Future State, Enrollment Projections, September 30, 2019-2028

Introduction

BCPS revises enrollment projections annually to include the most recent (September 30, 2018) enrollment projections calculations. The primary utility of enrollment projections are in resource allocation planning including operating budget, capital plan development, and staffing allocations.

In 2015, BCPS collaborated with Baltimore County Government to review the process and method for projecting student enrollment. Baltimore County Department of Planning engaged Sage Policy Group to conduct an independent analysis. Sage Policy Group found that the BCPS method and process-primarily a cohort survival-based method, were supported and that the school system’s change to more transparent, reproducible method was a positive step. They further concluded that the BCPS-updated, more standardized cohort survival method improved accuracy and reliability of enrollment projections. Sage Policy Group made additional suggestions regarding changes to methodology directed at improving accuracy at the neighborhood and building levels going forward.

BCPS continues to partner with Sage Policy Group and collaborate with Baltimore County Government in the refinement of the enrollment projections process and analysis of projection accuracy and use.
Enrollment Projection Time Period

The table below demonstrates the alignment between the current year, projected years, school years, and fiscal years associated with enrollment projections:

- The “Current Year” or “Actual” refers to the most recent official September 30 enrollment, in this case, September 30, 2018, for the 2018-2019 school year.
- The “Projection Year” refers to how far into the future the projection is estimating.
- The “Projection Date” is the future September 30 enrollment the projection is estimating. Enrollment projections are derived from historical September 30 enrollments, and therefore project for future September 30 enrollment dates.
- The “School Year” is the corresponding academic calendar year.
- The “Fiscal Year” is the corresponding fiscal year. A fiscal year is July 1 through June 30, and references the calendar year it completes.

### Enrollment Projection Time Period Alignment Table

<table>
<thead>
<tr>
<th>Current Year</th>
<th>Enrollment Date (as of)</th>
<th>Corresponding School Year</th>
<th>Corresponding Fiscal Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Enrollment</td>
<td>September 30, 2018</td>
<td>2018-2019</td>
<td>FY 2019</td>
</tr>
<tr>
<td>Projection Year</td>
<td>Projection Date (as of)</td>
<td>Corresponding School Year</td>
<td>Corresponding Fiscal Year</td>
</tr>
<tr>
<td>1st Year</td>
<td>September 30, 2019</td>
<td>2019-2020</td>
<td>FY 2020</td>
</tr>
<tr>
<td>2nd Year</td>
<td>September 30, 2020</td>
<td>2020-2021</td>
<td>FY 2021</td>
</tr>
<tr>
<td>3rd Year</td>
<td>September 30, 2021</td>
<td>2021-2022</td>
<td>FY 2022</td>
</tr>
<tr>
<td>4th Year</td>
<td>September 30, 2022</td>
<td>2022-2023</td>
<td>FY 2023</td>
</tr>
<tr>
<td>5th Year</td>
<td>September 30, 2023</td>
<td>2023-2024</td>
<td>FY 2024</td>
</tr>
<tr>
<td>6th Year</td>
<td>September 30, 2024</td>
<td>2024-2025</td>
<td>FY 2025</td>
</tr>
<tr>
<td>7th Year</td>
<td>September 30, 2025</td>
<td>2025-2026</td>
<td>FY 2026</td>
</tr>
<tr>
<td>8th Year</td>
<td>September 30, 2026</td>
<td>2026-2027</td>
<td>FY 2027</td>
</tr>
<tr>
<td>9th Year</td>
<td>September 30, 2027</td>
<td>2027-2028</td>
<td>FY 2028</td>
</tr>
<tr>
<td>10th Year</td>
<td>September 30, 2028</td>
<td>2028-2029</td>
<td>FY 2029</td>
</tr>
</tbody>
</table>

This Future State section includes:

- **Enrollment Projection Methods and Assumptions** – the purpose, coordination, and methodology used to develop enrollment projections.
- **Enrollment Projections Tables Notes** – these notes correspond to the Enrollment Projections Tables and provide details on configurations and factors that can influence current enrollments and future projections in unique ways.
- **Enrollment Projections, September 30, 2019-2028, by Planning Area by School** – These tables include headcount enrollment projections for 2019-2020 through 2028-2029. The charts for elementary, middle, and high school display projection trends and SRC by Planning Area. Note that the elementary charts reflect conversion to FTE enrollment to correctly compare to SRC.
Enrollment Projection Methods and Assumptions:

Methodology

Enrollment projections were generated using a cohort-survival method that incorporates the impact of new residential development. This method makes use of historical information about the progression of students from one grade level to the next in order to project how many students will be enrolled in a particular grade level the following year. This method also incorporates information about the number of live births within Baltimore County to better inform projections of students enrolling into kindergarten. Additionally, data on approved residential units in combination with pupil yield factors are used to estimate how many new students are generated as a result of new residential development.

Development Impact Considerations

Enrollment projections were generated over two forecast horizons: the first five years and the subsequent five years of the ten year projection period. Projections incorporate the impact of new residential development to occur in Baltimore County, with permitted residential development modeled to build-out at varying rates by housing type. The rates are based on an analysis of Baltimore County housing permit yields of BCPS students, units built and remaining, and dates of permit approval and construction start.

- Single Family Attached/Detached units are spread over a period of seven years.
- Single family semi-detached units are spread over a period of five years.
- Multi-family and mixed-use units are spread over a period of five years.

This is done by taking data on the number of unbuilt, approved residential units and multiplying it by pupil yield factors which are estimates of how many students are likely to be generated by each new housing unit on average. Data on approved residential units were obtained from Baltimore County Department of Planning while the pupil yield factors were taken from a recent study by BCPS published in August 2017. ¹

To avoid capturing trends twice in the projection calculations, the cohort survival ratios (CSRs) used during the first five projection years are based on data from the 2011-2012 school year. This year is relevant since it represents a low point in the pace of residential construction. During the subsequent five years of the projection period, CSRs are calculated using a three-year trailing average since the pace of new residential development is presumed to be equal to a long-term average.

Cohort Survival Procedures

Enrollment projections primarily employ a cohort survival method. The method makes use of historical data that capture the average progression of students from one grade to the next via CSRs. Using live birth data from Baltimore County, birth-to-kindergarten ratios (BTKs) are also calculated to better project kindergarten enrollment. The CSRs and BTKs were calculated using data from the 2011-2012 school year. In cases where these ratios were extremely high or low in that year, a two-year averaged ratio was used from the two most recent years available. Once projections were generated via the cohort survival method, any additional students derived from the impact of new residential development were added in order to arrive at a final projection.
Enrollment Projections Tables Notes:

Some schools have unique administrative or programmatic situations or changes that influence their enrollment and projection. The notes below correspond to and provide explanation for the letters in the notes column in the tables on the following pages:

A. **Partial Magnet Program Schools** – These schools have an attendance boundary, but also accept students through the magnet application process, which allows students who reside outside the school boundary to attend.

B. **Total Magnet Program Schools** – These schools do not have an attendance boundary and accept all students through the magnet application process. Unless otherwise noted, enrollments at these schools are projected constant over 10 years.

C. **Special Education Schools** – These public, separate day schools have no attendance boundary and serve students with significant disabilities who reside throughout the system. Unless otherwise noted, enrollments at these schools are projected constant over 10 years.

D. **Alternative Education Centers** – These centers provide services for students removed from the regular education program at their districted middle and high schools. With the exception of Crossroads Center, which has a 180-day program, centers enroll students for only a limited part of the school year. Enrollments at these schools are projected constant over 10 years.

E. **Recent Redistricting** - Recent school boundary changes have occurred in coordination with the opening of new schools and capital projects, including:
   - Lansdowne Elementary Community Boundary Change (for 2018-2019 school year)
   - Victory Villa Elementary Community Boundary Change (for 2018-2019 school year)
   - Honeygo Elementary Community Boundary Change (for 2018-2019 school year)

Enrollments at these schools may be influenced by parent and student special permission transfer requests associated with terminal grade level (Board of Education, Policy and Rule 5140).

F. **Full-Day Prekindergarten Pilot** – Two schools (Halstead Academy and Sandy Plains Elementary School) implemented a full-day Prekindergarten pilot program for the 2015-2016 school year. An additional school (Hawthorne Elementary School) implemented full-day Prekindergarten for the 2016-2017 school year. All prekindergarten students at these schools are full-day, and thus count as a whole full time equivalent (FTE) student for FTE calculations.

G. **Kindergarten Annexation** – These schools are sending or receiving schools for a kindergarten annexation. Upon completing kindergarten, these students return to their districted elementary schools for Grades 1 through 5.
   - All kindergarten students districted to Bedford Elementary School and Milbrook Elementary School attend kindergarten at Campfield Early Childhood Center.

H. **Norwood Elementary School and Holabird Middle School** – Beginning in the 2013-2014 school year, students in Grades 4 and 5 districted to Norwood Elementary School attend Holabird Middle School.
I. **Sollers Point Technical High School** – This regional career and technology magnet program is located on the campus of Dundalk High School. Students attend for a portion of the school day and all students are counted at their districted or assigned high schools for enrollment purposes. No enrollment is projected.

J. **Home and Hospital** – This program provides services to students with extended medical absences. These students remain enrolled in their districted or assigned school. No enrollment is projected.

K. **Colgate Elementary School at Rosedale Center** – In 2016, Rosedale Center relocated to a leased facility. Colgate Elementary School students and staff are temporarily located at the Rosedale Center building for the 2018-2019 and 2019-2020 school years to accommodate the demolition and replacement of Colgate Elementary School.

L. **Pending Redistricting** – The following redistricting processes are underway or pending approval by the Board of Education:

- **Castanea Estates Community Boundary Study (for 2019-2020)** – Redistricting is pending approval by the Board of Education for schools affected by this boundary process. No enrollment projection adjustment will be required as the development is under construction and the boundary changes do not affect any current students. Current maps do not reflect the redistricting, as the boundaries will not be effective until the 2019-2020 school. Please refer to Appendix p. for more details.

- **Dogwood Elementary School Capacity Relief Study (for the 2020-2021 school year)**

- **Johnnycake Elementary School Capacity Relief Study (for the 2020-2021 school year)**. These two processes are underway with approval anticipated in June 2019. Enrollment projections for affected schools will be updated in the next projection cycle associated with Students Count 2019. Current maps do not reflect this redistricting, as the boundaries will not be effective until the 2020-2021 school year.