



2024 Enrollment Forecast Summary

Planning Department

1. Introduction

To better understand and plan for student enrollment in each upcoming school year, the DeKalb County School District's Planning Department creates an enrollment forecast for the first Tuesday in October of the following years. The forecast of enrollment at each school and in each grade is based on the most recent data available at the time. This data includes detailed enrollment and student geographic information for several previous years from the District's student information system (Infinite Campus), as well as birth data from the Georgia Department of Public Health and housing development information taken from a variety of sources including city and county governments.

The ultimate purpose of the DCSD Enrollment Forecast is to inform decisions for the fair allocation of resources and the provision of an excellent learning environment for the students of the DeKalb County School District. This document gives a short explanation of the methods used to calculate the DCSD Enrollment Forecast.

2. Methodology

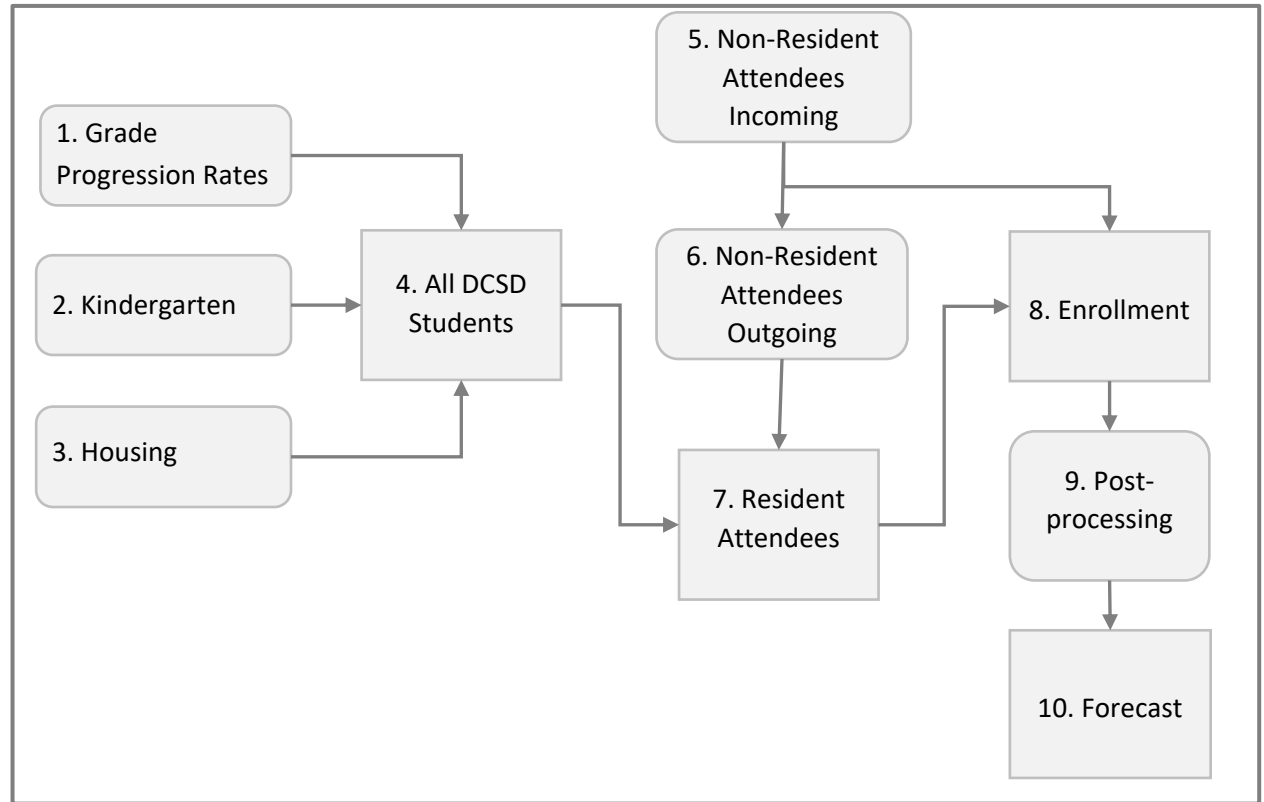
The forecast uses a method of population forecasting called “cohort-survival analysis”. In this method, future enrollment is forecasted based on historic matriculation patterns from grade to grade, birth rates, future housing development, and historic patterns of school-choice enrollment. The forecast is built using the following process:

1. **Grade Progression** – A *Grade Progression Rate*

refers to the ratio of students enrolled in a grade (residing in a given school’s attendance area) to students enrolled one grade lower, and one year prior. For example, the number of 3rd Graders living in the Allgood Elementary attendance area this year is divided by the number of 2nd Graders living in the same attendance area last year. This calculation is made for each grade from first through twelfth grades, for students living in each attendance area and for each of the last several years. An

average grade progression rate is then multiplied by the base or previous year’s count of students in a particular attendance area and grade to estimate the next year’s resident student population in that grade and attendance area.

Figure 1 - Forecast Process



2. **Kindergarten** - Kindergarten has no previous grade from which to draw a grade progression rate (pre-K is funding dependent, not population dependent, and therefore unreliable as an indicator for future kindergarten population). Therefore, the kindergarten forecast uses live births six years prior as the primary source to forecast the future kindergarten population.¹ The average ratio of DCSD kindergarteners residing in each elementary attendance area per 100 births in that attendance area is calculated for the previous three (3) years of data and multiplied by the births for each future forecast year.²
3. **Housing** – A housing development analysis allows future housing development expected to influence the enrollment forecast. DCSD receives regular updates from DeKalb County and from each of the municipalities in the District regarding plans for upcoming housing development. This information, along with third-party development data, is used to estimate the number of new housing units expected to be occupied by the next Fall, and in future years. Historic rates of student enrollment per housing unit (or *yield rates*) by housing unit type are then used to estimate the number of students expected from each new housing development for each future year.
4. **All DCSD Students** – The first three steps of the forecast are combined to estimate the number of all DCSD students expected to reside in an attendance area based on available data. To turn the forecast of students residing in an area into a forecast of students enrolled in a school, forecasted non-resident attendee students must be added to their attending school forecast (incoming) and removed from their zoned-school forecast (outgoing). Students enrolled in a school other than their zoned school are referred to as “non-resident attendees.”
5. **Non-Resident Attendees, Incoming** – The historic non-resident incoming enrollment at each school is used to forecast non-resident incoming enrollment in future years. The forecast method for each school is selected based on its specific enrollment policies and its historic enrollment patterns.

¹ “Six years prior” was used because the live birth data used was from September 2 to September 1 of each year, corresponding to the eligibility period for kindergarten. Because a student must be in their sixth year of life (at least five years old), kindergarteners counted in October of each school year would have to have been born during the eligibility period beginning six years prior.

² Kindergarten enrollment in several schools has low correlation with the number of births. In these cases, future kindergarten enrollment was interpolated using a variety of methods such as exponential smoothing, forest-based machine learning, linear regression, etc.

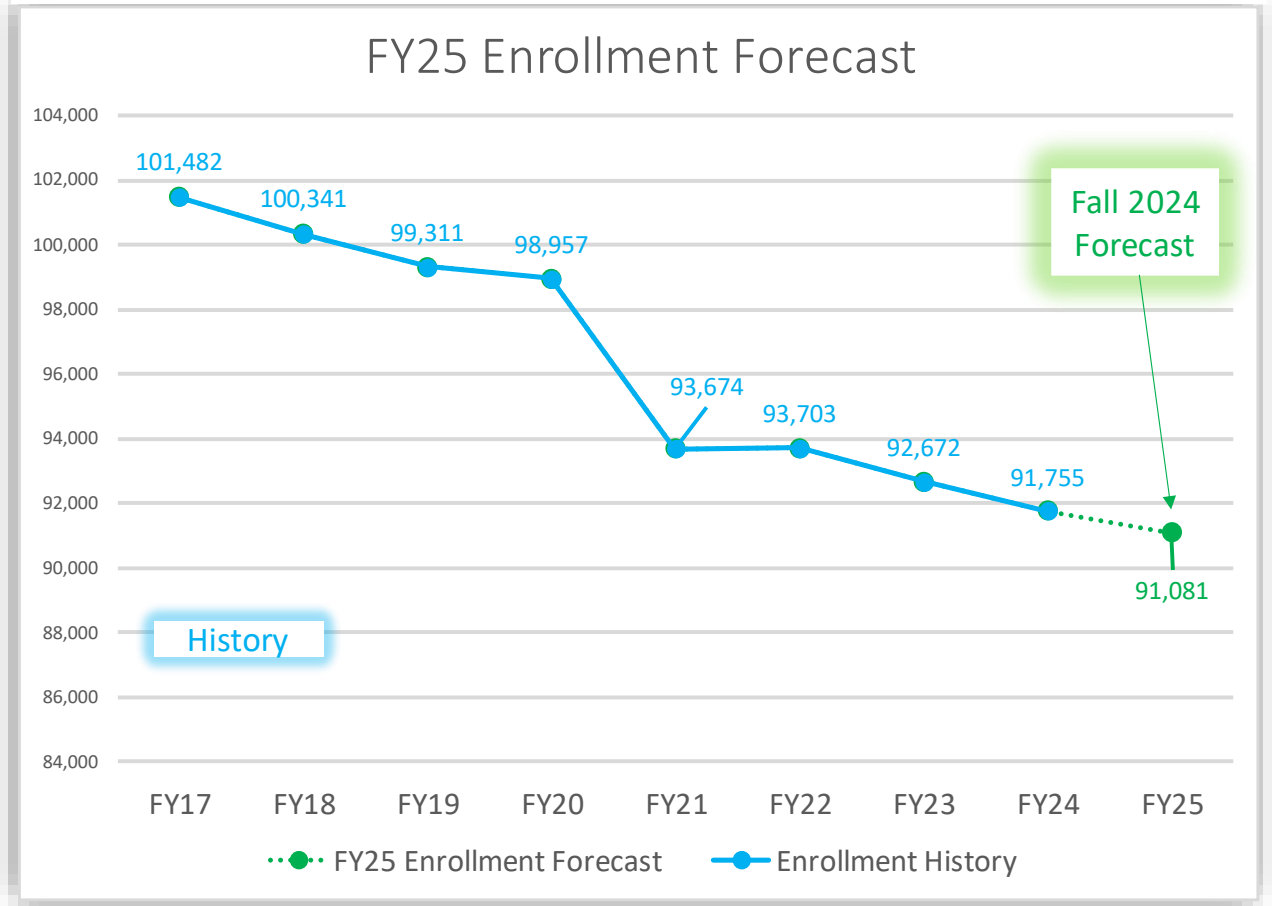
6. **Non-Resident Attendees, Outgoing** - The non-resident attendees outgoing (NRO) is calculated using the most recent year of enrollment data. The number of non-resident attendees in each grade residing in each attendance area is then divided by the district total number of non-resident attendees in that grade. This ratio is then multiplied by the total non-resident students by grade derived from the non-resident incoming forecast (see #5) to forecast the number of non-resident outgoing students for each attendance area.
7. **Resident Attendees** – Students who attend the school to which they are zoned are referred to as “resident attendees.” Resident attendees by grade in each elementary, middle, and high school attendance area are forecasted by excluding the total number of non-resident attendees outgoing from All Students residing in the attendance area (step 4 minus step 6).
8. **Enrollment** – The Non-Resident Attendee Incoming forecast and the Resident Attendee forecast by grade for each school are added together to generate the Preliminary Enrollment Forecast (step 5 plus step 7).
9. **Post – Processing** – The forecast model does not consider programmatic changes such as opening or closing schools, changing the location of special programs, etc. To account for this, changes must be made in post processing. To keep the overall forecast the same, all changes must account for both enrollment increases at particular schools and enrollment decreases from where those students are expected to be coming from.
10. **Forecast** – The final result is a forecasted enrollment for each grade at each school for each forecast year.

3. Results of the DCSD One-Year Enrollment Forecast

Overview

District enrollment is forecasted to be lower in Fall 2024 (see *Figure 2 – Enrollment History and Forecast*). Historically, DCSD Enrollment peaked at 101,801 in the Fall of 2014. Enrollment began to decrease in the Fall of 2015 and continued to decrease in the Fall of 2016, 2017, 2018, and 2019. After the onset of the COVID-19 pandemic in 2020, enrollment dropped by 5,283 students to 93,674. Despite expectations of a rebound in 2021 and 2022, enrollment remained about the same in 2021 and fell to 92,672 in Fall 2022. Enrollment for Fall of 2024 is expected to be 91,081 students, a decrease of 674 students from Fall of 2023.

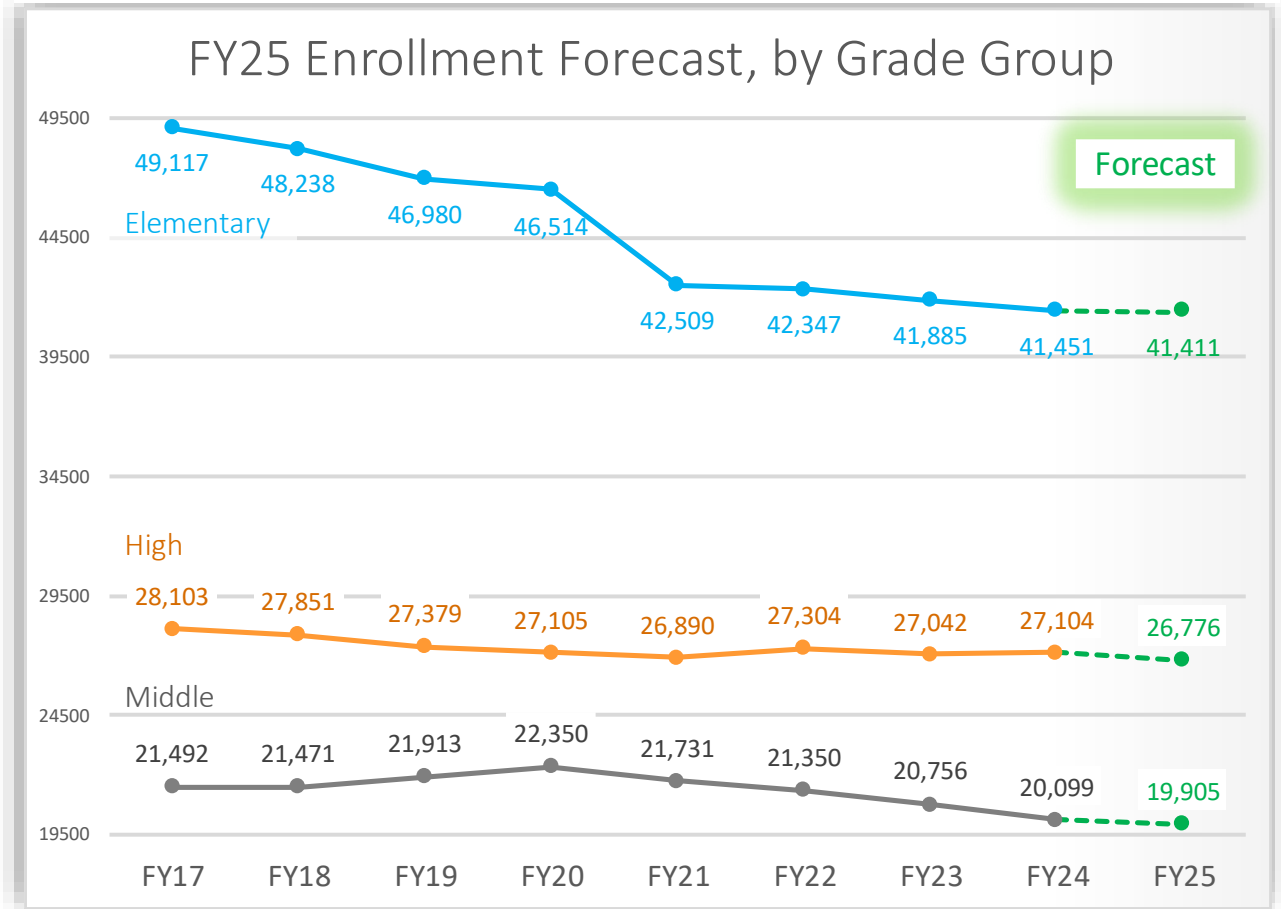
Figure 2 - Enrollment History and Forecast



[Grade Groups](#)

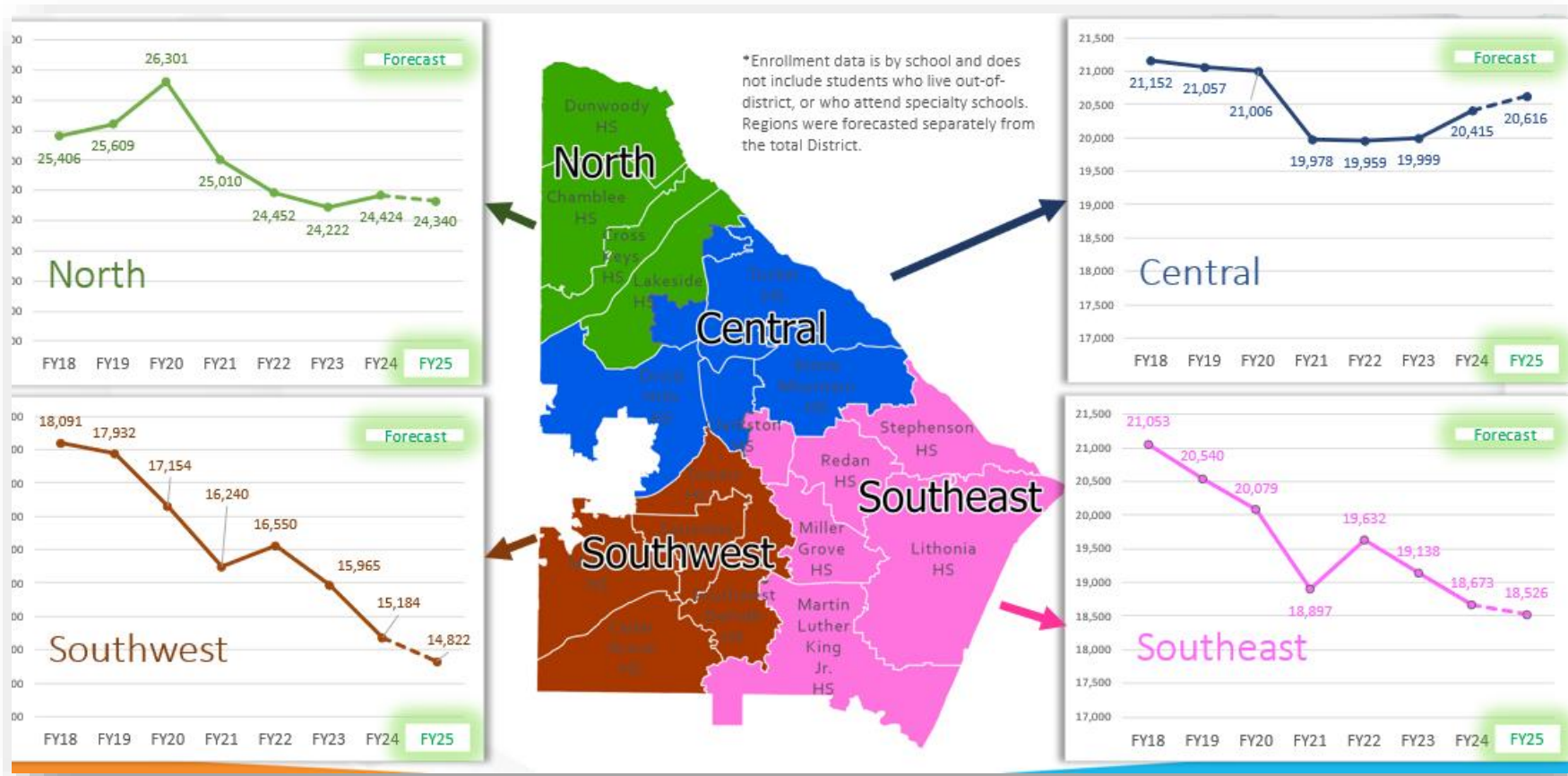
Elementary school enrollment (K-5) is expected to stay about the same with 41,451 in 2023 to 41,411 in 2024 (-0.1%). Middle school enrollment is expected to decrease slightly from 20,099 in 2023 to 19,905 in 2024 (-1.0%). High school enrollment is expected to decrease slightly from 27,104 in 2023 to 26,776 in 2024 (-1.2%). Elementary school enrollment peaked in 2015 at 52,389 students. As these large elementary cohorts matriculated into the upper grades, middle-school enrollment peaked in 2019 and high-school enrollment is expected to have peaked in the last couple years.

Figure 3 - Enrollment History and Forecast by Grade Group



Regions

Figure 4 - Enrollment History and Forecast by Student Address, Regions



The number of DCSD students living in North DeKalb is expected stay about the same: from 24,424 in 2023 to 24,340 in 2024 (-0.3%). The number of DCSD students living in Central DeKalb is expected to increase from 20,415 in 2023 to 20,616 in 2024 (+1.0%). The number of DCSD students living in Southwest DeKalb is expected to decrease: from 15,184 in 2023 to 14,822 in 2024 (-2.4%). The number of DCSD students living in Southeast DeKalb is expected to decrease: from 18,673 in 2023 to 18,526 in 2024 (-0.8%).