



# STOKES COUNTY SCHOOLS

## Student Enrollment February 10, 2022



LTConsulting

Construction Concepts

Planning & Inspections

## **Table of Contents**

	<b>Page</b>
<b>Section 1 Executive Summary</b>	<b>3</b>
<b>Section 2 Stokes County, Census, &amp; OSBM Populations</b>	<b>5</b>
<b>Section 3 Stokes County Live Births &amp; Kindergarten Enrollment</b>	<b>8</b>
<b>Section 4 Stokes County School Enrollment</b>	<b>10</b>
<b>Section 5 Stokes County Enrollment Projections</b>	<b>14</b>
<b>Section 6 Stokes County Facilities</b>	<b>24</b>
<b>Section 7 Stokes County Next Steps</b>	<b>28</b>
<b>Section 8 Appendix</b>	<b>29</b>

## Executive Summary

Studying student attendance history and data trends and forecasting student enrollment for the next 10 to 15 years are an important tool for long range school-by-school planning. This projection is not absolute, but is the best data available to plan facilities, transportation, operations, and financing to provide the best student educational programs. It can illustrate how and where county populations are increasing, decreasing, and shifting and how to adapt and be flexible for changing school enrollment trends in the coming years. The study uses accurate data to support and guide school usage planning and decisions across the county, as well as compares Stokes County to other schools across the state.

First, the previous 20 years History - Stokes County's general population was +/- neutral over the last 20 years (*Section 2 & Exhibit 3*) and Stokes County's workforce has remained relatively constant for the last 20 years. Between 1974 & 2010 school enrollment county wide was generally neutral averaging 6,810 students. During this time, as county population shifted, schools were added or consolidated to follow student movement. Stokes County should be commended for keeping up with the enrollment increases of the "Baby Boom Echo." Between 2000-2010 school facilities were right sized, where the district's building capacity closely matched the enrollment peak. (*See section 6*)

Between 2000- 2010 as the peak enrollment was working through the grades, three factors aligned as a precursor to the beginning of a steady student enrollment drop through today's 2021-22 - 5,422 enrollment. The 2000 peak birth rate enrolling 5 years later in 2005, the 15% student in-migration gain for kindergarten dropped to 2% gains from 2010 through today, and the sudden 2008-09 economic drop that appears to have slowed new move-in county population. (*See section 3 & 4*)

Result, between 2010 & 2021 district-wide enrollment sharply decreased 21% (*or 2% per year*), attributed to the three factors aligning. Finally, the birth rate decrease is beginning to slow from 1.7% per year (*2000-2010*) to 1.2% per year (*2010-2020*).

Next projecting student enrollment – To get the best forecast we start with "Live Births" setting the trends to kindergarten enrollment, then students progress up through the grades to graduation 18 years after birth. Births have been decreasing since 2000 but, following trends, are forecast at a slower 0.5% decrease per year through 2030, when it is anticipated "Live Births" in some areas of the county may become neutral. Five years after birth, 102% of those births enter Kindergarten indicating there is some in-migration to public schools.

Following the currently enrolled 2021-22 Kindergarten class through to graduation in 2033-34, the decreasing total district enrollment is projected to be approximately 4,748, a loss of +/- 674 additional students. During that time, the enrollment drop is slowing from the previous 2% per year loss to 1.1% per year loss through 2036-37.

## Executive Summary (cont.)

Third, in Stokes County where is enrollment likely to be? Stokes County future student locations should generally align with existing 20-year historical patterns, with the North and South attendance areas continuing to lose students faster than the Southwest quadrant of the county. The Southwestern quadrant has the highest density and population per square mile as well as 50% of the K-12 students. By 2031-32 it's forecast to increase to 53% of K-12 students and 63% of estimated new homes in Section 2 where future students are more likely. As the South and North HS attendance areas lose students, all but Sandy Ridge and Walnut Cove Elementaries have a growing excess capacity. The two high schools between 50 and 100 students per grade level will be challenged to provide a broad range of course choices to support a quality educational program. (See sections 4, 5 & 6)

High School enrollment changes 2021-22 to 2031-32:

North Stokes HS enrollment is projected to drop from 300 students to +/- 199 students

South Stokes HS enrollment is projected to drop from 528 students to +/- 336 students

West Stokes HS enrollment is projected to drop from 761 students to +/- 645 students

School Building utilization (Section 6). The state average is 175 Sq. Ft. per student. Stokes County averages 233 Sq. Ft. per student today and is projected to increase to 269 Sq. Ft. per student in 2031-32. As a result, Stokes County has a 27% excess capacity today, and is projected to grow to 35% excess capacity by 2036-37. A typical district or school should, as good practice, maintain a 10% variation from full capacity or utilization to handle typical school year to year enrollment changes.

Building utilization next steps – North Carolina is seeing a general decrease in rural area students, so Stokes County is not alone in its 10-to-15-year lower enrollment trend until births neutralize, or trends change, and/or economic growth outpaces declining birth rates and enrollment. As the declining enrollment and population shift continues, Stokes County should focus on maintaining their existing buildings and identifying where to lower building footage used or adjust and consolidate to reduce excess Sq. Ft. or capacity by 17% today and up to 25% by 2036-37. (leaving 10% for capacity flexibility)

**Finally, it is a total district process** – Stokes County should develop both a short-range and long-range plan to guide the district over a period of years. Identifying and prioritizing the most important needs, best educational practices, transportation and building utilization decisions on how to manage the continued enrollment decline in a fiscally and instructionally responsible way. According to a state report:

*“A School District must determine what school size best serves its students. As with school size, what programs a district chooses to be taught will guide how space is utilized in existing facilities. Often, size is a compromise among objectives for student achievement, student and staff safety, road patterns, transportation times and distances, and effective and efficient utilization of fiscal resources as well as local preferences.”*

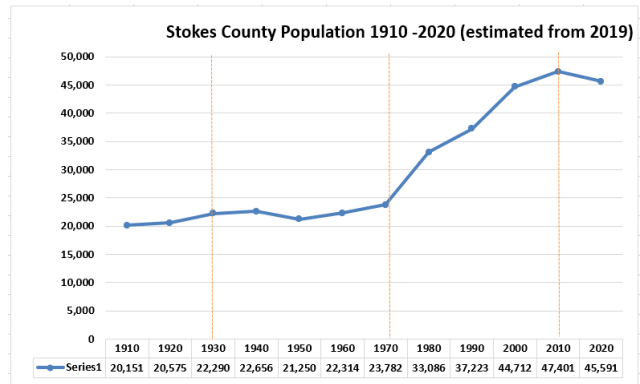
## Section 2

### Stokes County, Census, & OSBM Populations

**Stokes County population** has grown from 20,151 in 1910 to 47,404 in 2010 and is estimated to decrease slightly to 45,591 in the 2020 census compared to the 2010 census.

The “Stokes County 2035” planning document has several sections referring to population of student ages, working ages and elderly ages include the below: *See Stokes County 2035 Appendix Exhibit 1*

- a. The number of elderly Stokes County residents will increase more rapidly than either the number of children or working age adults (18-64)
- b. The retiring “Baby Boomer” generation will further continue this trend.
- c. Stokes County population is mostly concentrated within three municipalities (Danbury, Walnut Cove and King).
- d. Except for a few areas adjacent to three municipalities, the balance of the county is sparsely populated.



**The Office of State Budget Management (OSBM)** works in coordination with the Federal Census taken every 10 years. OSBM has broken information down into several categories, tracked past populations, and produced information by age groups, race and gender that generally forecast Stokes county’s last 20 years of decreased youth-aged population (Age 0 to 17). Stokes County future trend, as below, indicates a slightly decreasing student age population from 2020 to 2050.

*See other OSBM charts spanning from 2000 to 2050 included in Appendix Exhibit 2*

### Population Projections by Race, Sex & Age Groups - Vintage 2020

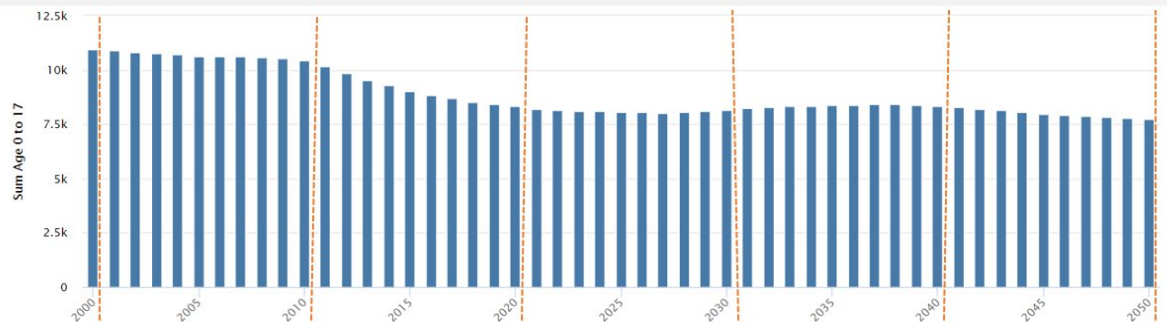


Information Table Map Analyze Export API

X axis Year Year Max. number of points Show all

Break down series Region Stack Normal Add a series

Column chart Y axis Sum Age 0 to 17 **Population Age 0 to 17**



## Section 2

**The 2020 US Census Bureau** is another data pool.  
**2020 US Census Bureau Quick Facts**

The 2020 census data for Stokes is not finalized by census tract and detailed by age groups, such as under 5-year old's and 5-to-17-year old's. 18–24-year old's, etc. so exact counts are not available by census tract. Instead, the "US Census Bureau Quick facts" identifies youth by percent of total county population, as noted on the quick fact sheet to the right. *Complete US Census quick Facts see Appendix (Exhibit 3)*

PEOPLE		
Population	Stokes County	United States
Population estimates, July 1, 2019, (V2019)	45,591	328,239,523
Population estimates base, April 1, 2010, (V2019)	47,413	308,768,106
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	-3.8%	6.3%
Population, Census, April 1, 2020	44,520	331,449,281
Population, Census, April 1, 2010	47,401	308,745,538
Age and Sex		
Persons under 5 years, percent	4.5%	6.0%
Persons under 18 years, percent	18.5%	22.3%
Persons 65 years and over, percent	21.8%	16.5%

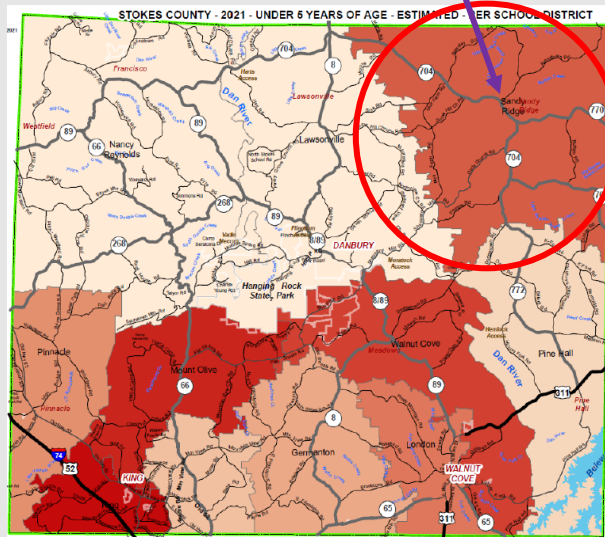
The Census total youth age population is not just public-school enrollment, but also includes home-school, private school, religious school, and charter school youth as well as transient movement within the county and moving into and out of the county. Those Quick facts and other variables make it difficult to generate an exact youth-age population per public-school attendance areas, especially considering the detailed age group information broken down by census tract is not available.

**Location of Youth Aged population** maps of Stokes County were generated by Stokes County GIS utilizing census tracts and converted to school attendance areas within a reasonable margin of error considering the variables above. Census data was broken into "under the age of 5" and "age 5 to age 17". Stokes Co GIS created color maps with darker color illustrating more students & lighter colors illustrating less students. Then with both maps side by side, we can begin to see the future (under 5) student population locations (darker or lighter) and compare future student locations with current student enrollment (ages 5-to-17-year old's) to see growing or shrinking enrollment areas. *See Stokes Population estimate 2020 spreadsheets in the Appendix (Exhibit 4)*

An example ... .. Darker color attendance area on left map indicates more "under 5-year old's" aka. future possible ... .. compared to the lighter color same attendance area on the right map showing currently enrolled students

### LOCATION OF YOUTH-AGED POPULATION

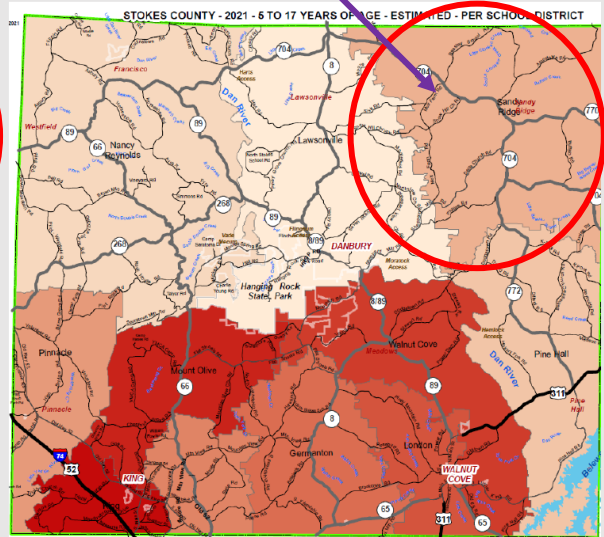
FUTURE SCHOOL AGE YOUTH NOW UNDER 5 YEARS



More students - darker colors

Less students lighter color

CURRENT SCHOOL AGE YOUTH 5-17



Stokes County Planning Office 2021

## Section 2

**Stokes County Density and Population** is most concentrated within the counties three municipalities and adjacent areas, as illustrated in the Stokes 2035 Vision Plan. The labor force since 2000 has remained relatively constant since 2000.

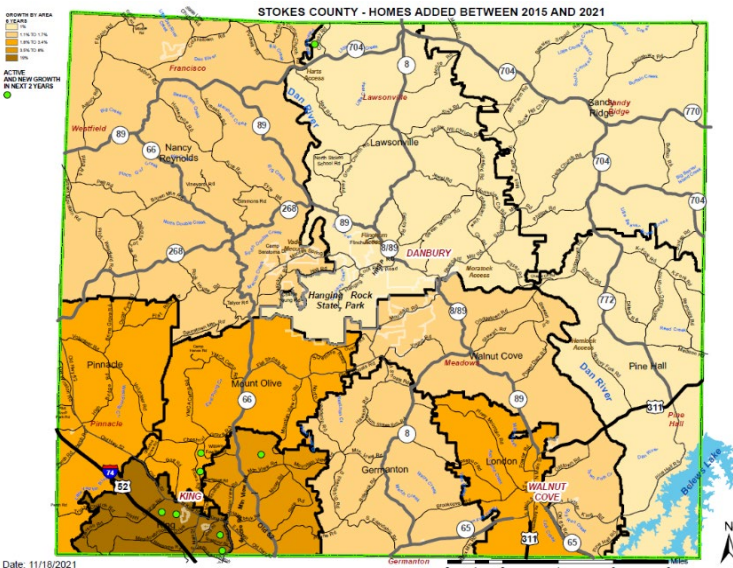
\* The total population (age 0 to 100) was divided into Elementary School Attendance Areas to illustrate structures /dwelling units and density of population per chart to right.

\* Population by Sq. Mile From lowest 34 in Nancy Reynolds to highest 526 in King

\* Estimated number of persons occupying a structure average from 1.2 in Nancy Reynolds to 4.11 in Popular Springs. (Note: Popular Springs & Mt Olive appear to have the largest family per household unit.) (Appendix Exhibit 4)

<u>SCHOOL DISTRICTS</u>			
Stokes County Population Estimate 2020 For			Estimated Average
District	Structures 2021	Population per Sq. Mi.-by Tract	Persons per household
Germannton	1,628	105	2.14
King	3,168	526	2.14
Lawsonville	1,570	39	1.73
London	1,686	191	2.06
Mount Olive	1,721	225	3.82
Nancy Reynolds	2,687	34	1.2
Pine Hall	1,496	60	1.93
Pinnacle	1,554	142	2.5
Poplar Springs	731	191	4.11
Sandy Ridge	1,883	55	1.93
Walnut Cove	1,972	121	2.52
<b>TOTALS</b>	<b>20,096</b>		
	Actual	Dynamic	Estimated

**Housing History- Existing and New** The 2020 Census has a total of 20,100 Stokes structures/dwelling units.



- The County housing trends indicate 11% of the homes in Stokes Co were built between 2000 and 2009 and 1% were constructed between 2010 and 2013.
- In 2013 it was estimated 11% of the structures were unoccupied.
- (Left on the map ... dark colors indicate the areas with the largest # homes added) Overall 6% more new homes/addresses were generated 2016 thru 2021 (approx. 1,195). (See Appendix Exhibit 4)
- Overall, Stokes Co. housing has increased by 18% since 2000.
- Future homes, approximately 1,400 lots or new addresses (6.5%) are proposed by Developers between 2021 and 2031

### Does the addition of new homes directly relate to added students?

For the future increased lots & students ... Trends have varied answers ... each answer leads to more questions.

- Are families moving from one Stokes Co. home to another? If so, which school has a decrease?
- Are home buyers of childbearing age? Do they already have children? How many?
- What is the price range of the home? Trends indicate larger home-sale prices have fewer youth.
- Developments take years to buildout and some never build out.

20 Year new housing vs student enrollment

- It is estimated 63% of 1,195 new homes added were constructed in the Southwest quadrant of Stokes Co.
- Student enrollment has decreased 23% In the Southwest quadrant since 2000, despite the added new homes.

Southwest Quadrant - Enrollment history
School year 2000-2001 - 1,634 enrolled students
School year 2012-2013 - 1,429 enrolled students
School year 2021-2022 - 1,256 enrolled students

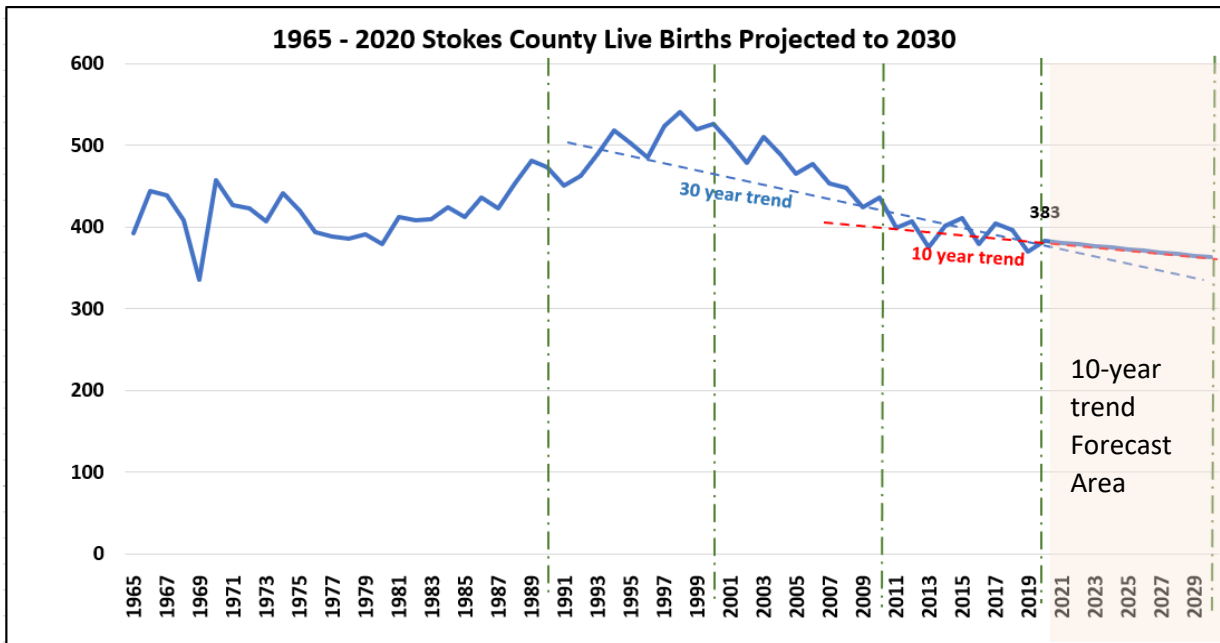
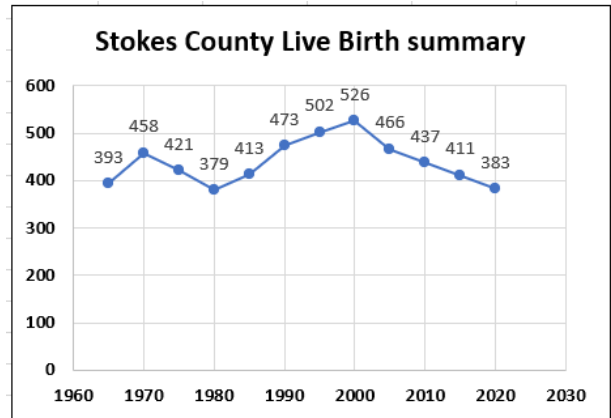
Stokes County history does not indicate added homes mean added student enrollment.

### Section 3

## Stokes County Live Births & Kindergarten Enrollment

**Live Births -- NC Vital Statistics Records** - To get the best forecast, we should start with 40 or 50 years of Actual "Live Births" data and trends with data from NC Vital Statistics & records.

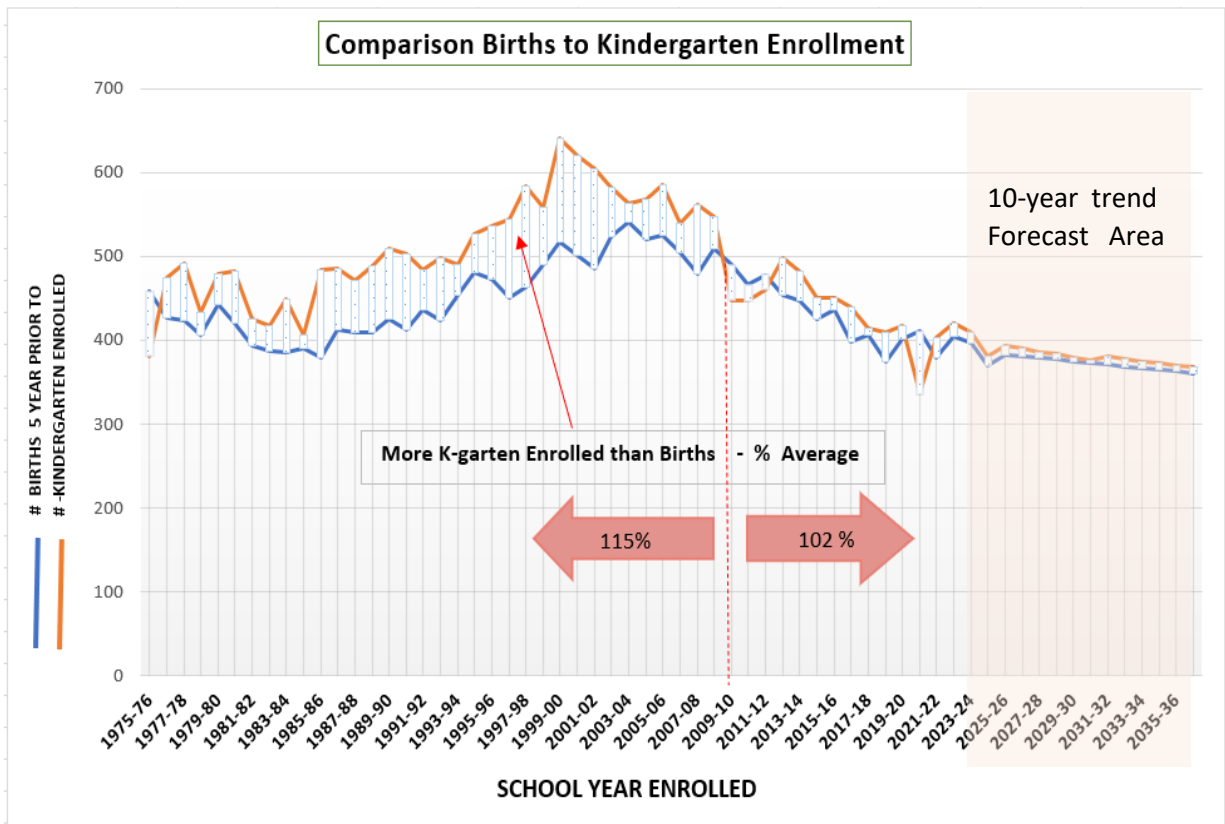
- The chart to the right gives a snapshot of Stokes County birth rates from 1965 to 2020.
- The largest per-year-birth-rate was 526 in 2000 and for the last 20 years the trend has been declining through 2020 at 383 births per year offsetting the previous 20 years of increased births.
- A national trend for parents to have less children, and therefore smaller families, could also align with fewer births.
- From this information we can develop birth trends as shown in the below chart:  
 previous 30 year trend      - - - - -  
 recent 10 year birth trend      - - - - -



### Section 3

**Kindergarten Enrollment -- Stokes County School's records** – Throughout the state kindergarten enrollment follows birth rates, with local community adjustments for economy, move-in and move-out population. Each school district has its own unique historical relationship between “Live Births” and Kindergarten enrollment.

The Stokes County Schools Comparison graph below calculated a 15 % increase of Kindergarten enrollment from births from 1975 until 2008-09. Such a trend is typically an indicator of a growing economy with move-in population increases. From 2010 to 2021 this increase drops to a stable 102% increase of Kindergarten enrollment from birth population. That would be more in line with a County neutral economy and move-in and move-out population trend. (Is it possible the 2009-10 drop aligns with the 2008 economy drop? ) (Appendix, Exhibit 6)



-The more recent 10-year trend appears to more accurately reflect the current birth and kindergarten enrollment patterns of Stokes County than the older 30-year trend, especially considering the move-in/move-out ratio drop/change about 2008-2009 that contributed heavily to the steeper 30-year decreasing kindergarten enrollment trend.

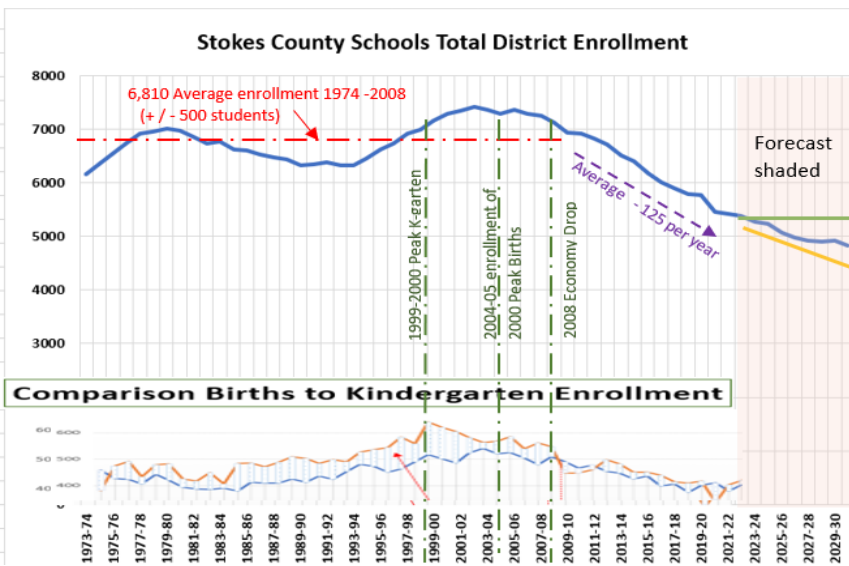
-In the last 12 years the trend indicates the kindergarten enrollment has averaged 102% of the live births. There was a one year drop for COVID in 2020 and 2021 enrollment recovered to meet the trend. That is an indicator Stokes County youth are not transferring to Private schools, Charter schools or Home schooling. (Appendix Section 4 - Charter, Home, and private school enrollment.)

## Section 4 Stokes County School Enrollment

**Stokes County Schools County-wide Enrollment History** – Student enrollment was gathered from Stokes County Schools from 1974 to 2021. During those times Stokes Schools found a gradual increase in students to 7,013 students in 1979-80, then gradual decreases to 6,325 students in 1992-93. Then a more rapid 500-student increase to 7,429 in 2002-03 that tracked with the Stokes County Kindergarten enrollment jumps. Followed by a 500-student decrease by 2009-10, offsetting the enrollment gains. The county enrollment averaged 6,810 students enrolled over 35 years +/- 500 students across the district between 1974 and 2009. (See Appendix Exhibits 9, 10, & 11)

**Changing District enrollment Since 2009** Next let's consider the peak birth rate, peak Kindergarten, and 2008 economy drop within 8 years. Each are enrollment changers by themselves, but all three together were factors in an increasing enrollment drop. The peak kindergarten class enrolled in 1999-2000 and started moving through the grade levels. After the peak 2004-05 peak birth rate, enrollment decline pushed 2% per year. Then the 2008 economic drop slowed Stokes Co. move in school enrollment. Following those events, school enrollment continued to decrease thru the 2021-2022 school year's 5,422 students.

In the last 12 years, total district-wide student enrollment has decreased 1,492 students in 17 schools. There was an average decrease of 125 students per year over 12 years. (See Appendix Exhibit 8)



Stokes County Schools has a small 5% blip in 2020 and 2021 when COVID hit initially, however the enrollment in 2021-2022 recovered with a small overall drop following national trends of Home Schooling. There was as an average COVID decrease in NC of 1.3 % and National range between 0.2% - 5 % school enrollment decrease.

School year	Total District Enrollment
1974-75	6,367
1975-76	6,549
1976-77	6,744
1977-78	6,929
1978-79	6,957
1979-80	7,013
1980-81	6,973
1981-82	6,865
1982-83	6,746
1983-84	6,779
1984-85	6,635
1985-86	6,601
1986-87	6,533
1987-88	6,474
1988-89	6,445
1989-90	6,325
1990-91	6,345
1991-92	6,393
1992-93	6,325
1993-94	6,337
1994-95	6,462
1995-96	6,622
1996-97	6,732
1997-98	6,916
1998-99	6,990
1999-00	7,160
2000-01	7,294
2001-02	7,355
2002-03	7,429
2003-04	7,368
2004-05	7,295
2005-06	7,374
2006-07	7,292
2007-08	7,259
2008-09	7,129
2009-10	6,948
2010-11	6,916
2011-12	6,827
2012-13	6,715
2013-14	6,510
2014-15	6,399
2015-16	6,174
2016-17	6,013
2017-18	5,897
2018-19	5,792
2019-20	5,779
2020-21	5,465
2021-22	5,422

## Section 4

**Trends in Grades 8-12** - High schools' calculations changed over time which reflected the current Stokes County 8<sup>th</sup> grade to 9<sup>th</sup> grade enrollment jump (5.3%) and graduation rate changes through the High school years. Both of these are typical for the entire state, but each school district has different trends. The last ten-year trend's 5.3 % jump was used for the enrollment projection. (*ten-year recent trend*)

**8<sup>th</sup> to 9<sup>th</sup> grade jump in enrollment.** Many districts attribute this to several factors and trends around private school, home school and charter school students transferring to the public High Schools to get a more comprehensive "Total High School" educational, social, music, arts, clubs, and athletic experience. In Stokes County each decade has a different enrollment jump over the last 25 years. Portions of the *Appendix Exhibit 16* chart to the right is summarized as below.

Between 1997-98 and 2001-02 a 16.3 % jump

Between 2003-03 and 2011-12 a 10.1 % jump

Between 2012-13 and 2021-22 a 5.3 % jump

The decreasing enrollment jump seems to support more move-in students prior to 2006 and fewer move-in students after. The timing somewhat aligns with the 2008 economic drop and Kindergarten trend decrease of 2009 identified in section 3.

Year	8th	10 yr avg increase 8th to 9th is 5.3%	by year	9th
Actual ADM 97-98	577	Average ↑ 16.3% ↓	7.3%	619
Actual ADM 98-99	546		15.3%	664
Actual ADM 99-00	538		23.4%	672
Actual ADM 00-01	574		19.7%	651
Actual ADM 01-02	559		15.4%	660
Actual ADM 02-03	575	Average ↑ 10.1% ↓	14.8%	644
Actual ADM 03-04	600		9.8%	634
Actual ADM 04-05	565		13.8%	678
Actual ADM 05-06	615		22.1%	701
Actual ADM 06-07	541		6.8%	652
Actual ADM 07-08	613		9.8%	601
Actual ADM 08-09	597		7.5%	658
Actual ADM 09-10	560		3.3%	619
Actual ADM 10-11	592		7.1%	602
Actual ADM 11-12	560		5.4%	622
Actual ADM 12-13	550	Average ↑ 5.3% ↓	4.2%	583
Actual ADM 13-14	515		2.3%	562
Actual ADM 14-15	491		3.1%	530
Actual ADM 15-16	533		4.3%	517
Actual ADM 16-17	460		5.7%	559
Actual ADM 17-18	475		6.5%	491
Actual ADM 18-19	435		-0.2%	474
Actual ADM 19-20	452		5.3%	459
Actual ADM 20-21	458		6.8%	483
Actual ADM 21-22	449		14.3%	522

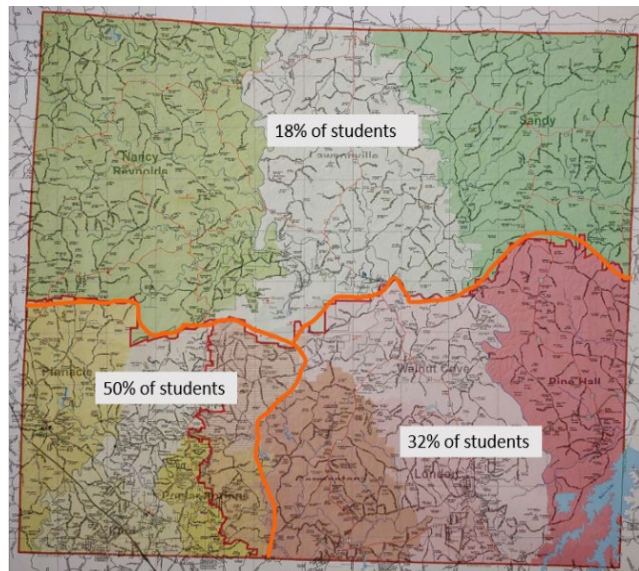
**Graduation Data** - Stokes County School District has an overall 86% graduation rate, and the three traditional High Schools have an average 91% graduation rate included in the forecasting. Student movement data for Early College and Meadowbrook were also considered.

(See *Appendix Exhibit 15*)

### **High School Attendance Area map –**

(*Appendix Exhibit – 18*)

Stokes County is divided into three High School attendance areas. Each high School area has 1 middle school and 3 or 4 elementary schools that form the feeder route to the High School. There are two district-wide schools, Meadowbrook and Early College, that total 4% of the total district population. The attached map shows the attendance areas and percent of K-12 students for each of the three High School areas.



## Section 4

### Enrollment changes by High School Attendance areas in Stokes County.

(See Appendix Exhibit 8)

**North Stokes High School** is in the northern half of the county and houses 18 % of the students.

Stokes County Schools	North Stokes High School District						
School #	332	338		328	320	348	
Schools	North Stokes	Piney Grove	Francisco	Nancy Reynolds	Lawsonville	Sandy Ridge	North High District Sub Totals
Actual ADM 99-00	413	383	94	195	209	263	1,557
Actual ADM 09-10	445	360	123	138	204	198	1,468
1998-2010 +/- Neutral	7.7%	-6.0%		-29.2%	-2.4%	-24.7%	-5.7%
Actual ADM 21-22	300	235	-	111	117	171	934
2010-2021 % decrease	-30.4%	-34.5%		-51.1%	-41.8%	-14.5%	-34.1%

**From 1998 to 2010** Only the High school experienced 7.7% growth (same larger grades working through school) while the 2 elem. schools decreased, averaging 27%. Lawsonville Elem. was small, but neutral. Overall, the North attendance area experienced 5.7% Neutral decrease.

**From 2010 to 2021** all had sharp enrollment declines, except Sandy Ridge. as the larger grade levels moved forward and smaller kindergarten classes enrolled. North has two of the district's three smallest schools. Overall North attendance area experienced the largest drop of the three High School areas with a 34.1% decrease.

**South Stokes High School** is the Southeast quadrant of the county and houses 32 % of enrollment.

**From 1998 to 2010** the Middle and High schools experienced growth (same larger grades working through school). The elementary schools had a 22% average decline with those large grades moving up. Overall South attendance area experienced 7.7 % decline.

**From 2010 to 2021** all the schools experienced declining enrollment, except for neutral Walnut Cove. The middle & high that had increases before, now see those large grades moving up and/or graduating, leaving the smaller class sizes, creating a sharp decline. Overall South attendance area experienced a 19.5 % decrease.

Stokes County Schools	South Stokes High School District						
School #	352	350	312	354	336	356	
Schools	South Stokes	Southeastern	Germentown	London	Pine Hall	Walnut Cove	South High District Sub Totals
Actual ADM 99-00	633	496	269	298	188	310	2,194
Actual ADM 09-10	691	506	198	257	149	225	2,026
1998-2010 +/- Neutral	9.2%	2.0%	-26.4%	-13.8%	-20.7%	-27.4%	-7.7%
Actual ADM 21-22	528	395	154	200	104	234	1,615
2010-2021 % decrease	-23.7%	-19.2%	-18.9%	-18.0%	-35.8%	2.2%	-19.5%

## Section 4

**West Stokes High School** is in the Southwest quadrant of the county and houses 50% of the district student enrollment.

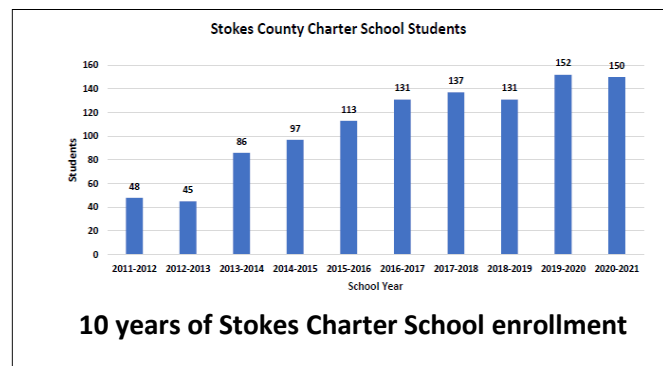
Stokes County Schools	West Stokes High School District						
School #	358	304	316	314	340	342	
Schools	West Stokes	Chestnut Grove	King	Mount Olive	Pinnacle	Poplar Springs	West High District Sub Totals
Actual ADM 99-00	889	777	682	717	235	-	3,300
Actual ADM 09-10	1,006	799	651	702	213	-	3,371
1998- 2010 +/- Neutral	13.2%	2.8%	-4.5%	-2.1%	-9.4%		2.2%
Actual ADM 21-22	761	640	363	294	153	437	2,648
2010-2021 % decrease	-23.3%	-22.2%	-22.8%	-7.0%	-21.9%	-0.2%	-20.7%

**From 1998 to 2010** the Middle and High schools experienced growth while the larger grade levels worked through School. The elementary schools decreased (and were almost neutral). Overall West attendance area had 2.2% Neutral growth.

**From 2010 to 2021** all had declining enrollment as the larger grade levels moved to graduation. 3 Elem. schools were almost neutral, Middle & High schools had a sharp 22% average decline, leaving the overall West attendance area with a 20.7% decrease.

**Other school enrollment in Stokes County** - Charter, Home Schools and Private/ Religious Schools were researched as below. There is no breakdown of where those students live in Stokes County.

**Charter Schools** – The state does not have any Charter School locations currently listed in Stokes County. In 2020-21, 150 or +/- 2.5% of Stokes County youth attended charter schools. (See Appendix Exhibit 14)

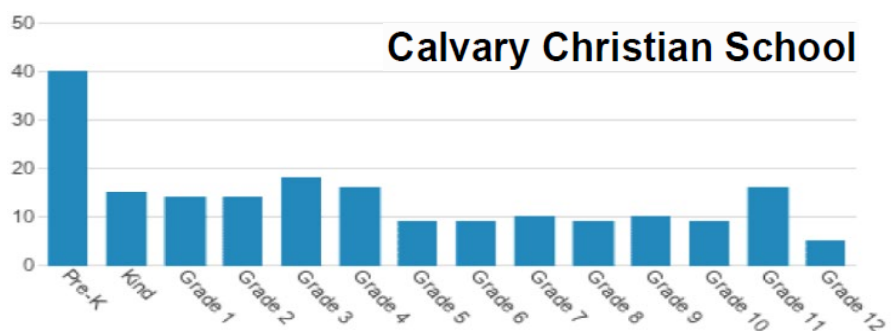


**The 2020-21 NC Home School Summary**

indicated Stokes County had 560 Home School locations and 930 home schooled students (average of 74 per grade). (See Appendix Exhibit 13)

**Private & Religious schools** – Calvary Christian School in King enrollment ranges between 175 and 194 less 40 pre-K or 154 - K-12 students according to websites or roughly 2.5% of the Stokes County K-12 youth. The breakdown by grade level varies on the chart to the right.

(See Appendix Exhibit 12)



## Section 5

### Stokes County Enrollment Projections

**Periodic student enrollment projections are one of the important tools in planning school buildings and school locations within the district.** School enrollment projections should be utilized in coordination with facility condition assessments, transportation and road networks, and local instructional / educational needs of the community. Local economy consideration includes Stokes County's work force, which has remained relatively constant for the past 20 years and no models used increased or decreased projections for economic variables. Enrollment projections should be updated every 10-15 years. The basis for the enrollment projection was performed utilizing National Center for Educational Statistics (NCES) "Enrollment Rate" and "Grade Progression" standard methods generally described in this section. *(Excerpts from Appendix Exhibit 23)*

**Assumptions underlying these methods** -The grade progression and enrollment rate methods assume that past trends in factors affecting public and private elementary and secondary school enrollments will continue over the forecast period. Assumptions imply that all factors influencing enrollments will display future patterns consistent with past patterns. This method includes the net effect of such factors as county population shifts, migration, dropouts, and transfers between public and private schools. One assumption in the forecast is: the COVID pandemic will not occur once every 10 years therefore, the 10% - one year 2020-21 COVID dip in enrollment was removed in future projections.

**A study of the relationships between "Live Births" and the number of students entering Kindergarten 5 years later, can be used for a reasonable projection of future students.**

**For Birth and Kindergarten projections**, the "Enrollment Rate Method" was used for projections presented in this report and are data-based utilizing Stokes County GIS projections and their use of 2000, 2010 and portions of the 2020 US Census Bureau available, Office of State Budget Management (OSBM) population projections, NC Department of Vital Statistics, NC State Center for Health Statistics (SCH), (Baby Book), and assumptions/trends for the birth rate.

*(For example, the birth- enrollment trend for the last 10 years of actual data in Stokes County was used as the projected birth-enrollment rate. To calculate enrollment for each year in the forecast period, the enrollment rate for Kindergarten was developed from the 10-year trend of projected births/population of the appropriate age group)*

**Birth history was used to create trends to plan for Kindergarten enrollment in the future** - With birth history and historical Kindergarten patterns set (Section 3), we can use trends and patterns to forecast into the future.

## Section 5

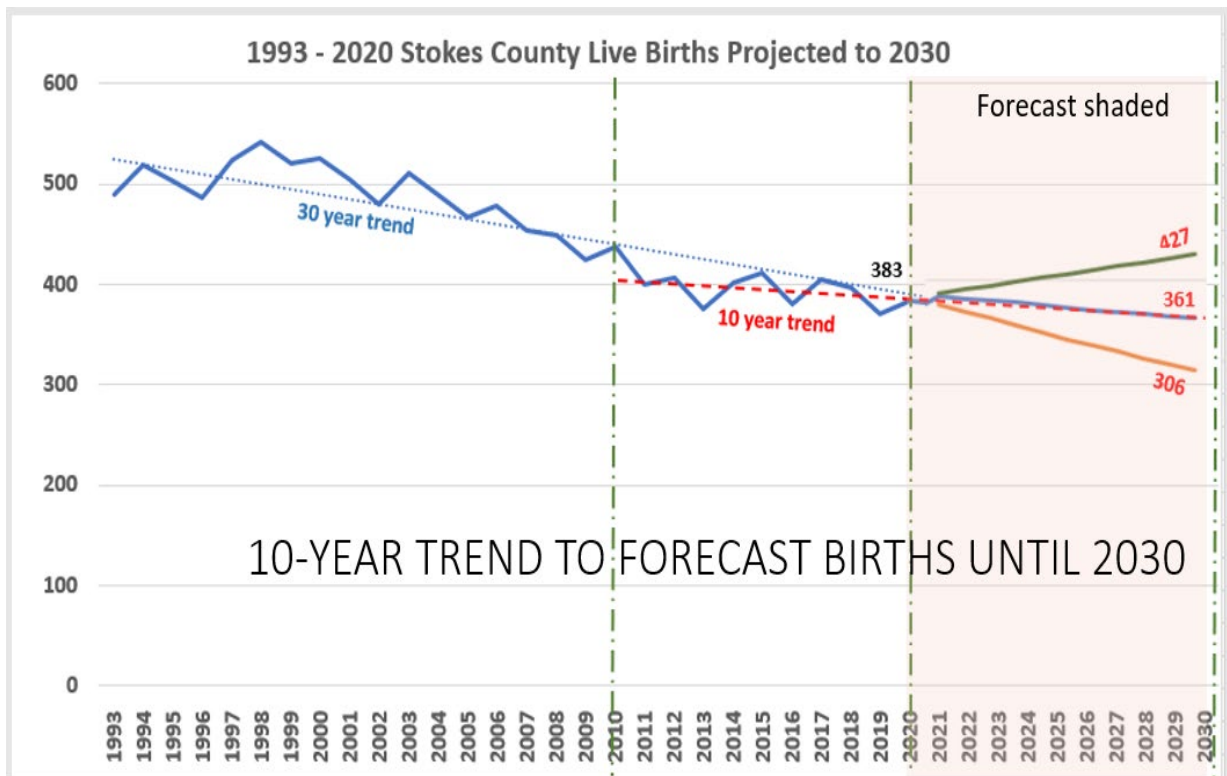
**First “Live Births” Projection** - In forecasting an unknown, trends and patterns can start to change so a margin of error or a “Variable Cone” should be set. Using a +/- 2% variable per year was used to follow the decreasing trend and 10-year birth rate decreases (a 0.5% decrease per year in births) and using the neutral economic and neutral move in/ move out pattern over the last 10 years, a birth and kindergarten enrollment can be forecast.

**The 10-year “Live Births” Projection** - “Enrollment Rate” scenario from historical data as below:

- 2020 actual 383 “Live Births” moving forward at 0.5% decrease per year created:
  - a calculated median birth rate in 2031 of 361 “Live Births”
- Then the “Variable Cone of error projection”:
- Calculated a high range of 427 “Live Births”
  - And low range of 306 “Live Births”

*(See Birth Chart and Variable Cone below following the 10-year trend in red)*

*(Charts in Appendix Exhibit 7)*



## Section 5

### Next, Kindergarten Enrollment Projection -

Historically between 2009-10 and 2021, Kindergarten averaged 102% more enrollment than births 5 years earlier. (Section 3) *(example- 380 babies born in 2016 would typically be enrolled in kindergarten in the 2021-22 school year, when 403 enrolled.)*

Following that 102% average trend, the Kindergarten enrollment in 2021-22 follow actual 404 to 383 births 2017 thru 2020, and later from 2021 projected 381 births along the decreasing 10-year trend until 361 births are forecast in 2031 generating +/- 368 Kindergarten enrollment in 2036-37.

Stokes County should consider the “Variable Cone of error projection” between 306 births and 427 Births. See Chart to the right. *(Note: consider the projections moving forward over the ten years, as the projection becomes cloudier moving further from actual “Live Births” in 2020.)*

Births 5 Years Prior to Enrollment		Year	K Enrollment	
2014	402	Actual ADM 19-20	418	
2015	411	Actual ADM 20-21	336	
2016	380	Actual ADM 21-22	403	
2017	404	Forecast Using 10-Year trend	2022-23	420
2018	396		2023-24	409
2019	370		2024-25	381
2020	383		2025-26	393
2021	381		2026-27	391
2022	379		2027-28	386
2023	377		2028-29	384
2024	375		2029-30	379
2025	373		2030-31	376
2026	371		2031-32	381
2027	369	Forecast	2032-33	378
2028	367		2033-34	375
2029	365		2034-35	373
2030	363		2035-36	370
2031	361		2036-37	368

*(excerpts from Appendix Exhibit 6)*

**Next, grades 1-12 projections-** The “Grade Progression Rate Method” was used for projections presented in this report and are data-based, utilizing mathematical projection of past data patterns into the future. The historical sets of enrollment data were provided by Stokes County Schools. The County’s work force has remained relatively constant for the past 20 years and no models used increased or decreased projections for economic variables.

**Variables in Calculations** - Just as the birth forecast has a margin of error or variable cone, the hundreds of calculations needed to develop enrollment projections all include rounding. Rounding calculations, when compounded over 10-15 years, may vary between +/- 2% and 3%.

**Historical Retention Ratio (RR)** is developed from actual K-12 enrollment data for Stokes County Schools from years 2012-13 through 2021-22. We then use that grade-by-grade historical RR to project enrollment for future school district years 2022-23 through 2036-37.

## Section 5

For example:

Historical - the rate of progression from grade 2 to grade 3 is the current year's grade 3 enrollment expressed as a percentage of the previous year's grade 2 enrollment. (97.8% in 2014-15) The chart below identifies Retention Ratios (RR) that vary year to year. Variable RRs were used in projections were used for future calculations.

Projection - To calculate enrollment for each year in the forecast period, the historical progression rate (RR) for each grade was applied to the future year's Forecast enrollment to projected future grade level Enrollment.

### Chart Illustrates Retention Ratio (RR) developed from Stokes County actual data.

Actual K-5 data 2012-13 thru 2021-22 were used to develop Historical Progression (RR).

This follows Cohorts flowing through each grade and year and calculations of RR were developed.

(Example of RR's circled in red)

(See Appendix Exhibit 16 for the entire progression RR - total district forecast)

Year	K Enrollment	Retention Ratio (RR)	1st	Retention Ratio (RR)	2nd	RR	3rd	RR	4th	RR	5th
Actual ADM 10-11	447	102.0%	457		521		534		492		525
Actual ADM 11-12	461	101.6%	454		466		497		530		497
Actual ADM 12-13	498	103.0%	475	97.8%	444	99.6%	464	95.8%	476	102.1%	541
Actual ADM 13-14	482	94.6%	471	95.6%	454	96.8%	430	97.6%	453	99.4%	473
Actual ADM 14-15	451	96.7%	466	96.4%	454	97.8%	444	99.1%	426	101.8%	461
Actual ADM 15-16	450	94.0%	424	95.9%	447	99.3%	451	96.8%	430	100.7%	429
Actual ADM 16-17	440	94.4%	425	98.1%	416	97.8%	437	98.0%	442	103.5%	445
Actual ADM 17-18	414	95.7%	421	99.3%	422	97.1%	404	100.7%	440	102.7%	454
Actual ADM 18-19	409	100.7%	424	100.7%	424	96.9%	409	100.2%	405	101.6%	447
Actual ADM 19-20	418	97.8%	400	95.5%	395	101.8%	432	99.8%	408	104.7%	424
Actual ADM 20-21	336	92.1%	365	94.0%	376	94.5%	370	98.6%	426	96.6%	394
Actual ADM 21-22	403	103.3%	347	99.5%	383	98.4%	370			100.9%	430
2022-23	420	103.0%	415	97.8%	339	99.6%	381	95.8%	354	102.3%	359
2023-24	409	94.6%	397	95.6%	397	96.8%	329	97.6%	372	99.4%	352
2024-25	381	96.7%	396	96.4%	383	97.8%	388	99.1%	326	101.8%	379
2025-26	393	94.0%	358	95.9%	380	99.3%	380	96.8%	376	100.7%	328
2026-27	391	94.4%	371	98.1%	351	97.8%	371	98.0%	373	103.5%	389
2027-28	386	95.7%	374	99.3%	369	97.1%	341	100.7%	374	102.7%	383
2028-29	384	100.0%	386	97.1%	363	96.9%	357	100.2%	342	101.6%	380
2029-30	379	97.8%	375	98.6%	380	97.1%	353	99.8%	356	104.7%	358
2030-31	376	97.1%	368	97.0%	364	97.9%	372	98.6%	348	97.6%	348
2031-32	381	97.1%	365	99.5%	366	98.4%	358	97.1%	361	100.9%	351
2032-33	378	95.7%	365	99.3%	362	99.6%	365	97.1%	348	102.7%	371
2033-34	375	94.6%	357	95.6%	348	96.8%	351	97.6%	356	99.4%	346
2034-35	373	96.7%	363	96.4%	344	97.8%	341	99.1%	348	101.8%	362
2035-36	370	94.0%	350	95.9%	348	99.3%	342	96.8%	330	100.7%	350
2036-37	368	94.4%	350	98.1%	344	97.8%	340	98.0%	335	103.5%	341

Years 2022-23 through 2036-37 are developed using the Progression method, calculating movement of cohorts through the grades. Areas shaded in Pink are from forecast birth trends.

Note: areas with a white background were forecast from actual birth records.

## Section 5

**Total 15-year student projection considering all the above, projects an enrollment decrease will continue to drop from:**

- 5,422 actual 2021-22 enrollment to
- 4,802 in 2031-32 and to
- 4,617 in 2036-37.

Births 5 Years Prior to Enrollment	Year	RR	K Enrollment									10 yr avg. Increase 8th to 9th is					Stokes Total Enrollment
				1st	2nd	3rd	4th	5th	6th	7th	8th		9th	10th	11th	12th	
411	Actual ADM 20-21	81.8%	336	385	376	387	426	394	410	457	458		483	447	456	450	5,465
380	Actual ADM 21-22	106.1%	403	347	383	370	405	430	424	420	449	5.3%	522	436	425	408	5,422
404	2022-23	103.9%	420	415	339	381	351	413	427	431	425	5.3%	496	487	409	406	5,405
396	2023-24	103.3%	409	397	397	329	372	352	403	437	419	5.3%	470	480	483	381	5,329
370	2024-25	102.9%	381	396	383	388	326	379	351	425		5.3%	463	464	468	466	5,305
383	2025-26	102.6%	393	358	380	380	376	328	381	346		5.3%	470	456	423	458	5,155
381	2026-27	102.6%	391	371	351	371	373	389	334	382	342	5.3%	450	460	429	405	5,048
379	2027-28	101.8%	386	374	369	341	374	383	396	332	390	5.3%	436	436	429	392	4,981
377	2028-29	101.8%	384	386	363	357	342	380	386	393	328	5.3%	432	423	404	402	4,924
375	2029-30	101.1%	379	375	380	353	356	358	399	396	388	5.3%	362	423	391		4,916
373	2030-31	100.8%	376	368	364	372	348	348	350	392	390	5.3%	429	353	415		4,832
371	2031-32	102.7%	381	365	366	358	361	351	354	356	385	5.3%	431	387	335	371	4,802
369	2032-33	102.3%	378	365	362	365	348	371	348	359	381	5.3%	426	402	363	321	4,768
367	2033-34	102.2%	375	357	348	351	356	346	361	357	350	5.3%	398	412	399	338	4,748
365	2034-35	102.1%	373	363	344	341	348	362	345	373	347	5.3%	387	394	402	385	4,761
363	2035-36	102.0%	370	350	348	342	330	350	364	340	366	5.3%	383	381	358	393	4,675
361	2036-37	101.9%	368	350	344	340	335	341	356	366	336	5.3%	404	375	358	343	4,617

**We have projections with a “Variable Cone” for the total district ...** (Appendix Exhibit 16)

**Now, let’s apply the “Grade Progression Ratio” Forecast for each high school as examples of what that forecast looks like as the existing kindergarten class moves toward graduation.**

Stokes County has assigned each elementary school a Middle school and in turn a High school the students will attend as they move through the grades.

*(An example is Nancy Reynolds, Lawsonville and Sandy Ridge Elementary schools are assigned to Piney Grove Middle School, which in turn is assigned to North Stokes High School.)*

Considering Stokes County’s work force has remained relatively constant for the past 20 years, no models used increased or decreased projections for economic variables. Each high school attendance area has already seen 20 years of local historical trends, housing data, move in & out population, economic changes, births, kindergarten data, 8<sup>th</sup> to 9<sup>th</sup> grade enrollment jumps, graduation rates, Early College and Meadowbrook transfer variables through the high school years ... so no additional variables or adjustments were used.

## Section 5

### North Stokes High School attendance area projection - decrease 101 students by 2031-32.

- Using the 66 students currently enrolled in kindergarten plus the current 1<sup>st</sup> to 5<sup>th</sup> grades, there are **399 Elementary students in the North HS attendance area in teal below.**
- Those same 66 kindergarteners plus 1<sup>st</sup> & 2<sup>nd</sup> graders will attend **Piney Grove MS in 2027-28 totaling 205 MS students, decreasing from the 235 MS students currently enrolled.**
- Those same 66 kindergarteners plus 1<sup>st</sup>, 2<sup>nd</sup>, & 3<sup>rd</sup> graders will attend North HS in 2031-32 totaling 260 students, then remove Meadowbrook, Early College students and consider graduation loss. **North HS will have 199 students, a decrease of 101 students from the 300 currently enrolled in North HS.**

North Stokes HS Current Attendance Area projections  
Middle and High School projection following current Kindergarten class of 2035

Elementary ADM North HS Attendance Area	K 2035	1st	2nd	3rd	4th	5th	Total Elem	
2021-2022 Actual ADM	66	63	76	55	65	74	399	Actual ES ADM 2021 @ North HS area
year 21-22								
<small>(Nancy Reynolds, Lawsonville, Sandy Ridge Elementaries ADM)</small>								

Middle ADM North HS Attendance Area	6th	7th	8th	Total MS	
Current K forward with two other grades into <u>Piney Grove School</u> starting 2027-2028	66	63	76	205	Projected PG MS ADM 2027
year 27-28					Actual 2021-22 ADM 235
<small>(Nancy Reynolds, Lawsonville, Sandy Ridge Elementaries ADM)</small>					

High School ADM North HS Attendance Area	9th	10th	11th	12th	Total HS	North High School 2021-2022 Actual ADM 300
Current 2021-22 K class moves forward with three other grades into <u>North High School</u> starting year 2031-32 -- Graduates 2035	66	63	76	55	260	Projected NorthBase ADM 2031
year 31-32						
Less Meadowbrook current yearly average transfer	-2	-1	-1	0	-4	
Less Early College current yearly average transfer	-10	-13	-6	-11	-40	
Adjusted North High school enrollment year 2031-32 -- Current K Graduating in 2035					216	Subtotal North HS ADM
Less 8% average graduation decrease from 9th grade to 12th Grade					-17	
Adjusted North High School enrollment 2031-32 -- Current 3rd Grade Graduating in 2032					199	Projected North HS ADM as K class of 2035 enters 9th Grade

(Appendix Exhibit 17)

## Section 5

### South Stokes High School attendance area projection - decrease 192 students by 2031-32.

- Using the 103 students currently enrolled in kindergarten plus the current 1<sup>st</sup> to 5<sup>th</sup> grades, there are **692 Elementary students in the South HS attendance area in teal below.**
- Those same 103 kindergarteners plus 1<sup>st</sup> & 2<sup>nd</sup> graders will attend **Southeastern MS in 2027-28 totaling 312 MS students, decreasing from the 395 MS students currently enrolled.**
- Those same 103 kindergarteners plus 1<sup>st</sup>, 2<sup>nd</sup>, & 3<sup>rd</sup> graders will attend South HS in 2031-32 totaling 435 students, then remove Meadowbrook, Early College students and consider graduation loss. **South HS will have 336 students, a decrease of 192 students from the 528 currently enrolled in North HS.**

South Stokes HS Current Attendance Area projections  
Middle and High School projection following current Kindergarten class of 2035

Elementary ADM South HS Attendance Area	K 2035	1st	2nd	3rd	4th	5th	Total Elem	
2021-2022 Actual ADM	103	102	107	123	122	135	692	Actual ES ADM 2021 @ South HS area
year 21-22								
(Germantown, London, Pine Hall, Walnut Cove Elementaries ADM)								

Middle ADM South HS Attendance Area	6th	7th	8th	Total MS	
Current K moves forward with two other grades into <u>Southeastern MS</u> starting 2027-2028	103	102	107	312	Projected Southeast ADM 2027
year 27-28					Actual 2021-22 ADM 395
(Germantown, London, Pine Hall, Walnut Cove Elementaries ADM)					

High School ADM South HS Attendance Area	9th	10th	11th	12th	Total HS	South High School 2021-2022 Actual ADM 528
Current 2021-22 K class moves forward with three other grades into <u>South High School</u> starting year 2031-32 -- Graduates 2035	103	102	107	123	435	Projected South Base ADM 2031
year 31-32						
(Germantown, London, Pine Hall, Walnut Cove Elementaries ADM)						
Less Meadowbrook current yearly average transfer	-3	-7	0	-4	-14	
Less Early College current yearly average transfer	-6	-12	-13	-21	-52	
Adjusted South High school enrollment year 2031-32 -- Current K Graduating in 2035					369	Subtotal South HS ADM
Less 9% average graduation decrease from 9th grade to 12th Grade					-33	
Adjusted South Stokes High School enrollment 2031-32 -- Current 3rd Grade Graduating in 2032					336	Projected South HS ADM as K class of 2035 enters 9th Grade

*(Appendix Exhibit 17)*

## Section 5

### West Stokes High School attendance area projection - decrease 117 students by 2031-32.

- Using the 234 students currently enrolled in kindergarten plus the current 1<sup>st</sup> to 5<sup>th</sup> grades, there are **1,247 Elementary students in the West HS attendance area in teal below.**
- Those same 234 kindergarteners plus 1<sup>st</sup> & 2<sup>nd</sup> graders will attend **Chestnut Grove MS in 2027-28 totaling 616 MS students, decreasing from the 640 MS students currently enrolled.**
- Those same 234 kindergarteners plus 1<sup>st</sup>, 2<sup>nd</sup>, & 3<sup>rd</sup> graders will attend West HS in 2031-32 totaling 808 students, then remove Meadowbrook, Early College students and consider graduation loss. **West HS will have 645 students, a decrease of 117 students from the 761 currently enrolled in West HS.**

West Stokes HS Current Attendance Area projections  
Middle and High School projection following current Kindergarten class of 2035

Elementary ADM West HS Attendance Area	K 2035	1st	2nd	3rd	4th	5th	Total Elem	
2021-2022 Actual ADM year 21-22 (King, Mt. Olive, Pinnacle, Popular Springs Elementaries ADM)	234	182	200	192	218	221	1,247	Actual ES ADM 2021 @ West HS area

Middle ADM West HS Attendance Area	6th	7th	8th	Total MS	
Current K moves forward with two other grades into <u>Chestnut Grove MS</u> starting 2027-2028 (King, Mt. Olive, Pinnacle, Popular Springs Elementaries ADM)	234	182	200	616	Projected Chestnut G ADM 2027
	year 27-28				Actual ADM 2021-22 640

High School ADM West HS Attendance Area	9th	10th	11th	12th	Total HS	West High School 2021-2022 Actual ADM 761
Current 2021-22 K class moves forward with three other grades into <u>West High School</u> starting year 2031-32 -- Graduates 2035 (King, Mt. Olive, Pinnacle, Popular Springs Elementaries ADM)	234	182	200	192	808	Projected West Base ADM 2031
	year 31-32					
Less Meadowbrook current yearly average transfer	-14	-4	-3	-2	-23	
Less Early College current yearly average transfer	-24	-21	-17	-16	-78	
Adjusted West High school enrollment year 2031-32 -- Current K Graduating in 2035					707	Subtotal West HS ADM
Less 9% average decrease from 8th grade to 12th Grade					-62	
<b>Adjusted West Stokes High School enrollment 2031-32 -- Current 3rd Grade Graduating in 2032</b>					645	Projected West HS ADM as K class of 2035 enters 9th Grade

(Appendix Exhibit 17)

## Section 5

### Projected Enrollment Changes by School Attendance Area *(Charts in Appendix Exhibit 19)*

**North Stokes High School** will continue its enrollment drop over the next 12 years, with a 33.7% drop compared to a 30.4% drop the previous 12 years.

**Piney Grove Middle** 16.2% enrollment drop over the next 12 years is half of compared 34.5% drop the previous 12 years.

**Three Elementary schools'** drop has slowed to a total 7.0% drop over the next 12 years.

**2022-32 NSHS area - 17.9% decline** - North

Stokes County Schools		North Stokes High School District					
LEA 850		Elementary, Middle, High					
School #	332	338	328	320	348		
Schools	North Stokes	Piney Grove	Nancy Reynolds	Lawsonville	Sandy Ridge	North High District Sub Totals	
Actual ADM 21-22	300	235	← 399 Total Elem →			934	
Actual Previous 12 Year % decrease	-30.4%	-34.5%	-51.1%	-41.8%	-14.5%	-34.1%	
Forecast ADM 2031-32	199	197	← 371 Total Elem →			767	
Future Forecast 10 Year % decrease	-33.7%	-16.2%		-7.0%		-17.9%	

Stokes High and Middle schools are pushing larger classes through and are being backfilled with smaller classes. The Elementary schools' average is 62 students per grade divided into three schools. *(21 per grade, per school, if divided evenly)* North Stokes' attendance area is sparsely populated and may be nearing the neutral population beyond 2036-37.

**South Stokes High School** will continue its enrollment drop over the next 12 years, with a 36.4% drop compared to a 23.7% drop the previous 12 years

**Southeastern Middle** 13.9% enrollment drop over the next 12 years is compared to a 19.2% drop the previous 12 years.

**Three Elementary schools'** decrease has slowed to a total 5.3% drop over the next 12 years.

**2022-32 SSSH area - 18.8% decline** - South

Stokes County Schools		South Stokes High School District					
LEA 850		Elementary, Middle, High					
School #	352	350	312	354	336	356	
Schools	South Stokes	Southeastern	German-town	London	Pine Hall	Walnut Cove	South High District Sub Totals
Actual ADM 21-22	528	395	← 692 Total Elem →				1,615
Actual Previous 12 Year % decrease	-23.7%	-19.2%	-18.9%	-18.0%	-35.8%	2.2%	-19.5%
Forecast ADM 2031-32	336	340	← 655 Total Elem →				1,331
Future Forecast 10 Year % decrease	-36.4%	-13.9%		-5.3%			-18.8%

Stokes High and Middle schools are pushing larger classes through and are being backfilled with smaller classes. The Elementary average is 109 students per grade divided into 4 schools. *(27 per grade, per school, if divided evenly)* Projections for South Stokes' attendance area enrollment decline may slow considerably beyond 2036-37.

**West Stokes High School** has the smallest high school enrollment drop over the next 12 years, with a 15.2% drop compared to a 23.3% drop the previous 12 years.

**Chestnut Grove Middle** 12.9% enrollment drop over the next 12 years is compared to a 22.2% drop the previous 12 years.

**Four Elementary schools'** decrease has slowed to a total 7.3% drop over the next 12 years.

**2022-32 WSHS area - 10.9% decline** - West Stokes High and Middle have the least drop in the county.

Stokes County Schools		West Stokes High School District					
LEA 850		Elementary, Middle, High					
School #	358	304	316	314	340	342	
Schools	West Stokes	Chestnut Grove	King	Mount Olive	Pinnacle	Poplar Springs	West High District Sub Totals
Actual ADM 21-22	761	640	← 1,247 Total Elem →				2,648
Actual Previous 12 Year % decrease	-23.3%	-22.2%	-22.8%	-7.0%	-21.9%	-0.2%	-20.7%
Forecast ADM 2031-32	645	558	← 1,156 Total Elem →				2,359
Future Forecast 10 Year % decrease	-15.2%	-12.8%		-7.3%			-10.9%

The Elementary average is 192 students per grade divided into 4 schools. *(48 per grade, per school, if divided evenly)* West Stokes' attendance area has the most new homes, most move-in population; but will decline in enrollment and increase from 50% to 53% of county enrollment by 2031-32.

## Section 5

### Look back and Look ahead of District Enrollment changes

#### **Total District Enrollment loss % is decreasing**

Last 12 years' 21.4% loss of total district enrollment (2000 through 2021)

Next 12 years' 13.6% loss of total district enrollment (2021 through 2032)

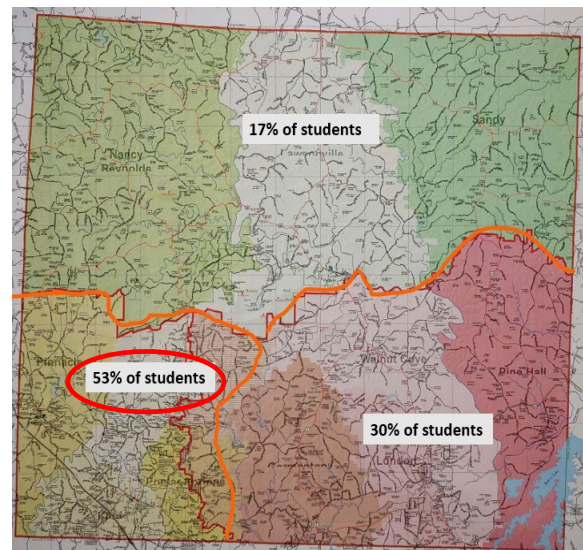
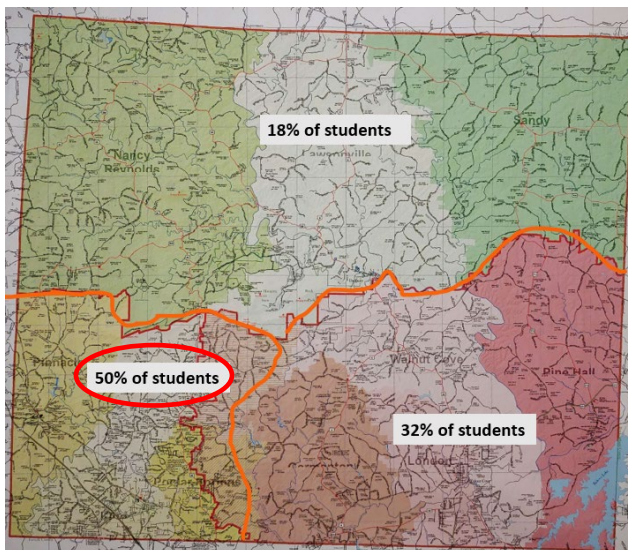
It's projected in the next 12 years and beyond, the total district enrollment decrease will continue until the birth rate becomes neutral or starts increasing. Historical records usually indicate enrollment increase will follow birth increase by 6-8 years. Other factors that may indicate an increase are when economic changes, such as move in population, increases at a pace faster than birth decline.

#### **Total District Enrollment Shifts within the County**

(Appendix Exhibit 18)

##### **2021-22 Total District Enrollment %**

##### **2031-32 Total District Enrollment %**



Northern and Southeastern areas of Stokes County continue to see a faster reduction of population as larger high school grades graduate, leaving smaller elementary grade enrollment to move up into high schools.

The Southwest quadrant's losses appear to be lower and may be offset by the newer home sales and apparent move-in population for that quadrant. The Southwest quadrant has also increased "student market share" in the county from 50% to 53% of the district's students as the other areas of the county lost "student market share."

## Section 6

### Stokes County Facilities

**Studying the building square footage, and comparing it to the school enrollment, can be a quick indicator of the efficiency of school buildings.** That can provide a quick snapshot to see which schools over-crowded and which schools should be able to house more students. (Typical definition –full capacity is 10% over or under the designed capacity.) NC DPI established Typical Elementary, Middle and High Schools Space Profiles for small, medium, and large schools in their Facilities Planning Guidelines on the state website. Those profiles establish a state base line and include the standard sizes, types and quantities of classrooms and all non-instructional space needs for student and programs within NC that generally align with national trends. Those profiles were used for Stokes County Schools in determining a baseline school square footage. *(Appendix Exhibit 22).*

Stokes County School Facilities are broken down as below: *(Appendix Exhibit 21)*

- 1,261,614 square feet of structures (Brick - Mortar & Pods) excluding mobile units
- 80 individual buildings and pods of different ages (1951-2000) & styles
- 2 Specialty schools Meadowbrook MS/HS & Early College HS
- 3 Traditional High Schools
- 3 Traditional Middle Schools
- 11 traditional Elementary Schools

#### Comparison to NC DPI (State Standards)

Of the 17 Traditional K-12 schools in Stokes Co. all but one (Poplar Springs) is considered “Small” per state standards.

3 elementary schools of the 11 are considered “Very Small”. (Defined as averaging one classroom per grade level or less (25 students per grade or 150 total elem. school).

2 of the three High Schools are projected to be “Very Small”, below 100 students per grade level, and generally accepted high school size to support an instructional program.

School Size State Comparison	School Planning				Stokes County		
	Type School	# students	Sq. Ft. per Student	Sq.Ft. per building	Average # students	Sq. Ft. per Student Average	Total County Sq. Ft.
Elementary Schools	Large	800	120				
	Medium	450	133				
	Small	300	148	50,034	213	253	
	Title 1		160				
Middle Schools	Large	1,120	142				
	Medium	950	140				
	Small	475	160	76,235	423	230	
	Title 1		167				
High Schools	Large	2,000	143				
	Medium	1,200	179				
	Small	600	199	119,346	530	298	
<b>Total Stokes Co.</b>							
NC DPI School Planning Space Profile	Elem, Middle High School	1,375	175	245,615	5,422		1,261,614 sf
					2021-22	233 sf	
					&	&	
					4,682	269 sf	
					2031-32		

Stokes County Schools average square footage per student all exceed the state guidelines by 170%, 143% and 150%. Result, there is an estimated 27% district-wide excess capacity.

(Full capacity is defined as within 10 % of the calculated capacity.) *(Appendix Exhibit 20)*

## Section 6

**History - Past & Peak Capacity 2002-03** - Overall school utilization at peak enrollment is in the middle of two methods used to calculate students per Sq. Ft. and matches the enrollment. This indicates Stokes County Schools' buildings, capacity and students aligned in 2002-03.

**Stokes County Student capacity calculations compared to State**

**Calculations methods.**

7,638 student capacity when using NC DPI Sq. Ft. per Elem, per Middle and per High separately.

7,209 student capacity when using the NC DPI average 175 Sq. Ft. per student.

7,429 actual students enrolled in 2002-03 This matches peak capacity, enrollment and square footage.

Schools		Total District		Capacity Calculator	
Stokes County Schools Capacity using State Capacity Sq. Ft. 2031-32	By	Elem, Middle, & High.	sf	7,638	Students
Stokes County Schools using State programing @ average 175 SQ.FT. per student	@	175	sf	7,209	Students
Stokes County Schools Square Footage (SQ. FT.) Total		1,261,614	sf	Actual 7,429	Students Enrolled in 2002-03

**Current - Capacity 2021-22** - Utilization at current enrollment and projected enrollment.

2,007 students under capacity 2021-22 with 5,422 students currently enrolled.

2,745 students under capacity 2031-32 with 4,802 projected students enrolled.

SQ FT per student (ADM 2021-22)	@	233	sf	5,422	Students
SQ FT per student (ADM 2031-32)	@	269	sf	4,802	Students

*(See Appendix Exhibit 20)*

**With district enrollment declining through 2036-37 – Sq. Ft. considerations as below:**

175 Sq. Ft. per student School Planning average Square Foot per student.

233 Sq. Ft. per student Stokes County School district wide in 2021-22. (This year's data)

269 Sq. Ft. per student Stokes County School district wide in 2031-32.

27% Sq. Ft. or district excess capacity actual 2021-22

35% Sq. Ft. or district excess capacity forecast in 2031-32.

## Section 6

**So, we looked at district wide, now let's look school by school** where the enrollment has dropped, creating empty classrooms.

Overall, in 2021-22 - 8 schools of the district's 17 traditional schools have excess capacity.

### Summarizing the High School attendance areas

North Stokes Attendance area - 4 of the 5 schools have excess capacity

Has 18 % of district enrollment 2021 - Forecast 17 % of district enrollment by 2031

Had 34% - 12 year enrollment drop 09-21 - add 17.9% enrollment drop by 2031

South Stokes Attendance area - 3 of the 6 schools have excess capacity

Has 32 % of district enrollment 2021 – Forecast 30 % of district enrollment by 2031

Had 19.5% 12 year enrollment drop 09-21 – add 18.8% enrollment drop by 2031

West Stokes Attendance area - 1 of the 6 schools have excess capacity

Has 50 % of district enrollment 2021 – Forecast 53 % of district enrollment by 2031

Had 23% -12 year enrollment drop 09-21 – add 15.2% enrollment drop by 2031

#### Enrollment changes

% Student Decrease

% Student Neutral

% Student Increase

#### Capacity Sq.Ft. Indicator

School Short Capacity

School Neutral Capacity

School Available Capacity

School Excess Available Capacity

State (NC DPI) School Size Comparison												
Type School	High School Planning			Middle School Planning			Elementary School Planning					
	Large	Medium	Small	Large	Medium	Small	Large	Medium	Small	Title 1		
# students	2000	1200	600	1120	950	475	800	450	300	-----		
Sq. Ft. per Student	143	179	199	142	140	160	120	133	148	160		

Stokes County Schools Comparison						Stokes County Schools Comparison						Stokes County Schools Comparison						
	Large	Medium	Small	Sq. Ft. per student	6 year % Changed		Large	Medium	Small	Sq. Ft. per student	6 year % Changed		Large	Medium	Small	Very Small	Sq. Ft. per student	6 year % Changed
North ADM 2021-22			300	383	-22.5%	Piney Grove ADM			235	276	-24.4%	Nancy Reynolds				111	468	-31.5%
2031-32			199	378		2031-32			193	336		2031-32				117	296	-39.7%
South ADM 2021-22			528	285	-7.0%	Southeast ADM			395	253	-6.4%	Lawsonville				171	176	-5.0%
2031-32			336	448		2031-32			342	292		Sandy Ridge					251	-12.0%
West ADM 2021-22			761	225	-18.1%	Chestnut Grove			640	161	-9.3%	Germantown		154			282	-7.8%
2031-32			645	266		2031-32			533	194		London		200			284	-35.0%
												Pine Hall			104		227	4.0%
												Walnut Cove		234				
												King			363		181	-17.1%
												Mt Olive			294		168	10.1%
												Pinnacle			153		261	-10.0%
												Poplar		437			189	-1.4%
												Springs						

(Appendix Exhibit 20)

## Section 6

**Now, let's look ahead** - By using square footage as an indicator of potential available space, schools will have 27% to 35% of their space available by 2037. Stokes County Schools should consider the following:

- 1- Prior to resetting capacity, a thorough school building capacity review should be done school by school and classroom by classroom, considering the latest educational programs.
- 2- A thorough facility assessment study should be performed to identify needed renovations and/or maintenance or, should a newer district building be considered for consolidation.
- 3- Of the 80 Stokes County buildings, can several buildings on a school site be closed to lower school maintenance costs, allowing the district to divert precious dollars to other unfunded facility needs?

## Section 7

### Stokes County Next Steps

**Planning ahead** - “Next Steps” should consider the gentle migration and population shift from the North and Southeast areas of the county toward the Southwest quadrant of the county. The shift combined with projected decreases in “Live Births”, Kindergarten students and a smaller 13% decrease in district student enrollment through 2036-37 should balance “Students First” with educational and operational needs for the next 10 to 15 years.

**Stokes County is not alone with this trend** - North Carolina is seeing a general decrease in rural area students. With decreasing enrollment becoming a topic for many school districts, many studies are available on different ways to address decreasing enrollment. Also, in the 70’s and 80’s when the “Baby Boomer” generation was graduating from school, there were decreases of 38% or more requiring school downsizing. Lessons can be learned from that time.

**It is a total district process** to review Stokes County’s student educational goals and programming and align school enrollment with adequate facilities needed to successfully deliver the desired student educational program within the limited funding available.

“Next Steps” should include many questions and topics for discussion not limited to the below.

Considering decreasing enrollment, what are ...

- A- Right sized schools in Stokes County? (*advantages & disadvantages of sizes*)
- B- Changes needed to provide quality student instruction?
- C- Best practices or shifts needed for adequate district funding?
- D- Best practices for transportation of students and delivery of food services?
- E- Short and long-term maintenance and long-term capital funding needs for buildings?
- F- Other topics?

## **Section 8**

### **Appendix List of Exhibits**

- Exhibit 1 Stokes 2035 -sections published 2014
- Exhibit 2 OSBM Stokes Co Population projections 2000-2050
- Exhibit 3 2020 US Census Quick Facts
- Exhibit 4 Youth-Home Location maps GIS
- Exhibit 5 Birth & K-garten Charts
- Exhibit 6 Compare Births - K-garten Enrollment
- Exhibit 7 Birth- K-garten Cone trend-pattern
- Exhibit 8 47 yr Chart Enrollment Change History
- Exhibit 9 24 yr SCS Enrollment Data
- Exhibit 10 District Enrollment N-S-W
- Exhibit 11 Western & Eastern Enrollment
- Exhibit 12 Calvary Christian School
- Exhibit 13 Home-School-2021 NC Annual-Report
- Exhibit 14 Charter Schools 2021 NC Annual listing
- Exhibit 15 Graduation Early College Meadowbrook Trends
- Exhibit 16 Stokes Enrollment Forecast
- Exhibit 17 High Sch projections 2031-32
- Exhibit 18 SCS-NC Enrollment Change Maps
- Exhibit 19 SCS Enrollment % Changes N-W-S
- Exhibit 20 Sq Ft Enrollment Comparison
- Exhibit 21 Facilities Sq Ft per Bldg
- Exhibit 22 NC DPI space profile pk-12
- Exhibit 23 NCEI Projection model basis 2019
- Exhibit 24 ORED 2007-08 Enrollment Forecast
- Exhibit 25 NCDPI 1991-92 SCS Facilities Survey
- Exhibit 26 BOE 2022-1-10 Enrollment Presentation-LTC