
WAKE COUNTY PUBLIC SCHOOL SYSTEM: 10 YEAR STUDENT MEMBERSHIP FORECAST

School Year 2023-2024



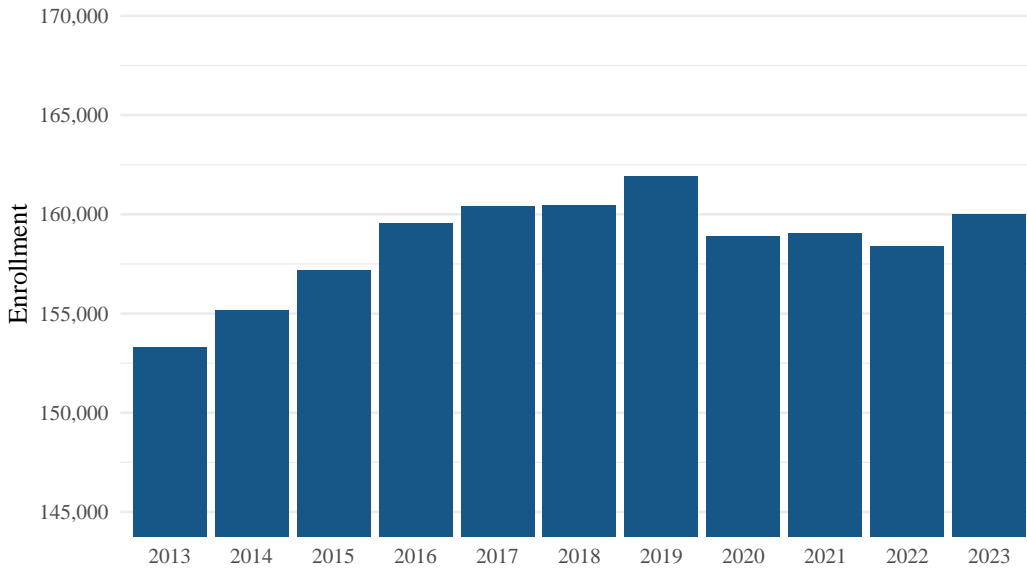
Table of contents

Executive Summary	2
Statewide Trends	3
Long-Range Forecast: Assumptions & Threats to Model	4
Impacts of Market Share Changes on Enrollments	6
Market Share Trends, 2013-14 to 2022-23	6
Charter and Private School Growth and Implications for Future Market Share	7
Kindergarten Enrollments Remain Below Expectations	8
Grade-Level Enrollments	9
Attendance Violations	10
Impacts on Wake County Charter Enrollments	10
Impacts on Fertility	11
Impacts of Migration	12
Impacts of Population Structure and Change	14
2022-23 Forecast Performance	16
2023-24 Ten-Year K-12 Forecast	17
Methodology	17
Assumptions	18
Projecting Fertility	18
Accounting for Missing Kindergartners	18
Charter School Impact	19
Results	19
Concerns/Unknowns	21

Executive Summary

Average Daily Membership (ADM) increased by 1,583 students (0.999%) in 2023-24 versus the 2022-23 ADM, after a small decrease last year. Small declines were seen in grades 1, 3, 5 through 8, and 10. Small increases occurred in Kindergarten and 9th grade, with larger increases in grades 4, 7, 11, and 12.

Figure 1. Student Membership Growth
2013–14 to 2023–24



Wake County (billing) charter school enrollments continued their increase, rising by 863 or 5.1% between 2022-23 and 2023-24, likewise private school enrollment also likely increased based on the most recent data available. In contrast, home school enrollment again declined markedly (though slightly less than last year). During 2022-23 the number of home school students in Wake County decreased 399 or -2.77% from 2021-22, however, the number of private school enrollments increased 826 or 3.96%. It seems likely that some of the students who were home schooled during the pandemic continue to find their way back to private, charter, or WCPSS schools.

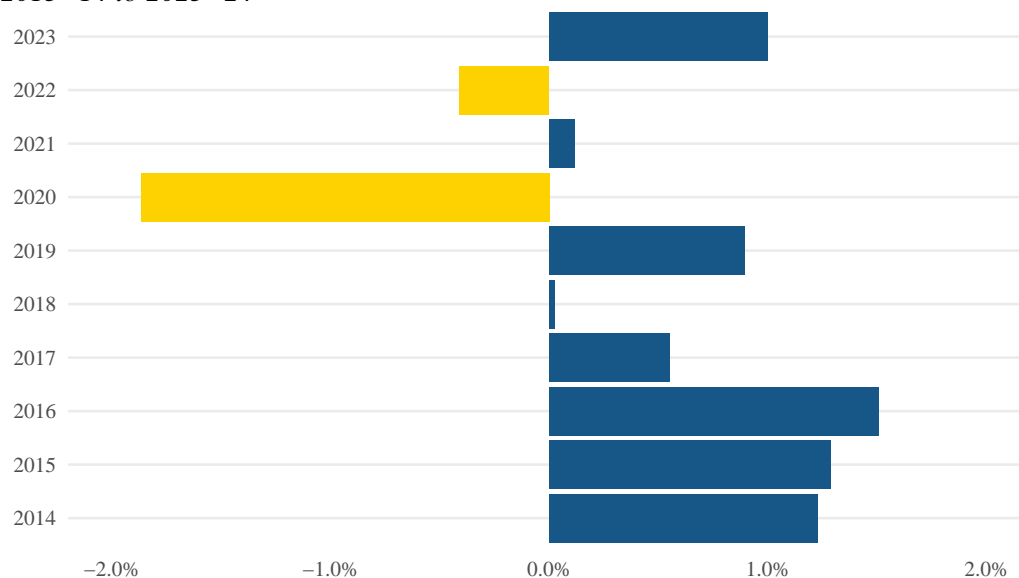
It does seem that we have started to see some regularization of trends post-COVID-19 pandemic. However, the new private school voucher law, which triples the budget of the Opportunity Scholarship program and removes income and prior public school enrollment restrictions, raises new uncertainty. While we do not necessarily know what the overall impact will be, there is some historical precedent to the first few years of an increase in funding like this to go mostly to current private school students, with increases in enrollment beginning as supply increases. The ten-year forecast was made with the following assumptions:

- Individuals who are currently enrolled in alternative schooling options (home school, charters, and privates) will stay in these options.
- No new assumptions were made about increases in private school enrollment, beyond the current growth trends.

- Births in Wake County will have small but steady increases, reflecting continued population growth.
- Grade progression ratios (GPRs) ignore the impacts of COVID-19 in 2020 and are based on observed transitions between 2017-2019 and 2021-2023.
- Two new charters will impact in 2024-25, and we continue to provide additional analysis of the impacts of potential charter openings.
- While home sales and building permits are down again this year, we are not including any new assumptions about impacts on school enrollment based on these trends.

Figure 2. Percent Change in Student Membership Growth

2013–14 to 2023–24



The 2023-24 WCPSS forecast predicts a 2024-25 Month 2 K-12 ADM of 450 students over the 2023-24 Month 2 ADM, an increase of 0.281%. This increase reflects a combination of expected continued and increased returns to normal kindergarten entry patterns and continued in migration to Wake County.

Over the next ten years, WCPSS is forecasted to gain 12,362 students overall (7.726%) by 2033-34. These gains reflect larger anticipated birth cohorts driven mostly by continued in-migration of families and those who are likely to have children to Wake County.

Statewide Trends

At the statewide level, enrollment decreased by 4,013 or -0.003%. As we can see below, Wake County Public Schools is instead increasing in enrollment. At the LEA level:

- 39 LEAs had increased enrollment in 2023-24 compared to 2022-23.
- 76 LEAs had decreased enrollment in 2023-24 compared to 2022-23.

Table 1. ADM Changes, 2023-24 vs. 2022-23, Selected LEAs

	2023-24	2022-23	Change	Percentage Change
North Carolina Total	1,371,957	1,375,970	-4,013	-0.3%
Franklin County Schools	7,852	7,733	119	1.5%
Wake County Schools	159,995	158,412	1,583	1.0%
Nash-Rocky Mount Schools	14,303	14,216	87	0.6%
Johnston County Schools	36,883	36,813	70	0.2%
Charlotte-Mecklenburg Schools	140,863	141,059	-196	-0.1%
Harnett County Schools	19,704	19,751	-47	-0.2%
Durham Public Schools	30,848	31,084	-236	-0.8%
Cumberland County Schools	48,313	48,742	-429	-0.9%
Winston Salem/Forsyth County Schools	51,198	51,736	-538	-1.0%
Chatham County Schools	8,822	8,934	-112	-1.3%
Chapel Hill-Carrboro City Schools	11,236	11,390	-154	-1.4%
Guilford County Schools	66,392	67,489	-1,097	-1.6%
Orange County Schools	6,978	7,108	-130	-1.8%
Granville County Schools	6,452	6,614	-162	-2.4%

Source: Month 2 ADM. Principal's Monthly Report, NC DPI and WCPSS Technology

The only other local school districts that saw increases were Franklin County Schools (119 students / 1.5%), Nash-Rocky Mount Schools (87 students / 0.6%), and Johnston County Schools (70 students / 0.2%). No other large school districts saw increases year over year.

Long-Range Forecast: Assumptions & Threats to Model

Making accurate school enrollment projections relies on two key elements: high-quality input data and accurate forecasts of future trends, such as births. When past trends are relatively stable, it is generally easier to forecast the future from the past. Rapidly changing local contexts – and deviations from historical norms – increase the challenge of producing accurate forecasts.

There are three areas that we continue to watch in terms of potential threats to the long-range forecast:

1. The lingering impacts of COVID-19
2. Changes in laws and decision-making for both charter and private schools that may increase enrollment in those options
3. The impact of inflation on home building and home sales

The local context was already dynamic, with steady population growth, declining fertility rates¹, and shifting market share before the COVID-19 pandemic. The global pandemic caused by COVID-19 was an unprece-

¹Fertility rates are the number of births per women 1,000 women ages 15 to 44. While the fertility rate has been declining, the number of births in Wake County are projected to increase. This may seem counterintuitive, but this difference is due to steady increases in the size of the population of women 15 to 44 in Wake County and projected continued increases in this population in the near term.

dedented event, with no historical precedent as a point of reference. We saw significant disruptions to trends at the start of the 2020-21 school year through the 2021-22 school year. These disruptions have declined in many ways, but we are still not fully back to pre-pandemic patterns. It seems that we may be reaching a “new normal,” but it is hard to say if things will return to pre-pandemic “normal” anytime soon – or ever.

Additionally, given how charter school governance has changed, and the change in the legislative landscape around private school vouchers, there is some lack of clarity on market share trends moving into the future:

- WCPSS lost 4,234 students in 2020-21 compared to 2019-20 (-1.9%). Enrollments rebounded by 183 or 0.1% in 2021-22, but this rebound did not make up for the decline in 2020-21². In the 2022-23 school year WCPSS enrollments declined by 654 students or 0.4%, dropping enrollment to a new post-pandemic low. In 2023-24 we see a rebound of 1,583 students, or 1%.
- Charter school openings have stayed slow, with 2 new schools slated to open next year. Overall charter school enrollment for 2023-24 is up 863 students or 5.1%.
- Home school enrollments continued to drop from the pandemic high from 2020-21. From 2021-22 to 2022-23 we see a loss of 399 students or 2.8% year over year. Over this same period, private school enrollments increased by 826 or 4.0%.

Many families have become more involved in the day-to-day education of their children during the COVID-19 pandemic, which may change their expectations of public education. Some of the data bear this out with declines in home schooling and increases in private schools. These changing expectations may lead families to continue to choose nonpublic instruction in the future unless public instruction adapts to these new expectations of greater flexibility and individualized instruction³.

Finally, home sales and building permits have slowed markedly. While inflationary pressures have slowed, and the Fed has hinted that it may even start lowering interest rates, it is unclear when interest rates will come down noticeably. Further, it is unclear how behavior will change based on these trends in the medium- to long-term.

Given these challenges and the unknowns they create, the ten-year forecast was made with the following assumptions:

- Individuals who are currently enrolled in alternative schooling options (home school, charters, and privates) will stay in these options.
- No new assumptions were made about increases in private school enrollment, beyond the current growth trends.
- Births in Wake County will have small but steady increases, reflecting continued population growth.
- Grade progression ratios (GPRs) ignore the impacts of COVID-19 in 2020 and are based on observed transitions between 2017-2019 and 2021-2023.
- Two new charters will impact in 2024-25, and we continue to provide additional analysis of the impacts of potential charter openings.

²These comparisons are based on violation-adjusted ADM for 2020-21 and 2021-22, as attendance patterns remained strongly influenced by COVID-19. When comparing non-violation adjusted ADM, WCPSS lost 4,234 students in 2020-21 compared to 2019-20 (-2.6%). Non-violation adjusted enrollments rebounded by 1,087 or 0.7% in 2021-22.

³Hill, Paul T. and Ashley Jochim. October 29, 2020. “Can public education return to normal after the COVID-19 pandemic?” Brown Center Chalkboard (blog). Retrieved January 12, 2021, from <https://www.brookings.edu/blog/brown-center-chalkboard/2020/10/29/can-public-education-return-to-normal-after-the-covid-19-pandemic/>.

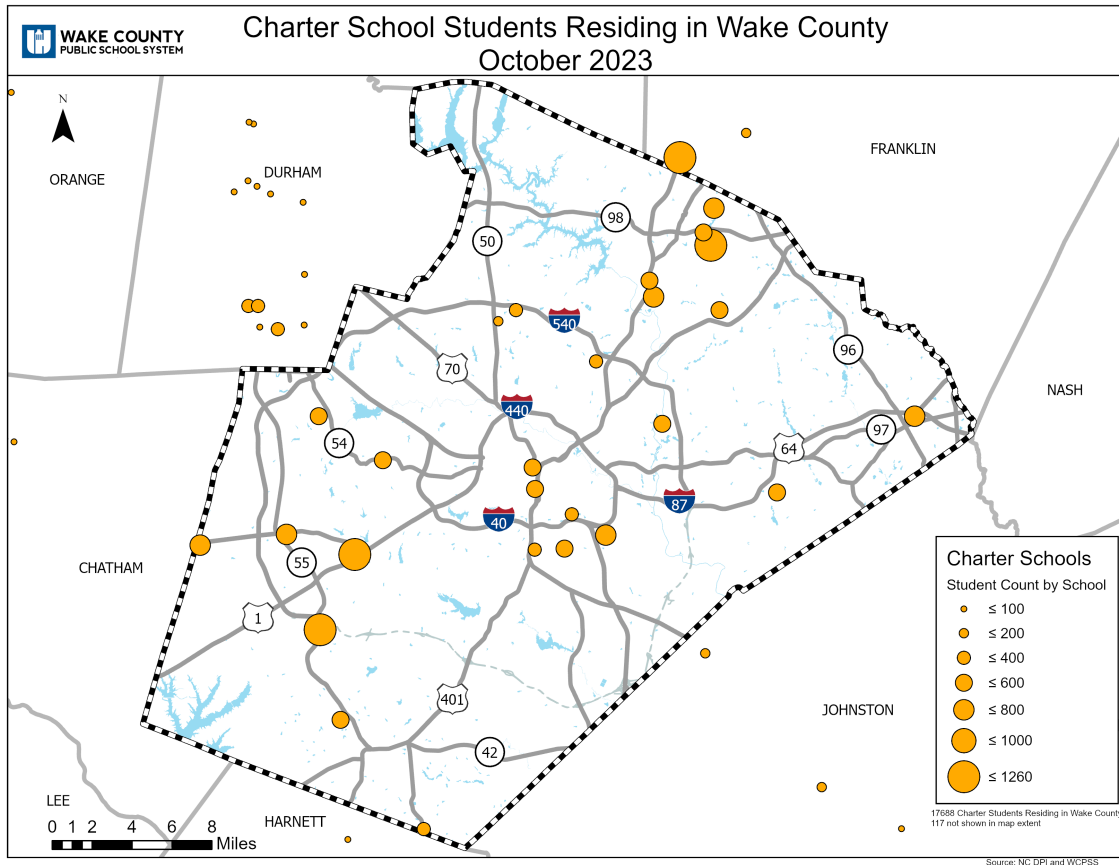
- While home sales and building permits are down again this year, we are not including any new assumptions about impacts on school enrollment based on these trends.

Impacts of Market Share Changes on Enrollments

Market Share Trends, 2013-14 to 2022-23

Between 2013-14 and 2022-23, WCPSS enrollment grew by 5,112 students, an increase of 3.3%. At the same time, the total number of K-12 students in Wake County, including WCPSS, charter schools (Wake billing), private schools, and home schools, grew by 25,206 or 13.6%, to reach 211,047 in 2022-23.

WCPSS market share—the percentage of K-12 enrollments occurring at Wake County Public Schools—dropped over seven percentage points over this period, from 82.5% to 75.1%. Market share declined most significantly between 2019-20 and 2020-21, dropping 1.8 percentage points from 77.6% to 75.8%.

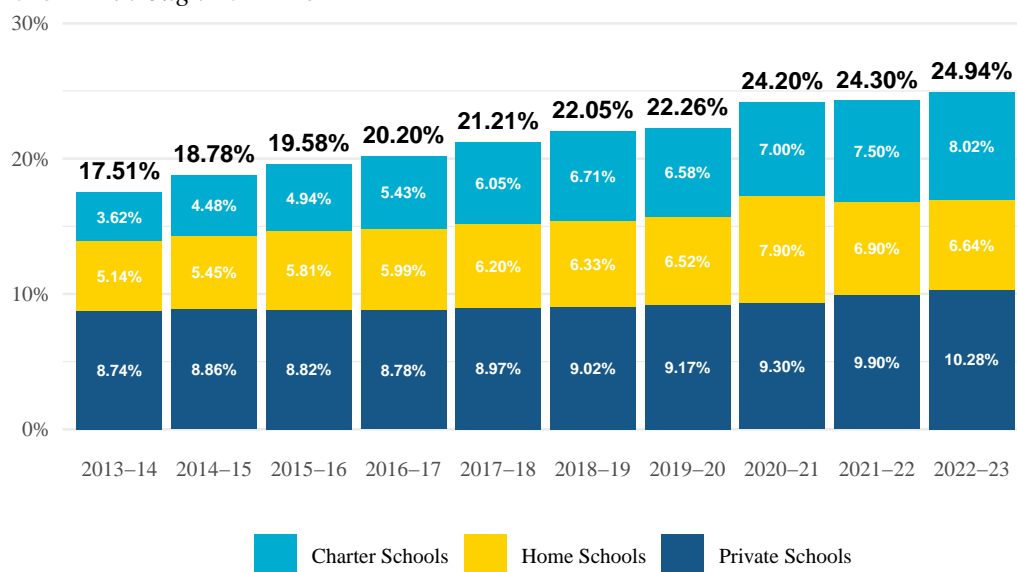


Over the past nine years, charter school, home school, and private school enrollments grew faster than WCPSS enrollments. WCPSS's shifting market share reflects the following dynamics:

- **Rapid expansion of charter schools:** Between the 2013-14 and 2022-23 school years, Wake charter school enrollments more than doubled, rising from 6,733 to 16,927, an increase of 151%. Charter school market share rose from 3.6% to 8% over this time.
- Charter schools continued to grow into the current school year up to 17,790.
- **Growth of home schools:** Between 2013-14 and 2022-23, home school enrollments in Wake County grew from 9,559 to 14,009, an increase of 47%. Home school market share rose from 5.1% to 6.6% over this time. These are smaller increases than when these comparisons were made for 2020-21, and even 2021-22, showing that some of the exponential growth during the pandemic may have been transitory.
- **Steady growth in private school enrollments:** Between 2013-14 and 2022-23, private school enrollments rose from 16,249 to 21,699, an increase of 5,450 or 33.5%. With this growth, private schools regained market share from their post-Great Recession low of 8.7% in 2013-14. As of 2022-23, they were at 10.3%.

Figure 3. Market Share of Non-WCPSS Schools

2013-14 through 2022-23



Charter and Private School Growth and Implications for Future Market Share

WCPSS enrollments increased by 1,583 compared to last year (1.0%). This gain more than makes up for last year’s decline. The number of Wake County students enrolled in charter schools increased by a slightly lower number than last year, at 863 students or 5.1%. This increase was down about 2 percentage points from last year, and well off the high growth rates Wake County saw in the pre-pandemic years.

However, the big unknown is the impact of the new law expanding private school vouchers. If this growth in charter schools is accompanied by increased utilization of private school options, WCPSS market share may continue to decline. We will not know the magnitude of private school enrollments until July 2024, when the 2023-24 data is released from the Division of Non-Public Education at the NC Department of Administration. We will not know the full impact of the new law until the largest increases in funding occur in the 2026-27 Fiscal Year.

Kindergarten Enrollments Remain Below Expectations

The birth to kindergarten ratio is the number of students who enter WCPSS kindergarten divided by the number of births to Wake County mothers five years prior. During 2010-11, this ratio was 0.947, meaning that the kindergarten class entering WCPSS was 94.7% of the births to Wake County mothers in 2005. This indicates a combination of any one of the following factors: more resident families with children born in the county were moving away from Wake County before their child entered kindergarten; lower net in-migration of families with young children to Wake County; or families with kindergartners being less likely to enroll their children in WCPSS.

The birth to kindergarten ratio has been relatively stable for the past decade. As WCPSS market share has declined over this period, the stable ratio likely reflects continued net in-migration of families with young children during these years. Meaning that growth from migration is making up what could otherwise be a larger decline in kindergarten enrollments.

Table 2. ADM Changes, Historical Birth to Kindergarten Ratios

Birth Year	Resident Births	School Year Entering Grade K	Actual WCPSS Grade K Enrollment	Birth to Kindergarten Ratio
2008	13,542	2013-14	12,213	0.902
2009	13,010	2014-15	12,065	0.927
2010	12,705	2015-16	11,860	0.933
2011	12,458	2016-17	11,855	0.952
2012	12,309	2017-18	11,664	0.948
2013	12,439	2018-19	11,416	0.918
2014	12,635	2019-20	11,819	0.935
2015	12,867	2020-21	10,438	0.811
2016	13,019	2021-22	11,233	0.863
2017	12,683	2022-23	10,963	0.864
2018	12,580	2023-24	11,053	0.879

Source: Month 2 ADM, Principal's Monthly Report, NC DPI and WCPSS Technology and North Carolina State Center for Health Statistics

Between the 2015-16 and 2019-20, the average birth to kindergarten ratio was 0.938. This ratio dropped to 0.811 in 2020-21, the lowest ratio observed in WCPSS over the past 21 years. The ratio rebounded to 0.863 in 2021-22, 0.864 in 2022-23, and 0.879 in 2023-24, but this was still below historical averages.

If historical ratios had held in 2023-24, WCPSS would have expected about 11,800 kindergartners; instead, there were 11,053 enrolled. As kindergarten is not mandatory, parents may still be withholding children from kindergarten or sending them to private or charter schools.

Grade-Level Enrollments

WCPSS system-wide gains in 2023-24 were driven by large increases in enrollments in grade two, four, eleven, and twelve.

Despite this overall increase compared to last year, WCPSS enrollments are down for many grade levels. The largest decreases, though still small compared to the increases in other grades, occurred in first and tenth grades.

Overall, grades K-5 had higher enrollments in 2023-24 compared to 2022-23 (971 more students or 1.4%). Grades 6-8 showed the only aggregate loss (318 fewer students or -0.9%). Fueled by large increases in eleventh and twelfth grades, overall enrollments in WCPSS high schools grew by 930 or 1.7%.

Table 3. WCPSS Changes in Membership, 2023-24 vs. 2022-23

Membership by Grade

	2022-23	2023-24	Net Gain	Percentage Change
K	10,963	11,053	90	0.8%
1	11,629	11,416	-213	-1.8%
2	11,264	12,008	744	6.6%
3	11,496	11,476	-20	-0.2%
4	11,360	11,792	432	3.8%
5	11,766	11,704	-62	-0.5%
6	11,776	11,707	-69	-0.6%
7	12,173	12,042	-131	-1.1%
8	12,617	12,499	-118	-0.9%
9	14,822	14,954	132	0.9%
10	13,835	13,576	-259	-1.9%
11	12,628	13,197	569	4.5%
12	12,083	12,571	488	4.0%
Total	158,412	159,995	1,583	1.0%

Source: Month 2 ADM. Principal's Monthly Report, NC DPI and WCPSS Technology

Membership by Level

	2023-24	2022-23	Net Gain	Percentage Change
K-5	69,449	68,478	971	1.4%
6-8	36,248	36,566	-318	-0.9%
9-12	54,298	53,368	930	1.7%
Total	159,995	158,412	1,583	1.0%

Source: Month 2 ADM. Principal's Monthly Report, NC DPI and WCPSS Technology

Attendance Violations

WCPSS had 374 enrolled students in violation of attendance policies for Month 2 of the 2023-24 school year, getting much closer to pre-pandemic averages. In prior years, the number of students in violation ranged from 121 to 166, averaging 138 per year.

Given the return to near-normal trends, this year we are no longer including an adjustment for attendance violations in our projection model.

Table 4. WCPSS Members in Violation, 2015-16 through 2023-24

School Year	WCPSS Members in Violation
2015-16	166
2016-17	128
2017-18	142
2018-19	135
2019-20	121
2020-21	1,348
2021-22	442
2022-23	269
2023-24	374

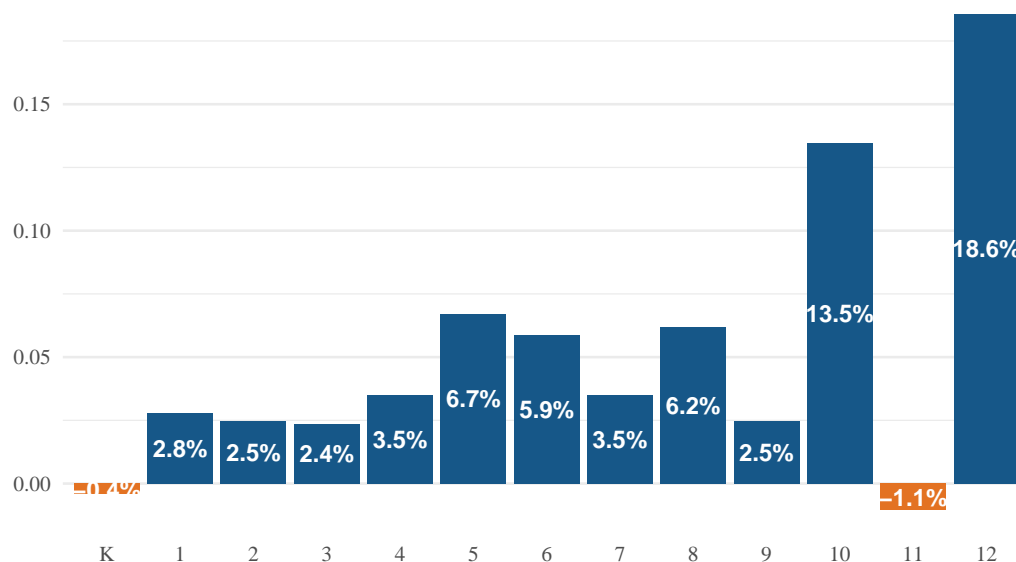
Source: Month 2 ADM. WCPSS Technology

Impacts on Wake County Charter Enrollments

The number of Wake County students (billing) enrolled in charter schools increased by 863 students over last year, continuing a trend of growth for charter schools in Wake County.

Wake County charter school enrollments (regardless of residence in Wake County) grew by 717 or 3.7% in 2023-24 compared to 2022-23. Wake County charter enrollment increased most significantly in high school (particularly grades 10 and 12 – following large increases in 9 and 11 last year), followed by late elementary and middle school grades, particularly fifth, sixth, and eighth. Kindergarten and grade 11 were the only grades that decreased year over year.

Figure 4. Change in Wake County Charter Enrollments
By Grade 2023–24 vs. 2022–23



Impacts on Fertility

During the first year of the COVID-19 pandemic, there was significant speculation about its impact on fertility. In June 2020, some scholars predicted as much as a 15% decline in births⁴, reflecting economic uncertainty and the challenges of navigating childcare, work, and schooling during a pandemic⁵. This estimate was later revised downwards, based on a faster than expected economic recovery, but most experts were still predicting lower levels of births⁶. These predictions appear to be true for 2020, but may not hold beyond that year. 2021 saw increased births, and while we are estimating a small decline for 2022, it is not assured, and it is closer to a return to normal rates of births.

In Wake County, there were 12,514 births in 2020, a decrease of 175 or -1.4% from 2019. This is smaller than the year-over-year decrease in births observed statewide (-3.0%).

During 2021, there were 13,168 births to Wake County residents, and during 2022 there were 13,145 births to Wake County residents. During the first 6 months of 2023, there were 6,276 births in Wake County. This number is almost exactly the same as 2022, and is more than the total number of births reported in the first half of the year for any year since 2016 (6,311), except for 2021 last year (6,314). In the past five years,

⁴Kearney, Melissa S., and Phillip B. Levine. June 15, 2020. “Half a million fewer children? The coming COVID baby bust.” Washington, DC: Brookings. Retrieved July 5, 2021, from <https://www.brookings.edu/research/half-a-million-fewer-children-the-coming-covid-baby-bust/>.

⁵Dockterman, Eliana. October 15, 2020. “Women Are Deciding Not to Have Babies Because of the Pandemic. That’s Bad for All of Us.” Time. Retrieved December 5, 2020, from <https://time.com/5892749/covid-19-baby-bust/>.

⁶Kearney, Melissa S., and Phillip B. Levine. December 17, 2020. “The coming COVID-19 baby bust: Update.” Washington, DC: Brookings. Retrieved January 13, 2021, from <https://www.brookings.edu/blog/up-front/2020/12/17/the-coming-covid-19-baby-bust-update/>.

about 48% of Wake County births occurred in the first six months of the year; extrapolating these trends to 2023 suggests a total of 13,019 births for the year, nearly eclipsing 2016 (13,019) and only slightly behind 2021 (13,168) and 2022 (13,145)⁷.

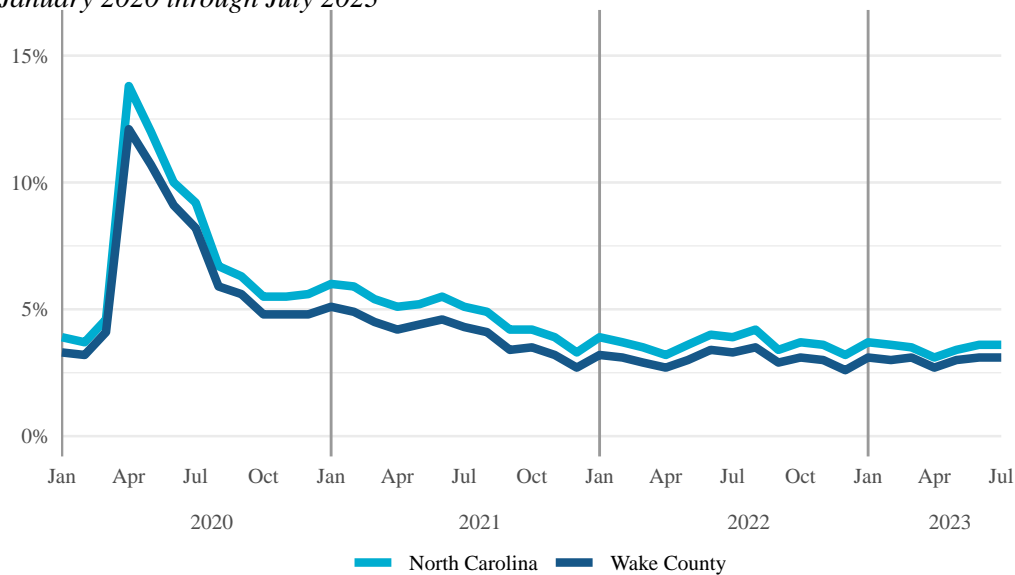
These trends indicate that the impact of COVID-19 has been unique and is not expected to have the same impact on fertility that we saw during the Great Recession, especially in counties, like Wake, where economic indicators remain strong. Further, we are not seeing significantly slowed birth rates due to inflation.

Impacts of Migration

Changes in migration have the potential to have larger, more immediate impacts on the school system than births, and economic indicators suggest that Wake will continue to experience population growth from migration.

Figure 5. Unemployment Rate by Month, Wake County vs. NC

January 2020 through July 2023



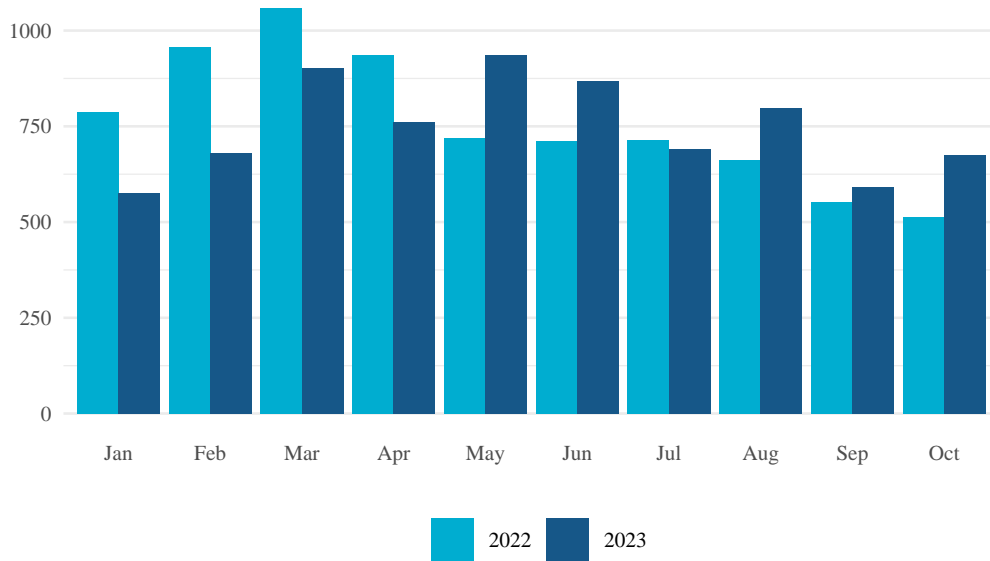
Economic indicators in Wake County remain strong: Wake County’s unemployment rate has been consistently lower than the state average. Both Wake County and North Carolina’s unemployment rates increased significantly in April and May during the first coronavirus lockdown and have since declined to pre-COVID levels. As of July 2023, Wake County’s unemployment rate was 3.1%, similar to the unemployment rate in February 2020 (2.9%).

Building permits will require further watching. Last year, building permits were strong early in the year, but then declined steadily. In 2023, we have seen underachievement early in the year, but we have not fallen

⁷North Carolina State Center for Health Statistics. Data provided by request. Data received in fall 2023 were provisional for 2023 and may be revised slightly in future data release.

in the back part of the year quite as much as last year. Given the current housing market and inflationary pressures on lending, it is possible, though not a given, that these permits will continue declining.

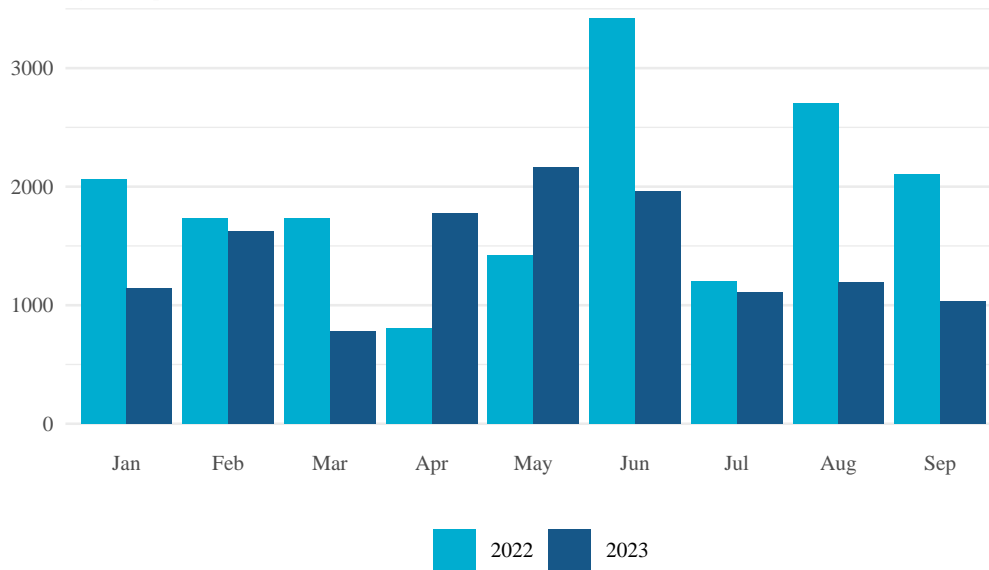
Figure 6. New Residential Building Permits: Wake County
January – October, 2022 and 2023



Home sales declined in 2020 compared to 2019 and increased slightly in 2021 compared to 2020 with a very strong close to the year. In 2022, sales began falling with the impact of rising interest rates. Yearly sales fell 23% (-6,704 sales). So far in 2023, sales have been down even more. Between January and September 2023, total home sales in Wake County were down 26% compared to the same period in 2022. This trend bears watching, especially it's potential short- to medium-term impacts on enrollment.

Figure 7. Home Sales: Wake County

January – September, 2022 and 2023

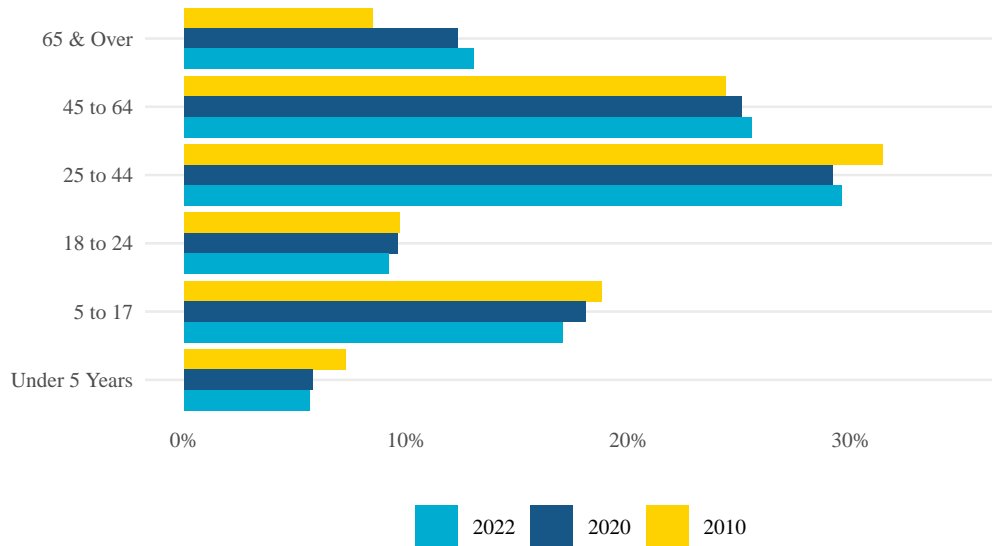


Impacts of Population Structure and Change

U.S. Census Bureau estimates indicate that Wake County’s population continues to age. Examining the change in distribution of select age cohorts reflects an increase in the share of total population for older adults (ages 65 years and over) between 2010 and 2022. As shown below in Figure 8, the population ages 65 and over accounted for 9% of the population on July 1, 2010; by July 1, 2020, this age group accounted for 12% of the County’s total population.

Figure 8. Share of Population by Age Group

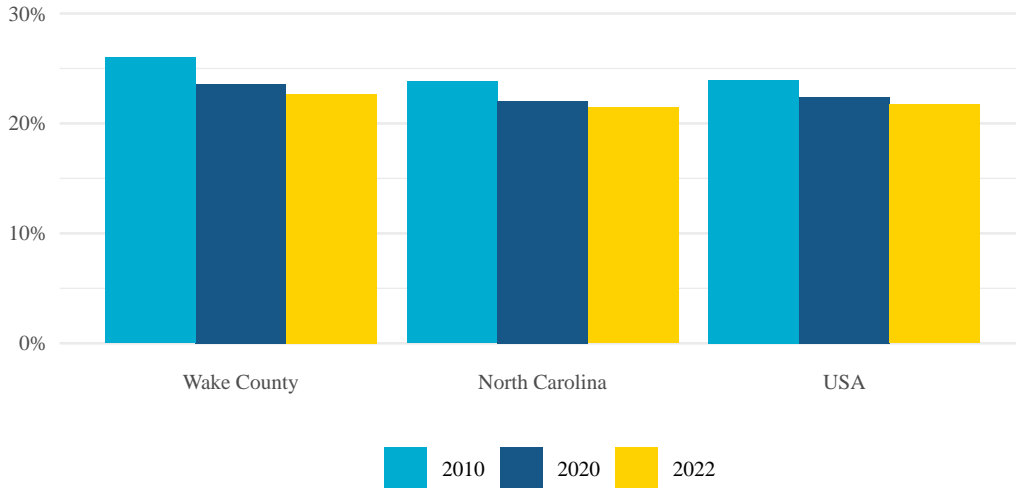
Wake County: 2010, 2020, and 2022



Source: U.S. Census Bureau, Population Division, Population Estimates

However, while the population continues to age, Wake County is still slightly younger than North Carolina and the United States as a whole. Figure 9 shows the proportion of the population 18 years and under for 2010, 2015, and 2022 for Wake County, North Carolina, and the United States. As we can see here, while the percentage decreases over time for each geographic entity, Wake County stays at a higher percentage than the comparison groups.

Figure 9. Share of Population Under 18 Years of Age
Wake County, North Carolina, and USA: 2010, 2020, and 2022



Source: U.S. Census Bureau, Population Division, Population Estimates

2022-23 Forecast Performance

The table below highlights violation-adjusted attendance enrollments by grade for 2022-23 and actual enrollment for 2023-24 and the 2023-24 forecast for WCPSS. Patterns are similar to the changes in enrollment by grade described above.

When comparing the 2023-24 forecast to the actual enrollments, the total enrollment was 944 students above the forecast enrollment. This was driven primarily by the fact that almost every grade outperformed the model. The exceptions were Kindergarten and first grades, which continue to have lower than expected classes.

Forecast deviation was negative for elementary school ages, driven completely by Kindergarten and first grades. Middle and high school age deviation was positive with the largest percent deviation in high school.

Table 5. WCPSS Changes in Membership by Grade, 2023-24 vs. 2022-23 and Forecast

Membership by Grade

	2022-23 (actual)	2023-24 (forecast)	2023-24 (actual)	Net Gain (2023-24 - 2022-23)	Percentage Change	Variance (actual - forecast)
K	10,963	11,728	11,053	90	0.8%	-675
1	11,629	12,199	11,416	-213	-1.8%	-783
2	11,264	11,776	12,008	744	6.6%	232
3	11,496	11,248	11,476	-20	-0.2%	228
4	11,360	11,543	11,792	432	3.8%	249
5	11,766	11,426	11,704	-62	-0.5%	278
6	11,776	11,624	11,707	-69	-0.6%	83
7	12,173	11,908	12,042	-131	-1.1%	134
8	12,617	12,276	12,499	-118	-0.9%	223
9	14,822	14,554	14,954	132	0.9%	400
10	13,835	13,588	13,576	-259	-1.9%	-12
11	12,628	13,115	13,197	569	4.5%	82
12	12,083	12,066	12,571	488	4.0%	505
Total	158,412	159,051	159,995	1,583	1.0%	944

Source: Month 2 ADM. Principal's Monthly Report, NC DPI and WCPSS Technology

Membership by Level

	2022-23 (actual)	2023-24 (forecast)	2023-24 (actual)	Net Gain (2023-24 - 2022-23)	Percentage Change	Variance (actual - forecast)
K-5	68,478	69,920	69,449	971	1.4%	-471
6-8	36,566	35,808	36,248	-318	-0.9%	440
9-12	53,368	53,323	54,298	930	1.7%	975
Total	158,412	159,051	159,995	1,583	1.0%	944

Source: Month 2 ADM. Principal's Monthly Report, NC DPI and WCPSS Technology

2023-24 Ten-Year K-12 Forecast

The 2023-24 ten-year K-12 forecast is based on the Month 2 Average Daily Membership (ADM) as reported by Wake County Public Schools (WCPSS).

Methodology

Future enrollments in WCPSS were projected using the grade progression methodology described by the Western Interstate Commission for Higher Education (WICHE)⁸.

More specifically, projections were calculated using a grade progression ratio (GPR), which uses data from kindergarten through twelfth grades to project enrollments in future years. A five-year smoothed average

⁸Bransberger, Peace and Demarée K. Michelau. 2016. Knocking at the College Door: Projections of High School Graduates. 9th ed. Boulder, CO: Western Interstate Commission for Higher Education.

ratio was used to place greater weight on more recent years with changing demographics and was calculated as:

$$Y_{pt} = wY_{p(t-1)} + (1 - w) \frac{\sum_{i=2}^5 Y_{p(t-i)}}{4}$$

where Y_{pt} is the grade progression ratio at a point p in year t , and w is the weight. This weight is 0.4 in the first year and 0.15 for each of the four prior years.

Assumptions

The ten-year forecast was made with the following assumptions:

- Individuals who are currently enrolled in alternative schooling options (home school, charters, and privates) will stay in these options.
- No new assumptions were made about increases in private school enrollment, beyond the current growth trends.
- Births in Wake County will have small but steady increases, reflecting continued population growth.
- Grade progression ratios (GPRs) ignore the impacts of COVID-19 in 2020 and are based on observed transitions between 2017-2019 and 2021-2023.
- Two new charters will impact in 2024-25, and we continue to provide additional analysis of the impacts of potential charter openings.
- While home sales and building permits are down again this year, we are not including any new assumptions about impacts on school enrollment based on these trends.

Projecting Fertility

While Wake County births decreased during 2020, they rebounded in 2021 to the highest level since 2016 and had a small decline in 2022 and 2023. We assumed births will continue to stabilize and then grow, reflecting overall strong population growth in Wake County. Births were projected based on a linear regression of the last 20 years of births in Wake County.

Table 6. Wake County Resident Live Births

2023 estimated, 2024-2028 projected

2021	2022	2023	2024	2025	2026	2027	2028
13,168	13,145	13,019	13,308	13,374	13,440	13,505	13,571

Accounting for Missing Kindergartners

Month 2 kindergarten enrollment was nearly 750 students lower than expected based on the number of births in 2018 and historical kindergarten yields. These missing kindergartners could enroll directly in Grade 1

in 2024-25, or they could instead enroll in kindergarten. Based on the challenge in accurately forecasting kindergarten enrollments in 2024-25, and the continued challenges posed by COVID-19, we did not assume that these “missing” kindergartners would be enrolled in WCPSS in 2024-25.

Charter School Impact

The current model accounts for the continued growth of two charter schools, as well as the continued build out of three other charter schools, with a potential impact of 1,673 students from WCPSS when they are fully built out. The impact of currently open and fully filled charters is assumed to be captured in the existing data⁹.

Table 7. Total Anticipated Charter Impact in Wake County

2024 through 2033

grade	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033
K	106	116	127	134	137	137	137	137	137	137
1	110	120	132	138	141	141	141	141	141	141
2	50	120	132	138	140	140	140	140	140	140
3	0	50	132	138	140	140	140	140	140	140
4	0	0	50	138	140	140	140	140	140	140
5	0	0	0	50	140	140	140	140	140	140
6	0	0	0	0	50	50	50	50	50	50
7	100	100	100	100	100	150	150	150	150	150
8	0	100	100	100	100	100	150	150	150	150
9	70	70	70	70	70	70	70	70	70	70
10	107	107	107	107	107	107	107	107	107	107
11	141	141	141	141	141	141	141	141	141	141
12	155	167	167	167	167	167	167	167	167	167
Total	839	1,091	1,258	1,421	1,573	1,623	1,673	1,673	1,673	1,673

Results

The forecast yields the following results for Month 2 ADM:

- In 2024-25, a net gain of 450 students over the 2023-24 Month 2 ADM, an increase of 0.3%.
- Small decrease in Month 2 ADM in 2025-26 (below 0.1%)
- Steady increases in Month 2 ADM through 2032-33 after that.
- Overall gain of 12,362 students (7.7%) over the ten-year period.

⁹Most of the current charters are at capacity/buildout. Some of the existing charters are below their projected enrollments while others are above their approved/projected enrollments. Because these patterns are inconsistent, we assumed no changes going forward.

Table 8. Final WCPSS Enrollment Projections by Grade

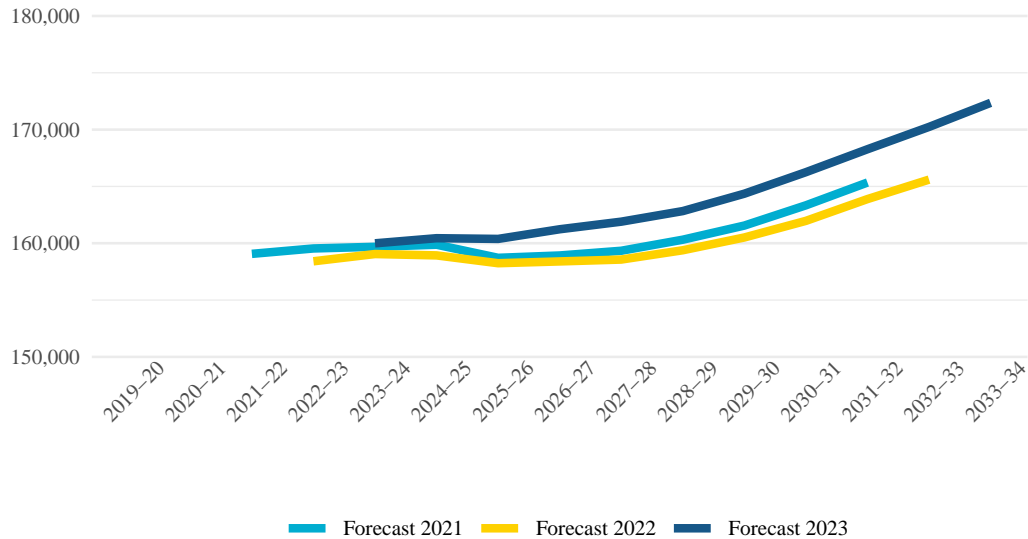
Month 2 ADM

Grade	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	Change, 2023-2033
K	10,963	11,053	11,716	11,578	12,141	12,113	11,992	12,262	12,323	12,384	12,445	12,507	1,454
1	11,629	11,416	12,145	12,140	11,996	12,585	12,560	12,438	12,717	12,781	12,845	12,908	1,492
2	11,264	12,008	11,597	12,382	12,376	12,235	12,840	12,817	12,693	12,978	13,043	13,108	1,100
3	11,496	11,476	12,091	11,677	12,457	12,457	12,319	12,930	12,907	12,782	13,069	13,135	1,659
4	11,360	11,792	11,632	12,255	11,836	12,621	12,625	12,487	13,107	13,084	12,957	13,248	1,456
5	11,766	11,704	11,975	11,812	12,445	12,021	12,817	12,824	12,684	13,313	13,289	13,161	1,457
6	11,776	11,707	11,598	11,867	11,706	12,333	11,912	12,791	12,797	12,658	13,282	13,258	1,551
7	12,173	12,042	11,785	11,674	11,947	11,783	12,420	11,993	12,885	12,892	12,751	13,384	1,342
8	12,617	12,499	12,220	11,960	11,848	12,125	11,959	12,605	12,173	13,078	13,084	12,941	442
9	14,822	14,954	14,577	14,250	14,063	13,932	14,256	14,061	14,819	14,371	15,431	15,439	485
10	13,835	13,576	13,686	13,403	13,101	12,929	12,808	13,107	12,927	13,626	13,213	14,191	615
11	12,628	13,197	12,814	13,021	12,751	12,463	12,298	12,183	12,469	12,297	12,964	12,569	-628
12	12,083	12,571	12,609	12,363	12,563	12,302	12,024	11,864	11,753	12,029	11,863	12,508	-63
Total	158,412	159,995	160,445	160,382	161,230	161,899	162,830	164,362	166,254	168,273	170,236	172,357	
# Change	-654	1,583	450	-63	848	669	931	1,532	1,892	2,019	1,963	2,121	
% Change	-0.4%	1.0%	0.3%	-0.0%	0.5%	0.4%	0.6%	0.9%	1.2%	1.2%	1.2%	1.2%	

Starting in 2026, enrollments are forecast to rise steadily, largely due to the forecasted increase in birth cohorts, and because most of the charters projected to impact enrollment will largely be at full capacity by then.

Figure 10. Comparison of Current and Past Forecast Series

WCPSS Total Enrollment: Forecast 2023–24, 2022–23, 2021–22



Source: Demographic Analytics Advisors and Carolina Demography

The final set of projections has been included as an Excel file.

Concerns/Unknowns

Lingering questions about future years include:

- How will changes in decision making for charter schools, and new laws expanding vouchers for private schools impact enrollment?
- How many missing students will return to school?¹⁰
- How will inflation and decreases in home sales impact people’s schooling decisions?
- How much will school choices—e.g. home schooling—made during the pandemic persist into the future? And for how long?
- How well will charter applications capture true build out?

In any year, there are challenges in making projections, but the last few years have been particularly challenging due to the COVID-19 pandemic. It is very hard to predict the response coming out of the pandemic during a period of inflation at levels we have not seen for decades, and we may see continued flux well into the 2024-25 school year and beyond.

¹⁰“Missing” refers to the significantly reduced enrollments in WCPSS that are not fully accounted for by increases in home schools, charter schools, and private schools. In Wake County, as in statewide, the decrease in public school enrollments was not fully offset by increased enrollments in other school systems. While some of this was concentrated in the earliest grades (Kindergarten), these enrollment declines do not account for the entirety of the shift.