

Pathways to Grade-Level Reading is powered by the North Carolina Early Childhood Foundation in collaboration with NC Child, The North Carolina Partnership for Children, Inc., and BEST NC.



The North Carolina Early Childhood Foundation (NCECF) marshals North Carolina's great people, ideas and achievements to build a foundation of opportunity and success for every child by the end of third grade. To learn more, visit: buildthefoundation.org



NC Child works to build a strong North Carolina by advancing public policies that ensure all children—regardless of race, ethnicity, or place of birth—have the opportunity to achieve their full potential. To learn more visit: www.ncchild.org.



The North Carolina Partnership for Children, Inc./ Smart Start advances a high quality, comprehensive, accountable system of care and education for each child beginning with a healthy birth. To learn more, visit: www.smartstart.org.



BEST NC unites an engaged and informed business perspective to build consensus toward dramatically transforming and improving education in North Carolina. To learn more, visit: best-nc.org.



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UNDERSTANDING THE STORY BEHIND THE DATA

The data in this *Chartbook* reflect the well-being of North Carolina children and their families. But these data are not the complete story and we must ask more questions and dig beneath long-term trends and averages to develop a deeper understanding of these observed outcomes.

As you review the available data, the following questions will help you apply context to and extract meaning from the measures:

IMPACT



Which measures highlight opportunities to create broad-scale change for children?

NEED



Which measures indicate areas where North Carolina children face significant challenges?

EQUITY



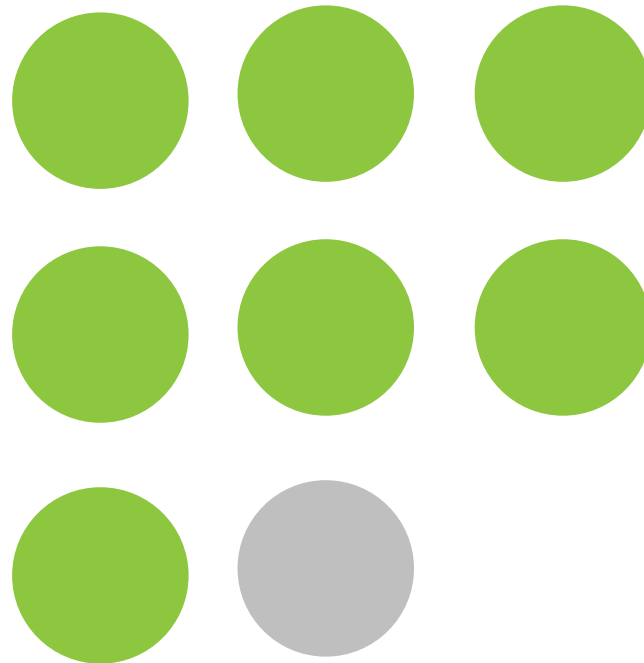
Which measures capture or influence race and ethnic, income, or geographic disparities?

DATA DEVELOPMENT AGENDA

The indicators selected for the Pathways to Grade-Level Reading Measures of Success Framework reflect robust research and evidence about what works to promote reading success. In some cases, North Carolina currently lacks valid, reliable, or available state-level data for selected measures. In others, state agencies may not regularly produce or report these measures.

The following list shows where we need new or improved data to support our understanding of birth-to-eight learning and education.

- % of students meeting expected growth in reading (K-3)



DATA WE HAVE



DATA
DEVELOPMENT
AGENDA



GUIDE TO CHART TERMS

The following terms are used to describe data trends throughout this document

IMPROVED/ WORSENE

Measures that changed by more than +/-5 percent. Trends describe changes in the state average and may not reflect changes in patterns by race and ethnicity.

UNCHANGED

Measures that changed by less than +/- 5 percent

SUPPRESSED ESTIMATE (SE)

Estimates that did not meet standards for reliability or precision were suppressed. The most frequent reasons for SEs include the unavailability of longitudinal data, fewer than 10 cases (low number events), and statistically unstable estimates.

DATA DETAIL

Measures disaggregated by race, ethnicity, income, or geography (as available), typically for a single data year.

NOT AVAILABLE (NA)

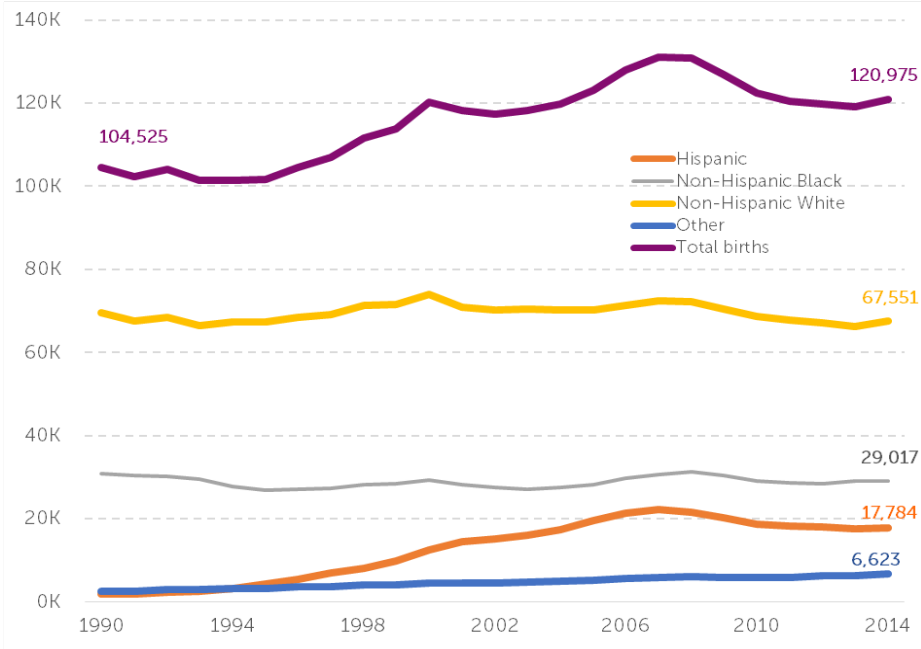
Data are unavailable for a specific year or disaggregation.

POOR/NEAR POOR

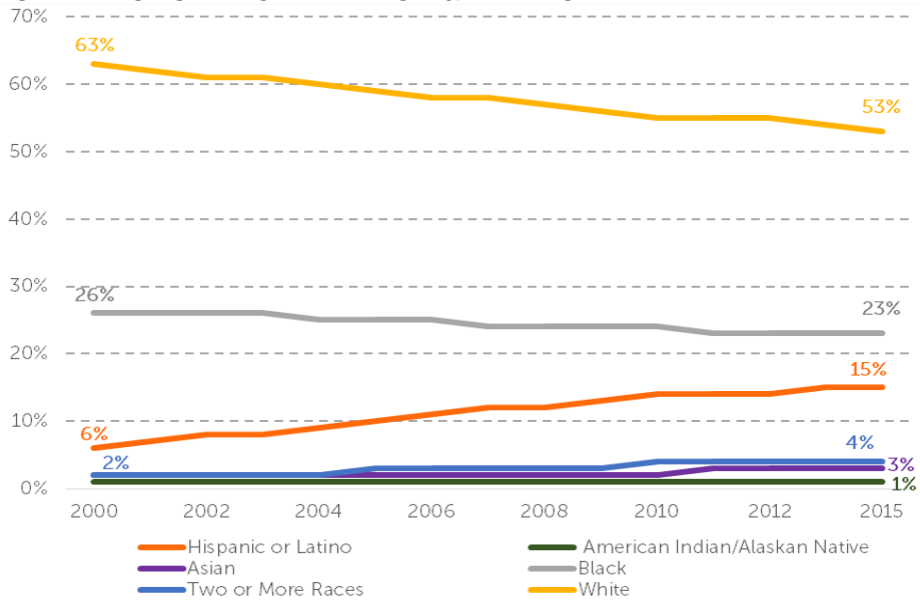
Poverty is an official measure defined by the U.S. Government based on family income, type, and size. There are two versions of the federal poverty measure, one used for statistical purposes by the U.S. Census Bureau (*poverty threshold*) and one used for administrative purposes by federal and state agencies. (*poverty guideline*). In this document poor refers to households where families earn less 100 percent of the poverty threshold, and near poor refers to households that earn less than 200 percent. The 2015 poverty threshold was \$19,078 for a family of three—the average household size in North Carolina—and the poverty guideline was \$20,090.

DEMOGRAPHIC SNAPSHOT

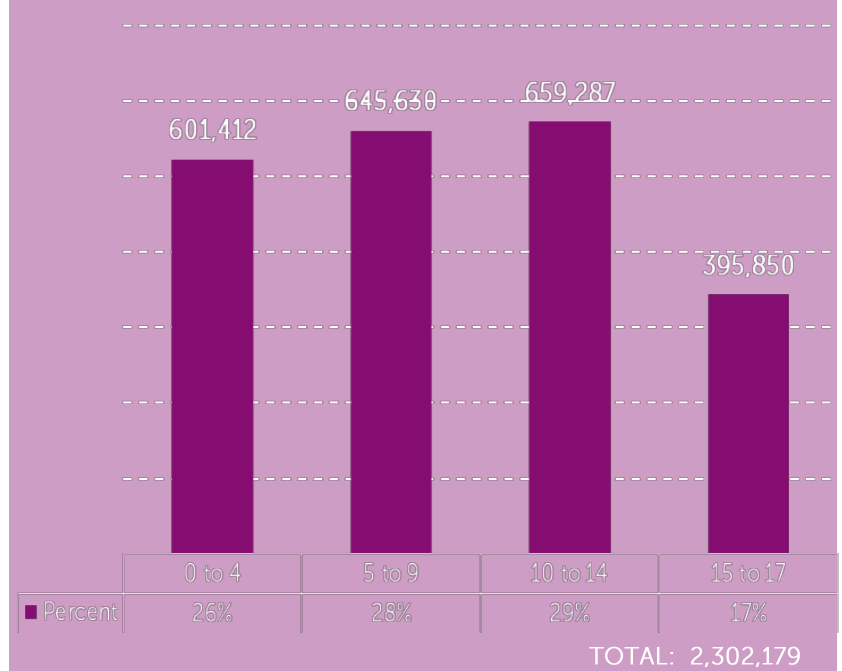
LIVE BIRTHS BY RACE & ETHNICITY



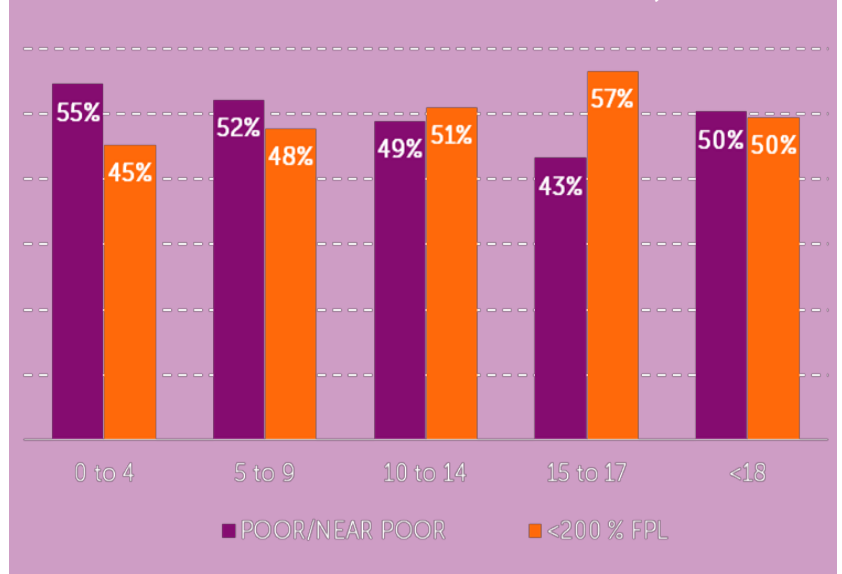
CHILD POPULATION BY RACE & ETHNICITY



CHILD POPULATION BY AGE, 2014



ECONOMIC HARDSHIP BY CHILD AGE, 2014



HIGH QUALITY BIRTH-TO- EIGHT LEARNING AND EDUCATION

Children's first eight years are a developmental continuum that set the foundation for all of the years that follow. Early, consistent, high-quality supports with continuity of practice and integrated support services from birth through age eight promote and sustain children's developmental gains.

Research shows that high-quality child care and prekindergarten programs help prepare all children for school and life success: though children from low-income backgrounds benefit the most, middle-income children benefit substantially from high-quality early education, and benefits outweigh costs for children from both middle- and low-income families. High-quality programs are culturally competent, work to fully understand and adapt to the home cultures of the children in their care, and use effective, developmentally-appropriate curricula to build their students' foundational learning skills. High-quality programs also provide needed supports and resources to teachers and staff to ensure high-quality, consistent teaching in the early education classroom.

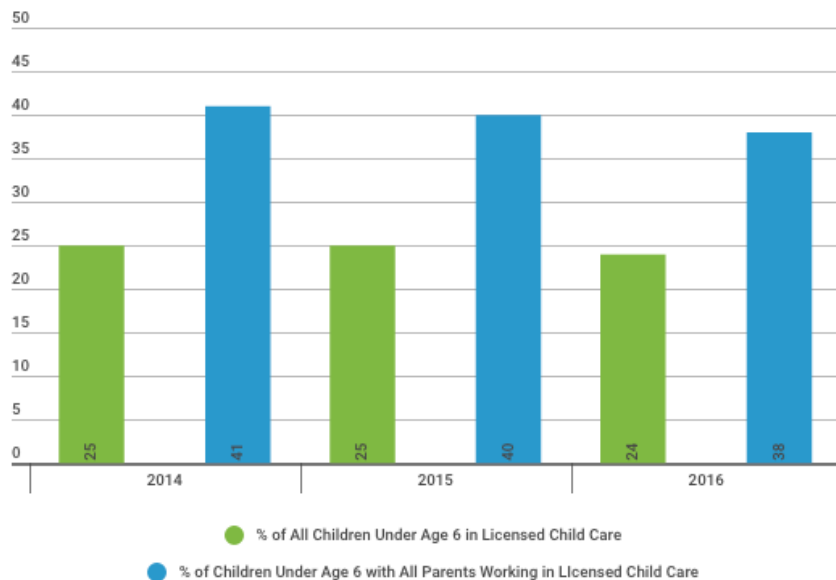
Children who enter kindergarten ready to learn are more likely to build on those foundational learning skills to grow into proficient readers by the end of third grade. Strong, effective kindergarten through third grade teachers and leaders – who provide students with high- quality classroom learning experiences, tailored to meet each child's needs – are more likely to help their students achieve grade-level reading proficiency. Effective schools also take into account students' social-emotional development by maintaining positive discipline and healthy school climates. To benefit from excellent teaching and effective school environments, students must attend school regularly.

ACCESS TO HIGH-QUALITY, BIRTH-TO-EIGHT PROGRAMS WITH HIGHLY QUALIFIED PROFESSIONALS

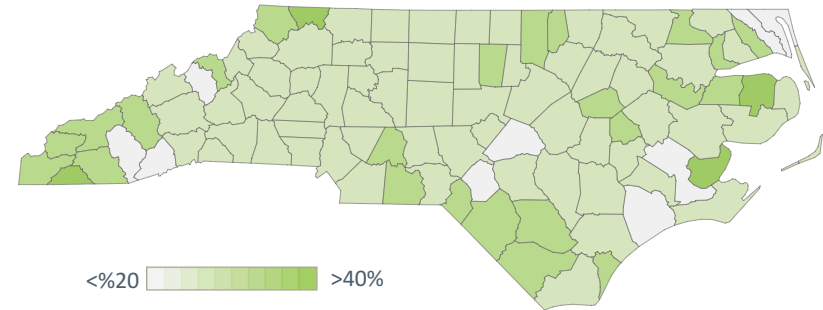
Child Care Enrollment

% of all children birth-to-five enrolled in child care

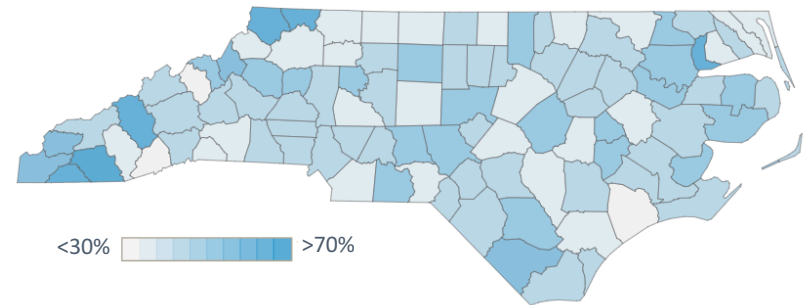
AGES: Under 6



% of All Children Under Age 6 in Licensed Care (2016)



% of All Children Under Age 6 with All Parents Working in Licensed Care (2016)



Data not available by income and race.

WHY IS THIS MEASURE IMPORTANT?

Young children, particularly those with multiple risk factors, benefit from the consistency of regular attendance at a high quality early education program, where they learn to work on tasks independently, follow directions and establish good attendance and learning habits. Enrollment in child care can lend consistency and stability to a child's life, which affects children's social competence, behavioral outcomes, cognitive outcomes, language development, school adjustment, and overall child well-being.

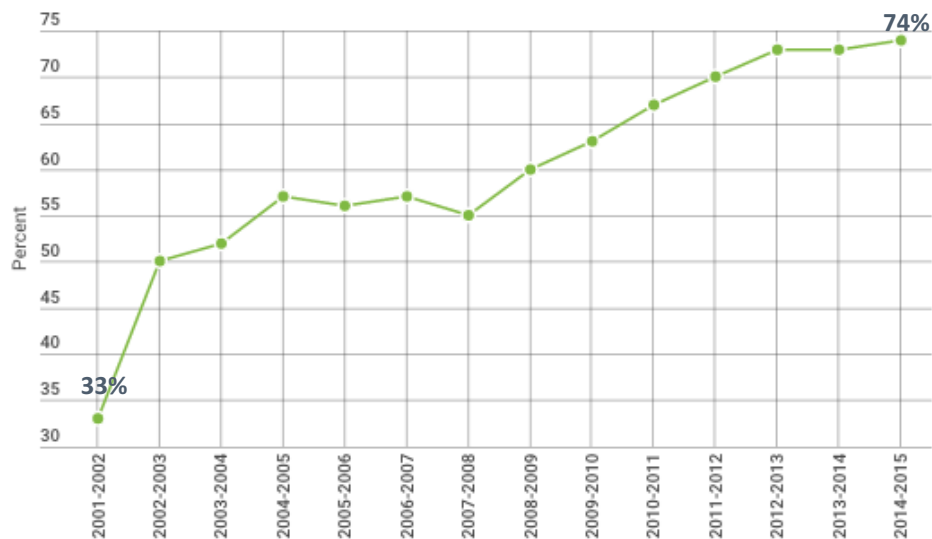
SOURCE: Child Care Services Association. Child Care in North Carolina. Available online at: [http:// www.childcareservices.org/](http://www.childcareservices.org/) Data are point-in-time estimates for July of the year cited.

ACCESS TO HIGH-QUALITY, BIRTH-TO-EIGHT PROGRAMS WITH HIGHLY QUALIFIED PROFESSIONALS

High Quality Child Care Enrollment

% of children birth-to-five attending licensed child care who are in high quality centers and homes (4- and 5-star)

AGES: Under 6

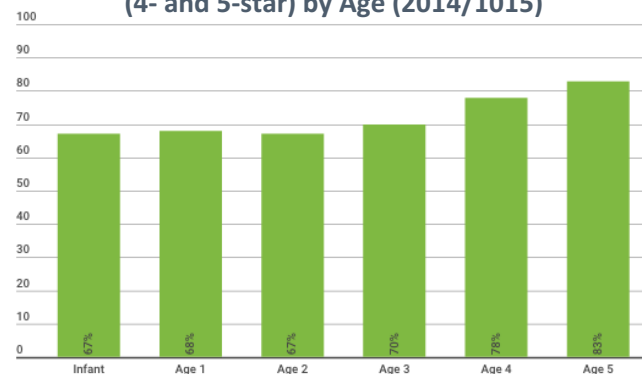


WHY IS THIS MEASURE IMPORTANT?

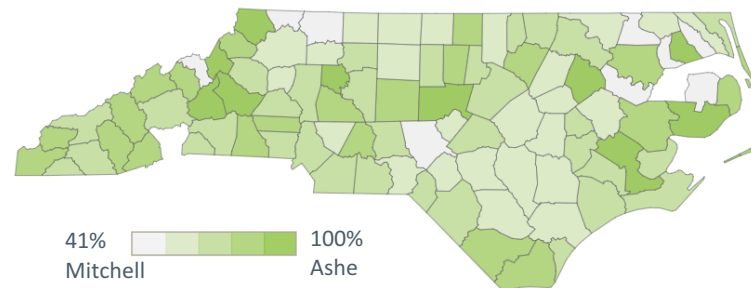
Children who attend a high quality early education program are better prepared for school— academically, socially and emotionally. Economically disadvantaged 3- and 4-year-old children who participate in high-quality preschool programs have better school achievement, social skills and behavior than children who do not participate in a preschool experience or who are enrolled in a low quality program. Children in higher quality programs have more advanced language and pre-math skills, more advanced social skills and warmer relationships with their teachers.

SOURCE: The North Carolina Partnership for Children, Inc., PBIS.

% of Children 0-5 Attending Licensed Child Care Who are in High-Quality Centers and Homes (4- and 5-star) by Age (2014/2015)



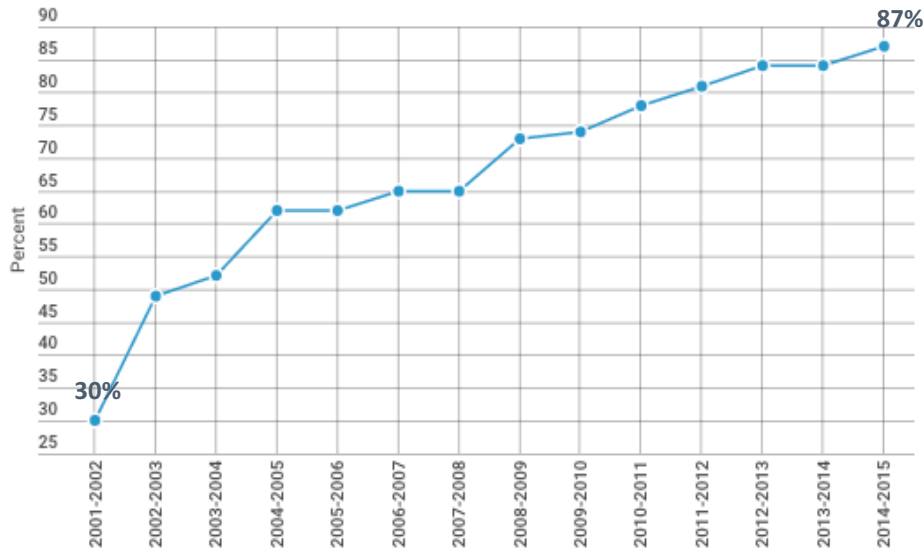
% of Children 0-5 Attending Licensed Child Care Who are in High-Quality Centers and Homes (4- and 5-star) by County (2014/2015)



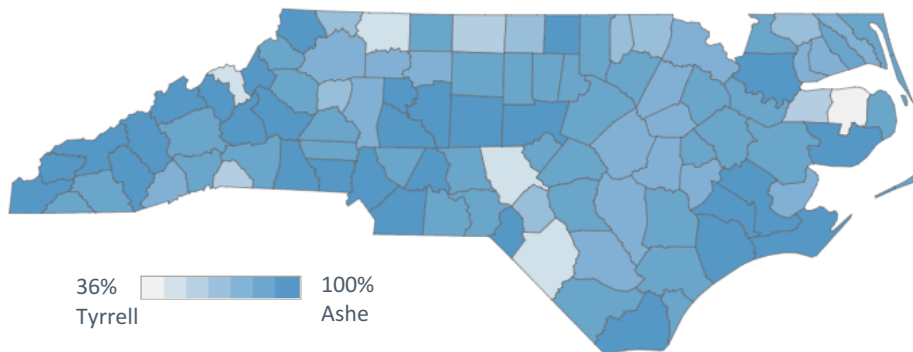
High Quality Child Care Enrollment

% of children birth-to-five attending licensed child care who are in high quality centers and homes (4- and 5-star)

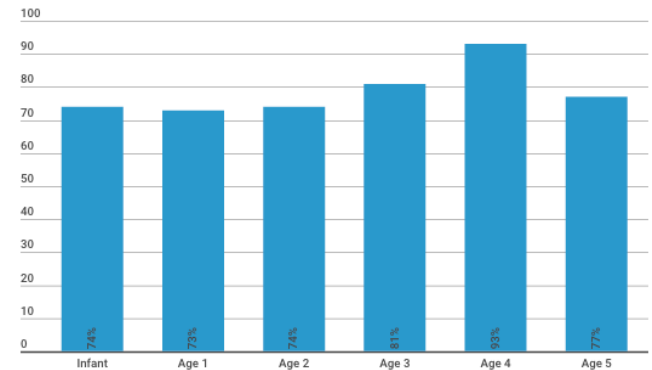
INCOME: Children Whose Families Receive Child Care Subsidy
AGES: Under 6



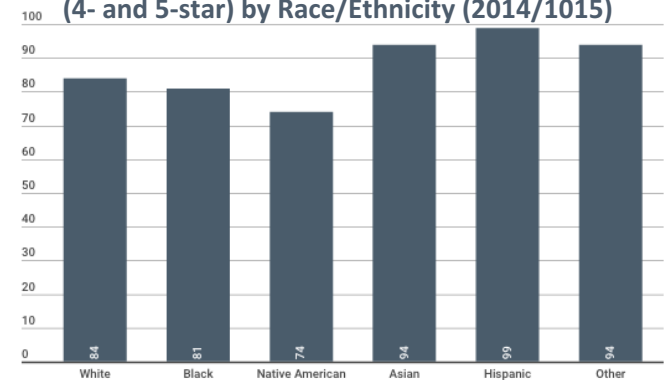
% of Children 0-5 Receiving Subsidy Attending Licensed Child Care Who are in High-Quality Centers and Homes by County (4- and 5-star) (2014/1015)



% of Children 0-5 Receiving Subsidy Attending Licensed Child Care Who are in High-Quality Centers and Homes (4- and 5-star) by Age (2014/1015)



% of Children 0-5 Receiving Subsidy Attending Licensed Child Care Who are in High-Quality Centers and Homes (4- and 5-star) by Race/Ethnicity (2014/1015)



SOURCE: The North Carolina Partnership for Children, Inc., PBIS.

SCHOOL ATTENDANCE

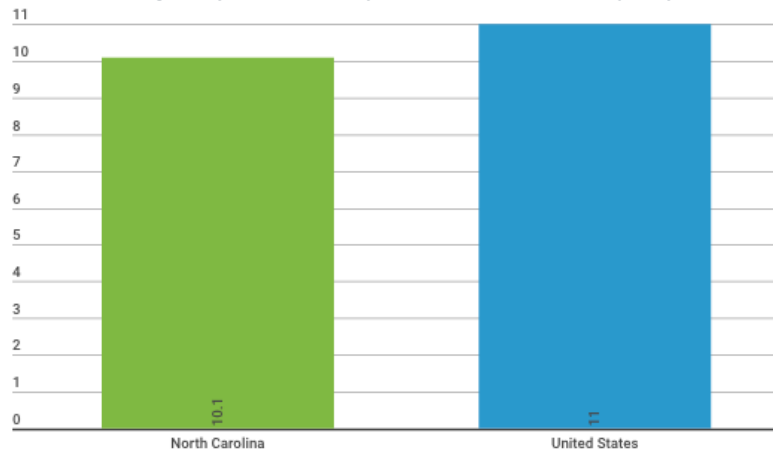
Regular Attendance

% of children with regular attendance at child care or education programs.

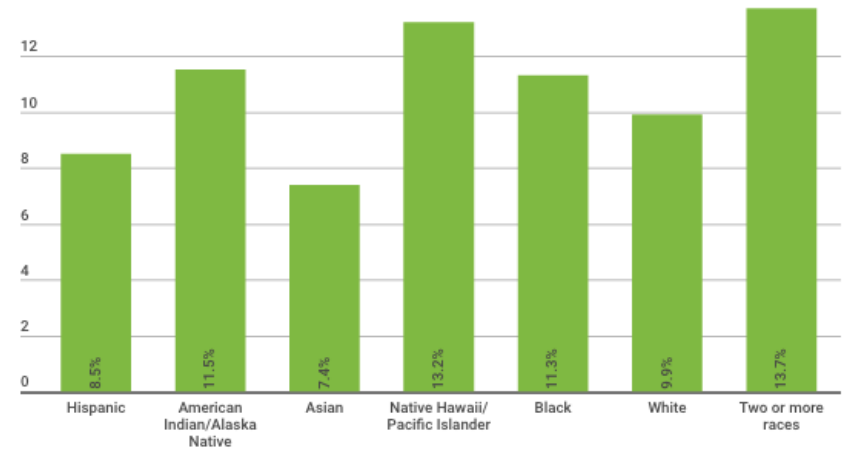
LEA data will be forthcoming.

AGE: NC Data includes all students in NC public and charter schools that have K, 1st, 2nd, and/or 3rd grades.

% of students who are chronically absent, meaning they miss 15 days of school or more per year



% of students by race/ethnicity who are chronically absent, meaning they miss 15 days of school or more per year



WHY IS THIS MEASURE IMPORTANT?

Children, particularly those with multiple risk factors, benefit from regular attendance at a high quality early education program where they learn to work on tasks independently and follow directions. Child care settings also provide opportunities to identify warning signs and to establish good attendance and learning habits. Consistent school attendance in the early grades helps boost children's academic learning, achievement, and motivation. Early chronic absenteeism is associated with lower academic achievement, truancy in middle school, school dropout, delinquency, and substance abuse. When children miss a substantial number of school days, it is more difficult for them to learn to read and to acquire other crucial academic skills. The educational experience of regularly attending children may also be adversely affected when teachers must divert their attention to meet the learning and social needs of chronically absent children when they return to school.

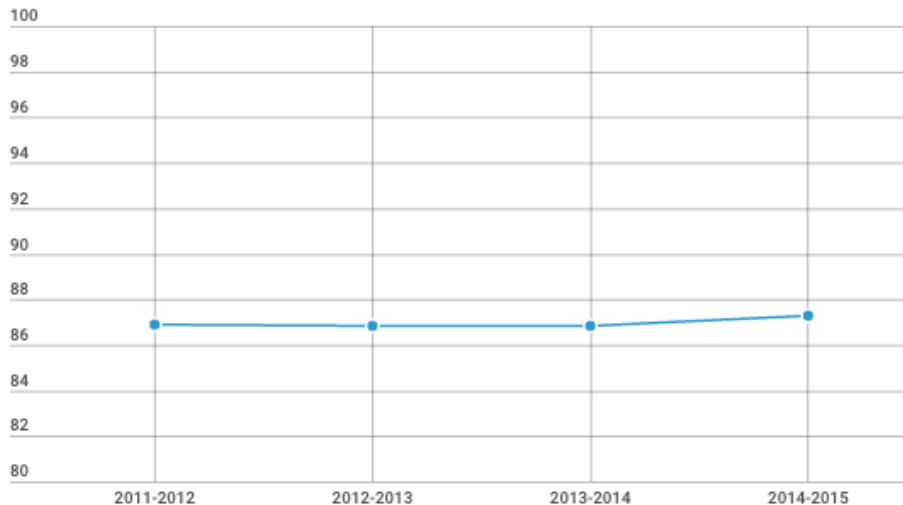
SCHOOL ATTENDANCE

Regular Attendance

% of children with regular attendance at child care or education programs.

AGE/POPULATION: Children enrolled in NC Pre-K.

Average percent of days attended (calculated as the ratio of average days attended divided by average operational days)



\$5,340

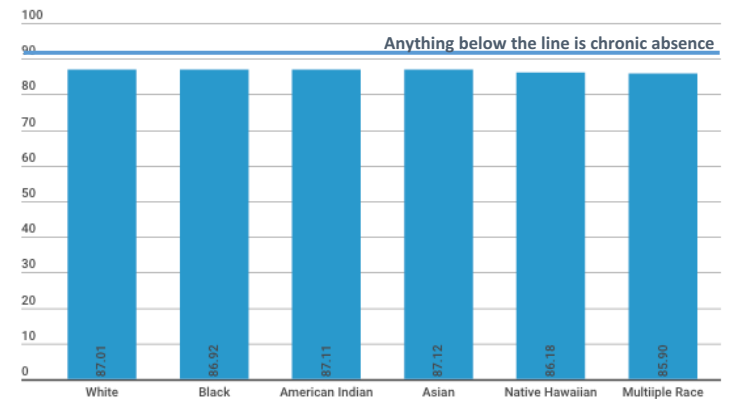
North Carolina state \$ per child enrolled in PreK



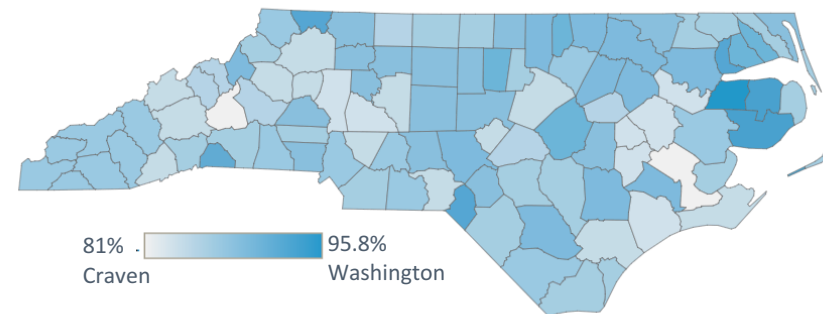
\$4,521

US Average state \$ per child enrolled in PreK

Average percent of days attended by race/ethnicity
(calculated as the ratio of average days attended divided by average operational days 2010-2015)



Average percent of days attended by county
(calculated as the ratio of average days attended divided by average operational days 2010-2015)

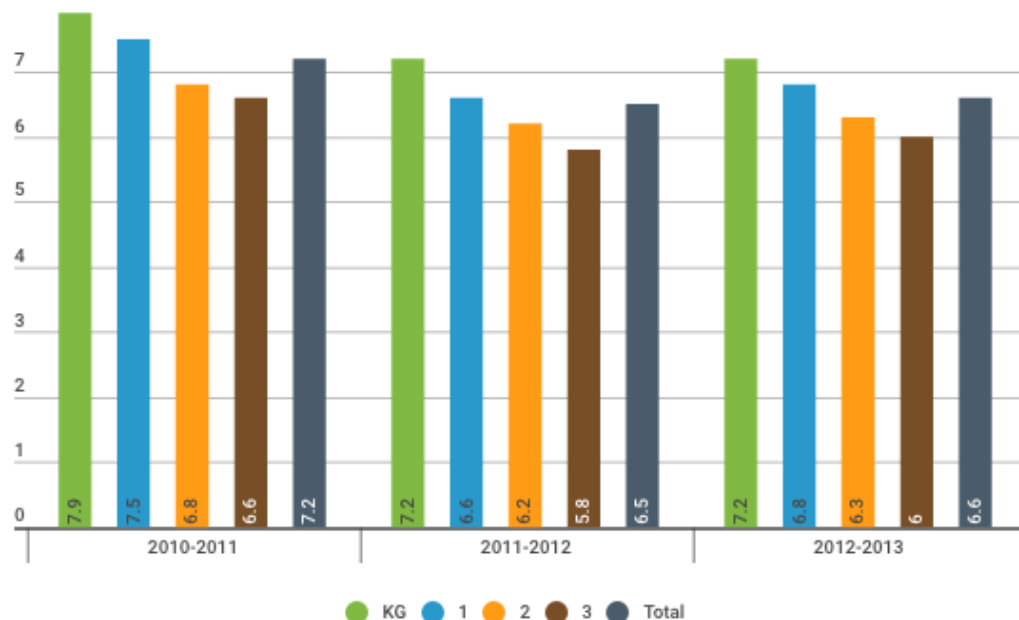


SCHOOL ATTENDANCE

School Stability

% of children who changed schools during the past school year (K-3)

AGE: Kindergarten through third grade



NC data by race/ethnicity will be forthcoming.

WHY IS THIS MEASURE IMPORTANT?

Consistency and stability in early child care and education affects children's social competence, behavioral outcomes, cognitive outcomes, language development, school adjustment, and overall child well-being. Frequent school changes during the early grades (K-3) are associated with retention in grade, behavioral problems, lower academic achievement, and lower high school graduation and college completion rates

SOURCE: US Department of Education, Office of Civil Rights Data Collections, 2013-14



National Comparison:

A research study using longitudinal data starting in the late 1990s/early 2000s found that nationwide, about 7% of kindergarteners change schools during the kindergarten year.

Source: Burkam, D., Lee, V., and Dwyer, J., *School Mobility in the Early Elementary Grades: Frequency and Impact From Nationally-Representative Data*. University of Michigan. 2009

Disproportionality:

A 2010 Government Accountability Office study followed students who entered kindergarten in 1998 through 2007. It found 13 percent of students changed schools four or more times by the end of 8th grade, and highly mobile students were disproportionately more likely to be poor or black than students who changed schools twice or fewer times. The same study found families who did not own their own homes made up 39 percent of the most highly mobile students.

Source: US GAO, K-12 EDUCATION: Many Challenges Arise in Educating Students Who Change Schools Frequently, 2010.

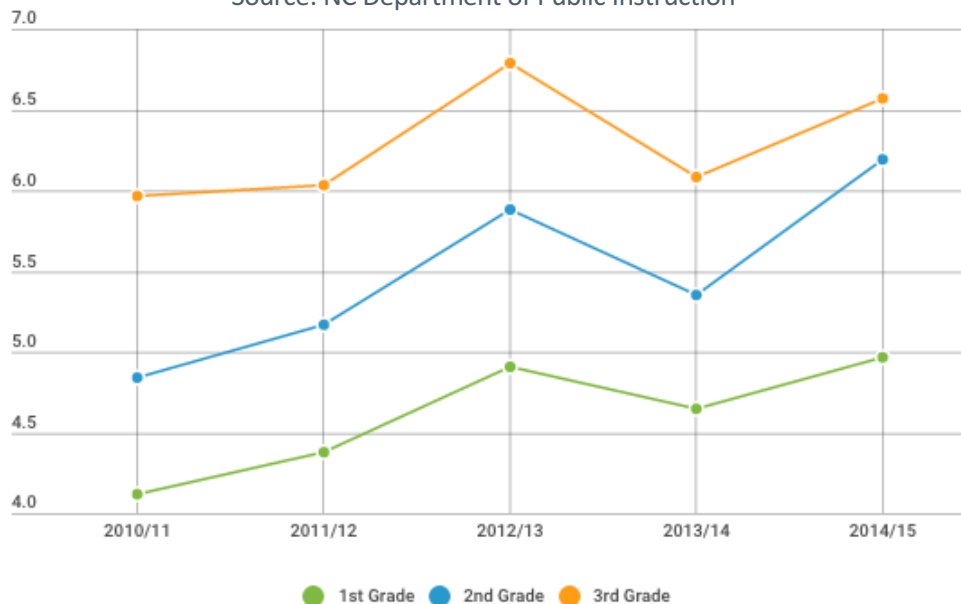
SAFE, POSITIVE CLIMATES THAT SUPPORT SOCIAL-EMOTIONAL DEVELOPMENT

Suspensions

% of all birth-to-eight children suspended from programs and schools

% of 1st, 2nd and 3rd grade students suspended by year (calculated as suspension rates by average daily membership per grade)

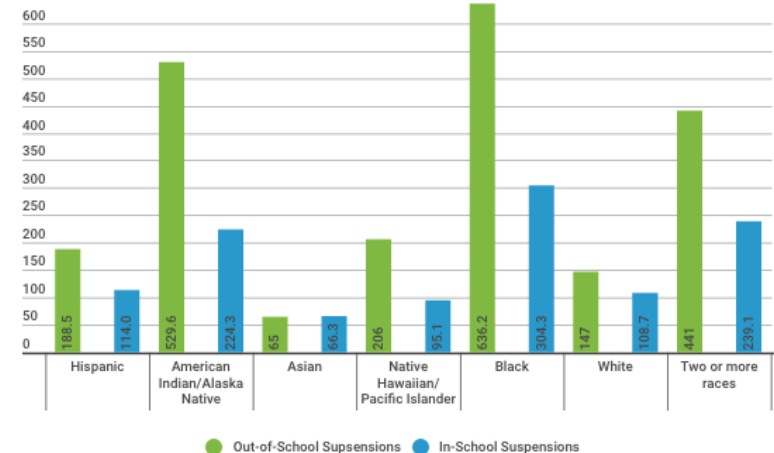
Source: NC Department of Public Instruction



Rate of students without disabilities who received one or more suspensions by race per 10,000

Data includes all students in NC public and charter schools that have K, 1st, 2nd, and/or 3rd grades.

Source: US Department of Education, Office of Civil Rights Data Collections, 2013-14



OCR and NC DPI data are not comparable.

The populations measured in the OCR and NC DPI data are not the same. NC DPI data includes all 1st, 2nd and 3rd graders in public and charter schools. OCR data is by school, and includes all students in schools that have either a K, 1st, 2nd, or 3rd grade.

WHY IS THIS MEASURE IMPORTANT?

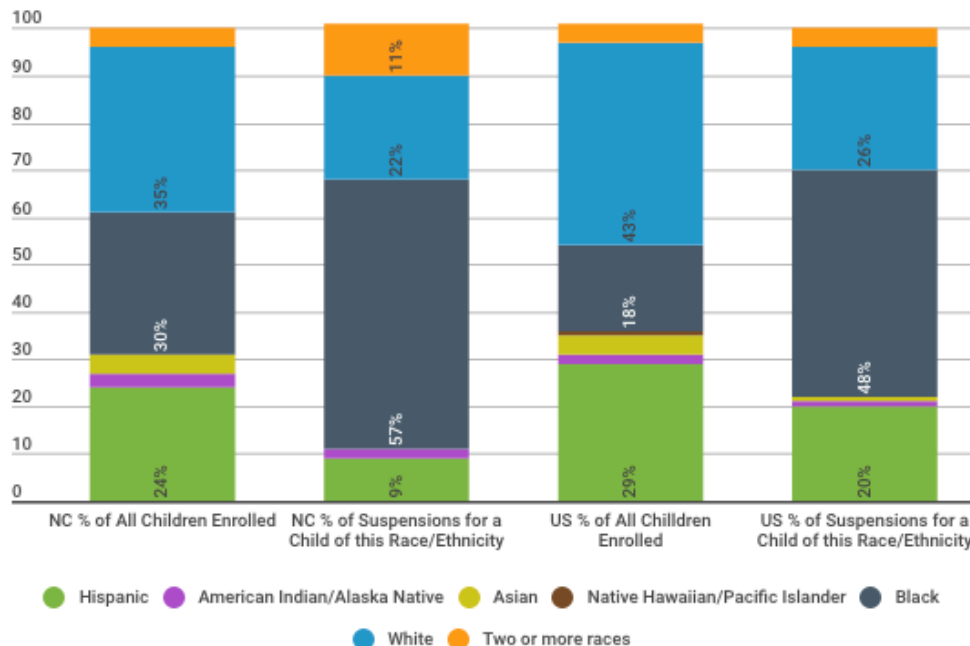
School discipline policies that result in students losing instructional time can cause students to fall behind and be retained in grade. Research has shown that racial and ethnic minorities and students with disabilities are disproportionately affected by school discipline policies that focus on suspensions and expulsions, and that the disproportionality begins as early as preschool.

SAFE, POSITIVE CLIMATES THAT SUPPORT SOCIAL-EMOTIONAL DEVELOPMENT

Suspensions

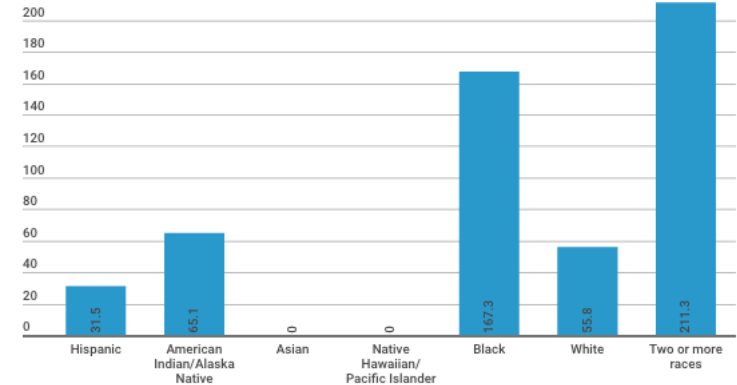
% of all birth-to-eight children suspended from programs and schools

Proportion of Preschool Suspensions by Race/Ethnicity
NC vs. US
AGE: 3, 4, and 5-year olds in public and charter schools



Source for both charts: US Department of Education, Office of Civil Rights Data Collections, 2013-14

Rate of preschool students (ages 3, 4 and 5) who received one or more suspensions by race per 10,000 (total n=208)



Note on Preschool *Expulsion*

In 2005, when the first research was done on preschool expulsions, NC was among the top 9 states in preschool expulsions, with a rate of >10 per 1,000 preschool students.

Rates have fallen significantly since then in NC, with the Office of Civil Rights data reporting only 2 preschool expulsions in 2013-14.

Source: Gilliam, W. *Prekindergarteners Left Behind: Expulsion Rates in State Prekindergarten Programs*, 2005

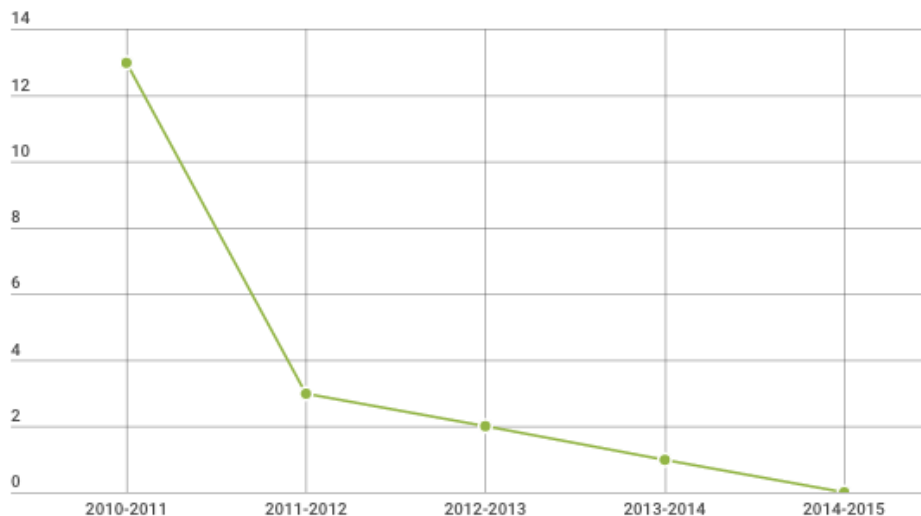
SAFE, POSITIVE CLIMATES THAT SUPPORT SOCIAL-EMOTIONAL DEVELOPMENT

Expulsions

% of all birth-to-eight children expelled from programs and schools

Expulsions for PK-5th Grade

Source: Department of Public Instruction,
www.dpi.state.nc.us/research/discipline/reports/

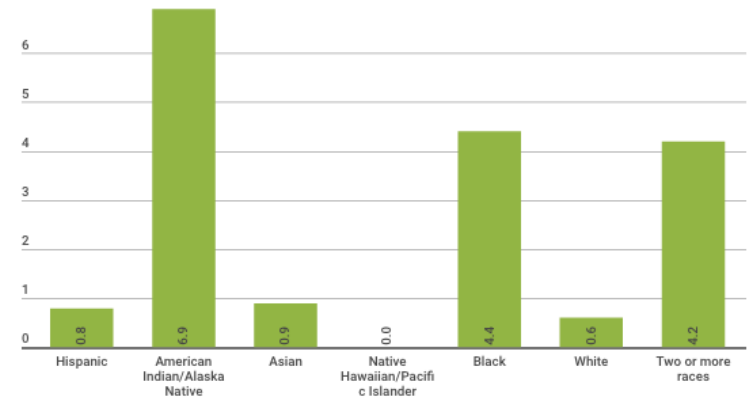


WHY IS THIS MEASURE IMPORTANT?

School discipline policies that result in students losing instructional time can cause students to fall behind and be retained in grade. Research has shown that racial and ethnic minorities and students with disabilities are disproportionately affected by school discipline policies that focus on suspensions and expulsions, and that the disproportionality begins as early as preschool.

Rate of students without disabilities who received an expulsion by race per 10,000 (n=138)

Source: US Department of Education, Office of Civil Rights
Data Collections, 2013-14



OCR and NC DPI data are not comparable.

OCR defines expulsion as an action taken by the local educational agency removing a child from his/her regular school for disciplinary purposes for the remainder of the school year or longer in accordance with local educational agency policy. Expulsion also includes removals resulting from violations of the Gun Free Schools Act that are modified to less than 365 days.

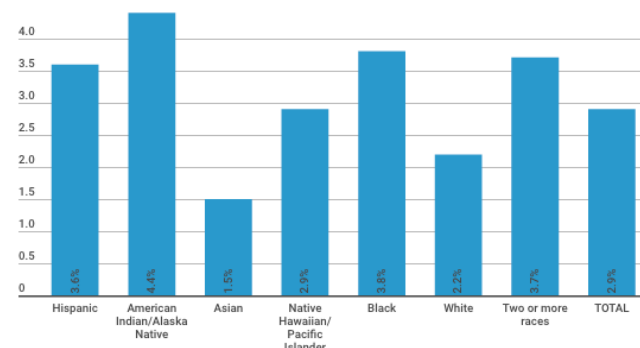
NC DPI definition of expulsion is much stricter: When a student is expelled from school, the student cannot return to their home school or any other school within the LEA. An expulsion is usually reserved for cases where the student is at least 14 years of age and presents a clear threat of danger to self or others. NC DPI data report that in 2013-14, only 1 elementary school student was expelled.

Retentions

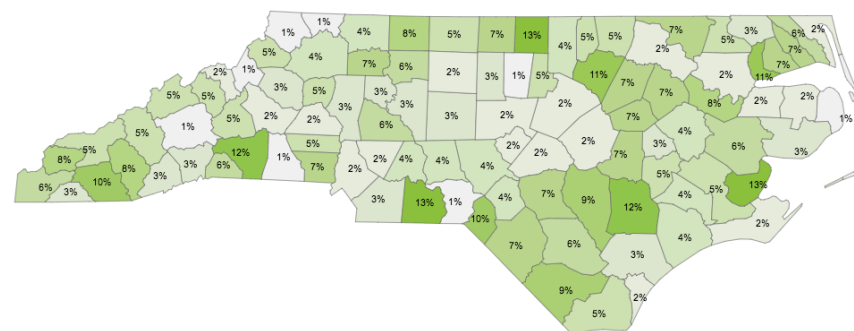
Percent of Students Retained by Grade (2014/15)



Data includes all students in NC public and charter schools that have K, 1st, 2nd, and/or 3rd grades.



Percent of Children Retained in Kindergarten



WHY IS THIS MEASURE IMPORTANT?

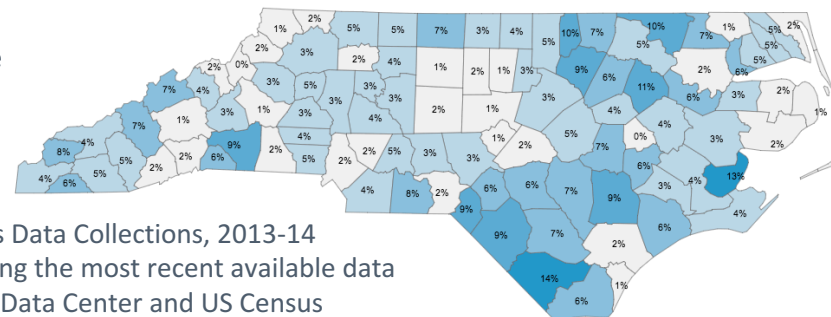
A large body of research suggests that students retained in the early years achieve at lower levels, are more likely to drop out of high school, and have worse social-emotional outcomes than similar students who are promoted.

Source for Data by Grade: NC Department of Public Instruction Statistical Profile, Table 8, Impact of Summer School on Non-Promotion Rate

Source for Race/Ethnicity Data: US Department of Education, Office of Civil Rights Data Collections, 2013-14

Source for County Data: 2015 Child Care Services Association. Figures derived using the most recent available data from Child Care Services Association, DCDEE, NC Budget and Tax Center, NC State Data Center and US Census Bureau, NC Department of Public Instruction, NC Child Resource and Referral Council, NC Head Start State Collaboration Office.

Percent of Children Retained in 1st Grade

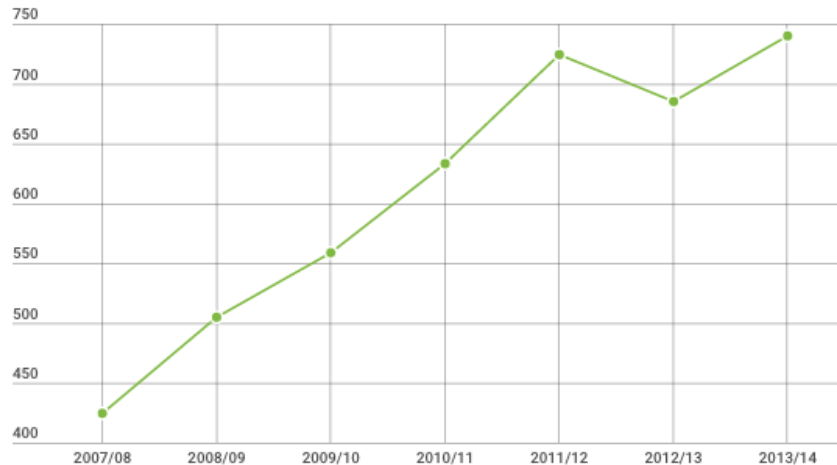


SAFE, POSITIVE CLIMATES THAT SUPPORT SOCIAL-EMOTIONAL DEVELOPMENT

Social Emotional Strategies

% of schools integrating social-emotional strategies

Number of NC Elementary Schools Participating in Positive Behavior Interventions and Supports (PBIS)



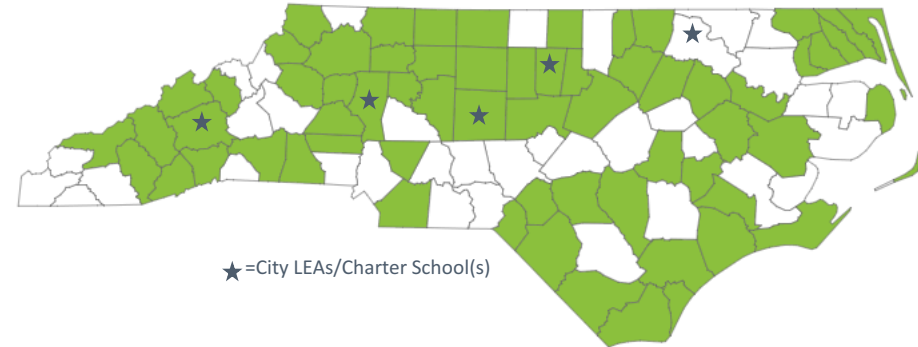
By 2013-14, about 40% (740) of the elementary schools in NC in 2013-14 were implementing PBIS.

WHY IS THIS MEASURE IMPORTANT?

Effective schools support children's social-emotional development by easing transitions – systematically involving child care programs and families before transition to kindergarten, aligning curricula and expectations within the school and with early education programs, and considering social-emotional development when determining retention and promotion policies. Students show better academic and social-emotional outcomes when they learn in positive school climates, where they feel safe, connected and engaged.

SOURCE: NC Department of Public Instruction, PBIS Report, 2013-14

North Carolina Counties with at least one Positive Behavior Intervention and Support implementing School, 2013/2014



Of Note

Implementation Criteria are used by schools to demonstrate measurable levels of implementation of PBIS. Initially, in 2011, only 34% of schools that received PBIS training demonstrated measurable implementation outcomes that suggested they were implementing PBIS with fidelity. This percentage has increased: in 2013-14, 59% of schools that had been trained in PBIS met the criteria to be considered implementing PBIS with fidelity.