,087 | 7,147 | +.8\% | 7,509 | 7,563 | +.7\% | 7,999 | 7,735 | -3.3\% |
| Francis Hammond MS |  |  |  |  |  |  |  |  |  |
| Francis Hammond MS 1 | 427 | 417 | -2.3\% | 441 | 431 | -2.3\% | 445 | 462 | +3.8\% |
| Francis Hammond MS 2 | 424 | 429 | +1.2\% | 451 | 439 | -2.7\% | 449 | 459 | +2.2\% |
| Francis Hammond MS 3 | 412 | 428 | +3.9\% | 448 | 433 | -3.3\% | 447 | 465 | +4.\% |
| George Washington MS |  |  |  |  |  |  |  |  |  |
| George Washington MS 1 | 470 | 482 | +2.6\% | 451 | 524 | +16.2\% | 540 | 580 | +7.4\% |
| George Washington MS 2 | 464 | 486 | +4.7\% | 450 | 523 | +16.2\% | 540 | 578 | +7.\% |
| MS Total | 2,197 | 2,242 | +2.\% | 2,241 | 2,350 | +4.9\% | 2,421 | 2,544 | +5.1\% |
| Minnie Howard Center | 689 | 701 | +1.7\% | 680 | 700 | +2.9\% | 695 | 714 | +2.7\% |
| TC Williams HS | 2,343 | 2,254 | -3.8\% | 2,299 | 2,422 | +5.4\% | 2,498 | 2,569 | +2.8\% |
| HS Total | 3,032 | 2,955 | -2.5\% | 2,979 | 3,122 | +4.8\% | 3,193 | 3,283 | +2.8\% |
| Grand Total | 12,316 | 12,344 | +.23\% | 12,729 | 13,035 | +2.4\% | 13,613 | 13,562 | -.37\% |

## Births and Kindergarten Capture

Of the live births to Alexandria residents in 2008 reported by the Virginia Department of Vital Statistics, approximately $58 \%$ enrolled in ACPS in 2013. This represents a departure from the upward trend we have experienced since 2005. It is unclear at this time if this indicates a reversal in the trend.

## Alexandria Births and Kindergarten Enrollment 5-Years Later

During the process of projecting enrollment for School Year 2013-2014, the group decided to use the 3yr average K-Capture of $64.0 \%$ to project kindergarten enrollment. Because of such a difference between the actual of $58 \%$, staff recommends using a 5 year average K-Capture rate of $60.9 \%$ for the FY15-20 projections. Births for 2013 and 2014 must be estimated in order to project kindergarten enrollment in FYs19 and 20. To do so, staff recommends using a long-term 15 year average birth rate per person to Alexandria residents.


## Cohort Survival

Cohort survival compares the number of students in a grade to the number of students in the previous grade the previous school year. Annual ratios are averaged and then used to project future enrollment. For the FY15-20 projections, staff recommends using the 3-year average. This allows us to be reflective of recent trends and is a conservative projection compared to a 2 or 6 year average cohort survival.


## Division-Wide Historical and Projected Enrollment

Using the 5 year K-Capture average and the 3-year Cohort Survival Ratio, the graph below shows ACPS historical and projected student enrollment since September 1999 (FY 2000) including pre-kindergarten. ACPS enrollment has been increasing since FY 2007 and we project it to continue to do so through FY 2020.


- Includes special placements

The graph below shows the breakdown between elementary, middle, and high school enrollment. The majority of enrollment growth in the division has occurred at the elementary level until this year when middle and high schools have seen larger growth. The larger cohorts of students are aging through the system at higher cohort survival rates which rapidly bring up the numbers of students in the higher grades compared to previous years.


The graph below shows the breakdown of growth at the elementary level, by region. The Central Region grew slightly more than the West side. There was virtually no growth in the East Region.


Central: C. Barrett, D. MacArthur, G. Mason East: C. Kelly, J.-Houston, L.-Crouch, M. Maury, Mt. Vernon West: J.K. Polk, J. Adams, P. Henry, S. Tucker, W. Ramsay

## Next Steps

- Calculate student generation rates for the School Year 2013-2014 class and update our averages. The resulting changes to student population through new and re-development will be incorporated into the projections.
- Capacity analysis to determine how the projections affect capacity needs.

