

# The Guilford Readiness of Children for School (ROCS) Study: 2024



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**M**DRC's Guilford Readiness of Children for School (ROCS) study is an evaluation of the Ready for School, Ready for Life initiative in Guilford County, North Carolina. The initiative aims to support interconnected programs and services for young children and their families with the goal of having children enter kindergarten ready for learning.

*Amy Taub  
Shira Mattera  
Rebecca Salzer  
Sydney Roach*

The multiyear, multimethod Guilford ROCS study has two parts. An implementation substudy describes the rollout of the initiative and its components through interviews, surveys, focus groups, and program data. An outcomes-monitoring substudy uses administrative and survey data to track the well-being of families and children from the prenatal period through third grade, and to record trends in their well-being over time.<sup>1</sup>

This brief provides an update on the rollout and implementation of the initiative in 2024 and describes trends in child and family well-being over the past decade in Guilford County. These trends provide information on what child well-being looked like in the county before the initiative began and in its early rollout. As the initiative continues, MDRC will report on how these trends are changing over time.



## The Ready for School, Ready for Life Initiative in 2024

As described in detail in a previous [report](#), Ready for School, Ready for Life aims to strengthen connections among existing programs in Guilford County and provide support for families and young children through universal screening for strengths and needs, followed by connections to targeted services.<sup>2</sup> A backbone organization of the same name (Ready for School, Ready for Life) coordinates the initiative.

The initiative takes place in Guilford County, where over a fourth of the 33,000 children who are 6 and younger live in poverty.<sup>3</sup> A stated goal of the initiative is to support young children and their families, so children are ready for kindergarten and on track in third grade.

In 2017, The Duke Endowment secured cofunding from Blue Meridian Partners and chose Guilford County for a regional investment focused on early childhood due to its existing set of programs, providers, workgroups, and funders focused on prenatal and early childhood support. This set included the Ready for School, Ready for Life organization, which had been convening many of these partners to identify system challenges and opportunities before being designated as the backbone organization of the Ready Ready initiative through this investment. Beginning in 2018, the initiative focused on plans for the prenatal-to-age-3 phase that include eight components, or streams of work, organized into three major areas: “Build a System of Care,” “Expand and Improve Services,” and “Change Systems and Build Public Will.” Table 1 shows the initiative components and Figure 1 shows a timeline of initiative activities from 2017 to 2024.

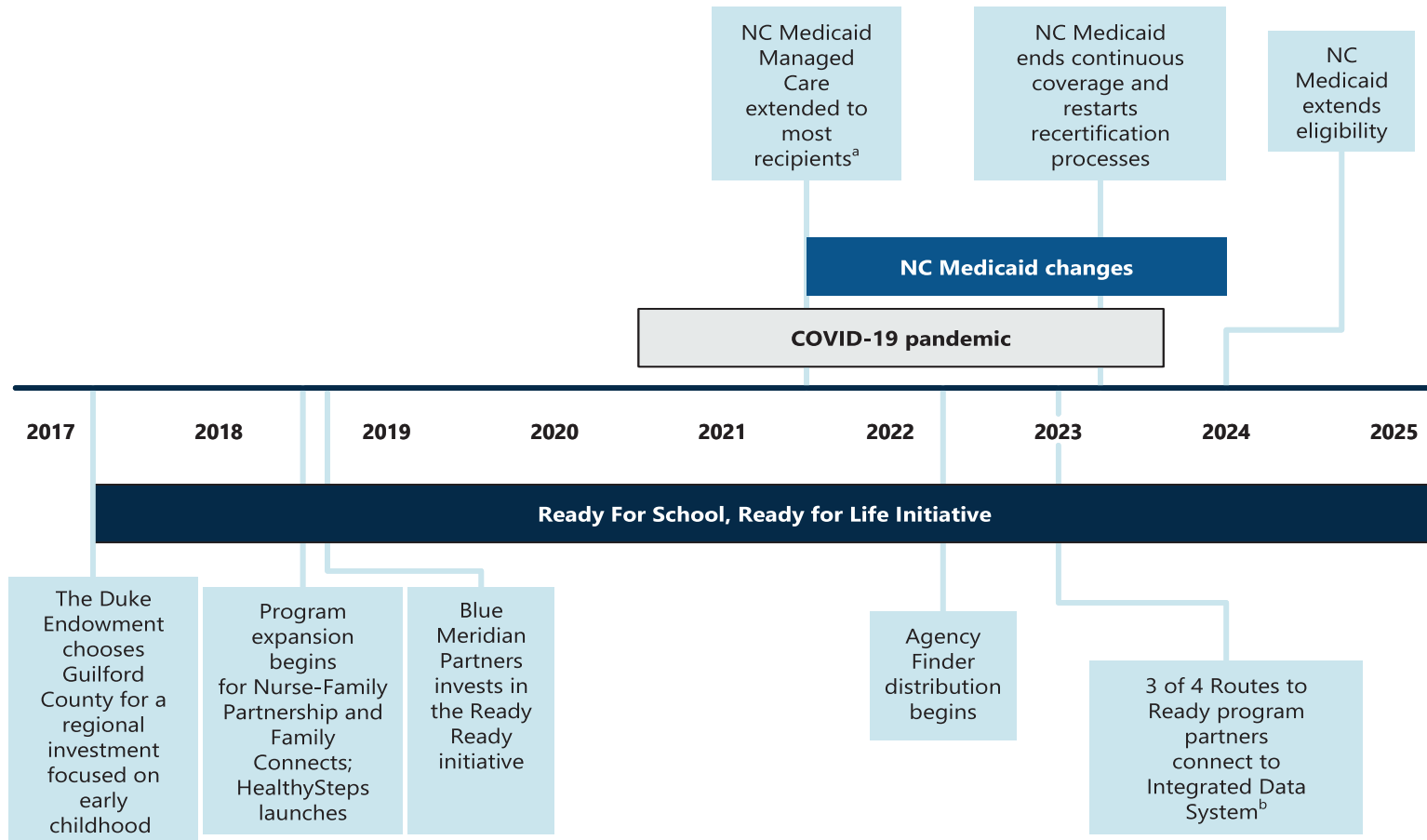
*A stated goal of the initiative is to support young children and their families, so children are ready for kindergarten and on track in third grade.*

**Table 1. Ready for School, Ready for Life Initiative Components**

<p><b>BUILD A SYSTEM OF CARE</b></p> <ul style="list-style-type: none"> <li>• Routes to Ready</li> <li>• Community Navigation</li> <li>• Integrated Data System</li> <li>• Community Alignment</li> </ul>	<p><b>EXPAND AND IMPROVE SERVICES</b></p> <ul style="list-style-type: none"> <li>• Program Expansion</li> <li>• Continuous Quality Improvement</li> <li>• Early Literacy</li> </ul>	<p><b>CHANGE SYSTEMS AND BUILD PUBLIC WILL</b></p> <ul style="list-style-type: none"> <li>• Backbone Organization (Ready for School, Ready for Life Organization)</li> </ul>
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The four components in the “Build a System of Care” area — Community Navigation, Routes to Ready, Integrated Data System, and Community Alignment — were the center of the initiative’s implementation efforts in 2024. The initiative’s focus on its “Routes to Ready” component (the intentional integration of four programs that serve families prenatally and through the time their children are 3) was

Figure 1. Timeline



NOTES: <sup>a</sup>A law enacted by the North Carolina General Assembly in 2015 kicked off “Medicaid Transformation” in the state, moving Medicaid from fee-for-service to managed care.

<sup>b</sup>Partners connected to the Integrated Data System over the course of 2023. Connection began in early 2023 for Community Navigation, summer 2023 for Family Connects, and fall 2023 for HealthySteps.

demonstrated through continued work on the systems components that support this integration, particularly on the functionality of the Integrated Data System. The initiative also continued to work on how the four programs collaborate and how families are introduced to Routes to Ready.<sup>4</sup> The implementation of Routes to Ready in 2024 is the focus of a separate brief.<sup>5</sup>

The initiative's work to support children ages 3 to 5 was not identified as a distinct initiative component in 2024, though programs that support children of this age were implemented through the Early Literacy Component and the Program Expansion component. In 2024, the initiative's work to support children ages 3 to 5 encompassed pilot tests of several strategies.<sup>6</sup>

Implementation in some other component areas did not fully proceed as intended, as the backbone organization had an interim leader, and as priorities were refined and work was redesigned.

## **Family and Child Well-Being in Guilford County in the Past Decade**

The purpose of the outcomes-monitoring substudy is to describe the well-being of children and families in Guilford County, both as a whole and among subpopulations, as the initiative is being implemented. It is designed to track family and child well-being at specific developmental stages the initiative identified—birth, 3 years old, kindergarten entry, and third grade—through at least 2029. Children's language/literacy and social-emotional development were identified as primary outcomes of focus for the initiative. The substudy uses existing administrative data to describe child outcomes, where available. However, Guilford County, like most communities in the United States, lacks existing and centralized information about the identities and locations of families before their children enter the formal school system, as well as information on how they are faring, what their needs are, and whether their needs are being met. The outcomes-monitoring substudy addresses this lack of information by also collecting survey data, following two cohorts of 1,300 children (that is, groups of children born in the same year) born in Guilford County in 2025 and 2027. Caregivers who consent to participate in the study will receive short surveys when their children are born, are 1 year old, and are 2 years old, and a longer survey when their children are 3. These surveys include information about children's health and development, maternal well-being, and service receipt. The birth survey for children born in 2025 is underway in the two largest hospitals in Guilford County. While survey data are still being collected, the outcomes-monitoring substudy will describe family and child well-being using existing data about priority initiative outcomes from administrative data sources.

### **Trends in Outcomes**

To provide context for child and family well-being during the rollout of the initiative, this brief lays out the trends in available outcomes in Guilford County over the past decade, focusing on the priority outcomes for the initiative. It draws on data from vital records (birth certificates), Medicaid, and Guilford County Schools (GCS).<sup>7</sup> As shown in Figure 1, these outcomes were influenced by historical

events and shifts in policy that occurred during this period. Guilford County was affected by the COVID-19 pandemic from 2020 to 2023. In addition, North Carolina Medicaid shifted from a pay-per-service model to managed care in 2021.

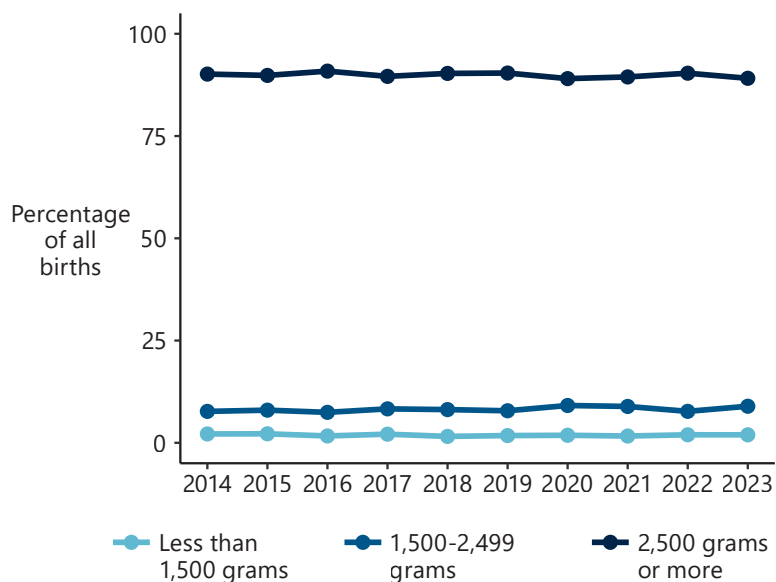
In addition, there have been demographic shifts in the county. Over the past 10 years, the population of Guilford County has grown from approximately 500,000 to approximately 540,000 residents.<sup>8</sup> However, the number of children under the age of 5 has remained consistent at about 30,000, and approximately 6,000 babies have been born each year.<sup>9</sup> The population of the children in the county has become more diverse between 2014 and 2023. The proportion of non-Hispanic White children decreased by 7 percentage points (from 41 percent in 2014 to 34 percent in 2023), the share of Black children decreased by 1 percentage point (from 37 percent to 36 percent), the proportion of Hispanic children increased by 5 percentage points (from 12 percent to 17 percent), the proportion of Asian children increased by 1 percentage point (from 5 percent to 6 percent), the share of children identified as some other race increased by 2 percentage points (from 5 percent to 7 percent), and the proportion of multiracial children increased by 8 percentage points (from 5 percent to 13 percent).<sup>10</sup> The proportion of children who were foreign-born (about 5 percent) and living in poverty (about a quarter) has remained consistent.

In that context, the following section describes trends in selected outcomes in Guilford County from 2014 to 2023, where data are available.<sup>11</sup> It focuses on children at four developmental points (birth, ages 1 through 3, kindergarten entry, and third grade) and on outcomes that have been identified as primary outcomes of focus for the initiative: healthy births, child health, children’s social-emotional development, and children’s language/literacy. The outcomes examined have been relatively stable over the past 10 years in the county, although some — such as emergency department visits and third-grade reading proficiency — shifted during the COVID-19 pandemic. Where there are racial disparities in these outcomes, those disparities have also been persistent over the past decade.

**Outcomes at Birth**

Low birth weight is a commonly used indicator for newborn health. The initiative aims to improve newborn health by increasing the use of pre-natal care and referring families to services. As shown in Figure 2, birth-weight trends in Guilford County have been stable from 2014 to 2023. Each year, between 89 percent and

**Figure 2. Birth Weights in Guilford County 2014-2023**



SOURCE: North Carolina Department of Vital Statistics.

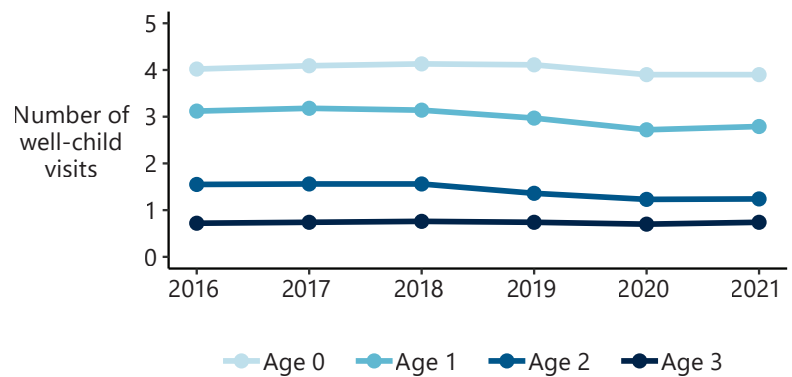
91 percent of children were born at a healthy weight (2,500 grams or more), between 7 percent and 9 percent were born at a low birth weight (between 1,500 and 2,500 grams), and approximately 2 percent were born at a very low birth weight (less than 1,500 grams; actual values ranged from 1.6 percent to 2.2 percent each year). It appears that non-Hispanic Black women are less likely to give birth to a baby at a healthy weight than women of other races. For example, in 2023, 85 percent of babies with non-Hispanic Black mothers were born at a healthy weight, compared with 89 percent to 93 percent for other races (Hispanic, non-Hispanic White, and non-Hispanic other). This disparity has been consistent for the last decade. Both the overall birth weights and the racial/ethnic disparities are similar to those of North Carolina as a whole.

### Outcomes for Children Ages 1 Through 3

**WELL-CHILD VISITS.** Receipt of well-child visits is a measure of families’ use of preventive health care. The initiative aims to increase the use of preventive health services by referring families to services. Information about the number of well-child visits received by Guilford County children was available for the subset of children served by Medicaid.<sup>12</sup>

As shown in Figure 3, children who were enrolled in Medicaid received approximately four Medicaid-paid well-child visits the year they were born, approximately three well-child visits the year they turned 1, approximately one and a half well-child visits the year they turned 2, and approximately one well-child visit the year they turned 3, each year from 2016 to 2021.<sup>13</sup> Differences in the number of well-child visits received by children of different racial/ethnic backgrounds are small.

**Figure 3. Number of Medicaid-Paid Well-Child Visits for Children in Guilford County Ages 0 to 3, 2016-2021**



SOURCE: Medicaid records.

NOTE: Numbers reflect events that occurred in the calendar year that the child turned each age.

**EMERGENCY DEPARTMENT VISITS.** The use of emergency services is both costly and indicative of a serious health event. The initiative aims to reduce the use of emergency services by improving birth outcomes, increasing the use of preventive care, and increasing knowledge of infant health and safety hazards.

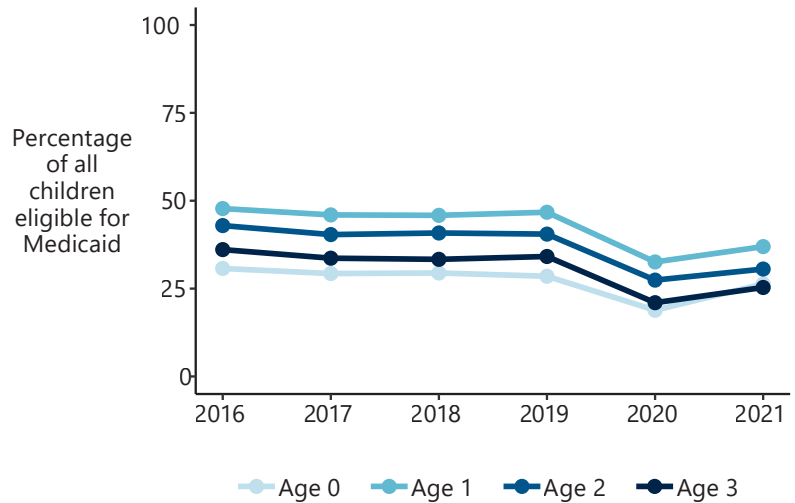
Information on whether a child had an emergency department (ED) visit in the past year was available for the subset of children served by Medicaid in Guilford County.

As shown in Figure 4, from 2016 to 2019, between 29 percent and 31 percent of children enrolled in Medicaid had a Medicaid-paid ED visit the year they were born, between 46 percent and 48 percent

of children had an ED visit the year they turned 1, between 40 percent and 43 percent of children had an ED visit the year they turned 2, and between 33 percent and 36 percent had an ED visit the year they turned 3.

The proportion of children who had an ED visit was lower in 2020 (19 percent of children under 1, 33 percent of 1-year-olds, 27 percent of 2-year-olds, and 21 percent of 3-year-olds). ED use was higher in 2021 than in 2020, but still had not returned to prepandemic levels. This trend is consistent with national trends, which show that ED use declined during the COVID-19 pandemic.<sup>14</sup> Differences in the use of emergency services by children of different racial/ethnic backgrounds are small (not shown).

**Figure 4. Percentage of Children Ages 0 to 3 in Guilford County Who Had a Medicaid-Paid Emergency Department Visit, 2016-2021**



SOURCE: Medicaid records.

NOTE: Numbers reflect events that occurred in the calendar year that the child turned each age.

**Outcomes at Kindergarten Entry**

**SOCIAL-EMOTIONAL LEARNING.** Initiative stakeholders have identified social-emotional learning as a priority outcome for the initiative. The initiative aims to improve children’s social-emotional learning through its *Routes to Ready* component programs and systems building and by expanding families’ access to other programs in Guilford County meant to support children ages 0 to 3 and 3 to 5 through its *Program Expansion* component. The measure of social-emotional learning used in this brief is a domain score calculated by summing scores from the five indicators of the North Carolina Early Learning Inventory (NC-ELI) in the social-emotional domain: “manages feelings,” “follows limits and expectations,” “responds to emotional cues,” “interacts with peers,” and “solves social problems.”<sup>15</sup> Possible scores range from 5 to 65.

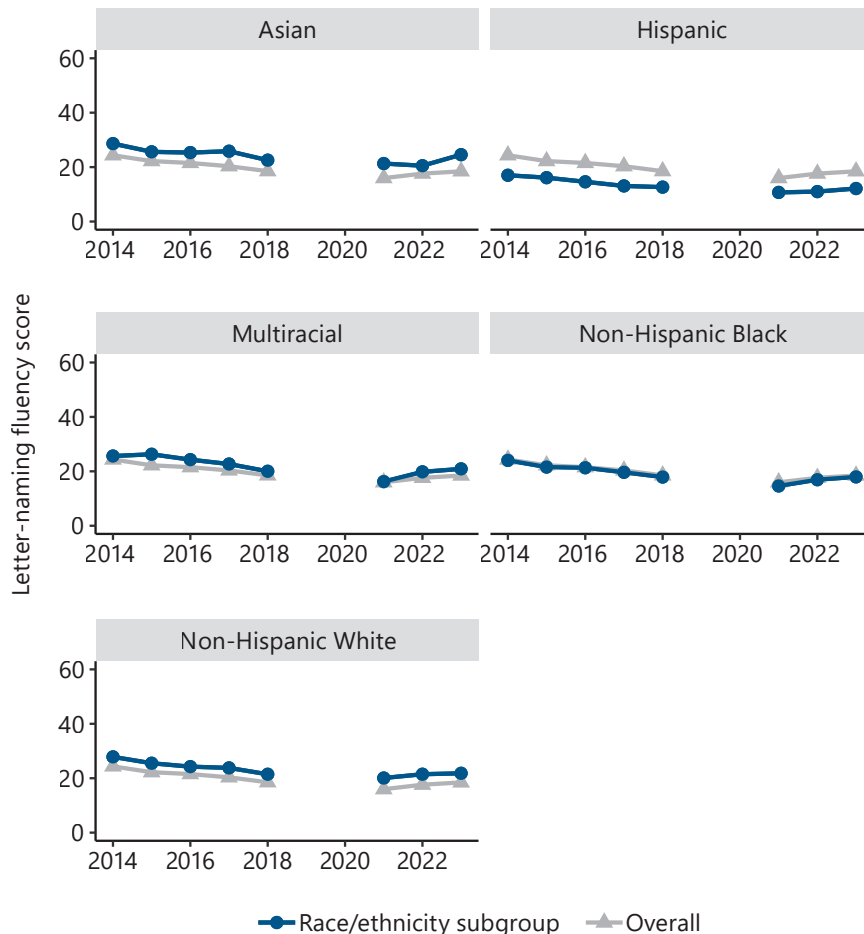
This brief presents data on the NC-ELI from Guilford County Schools (GCS) beginning in school year 2021-2022. Average NC-ELI social-emotional domain scores were 30.9 in 2022, 28.5 in 2023, and 28.1 in 2024 (shown in more detail in supplemental tables posted online in the same location as this brief). Differences in scores for children of different racial/ethnic backgrounds were small (not shown).

**READING.** Reading has also been identified as a priority outcome for the initiative. The initiative aims to improve children’s reading through its investments in its Early Literacy component and its pilot

testing of other strategies meant to support children ages 3 to 5. GCS uses an assessment called the Dynamic Indicators of Basic Early Literacy Skills (DIBELS) to assess children’s early literacy skills. Due to changes in the version of the DIBELS that was administered, the measure that was collected most consistently at the beginning of kindergarten over time was a subtest called letter-naming fluency.<sup>16</sup> This brief highlights findings on that subtest from 2014 to 2024 for comparability across time, and findings on the composite score when the district began using an updated version of the DIBELS in the 2021-2022 school year.

To assess letter-naming fluency, children are shown upper- and lowercase letters and are asked to name as many as they can in one minute.<sup>17</sup> As shown in Figure 5, children’s scores on letter-naming fluency decreased between 2015 and 2019 (from 24.3 in 2015 to 18.5 in 2019). Scores were lower after the pandemic (16.0 in 2022). Although scores have increased each year since 2022 (up to 18.5 in 2024), they have only risen to 2019 levels.

**Figure 5. Children’s Letter-Naming Fluency Scores at Kindergarten Entry in Guilford County Public Schools, 2014-2023, by Race/Ethnicity**



(continued)

## Figure 5 (continued)

SOURCE: Guilford County Schools.

NOTES: The DIBELS was not administered in Guilford County in the 2019-2020 and 2020-2021 school years.

The DIBELS Next was administered before 2020. Starting in the 2021-2022 school year, the DIBELS 8 was administered. Scores on the letter-naming fluency subtask are comparable across editions.

Native American/Alaska Native and Pacific Islander are not shown due to small sample sizes.

Since GCS started using a newer version of the DIBELS in 2022, approximately 25 percent of children have been at or above the benchmark score (which indicates they are at low risk for not reading). The proportion of children at this benchmark in GCS is similar to the proportion of children at this benchmark in North Carolina. In GCS, non-Hispanic White and Asian children have tended to score higher on the DIBELS than the average, while Hispanic children have tended to score lower than average; these disparities have remained consistent over time (shown in Figure 5 for letter-naming fluency).

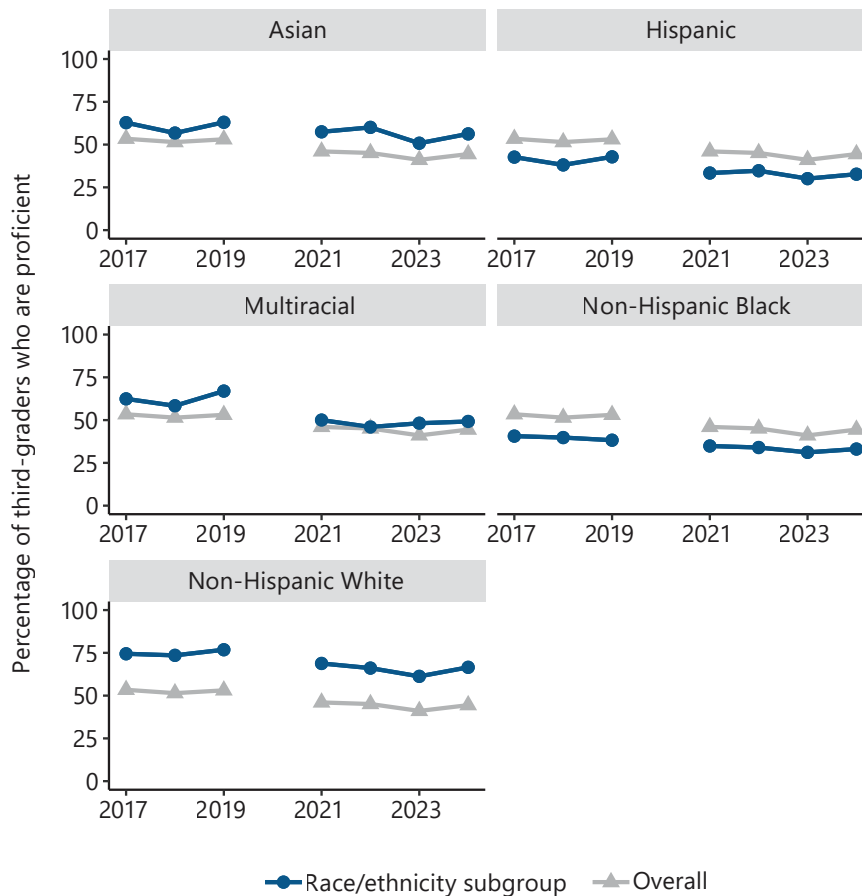
### Outcomes in Third Grade

**SUSPENSIONS.** In-school and out-of-school suspensions are used as a potential indicator of children's social and emotional development in third grade. Typically, in-school and out-of-school suspensions for third-graders in GCS have been very infrequent (affecting fewer than 3 percent of students each year). The percentage of students suspended has been lower since the pandemic (fewer than 2 percent each year from 2022-2024). While the suspension rate for all racial groups is low, there are racial disparities, with non-Hispanic Black children more likely to be suspended than children in other racial/ethnic groups (not shown).

**READING.** As shown in Figure 6, before the pandemic, a little over half of GCS third-graders were proficient in reading on the North Carolina End of Grade Test (51 percent to 53 percent from 2017 to 2019).<sup>18</sup> Since the pandemic, fewer than half of students have been proficient in reading (41 percent to 46 percent from 2021 to 2024). Reading proficiency in GCS was at its lowest in 2023 (41 percent) but improved the following year (44 percent in 2024). Reading proficiency was lower in GCS than in North Carolina as a whole before the pandemic (58 percent of children were proficient statewide in 2019) and remained so after the pandemic (statewide, 48 percent of children were proficient in reading in 2023 and 49 percent were proficient in 2024).

In GCS, racial disparities in third-grade reading scores have been consistent over time. Non-Hispanic White children have had the highest scores, followed by Asian and multiracial children, followed by non-Hispanic Black and Hispanic children (Figure 6). For example, in 2024, 67 percent of non-Hispanic White children, 57 percent of Asian children, 50 percent of multiracial children, 33 percent of Hispanic children, and 33 percent of non-Hispanic Black children were proficient in reading. These gaps are larger than those seen in North Carolina as a whole: statewide, in 2024, 61 percent of non-Hispanic White children, 70 percent of Asian children, 51 percent of multiracial children, 34 percent of Hispanic children, and 35 percent of non-Hispanic Black children were proficient in reading.

**Figure 6. Percentage of Third-Graders Proficient in Reading in Guilford County Public Schools, 2017-2024, by Race/Ethnicity**



SOURCE: Guilford County Schools.

NOTE: Reading scores are presented as the percentage of students who were proficient on the North Carolina End of Grade Test.

The third-grade End of Grade Test was not administered in 2020 in North Carolina due to COVID-19.

Native American/Alaska Native and Pacific Islander are not shown due to small sample sizes.

## Looking Ahead

In summary, the outcomes examined in this brief have been relatively consistent for the past decade. These stable trends (with the exception of the COVID-19 disruption), point to the challenge for interventions and policies to shift child outcomes meaningfully.

As the Ready for School, Ready for Life Initiative continues to roll out, Guilford ROCS will continue to collect information about initiative implementation and family and child outcomes from the data

sources used in this brief, as well as other existing data sources.<sup>19</sup> In early 2025, ROCS launched the first survey of families with children born in Guilford County in that year. ROCS plans to follow up with families in that cohort when their children are ages 1, 2, and 3. Findings from the family survey will be presented as they become available in future years, beginning with information about family functioning, family needs, and family referrals when children are born.

A separate research brief will share 2024 findings from the implementation substudy, focusing on the Routes to Ready component of the initiative. ROCS briefs are planned each year through 2031 to share findings from the implementation and outcomes-monitoring substudies.

## Notes and References

1. Administrative data are data collected primarily for the management of programs and public services.
2. Shira Mattera and Carolyn J. Hill, *The Guilford ROCS (Readiness of Children for School) Study: Overview* (MDRC, 2024).
3. This statistic comes from American Community Survey five-year estimates. See U.S. Census Bureau, “Guilford County, North Carolina” (website: <https://data.census.gov/all?q=Guilford+County,+North+Carolina>, n.d., accessed on August 11, 2025).
4. The four programs are HealthySteps, Family Connects, Nurse-Family Partnership, and Community Navigation.
5. Kristen Faucetta and Mallory Undestad, “Implementation of the Ready Ready Initiative in 2024: Building a System of Care Through Routes to Ready” (MDRC, forthcoming).
6. At the end of 2024, one pilot test was operational. Seven other 3-to-5 strategies were pilot tested but had been paused by the end of the year.
7. Vital statistics reported in this brief come from publicly available reports produced by the North Carolina Department of Vital Statistics. The ROCS team obtained Medicaid data through the Research Data Assistance Center that cover claims from 2016 to 2021. For this brief, the team filtered the data to include only children who were 3 years old or younger and who had home or mailing addresses in Guilford County. The ROCS team obtained school records data from Guilford County Schools. Because kindergarten entry and third grade are priority time points for the initiative, this brief focuses on these two time points.
8. Demographic information for Guilford County in 2014 and 2023 comes from American Community Survey five-year estimates. See U.S. Census Bureau (n.d.).
9. There were 30,901 children living in the county in 2014 and 30,540 children in 2023. In 2014, 6,085 babies were born in Guilford County, and 5,757 babies were born there in 2023.
10. These percentages do not sum to 100 because the American Community Survey does not report on race and ethnicity separately for any races other than White.
11. Trends for additional outcomes can be found in supplemental tables posted online in the same location as this brief.
12. Children in North Carolina can be eligible for Medicaid if their families’ incomes are below 216 percent of the federal poverty line or if they have certain health needs. In 2023, 42 percent of children under the age of 18 in Guilford County were enrolled in Medicaid. Center for Children and Families of the McCourt School of Public Policy at Georgetown University, “Medicaid Coverage in North Carolina Counties, 2023” (website: <https://ccf.georgetown.edu/2025/02/06/medicaid-coverage-in-north-carolina-counties-2023/>, n.d., accessed on July 18, 2025).
13. Bright Futures and the American Academy of Pediatrics recommend that children receive six well-child visits before their first birthday, three between their first and second birthdays, two between their second and third birthdays, and one per year after. Bright Futures and the American Academy of Pediatrics, “Recommendations for Preventive Pediatric Health Care” (American Academy of Pediatrics, 2025).
14. Glenn Melnick, June F. O’Leary, Ben A. Zaniello, and Luis Abrishamian, “COVID-19 Driven Decline in Emergency Visits: Has It Continued, Is It Permanent, and What Does It Mean for Emergency Physicians?” *American Journal of Emergency Medicine* 61 (2022): 64–67.
15. The NC-ELI is North Carolina’s kindergarten-entry assessment and is required by law according to the

North Carolina State Board of Education Policy KNEC-017. It is an observation-based tool completed by teachers in the first 60 days of the kindergarten year. It is composed of 16 indicator scores from five areas or domains, implemented using the Teaching Strategies Gold platform. The social-emotional learning domain score is created from the five items in the social-emotional learning domain. Scores from the other five domains are presented in the supplemental tables.

16. GCS did not administer the DIBELS in school years 2019-2020 or 2020-2021. When it resumed collecting DIBELS scores in 2021-2022, it switched from the version it had been using previously (DIBELS Next) to a new version (DIBELS 8). Due to differences between the versions of the DIBELS, letter-naming fluency is the only outcome that is available at the beginning of kindergarten from 2014 through 2024. Letter-naming fluency is an indicator of risk, not an instructional target for the district. Additional subtests were administered for both the DIBELS Next and DIBELS 8 at the end of kindergarten, so both beginning- and end-of-year scores are shown in the supplemental tables.
17. The DIBELS Next (used from 2015 to 2019) does not set any benchmark scores for letter-naming fluency. The DIBELS 8 (used from 2021 to 2024) sets benchmarks for minimal risk at 25 points or higher, some risk between 16 and 24 points, and at risk at 15 points or less.
18. Reading scores are presented as the percentage of students who were proficient on the North Carolina End of Grade Test for English Language Arts at the end of third grade. Clear Impact, "Third Grade Reading Proficiency: Percent of Children in NC (Race/Ethnicity) Who Are Proficient in Reading at End of Third Grade (website: <https://embed.clearimpact.com/Measure/Embed/100820565>, n.d., accessed on July 18, 2025).
19. For example, in 2025, Guilford County Schools began collecting data using the Early Development Instrument, a population-based measure of kindergarten skills. Guilford ROCS also plans to incorporate information from the North Carolina Early Childhood Integrated Data System.

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**New York**  
200 Vesey Street, 23rd Fl.  
New York, NY 10281  
Tel: 212 532 3200

**Washington, DC**  
750 17th Street, NW  
Suite 501  
Washington, DC 20006

**Oakland**  
475 14th Street, Suite 750  
Oakland, CA 94612  
Tel: 510 663 6372

