

Executive Summary

WCPSS Average Daily Membership (ADM) increased by 1,087 students (0.7%) in 2021-22. This increase does not offset the large enrollment declines experienced during 2020-21. A larger than typical share of students is in violation of attendance requirements, though not to the level observed during 2020-21. Adjusting for these violations indicates a smaller increase in enrollments (net gain of 183 or 0.1% when comparing violation-adjusted enrollments for 2020-21 to 2021-22).

In contrast, Wake County (billing) charter school enrollments increased by 1,290 or 8.9%, and higher enrollments in home school and private schools likely continued. During 2020-21, the number of home school students in Wake County increased 2,772 or 20.4% and the number of private school enrollments increased 290 or 1.5%. The flexibility that families feel they achieve under these traditional public school alternatives may lead these trends to stay or intensify.

The global pandemic caused by COVID-19 is an unprecedented 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 and these disruptions have continued through 2021-22. Our understanding of how they will play out in the near-term and longer-term remains limited. The ten-year forecast was made with the following assumptions:

- Individuals who enroll in alternative schooling options (home school, charters, and privates) will stay in these options.
- 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 2015-2019 and 2020-21.
- Three new charters will impact in 2022-23.

The 2021-22 WCPSS forecast predicts a 2022-23 Month 2 K-12 ADM of 476 students over the violation-adjusted 2021-22 Month 2 ADM, an increase of 0.3%. This increase reflects a combination of expected returns to normal kindergarten entry patterns and large birth cohort in 2016.

Over the next ten years, WCPSS is forecasted to gain 6,278 students overall (3.9%) by 2030-31. These gains reflect larger anticipated birth cohorts.

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.

The local context was already dynamic, with steady population growth, declining fertility rates¹, and shifting market share. **The global pandemic caused by COVID-19 is an unprecedented 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 and these disruptions have continued to impact enrollments in 2021-22. We have limited understanding about how they will play out in the near term and the longer term:**

- WCPSS lost 3,024 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 2020-21.²
- Six charters had applied for opening in fall 2020 in Wake County but only one did. One charter opened in fall 2021 and three additional charters are expected to open in fall 2022.
- Home school enrollments increased by 2,772 or 20.4% in 2020-21 compared to 2019-20. Over this same period, private school enrollments increased by 290 or 1.5%.

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. These changing expectations may lead families to choose nonpublic instruction in the future unless public instruction adapts to these new expectations of greater flexibility and individualized instruction.³

¹ Fertility 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.

² These 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.

³ Hill, 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/>.

COVID-19 and Wake County

Public School Enrollments Rebounded but Remain Down Statewide

Statewide, nearly 63,000 fewer students were attending public schools in Month 2 of 2020-21 compared to 2019-20, a loss of -4.4%. Public school enrollments rebounded slightly in Month 2 of 2021-22, increasing 12,571 or 0.9%. At the Local Education Agency (LEA):

- 61 LEAs had increased enrollments in 2021-22 compared to 2020-21
- 2 LEAs had no change in enrollments
- 53 LEAs had decreased enrollments in 2021-22 compared to 2020-21⁴

Locally, ADM declined in Chapel Hill-Carrboro City Schools (-3.0%), Granville County Schools (-2.4%), and Harnett County Schools (-0.4%). WCPSS ADM had a larger percentage increase (0.7%) than Durham Public Schools (0.1%) but was below the statewide average (0.9%). The neighboring districts of Johnston County Schools (3.8%), Franklin County Schools (2.6%), and Chatham County Schools (2.2%) had larger percentage increases in ADM enrollments than WCPSS, though, apart from Johnston, these systems had larger decreases in 2020-21. Among local school systems, Johnston County Schools had the largest numeric increase in enrollments between 2020-21 and 2021-22 (1,364), followed by WCPSS (1,087).

Table 1. ADM Changes, 2021-22 vs. 2020-21, selected LEAs

	2020-21	2021-22	Change	% Change
North Carolina Total	1,355,120	1,367,691	12,571	0.9%
Chapel Hill-Carrboro City Schools	11,764	11,411	-353	-3.0%
Charlotte-Mecklenburg Schools	138,884	140,471	1,587	1.1%
Chatham County Schools	8,612	8,805	193	2.2%
Cumberland County Schools	48,185	47,949	-236	-0.5%
Durham Public Schools	31,171	31,189	18	0.1%
Franklin County Schools	7,724	7,921	197	2.6%
Granville County Schools	6,816	6,650	-166	-2.4%
Guilford County Schools	68,264	67,632	-632	-0.9%
Harnett County Schools	19,256	19,186	-70	-0.4%
Johnston County Schools	35,906	37,270	1,364	3.8%
Nash-Rocky Mount Schools	13,896	14,179	283	2.0%
Orange County Schools	7,031	7,094	63	0.9%
Wake County Public Schools*	157,673	158,760	1,087	0.7%
Winston Salem/Forsyth County Schools	50,407	51,974	1,567	3.1%

Source: Month 2 ADM, Principal's Monthly Report, NC DPI

*Unadjusted ADM shown for accurate comparison. Enrollment forecast is based on ADM adjusted for enrollment violations.

⁴ LEAs include the Innovative School District (LEA 295).

Compared to the other largest school districts in the state, WCPSS had smaller relative enrollment losses in 2020-21. During 2021-22, some of the larger systems have had enrollment growth that is outpacing WCPSS, such as Charlotte-Mecklenburg Schools (1.1%) and Winston-Salem/Forsyth County Schools (3.1%). Two of the other largest systems, Guilford County Schools (-0.9%) and Cumberland County Schools (-0.5%), have continued to see enrollment declines.

Impacts on Market Share & Enrollments

Market Share Trends, 2013-14 to 2020-21

Between 2013-14 and 2020-21⁵, WCPSS enrollment grew by 4,373 students, an increase of 2.9%.⁶ 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 22,054 or 11.9%, to reach 207,895 in 2020-21.

WCPSS market share—the percentage of K-12 enrollments occurring at Wake County Public Schools—dropped nearly seven percentage points over this period, from 82.5% to 75.8%. 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 eight 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 2020-21 school years, Wake charter school enrollments⁷ more than doubled, rising from 6,733 to 14,490, an increase of 115%. Charter school market share rose from 3.6% to 7.0% over this time.
 - Charter schools continue to experience strong growth. Wake charter enrollments increased by 1,290 or 8.9% between 2020-21 and 2021-22.
- **Growth of home schools:** Between 2013-14 and 2020-21, home school enrollments in Wake County grew from 9,559 to 16,347, an increase of 71%. Home school market share rose from 5.1% to 7.9% over this time.
- **Steady growth in private school enrollments:** Between 2013-14 and 2020-21, private school enrollments rose from 16,249 to 19,385, an increase of 3,136 or 19.3%. With this

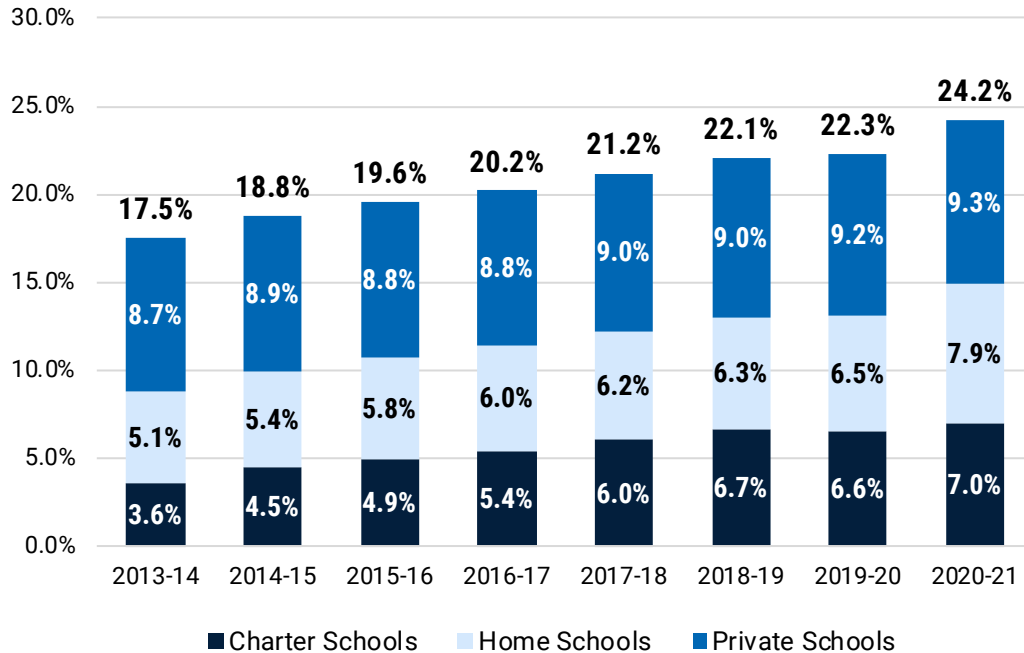
⁵ Using 2013-14 school year and later for comparisons because this was the first year that WCPSS membership was reported using Month 2 ADM.

⁶ Between 2019-20 and 2020-21, the total number of K-12 students in WCPSS, charter, private, and home schools decreased by 766 students, the first time in the last 20 years a decrease has been recorded. While the pace of K-12 increases had slowed in recent years, the K-12 population was steadily increasing by a few thousand students each year.

⁷ Wake County charter students billing. The number of all students in Wake County charter schools (including students from other counties) grew from 7,482 to 16,368 over this period, an increase of 8,886 or 119%.

growth, private schools regained market share from their post-Great Recession low of 8.7% in 2013-14. As of 2020-21, they were at 9.3%.

Figure 2. Market share of non-WCPSS schools, 2013-14 to 2020-21



Sources: NC DPI PMR Month 2, NC Department of Administration

Charter Growth and Implications for 2021-22 Market Share

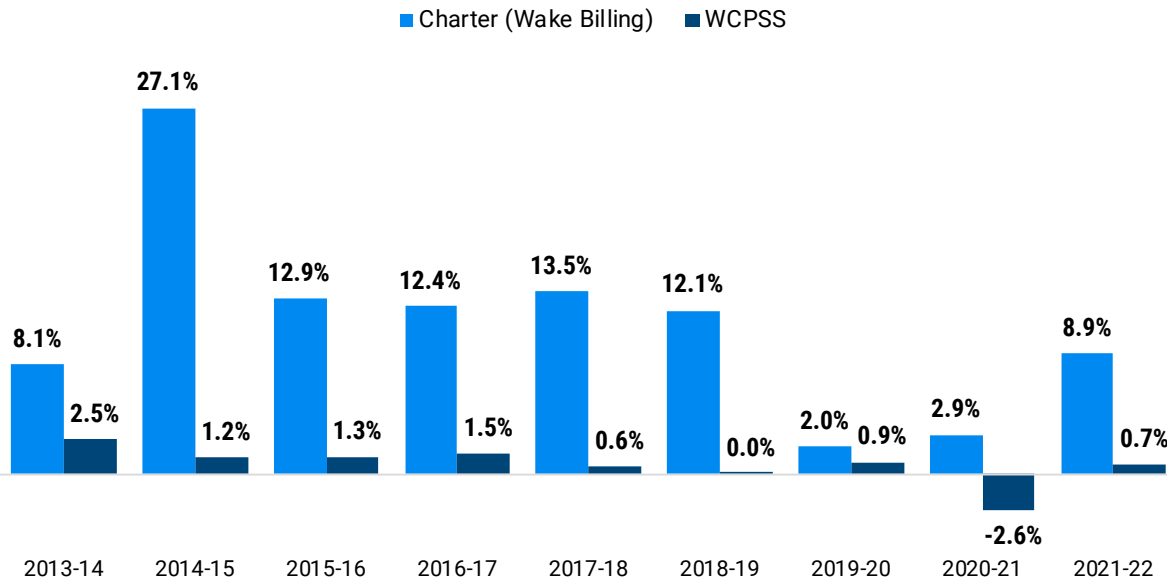
WCPSS enrollments grew by 1,087 compared to last year (0.7%). This growth does not offset the enrollment declines that occurred between 2019-20 and 2020-21 (-4,234).

Over the last year, the number of Wake County students enrolled in charter schools grew by 1,290 or 8.9%. This was the strongest year of growth for charter enrollments since 2018-19.

If this growth in charter schools is accompanied by continued high utilization of home school and private school options, WCPSS market share may continue to decline. We will not know the magnitude of either home school or private school enrollments until July 2022, when the 2021-22 data are released from the Division of Non-Public Education at the NC Department of Administration.

Figure 3. Charter Schools Growing More Quickly than WCPSS

Year-over-year growth in Wake County Public School System vs. charters (billed), 2013-14 to 2021-22



Source: WCPSS

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. Historical birth to Kindergarten ratios

Birth Year	Resident Births	School Year Entering Grade K	Actual WCPSS Grade K Enrollment	Birth to Kindergarten Ratio
2005	12,264	2010-11	11,608	0.947
2006	12,849	2011-12	12,057	0.938
2007	13,299	2012-13	12,108	0.910
2008	13,529	2013-14	12,213	0.903
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	11,440	0.920
2014	12,635	2019-20	11,819	0.935
5-Year Average (2015-16 to 2019-20)				0.938
2015	12,867	2020-21	10,438	0.811
2016	13,019	2021-22	11,233	0.863

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, but this was still below historical averages.

If historical ratios had held in 2021-22, WCPSS would have expected about 12,212 kindergartners; instead, there were 11,233 enrolled. As kindergarten is not mandatory, parents may be withholding children from kindergarten or home school until they can participate in a full year of in-person school, rather than try to navigate virtual schooling.

Grade-Level Enrollments (Actual, Unadjusted for Attendance-Violations)

WCPSS systemwide growth in 2021-22 was driven by large increases in enrollments in grade nine (1,864 more students or 13.6%, potentially due to high non-promotion rates) and kindergarten (820 more students or 7.9%). Eleventh and second grades also grew faster than the system average, while seventh and tenth grades had modest growth.

Despite overall growth compared to last year, WCPSS enrollments are down for many grade levels. Twelfth grade had the largest enrollment declines (615 fewer students or -5.1%) followed by sixth grade (390 fewer students or -3.1%). Except for kindergarten and second grade, enrollment in most elementary grades declined by a few hundred students compared to last year.⁸

⁸ These patterns by grade are similar to enrollment shifts seen statewide. Across North Carolina’s public schools, the largest enrollment increases were in ninth grade (12.3%) and kindergarten (10.5%), followed by eleventh grade (3.8%) and small increases in grades 2, 3, 4, and 8. Statewide, twelfth grade had the largest enrollment declines (-8.9%), followed by first and sixth grades (-3.0% each). Grades 5, 7, and 10 also had enrollment declines.

Table 4. WCPSS Changes in Membership, 2021-22 vs. 2020-21
Membership by Grade

	2020-21 (actual)	2021-22 (actual)	Net Gain	Percentage Change
K	10,405	11,225	820	7.9%
1	11,418	11,124	-294	-2.6%
2	11,325	11,566	241	2.1%
3	11,665	11,346	-319	-2.7%
4	11,987	11,711	-276	-2.3%
5	12,222	11,995	-227	-1.9%
6	12,427	12,037	-390	-3.1%
7	12,512	12,548	36	0.3%
8	12,833	12,663	-170	-1.3%
9	13,715	15,579	1,864	13.6%
10	13,109	13,125	16	0.1%
11	12,082	12,483	401	3.3%
12+	11,973	11,358	-615	-5.1%
Total	157,673	158,760	1,087	0.7%

Membership by Level

	2020-21 (actual)	2021-22 (actual)	Net Gain	Percentage Change
K-5	69,022	68,967	-55	-0.1%
6-8	37,772	37,248	-524	-1.4%
9-12+	50,879	52,545	1,666	3.3%
Total	157,673	158,760	1,087	0.7%

Source: Month 2 ADM, Principal's Monthly Report, NC DPI
 Unadjusted ADM is shown. Enrollment forecast is based on ADM adjusted for enrollment violations.

Overall, grades K-5 had lower enrollments in 2021-22 compared to 2020-21 (55 fewer students or -0.1%). Losses in grades 6-8 were more pronounced (524 fewer students or -1.4%). Fueled by large increases in ninth grade, overall enrollments in WCPSS high schools grew by 1,666 or 3.3%.

Attendance Violations

WCPSS had 442 enrolled students in violation of attendance policies for Month 2 of the 2021-22 school year. In prior years, the number of students in violation ranged from 121 to 166, averaging 138 per year. Current enrollment violations are 304 students higher than this average, but 906 students below the attendance violations observed in 2020-21.

High school students, particularly ninth, tenth, and eleventh graders, are those most likely to be in violation. Of the WCPSS members in violation:

- 145 or 33% are in grade 9;
- 76 or 17% are in grade 10;
- 63 or 14% are in grade 11; and
- 42 or 10% are in grade 12

In total, 74% of students in violation are in high school; 15% are in grades 6-8 and 11% are in grades K-5.

Impacts on Wake County Charter Enrollments

The number of Wake County students (billing) enrolled in charter schools increased by 1,290 students over last year, more than the total increase in Wake County charter school enrollments observed in 2021.⁹

Wake County charter school enrollments grew by 763 or 4.7% in 2021-22 compared to 2020-21, similar to the statewide growth rate in charter enrollments (4.5%). Wake County charter enrollment increased most significantly in middle school (grades 6 and 7), followed by elementary grades, particularly first and third. At the high school level, Wake County charter school enrollments decreased for all grades except for tenth.

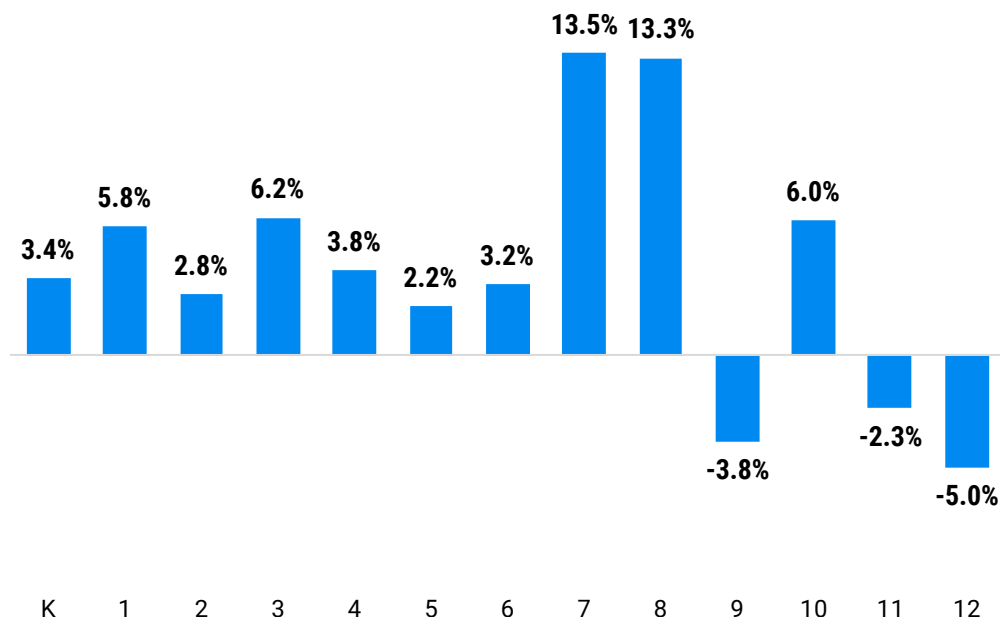
Table 3. WCPSS Members in Violation, 2015-16 to 2021-22

School Year	WCPSS Members in Violation
2015-16	166
2016-17	128
2017-18	142
2018-19	135
2019-20	121
2015-2020 Average	138
2020-21	1,348
2021-22	442

Source: WCPSS Technology Services

⁹ Charter schools located in Wake County serve Wake County students and students from neighboring districts. Last year, 89% of Wake County charter students were WCPSS billed; that share is currently 92%.

Figure 4. Change in Wake County charter enrollments by grade, 2021-22 vs. 2020-21



Source: NC DPI Month 2 PMR

Note: This includes all individuals enrolled in charter schools, not just Wake County billing

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 births,¹⁰ reflecting economic uncertainty and the challenges of navigating childcare, work, and schooling during a pandemic.¹¹ This estimate was later revised downwards, based on a faster than expected economic recovery, but most experts were still predicting lower levels of births.¹² These predictions appear to be true for 2020, but may not hold in all places for 2021.

In Wake County, there were 12,514 births in 2020, a decrease of 175 or -1.4% from 2019.¹³ This is smaller than the year-over-year decrease in births observed statewide (-3.0%).

During the first six months of 2021, there were 6,273 births to Wake County residents. This number is higher than the total number of births reported in the first half of the year for any year since 2016 (6,311). In the past five years, about 48% of Wake County births occurred in the first

¹⁰ Kearney, 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/>.

¹¹ Dockterman, 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/>.

¹² Kearney, 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/>.

¹³ North Carolina State Center for Health Statistics. Data provided by request. Data received in fall 2022 were provisional for 2020 and may be revised slightly in future data release.

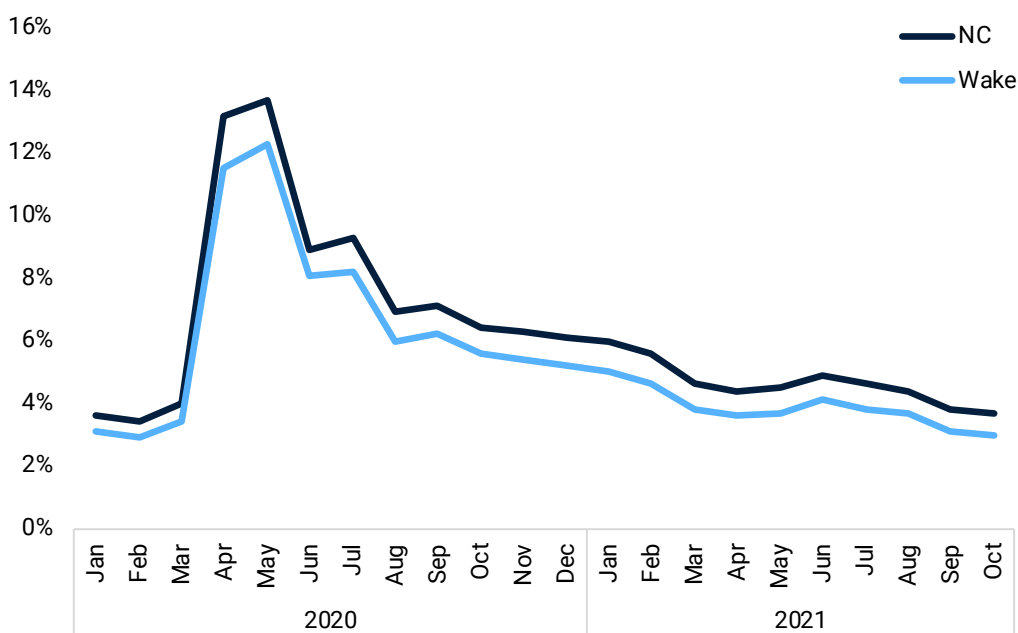
six months of the year; extrapolating these trends to 2021 suggests a total of 12,966 births for the year, the highest year since 2016.

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.

Impacts on 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 4. Unemployment Rate by Month, Wake vs. NC, 1/2020 - 10/2021



Source: BLS Local Area Unemployment Statistics

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 October 2021, Wake County’s unemployment rate was 3.0%, similar to the unemployment rate in February 2020 (2.9%).

While building permits were down in 2020 compared to 2019, they have since rebounded. Between January and September 2021, Wake County issued 7,042 building permits, an increase of 1,089 or 18.3% over this same period in 2020. This is the largest number of building permits issued in the first nine months of the year since 2007.

Home sales declined in 2020 compared to 2019 and declined again in 2021 compared to 2020. Between January and October 2021, total home sales in Wake County were down 3.7% compared to the same period in 2020. Despite this reduction, home sales remain strong. There were 23,621 home sales in the first ten months of the year, similar to the volume of sales observed during this period in 2016 (23,693) and above sales volumes between 2007 and 2014.

2021-22 Forecast Performance

The table below highlights violation-adjusted attendance enrollments by grade for 2020-21 and 2021-22 and the 2021-22 forecast for WCPSS. (See below for details on violation adjustments.) Patterns are similar to the changes in enrollment by grade described above—the largest increases are in ninth grade (potentially due to high non-promotion rates)¹⁴ and kindergarten, while the largest decreases are in twelfth grade and the majority of elementary grades—but the overall magnitude of change compared to last year is tempered, due to the higher number of attendance violations in 2020-21 compared to 2021-22.

Table 5. WCPSS Changes in Membership by Grade, 2021-22 vs. 2020-21 and forecast

Membership by Grade						
	2020-21 (violation- adjusted actual)	2021-22 (forecast)	2021-22 (violation- adjusted actual)	Net Gain (2021-22 - 2020-21 violation- adjusted actual)	Percentage Change	Variance (actual - forecast)
K	10,438	12,790	11,233	795	7.6%	-1,557
1	11,456	11,277	11,129	-327	-2.9%	-148
2	11,360	11,448	11,574	214	1.9%	126
3	11,683	11,369	11,351	-332	-2.8%	-18
4	12,005	11,775	11,715	-290	-2.4%	-60
5	12,246	12,141	11,998	-248	-2.0%	-143
6	12,475	12,208	12,047	-428	-3.4%	-161
7	12,577	12,636	12,567	-10	-0.1%	-69
8	12,917	12,680	12,681	-236	-1.8%	1
9	14,003	14,565	15,679	1,676	12.0%	1,114
10	13,354	13,219	13,178	-176	-1.3%	-41
11	12,274	12,715	12,527	253	2.1%	-188
12+	12,095	11,768	11,387	-708	-5.9%	-381
Total	158,883	160,591	159,066	183	0.1%	-1,525

Membership by Level						
	2020-21 (violation- adjusted actual)	2021-22 (forecast)	2021-22 (violation- adjusted actual)	Net Gain (2021-22 - 2020-21 violation- adjusted actual)	Percentage Change	Variance (actual - forecast)
K-5	69,188	70,800	69,000	-188	-0.3%	-1,800
6-8	37,969	37,524	37,295	-674	-1.8%	-229
9-12+	51,726	52,267	52,771	1,045	2.0%	504
Total	158,883	160,591	159,066	183	0.1%	-1,525

¹⁴ Statewide, the 9th grade non-promotion rate was 16.5% in 2020-21.

When comparing the 2021-22 forecast to the actual (violation-adjusted) enrollments, the total enrollment was 1,525 students below the forecast enrollment. This was primarily driven by the much smaller than forecast enrollments in kindergarten (1,557 fewer than forecast), reflecting the pandemic's continued impact on early grade enrollments.

Despite much larger than predicted enrollments in ninth grade (1,114 more students than forecast), enrollments were below the forecast for all other grades except for second and eighth. Overall, K-5 enrollments were 1,800 lower than forecast and middle school (grades 6-8) enrollments were 229 students lower than forecast. High school enrollments were 504 more than forecast, driven by the large increase in enrollments in ninth grade.

2021-22 Ten-Year K-12 Forecast

The 2021-22 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).¹⁵

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 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 enroll in alternative schooling options (home school, charters, and privates) will stay in these options.
- 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 2015-2019 and 2020-21 and 2021-22.
 - Due to continued lower than expected enrollments in kindergarten, the birth to kindergarten ratios are based on the observed birth to kindergarten ratios from 2015-2019 and ignore both 2020-21 and 2021-22 school years.
- Three new charters will impact in 2022-23.

Projecting Fertility

While Wake County births decreased during 2020, they rebounded in 2021 to the highest level since 2016. We assumed births will continue to 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.

¹⁵ Bransberger, 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.

Table 6. Wake County Resident Live Births (2020 provisional; 2021 estimated, 2022-2026 projected)

2020	2021	2022	2023	2024	2025	2026
12,514	12,966	13,185	13,252	13,319	13,385	13,452

Violations by Grade

The team review suggested that using current Month 2 ADM for WCPSS in 2021-22 would again yield artificially low enrollments, due to the above average number of students who are currently in violation of attendance requirements. To account for this, we normalized the 442 attendance violations to the average violations between 2015 and 2019 (138). We then distributed the 304 additional grade enrollments to ADM by grade according to the current pattern of attendance violations by grade. This yields a violation-adjusted Month 2 ADM of 159,259.

Table 7. Violation-Adjusted Membership by Grade

	2021-22 (actual)	2021-22 (violation adjusted)	Difference	% Difference
K	11,257	11,265	8	0.1%
1	11,155	11,160	5	0.0%
2	11,601	11,609	8	0.1%
3	11,379	11,384	5	0.0%
4	11,739	11,743	4	0.0%
5	12,029	12,032	3	0.0%
6	12,037	12,047	10	0.1%
7	12,548	12,567	19	0.2%
8	12,663	12,681	18	0.1%
9	15,579	15,679	100	0.6%
10	13,125	13,178	53	0.4%
11	12,483	12,527	44	0.4%
12+	11,358	11,387	29	0.3%
Total	158,953	159,259	306	0.2%

Accounting for Missing Kindergartners

Month 2 kindergarten enrollment was about 1,000 students lower than expected based on the number of births in 2016 and historical kindergarten yields. These missing kindergartners could enroll directly in Grade 1 in 2022-23, or they could instead enroll in kindergarten. Based on the challenge in accurately forecasting kindergarten enrollments in 2021-22 (the violation-adjusted enrollments were 1,557 students below the forecasted enrollments), and the continued challenges posed by COVID-19, we did not assume that these “missing” kindergartners would be enrolled in WCPSS in 2022-23.

Charter School Impact

The current model accounts for three charter school openings with a potential impact of 2,884 students from WCPSS when they are fully built out. The impact of currently open charters is assumed to be captured in the existing data.¹⁶

The projections model accounts for three charter school openings, with the following impacts, based on current applications:¹⁷

- **Revitalize Charter** expected to open in 2022
 - **Impact:** reduce WCPSS enrollments by 216 in 2022 (72 per grade in grades K-2) and increase to 648 in 2028 (72 students per grade in K-8).
- **Triangle Math & Science Academy Apex** expected to open in 2022
 - **Impact:** reduce WCPSS enrollments by 600 in 2022 (100 per grade in grades K-5) and increase to 900 students in 2025 (100 students per grade in grades K-8).
- **Wake Preparatory Academy** expected to open in 2022
 - **Impact:** reduce WCPSS enrollments by 830 in 2022 (80 in K, 67 students per grade in grades 1-6, 180 in grade 9, and 168 in grade 10). Impacts increase to 1,336 in 2025 (80 in K, 67 students per grade in grades 1-8, and 180 students per grade in grades 9-12).

Combined, the 3 charter schools described intend to serve 2,884 students in WCPSS by 2028.

Table 8. Total Anticipated Charter Impact in Wake County, 2022-2031

Grade	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031
K	252	252	252	252	252	252	252	252	252	252
1	239	239	239	239	239	239	239	239	239	239
2	239	239	239	239	239	239	239	239	239	239
3	167	239	239	239	239	239	239	239	239	239
4	167	167	239	239	239	239	239	239	239	239
5	167	167	167	239	239	239	239	239	239	239
6	67	167	167	167	239	239	239	239	239	239
7	0	67	167	167	167	239	239	239	239	239
8	0	0	67	167	167	167	239	239	239	239
9	180	180	180	180	180	180	180	180	180	180
10	168	180	180	180	180	180	180	180	180	180
11	0	168	180	180	180	180	180	180	180	180
12	0	0	168	180	180	180	180	180	180	180
Total	1,646	2,065	2,484	2,668	2,740	2,812	2,884	2,884	2,884	2,884

¹⁶ Most 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.

¹⁷ Two charter schools were included in last year’s model but are no longer anticipated to open and are not included in this year’s model: Heritage Collegiate Leadership Academy was not approved and will not be opening; North Raleigh Charter relinquished its charter and will not be opening.

The model did not include Nalanda Academy, as this is a new applicant that has not yet gone before the board for approval (pending January 2022). If Nalanda is approved, they will be opening in the fall of 2023.

Results

The forecast yields the following results for Month 2 ADM:

- In 2022-23, a net gain of 476 students over the violation-adjusted 2021-22 Month 2 ADM, an increase of 0.3%.
- Small increases in Month 2 ADM between 2022-23 and 2024-25 (about 0.1% per year)
- Large decrease in Month 2 ADM in 2025-26, followed by steadily larger increases in Month 2 ADM through 2031-32.
- Overall gain of 6,278 students (3.9%) over the ten-year period.

Table 10. Final WCPSS Enrollment Projections by Grade

Month-2 ADM Red means grade is projected to be lower than prior year													
	2020 (adjusted ADM; original: 157,673)	2021 (adjusted ADM; original: 158,953)	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	Change, 2021- 2031
K	10,438	11,233	11,629	11,532	11,634	11,470	11,894	12,099	12,162	12,224	12,286	12,349	1,116
1	11,456	11,129	12,412	12,086	11,986	12,092	11,922	12,361	12,574	12,639	12,704	12,768	1,639
2	11,360	11,574	11,033	12,575	12,244	12,143	12,250	12,078	12,523	12,738	12,804	12,870	1,296
3	11,683	11,351	11,413	11,039	12,582	12,251	12,149	12,257	12,084	12,530	12,745	12,811	1,460
4	12,005	11,715	11,249	11,479	11,103	12,655	12,322	12,220	12,328	12,155	12,602	12,819	1,104
5	12,246	11,998	11,626	11,325	11,557	11,179	12,741	12,406	12,303	12,412	12,237	12,688	690
6	12,475	12,047	11,825	11,522	11,224	11,454	11,078	12,626	12,294	12,193	12,300	12,127	80
7	12,577	12,567	12,175	11,952	11,647	11,345	11,578	11,199	12,764	12,428	12,325	12,434	-133
8	12,917	12,681	12,670	12,275	12,050	11,743	11,439	11,673	11,292	12,870	12,531	12,428	-253
9	14,003	15,679	14,530	14,517	14,059	13,876	13,636	13,283	13,555	13,196	15,026	14,634	-1,045
10	13,354	13,178	13,178	13,710	13,698	13,265	13,093	12,866	12,533	12,790	12,451	14,179	1,001
11	12,274	12,527	12,484	13,857	12,979	12,967	12,557	12,394	12,179	11,863	12,107	11,786	-741
12	12,095	11,387	11,859	11,818	13,110	12,277	12,266	11,878	11,723	11,520	11,221	11,451	64
Total	158,883	159,066	159,542	159,687	159,873	158,717	158,925	159,340	160,314	161,558	163,339	165,344	6,278
% change	-1.87%	0.12%	0.30%	0.09%	0.12%	-0.72%	0.13%	0.26%	0.61%	0.78%	1.10%	1.23%	3.9%
# change	-3,024	183	476	145	186	-1,156	208	415	974	1,244	1,781	2,005	

Notably, WCPSS enrollments are projected to decrease markedly in 2025 to below their 2020 level and then increase steadily. This decrease is largely due to the impact of a smaller birth cohort in 2020 (the 2025 kindergarten cohort) and the aging out of the current ninth grade cohort.

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

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

Concerns/Unknowns

Lingering questions about future years include:

- How many missing students will return to school?¹⁸
- Will 2022-23 truly be “post-pandemic”?
- 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 last year and this year have been particularly challenging due to the COVID-19 pandemic. It is very hard to predict the response coming out of the pandemic, and we may see continued flux well into the 2022-23 school year and beyond.

¹⁸ “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.