



DCSD One-Year Enrollment Forecast
December 2021

Planning Department

1. Introduction

To better understand and plan for the future of enrollment in DeKalb County School District, the Planning Department is updating the enrollment forecast to include Fall 2021 enrollment data. The new DCSD One-Year Enrollment Forecast considers the most recent trends and school programming to forecast enrollment for the next school year, Fall 2022. The ultimate purpose of the DCSD One-Year 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 One-Year 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 in the attendance area last year. The calculation is made for the first through twelfth grades for students living in each attendance area and back several years.

The average mobility rate¹ is then multiplied by

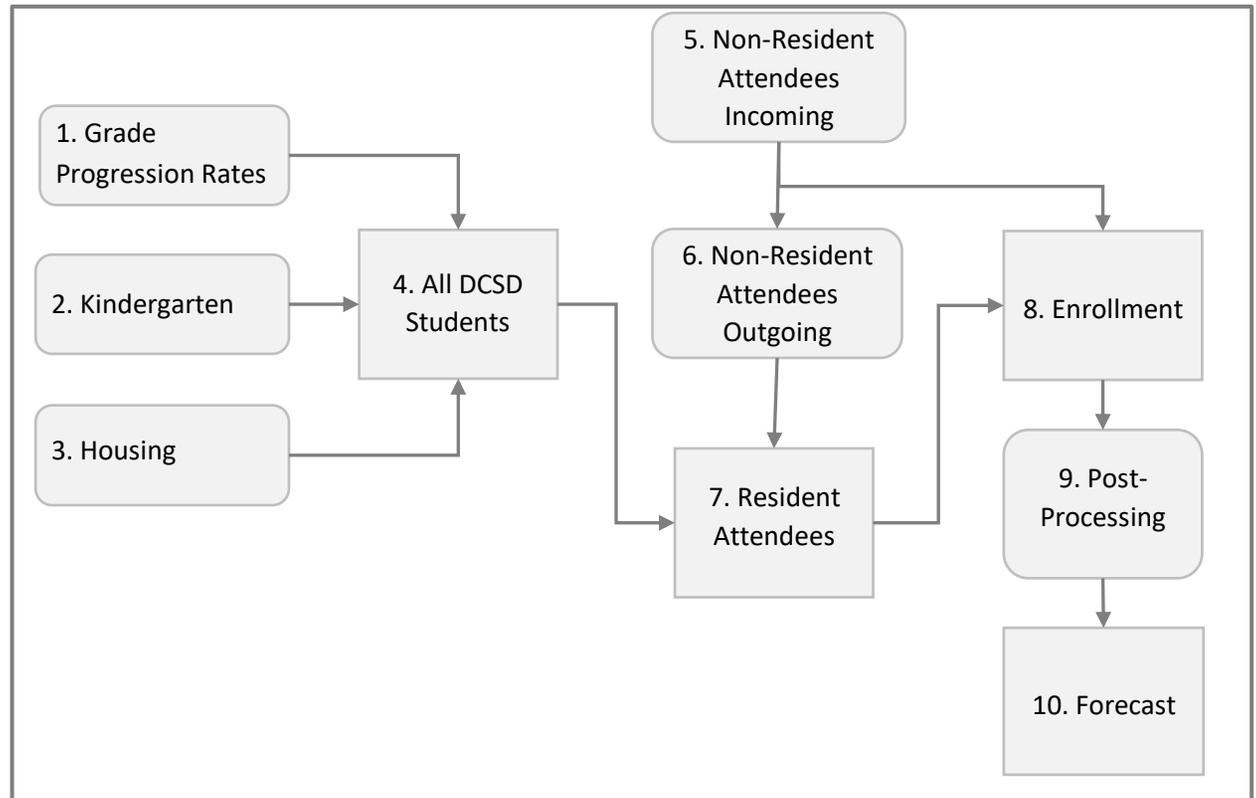


Figure 1 - Forecast Process

¹ For the December 2021 forecast, an average of grade progression to SY 2021, 2019, and 2018 is used (3-year average). Grade progression rates to 2020 were excluded because of the COVID-19 disruptions to (or large drop in) enrollment.

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.

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.² The average ratio of DCSD kindergarteners residing in each elementary attendance area per 100 births in that attendance area was calculated for the previous three (3) years of data and multiplied by the births for each future forecast year.³
3. **Housing** – A housing development analysis allows expected future housing development to influence the forecast. DCSD receives regular updates from DeKalb County and from each of the municipalities in the District regarding plans for housing development. This information, along with third-party development data, is used to estimate the number of new units expected to be occupied in a given year. Historic rates of student enrollment by housing type and housing unit (or *yield rates*) are used to estimate the number of students to expect from new housing development.
4. **All DCSD Students** – The first three steps of the forecast estimate the number of students expected to reside in an attendance area based on available data. Students who attend the school to which they are zoned, are referred to as “resident attendees.” Students enrolled in a school other than their zoned school are referred to as “non-resident attendees.” To forecast enrollment, non-resident attendees must be added to their attending school forecast (incoming) and removed from their zoned-school forecast (outgoing).
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.

² “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.

³ 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.

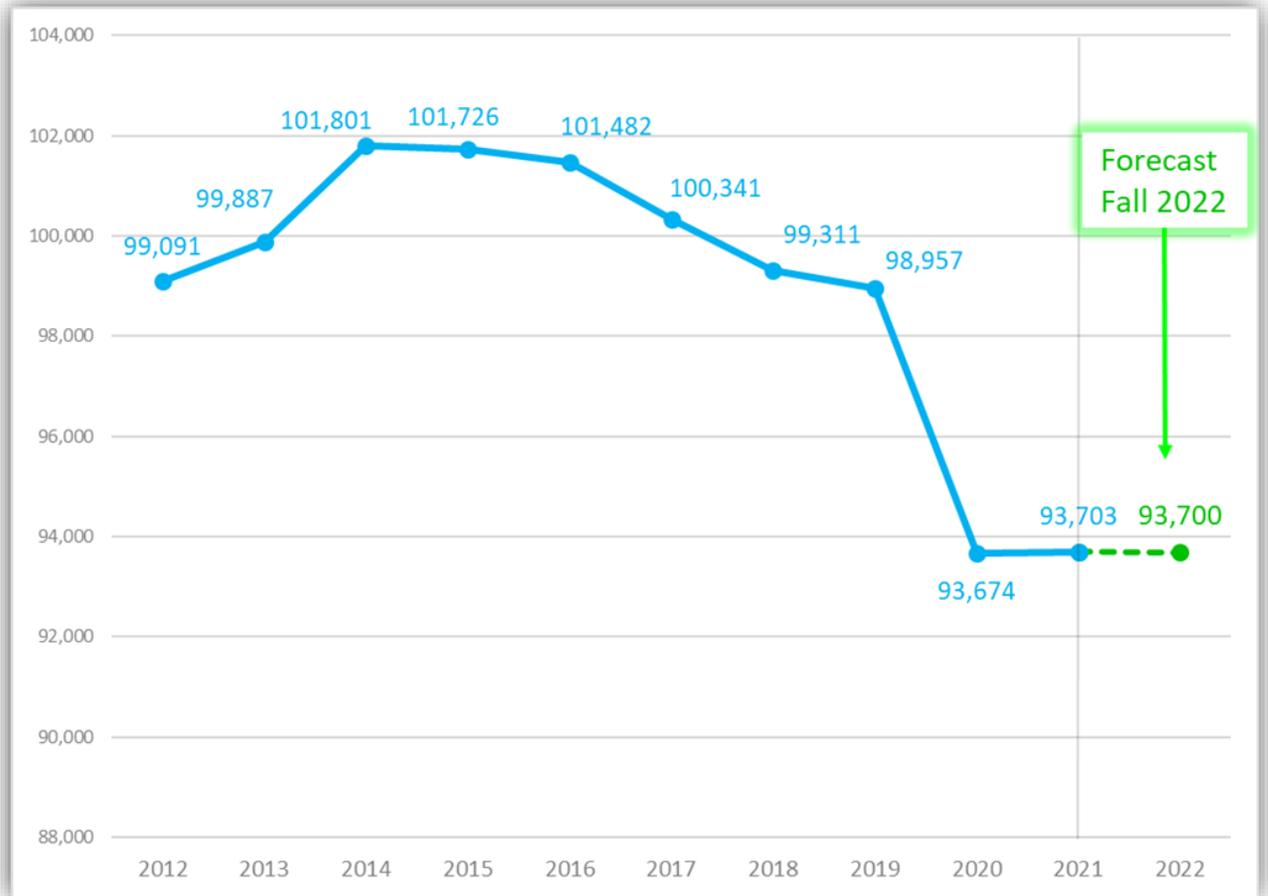
6. **Non-Resident Attendees, Outgoing** - The non-resident attendees outgoing (NRO) is calculated using the most recent year of enrollment data (2021). The number of non-resident attendees in each grade residing in each attendance area is divided by the district total number of non-resident attendees in each 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** – 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 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

Enrollment for Fall of 2022 is expected to be 93,700 students, a decrease of 3 students from Fall of 2021. DCSD Enrollment grew from 99,091 in the Fall of 2012 to a peak of 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. In aggregate, enrollment for the District is forecasted to be about the same as Fall 2021.

Figure 2 - Enrollment History and Forecast

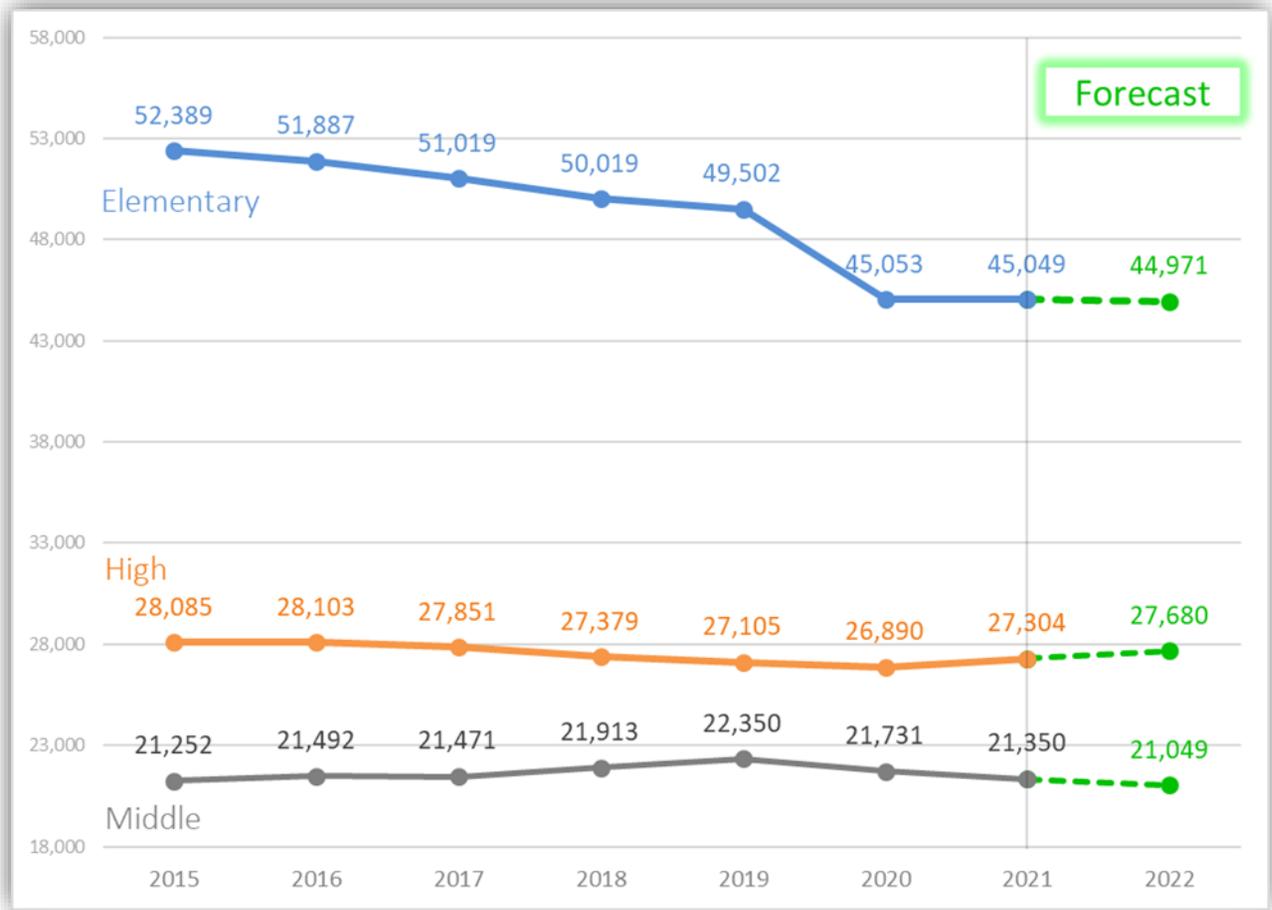


DCSD One-Year Enrollment Forecast

Figure 3 - Enrollment History and Forecast by Grade Group

[Grade Groups](#)

Elementary school enrollment (K-5) is expected to decrease slightly from 45,049 in 2021 to 44,971 in 2022 (-x%). Middle school enrollment is expected to decrease slightly from 21,350 in 2021 to 21,049 in 2022 (-x%). High school enrollment is expected to increase slightly from 27,304 in 2021 to 27,680 in 2022 (+x%). Elementary school enrollment peaked in 2015 at 52,389 students. As elementary students matriculated into the upper grades, middle-school enrollment peaked in 2019 and high-school enrollment is expected to peak in the next year or two.



Regions

Enrollment in the North DeKalb (Region 1) is expected to increase slightly from 18,593 in 2021 to 18,637 in 2022(+x%). Enrollment in Central DeKalb (Regions 2 & 4) is expected to be about the same, from 26,413 in 2021 to 26,434 in 2022 (+x%). Enrollment in South DeKalb (Regions 3, 5-7) is expected to decrease slightly from 35,587 in 2021 to 35,526 in 2022 (-1.9%). 2020 (+0.6%).

