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

Introduction

BCPS revises enrollment projections annually to include the most recent (September 30, 2019) 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, Inc. 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 a 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, 2019, for the 2019–2020 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 (FY)” 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, 2019</td>
<td>2019–2020</td>
<td>FY 2020</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, 2020</td>
<td>2020–2021</td>
<td>FY 2021</td>
</tr>
<tr>
<td>2nd Year</td>
<td>September 30, 2021</td>
<td>2021–2022</td>
<td>FY 2022</td>
</tr>
<tr>
<td>3rd Year</td>
<td>September 30, 2022</td>
<td>2022–2023</td>
<td>FY 2023</td>
</tr>
<tr>
<td>4th Year</td>
<td>September 30, 2023</td>
<td>2023–2024</td>
<td>FY 2024</td>
</tr>
<tr>
<td>5th Year</td>
<td>September 30, 2024</td>
<td>2024–2025</td>
<td>FY 2025</td>
</tr>
<tr>
<td>6th Year</td>
<td>September 30, 2025</td>
<td>2025–2026</td>
<td>FY 2026</td>
</tr>
<tr>
<td>7th Year</td>
<td>September 30, 2026</td>
<td>2026–2027</td>
<td>FY 2027</td>
</tr>
<tr>
<td>8th Year</td>
<td>September 30, 2027</td>
<td>2027–2028</td>
<td>FY 2028</td>
</tr>
<tr>
<td>9th Year</td>
<td>September 30, 2028</td>
<td>2028–2029</td>
<td>FY 2029</td>
</tr>
<tr>
<td>10th Year</td>
<td>September 30, 2029</td>
<td>2029–2030</td>
<td>FY 2030</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, 2020–2029, by Planning Area by School** – These tables include headcount enrollment projections for 2020–2021 through 2029–2030. 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. 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 entering kindergarten. Additionally, when it is deemed necessary, enrollment projections are supplemented with the impact of new residential development. More specifically, the 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.

Cohort Survival Procedures

Enrollment projections primarily employ a cohort survival method. This method makes use of historical data that capture the average progression of students from one grade to the next via cohort survival ratios (CSRs). Using live birth data from Baltimore County, birth-to-kindergarten ratios (BTKs) are also calculated to project kindergarten enrollment. The CSRs and BTKs are calculated as multi-year averaged ratios, using data from the five most recent school years from SY 2015–2016 to SY 2019–2020. In cases where the school is impacted by an annual boundary change, the CSR/BTK ratios are calculated by excluding the years in which catchment areas are affected by the boundary change in order to stabilize the ratios.

Development Impact Considerations

Projections account for the impact of new residential development in Baltimore County, with permitted residential development modeled to be built 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.

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 are obtained from Baltimore County Department of Planning while the pupil yield factors are taken from a recent study by BCPS published in August 2017.\(^1\)

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\(^1\) BCPS 2017 Yield Factor Study
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 include:
   - **Castanea Estates Community Boundary Study (for 2019–2020)** – The Board of Education approved this boundary adjustment on March 5, 2019. No enrollment projection adjustment were required. Current maps reflect the redistricting, as the boundaries were effective for the 2019–2020 school.

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 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 and Milbrook elementary schools attend kindergarten at Campfield Early Learning 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.
Enrollment Projections Tables Notes, continued:

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. **Watershed Public Charter School** – This public charter school opened in Fall 2019 with grades Kindergarten through Grade 3. Grades 4 and 5 will fill via matriculation and application over the next two years. There is no attendance boundary for this school, which accepts students via an application process.

M. **Approved Redistricting** – The following redistricting processes are approved by the Board of Education:
   - **Dogwood Elementary School Capacity Relief Study (for the 2020–2021 school year)**
   - **Johnnycake Elementary School Capacity Relief Study (for the 2020–2021 school year)** - The Board of Education approved these two boundary changes on June 11, 2019. Enrollment projections for affected schools reflect student redistribution. Current maps do not reflect this redistricting, as the boundaries will not be effective until the 2020–2021 school year. Please refer to Appendix p. for more details.

N. **Pending Redistricting** - The following redistricting processes are approved by the Board of Education:
   - **Pleasant Plains Elementary Capacity Relief Study (for the 2020–2021 school year)** - This process is underway, and approval by the Board of Education is expected in March 2020. Enrollment projections for affected schools do not yet reflect student redistribution. Current maps do not reflect this redistricting, as the boundaries will not be effective until the 2020–2021 school year. Please refer to Appendix p. for more details.