

# Trends in Virginia Students Identified as At-Risk for Reading Difficulties: Spring Literacy Screening, 2019-2023

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## OVERVIEW

The early years of schooling coincide with a sensitive period for language and literacy development. The language and literacy competencies that students develop in the first years of schooling serve as a foundation, not only for later reading skills, but for academic learning and engagement across all academic subjects. Research shows that when students do not have adequate reading skills by the end of their third-grade year, they are likely to continue to struggle, often with ramifications that span beyond poor reading outcomes. As such, literacy screening throughout early schooling is critical to be able to identify and intervene with students who are struggling to learn to read so that they can receive the support that will help them become successful readers.

The Phonological Awareness Literacy Screening (PALS) assessment serves as Virginia's state-supported literacy screener for kindergarten, first, and second grades. Used in the Commonwealth for over 20 years, educators in 131<sup>1</sup> Virginia school divisions administer PALS to evaluate their students' risk of reading difficulties. PALS scores reflect students' skill levels on key indicators of reading development, and supply critical information for families, educators, administrators, and policymakers seeking to support Virginia's young learners.

To indicate students who are at risk for reading difficulties, PALS uses benchmark scores. Students who score below the benchmark are at high risk for developing persistent reading difficulties; students who score in the mid-range of the scale (slightly above benchmark) are at elevated risk for reading difficulties; and students who score in the high range of the scale (well above benchmark) are considered at low risk for reading difficulties. PALS benchmark scores guide the state's allocation of Early Intervention Reading Initiative (EIRI) funds to support early literacy intervention for students who score below the benchmark. The resources afforded by EIRI can be essential to help students establish foundational skills, set a faster trajectory toward reading proficiency, and meet subsequent benchmarks.

PALS benchmark reports help teachers, administrators, and families understand their students' established and emergent literacy competencies. Benchmark reports for a single assessment window (Fall, Mid-Year, or Spring) are useful snapshots of student performance. However, benchmark reports that compare multiple years of PALS data are necessary to understand trends in below-benchmark rates over time—for Virginia K-2 overall, as well as for specific grade levels and student demographic groups. Multiyear comparisons also help reveal the evolving effects of COVID-19 on PALS below-benchmark rates.

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<sup>1</sup> Fairfax County Public Schools (FCPS) began participating in PALS in Fall 2021, in kindergarten classrooms only. To provide consistency in cross-year comparisons, FCPS data are not included in this report.

To facilitate educational stakeholders' understanding of trends in below-benchmark rates over time, Virginia Literacy Partnerships (VLP) publishes a biannual statewide report comparing PALS benchmark data across the most recent Fall or Spring assessment windows. This is the Virginia Spring 2023 PALS Report, which presents PALS benchmark data from Spring 2019, Spring 2021,<sup>2</sup> Spring 2022, and Spring 2023, accompanied by a summary of key takeaways distilled from the data. Collectively, these four windows illuminate the initial impact of COVID-19-related learning disruptions on Spring PALS K-2 below-benchmark rates and the extent to which below-benchmark rates improve as we move beyond the most acute effects of the pandemic on the classroom learning environment.

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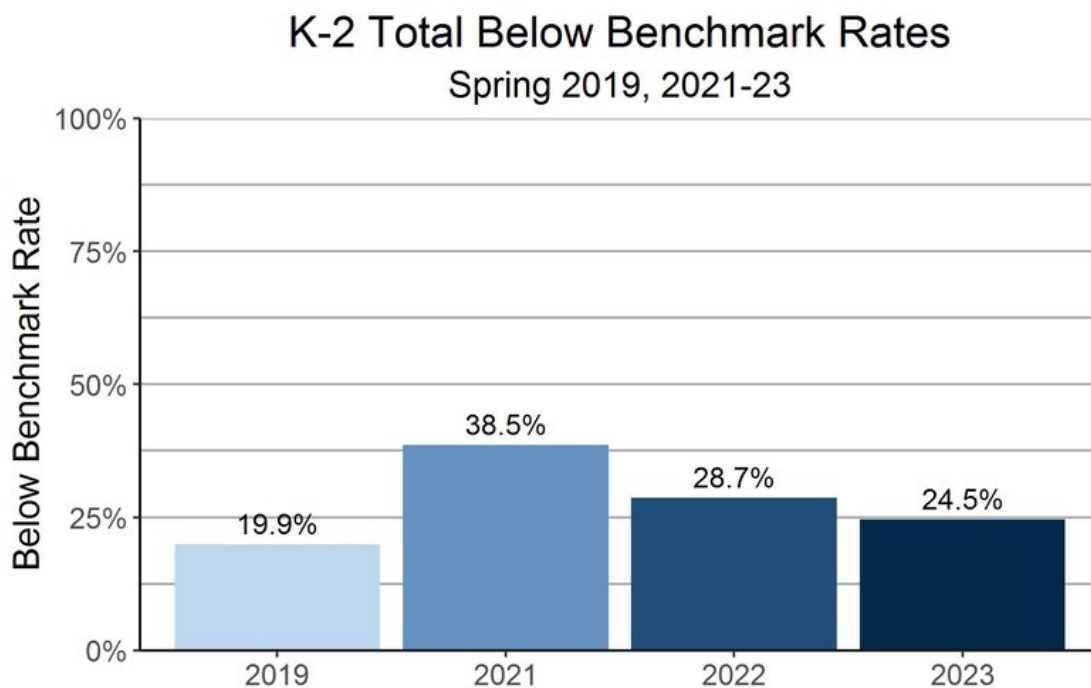
<sup>2</sup> PALS was not administered in Spring 2020 due to school closures and disruption in response to the onset of the COVID-19 pandemic.

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**KEY TAKEAWAY #1**

**The overall rate of K-2 students scoring below the PALS benchmark decreased from Spring 2022 to Spring 2023 but remained higher than that of Spring 2019 (pre-pandemic). The amount of improvement in below-benchmark rates from Spring 2022 to Spring 2023 was similar across each of the three grade levels. See Figures 1 and 2.**

Spring 2023 PALS below-benchmark rates marked the second consecutive year of improvement (that is, the percentage of students falling below-benchmark decreased) for the spring assessment window. The Spring 2023 below-benchmark rate fell from Spring 2022 by 4.2 percentage points, with an overall drop of 14 percentage points since peak height in Spring 2021. Still, at 24.5%, the Spring 2023 below-benchmark rate remained 4.6 percentage points above the 2019 pre-pandemic rate of 19.9%.



*Figure 1. PALS below-benchmark rates for Spring 2019, 2021, 2022, and 2023 assessment windows, Virginia-wide, grade levels combined.*

Moreover, the PALS below-benchmark rate improved at each grade-level from Spring 2022 to Spring 2023, marking the second Spring window of declining below-benchmark rates since peak Spring rates observed in 2021. Spring 2023 kindergarten below-benchmark rates were down 4.5 percentage points from Spring 2022 and down 17.4 percentage points from Spring 2021. Spring 2023 first grade below-benchmark rates were down 4 percentage points from Spring 2022 and down 15.6 percentage points from Spring 2021. Spring 2023 second grade below-benchmark rates were down 4.3 percentage points from Spring 2022 and down 8.7 percentage points from Spring 2021, reflecting the weakest rebound of the three grade levels. However, like the overall 2023 below-benchmark rate, the Spring 2023 below-benchmark rate for each K-2 grade level remained higher than the corresponding 2019 pre-pandemic rate.

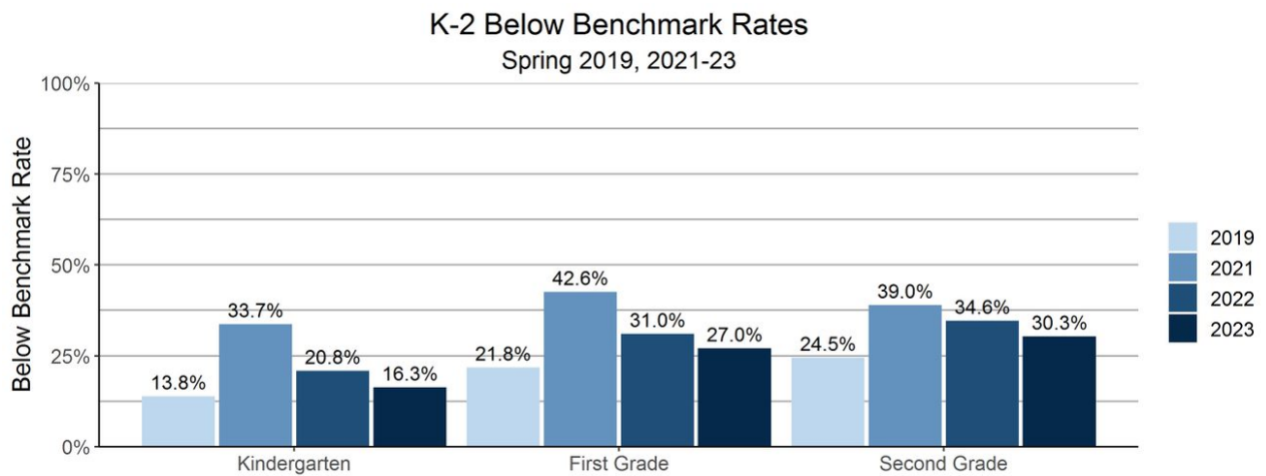


Figure 2. PALS below-benchmark rates for Spring 2019, 2021, 2022, and 2023 assessment windows, Virginia-wide, by grade level.

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**KEY TAKEAWAY #2**

The percentage of students in low-risk and medium-risk groups grew from Spring 2022 to Spring 2023 while the percentage of students at high risk for developing reading difficulties fell, marking improvement for the second consecutive Spring assessment window. Of the four Spring windows reported here, the Spring 2023 distribution of students at low, medium, and high risk for reading difficulties was the closest approximation to the Spring 2019 (pre-pandemic) distribution. See Figure 3.

The distribution of students at low, medium, and high risk for reading difficulties shifted greatly between the Spring 2019 pre-pandemic assessment window and the next available Spring assessment window in 2021. The pattern of change from Spring 2019 to Spring 2021 suggested that many students at low risk remained at low risk, but more students at medium risk were being identified as at high risk. Since Spring 2022, the number of students in the low-risk group slightly increased (.6 percentage points), the amount of students in the medium-risk groups increased by 3.5 percentage points, and the amount of students in the high-risk group has decreased by 4.2 percentage points.

### K-2 Bands of Risk Membership Spring 2019, 2021-23

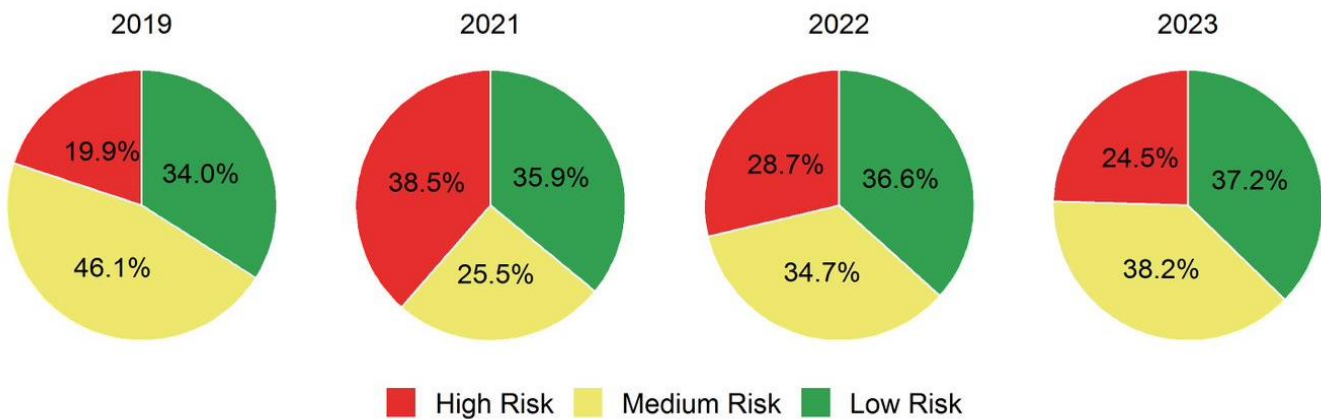


Figure 3. Proportion of students at low, medium, and high risk (i.e., below PALS benchmark score) for reading difficulties at Spring 2019, 2021, 2022, and 2023 assessment windows, grade levels combined.

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### KEY TAKEAWAY #3

**When examining Spring 2023 PALS below-benchmark rates by grade level, student race/ethnicity, and demographic subgroups, below-benchmark rates appeared disproportionately high in certain grades and subgroups. See Figures 4, 5, and 6.**

Spring 2023 PALS below-benchmark rates were highest (greater than 35% of students below benchmark) in the first and second grade cohorts, specifically for students who are Black, Hispanic, economically disadvantaged, English learners, or who have a disability. These student subgroups had below-benchmark rates 6.1 to 25.7 percentage points *above* the overall grade-level below-benchmark rate.

The lowest below-benchmark rates (less than 15% of students below benchmark) were observed in the kindergarten cohort, specifically for students who are Asian; White; Non-Hispanic, Other, or 2+ races; non-economically disadvantaged; or non-English learners. These groups had below-benchmark rates 2.8 to 15.1 percentage points *below* the overall grade-level below-benchmark rate.

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### KEY TAKEAWAY #4

**When examining Spring 2023 PALS below-benchmark rates compared to Spring 2022 below-benchmark rates by grade level and student subgroup, lower rates were observed across grades and subgroups, though the magnitude of improvements were variable. See Figures 4 and 5.**

Typically, the greatest grade-level improvements in below-benchmark rates were seen among students who are Black (Spring 2023 rates 5.8 to 7.4 percentage points lower than Spring 2022), Hispanic (Spring 2023 rates 4.5 to 7.1 percentage points lower than Spring 2022), economically disadvantaged (Spring 2023 rates 5.8 to 6.5 percentage points lower than Spring 2022), or who have a disability (Spring 2023 rates 2.8 to 5.6 percentage points lower than Spring 2022). The smallest improvements in below-benchmark rates were observed among students who are Asian (Spring 2023 rates decreased from Spring 2022 by 1.0 to 2.0 percentage points).

### K-2 Below Benchmark Rates by Race/Ethnicity Spring 2019-2023

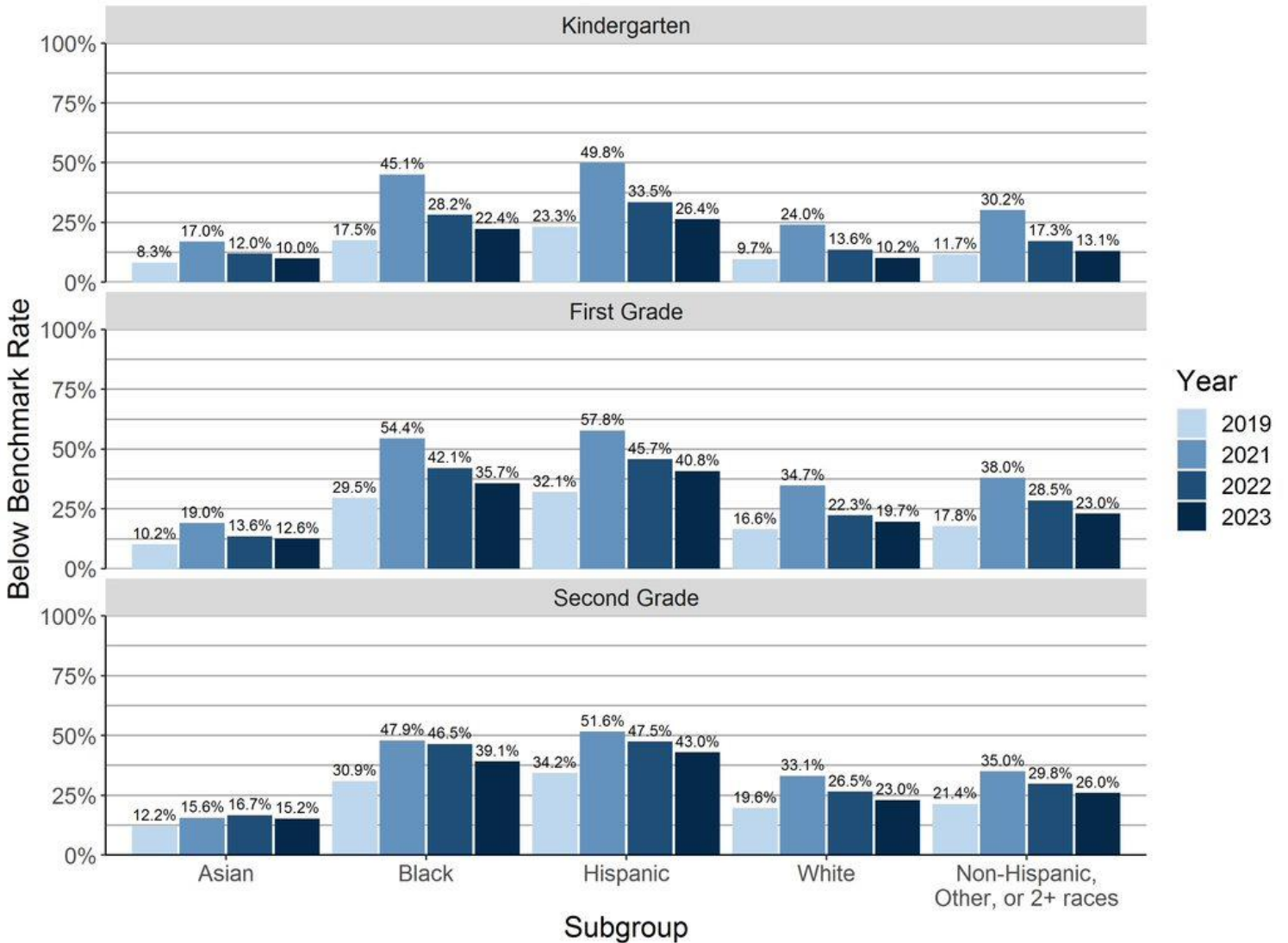


Figure 4. Below-benchmark rates for Spring 2019, 2021, 2022, and 2023 assessment windows, by student race/ethnicity and grade level.

## K-2 Below Benchmark Rates by Demographic Variables Spring 2019-2023

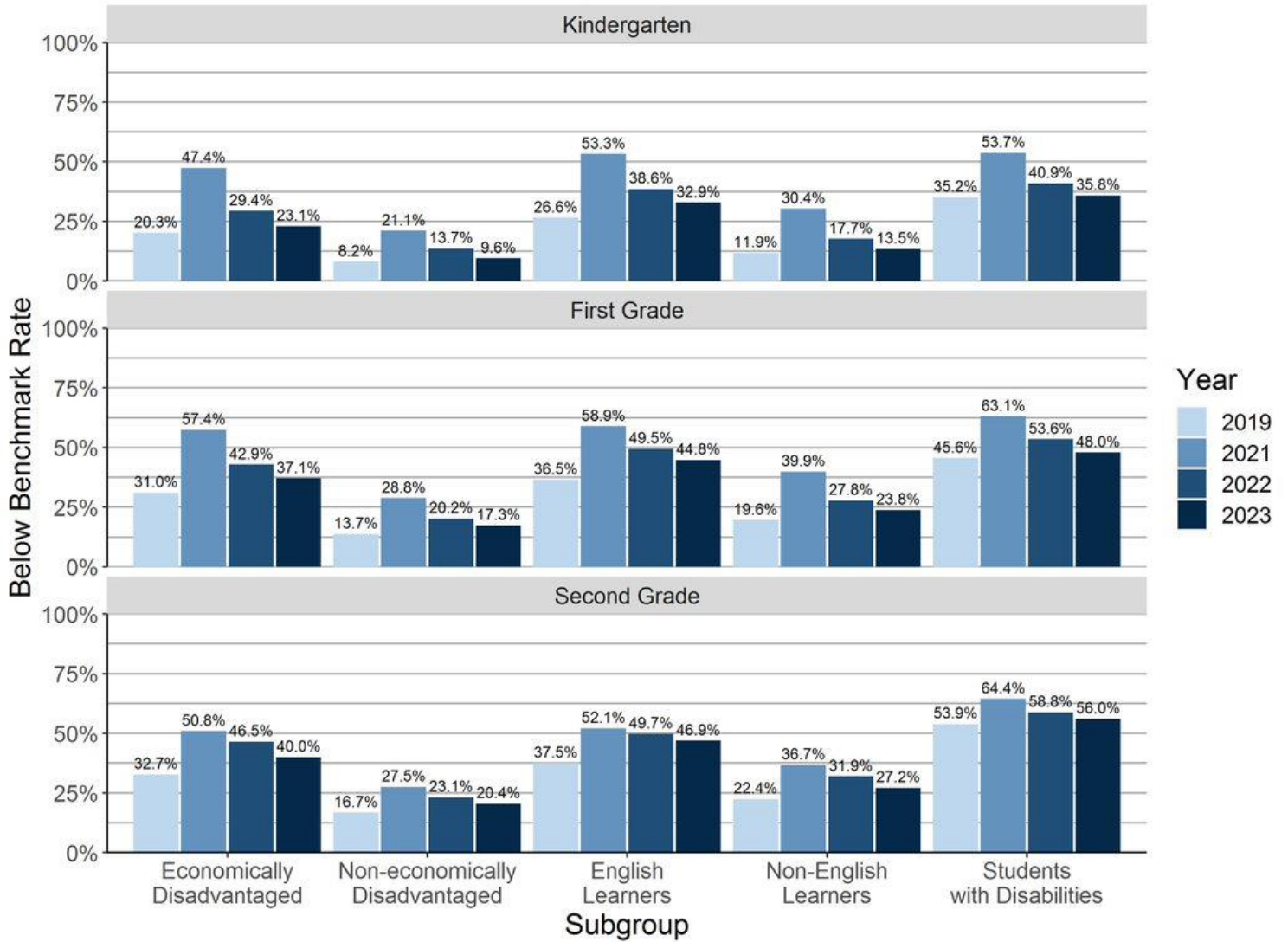


Figure 5. Below-benchmark rates for Spring 2019, 2021, 2022, and 2023 assessment windows, by student demographic subgroup and grade level.



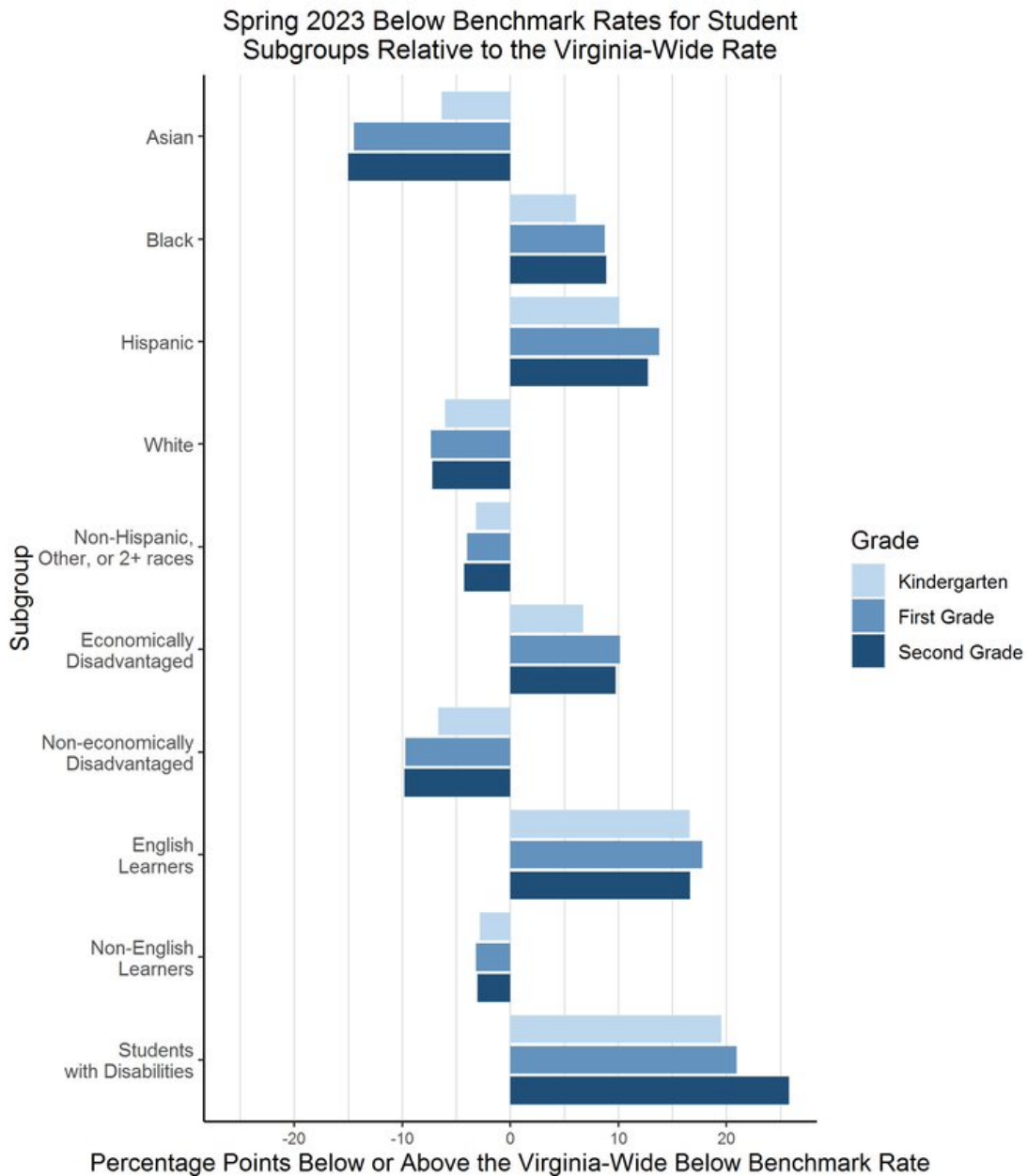


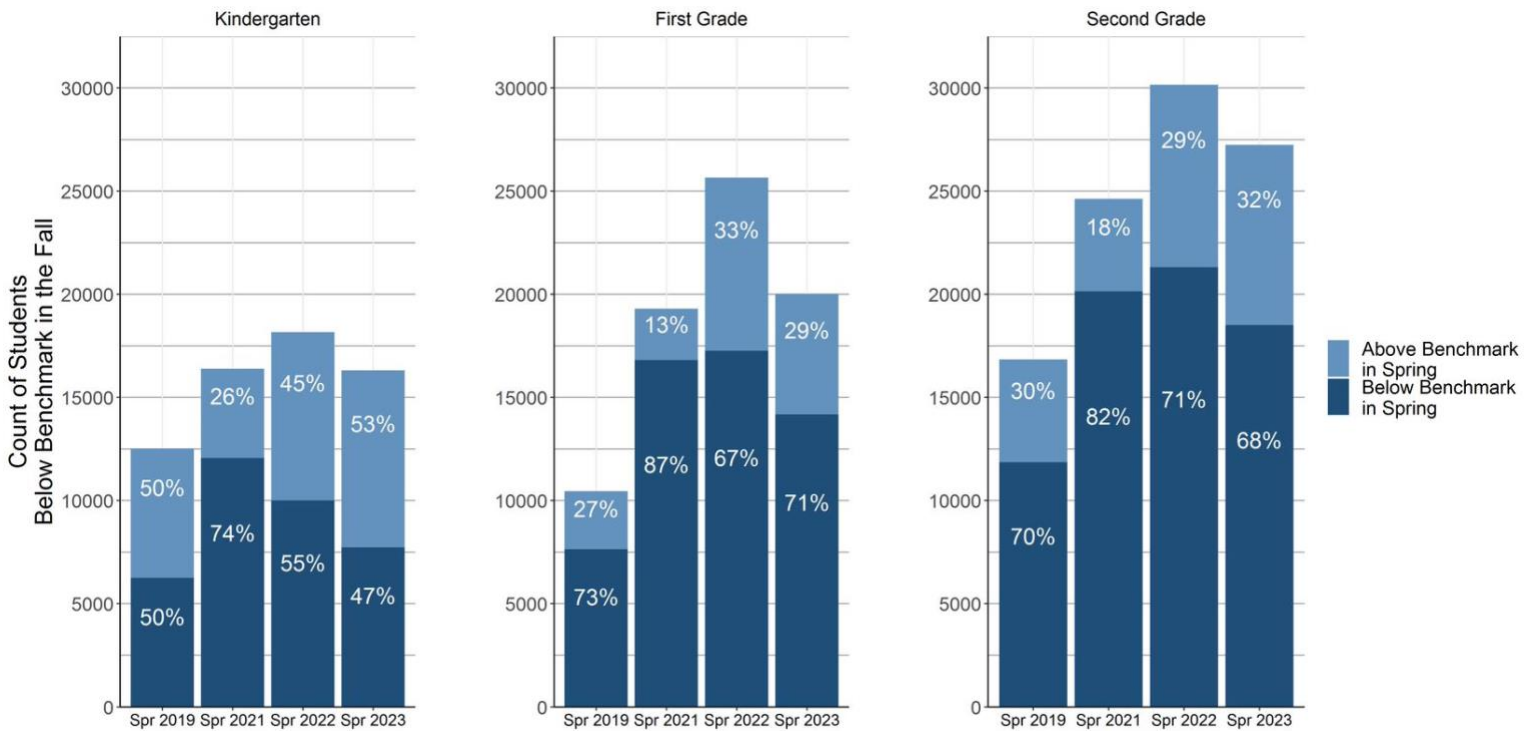
Figure 6. Disparities between the overall Virginia-wide grade-level Spring 2023 below-benchmark rate and each student grade-level subgroup. Zero represents the Virginia-wide below-benchmark rate: Bars to the left of zero indicate a student subgroup with a below-benchmark rate lower (better-performing) than the Virginia-wide rate; bars to the right of zero indicate a student subgroup with a below-benchmark rate higher (poorer-performing) than the Virginia-wide rate.

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**KEY TAKEAWAY #5**

**A majority of first and second grade students who scored below benchmark in Fall 2022 also scored below benchmark in Spring 2023. Overall, however, the percentage of students below-benchmark at both Fall 2022 and Spring 2023 fell below the pre-pandemic rates of the 2018-19 school year. See Figure 7.**

During the 2022-23 school year, a majority of students who scored below the PALS benchmark in the Fall in both first (71%) and second (68%) grades also went on to score below benchmark in the Spring. Among kindergarten students, the rate was lower at 47%. For all three grade levels, these rates were improved from the pre-pandemic 2018-19 school year. However, an increase in student enrollment from 2018-19 to 2022-23 means that despite a lower percentage rate, there was a higher raw number of students scoring below benchmark at both Fall and Spring in 2022-23 compared to 2018-19.



*Figure 7. Proportion of students who scored at or above benchmark and below benchmark in the Spring after having scored below benchmark in the Fall, by school year and grade level. Using the bar to the very far right as an example, of second grade students who scored below benchmark in Fall 2022, 68% went on to also score below benchmark in Spring 2023 and 32% went on to score at or above benchmark.*

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## CONCLUSION

This report summarizes the literacy performance of Virginia kindergarten, first, and second grade students across the previous four PALS Spring assessment windows spanning 2019 (pre-pandemic), 2021, 2022, and 2023, the most recent PALS assessment window.

Virginia-wide, the rate of K-2 students identified as being at high risk for developing reading difficulties decreased from Spring 2022 to Spring 2023 for the second consecutive Spring assessment window. Moreover, a decline in the below-benchmark rate was observed at all three grade levels. Even though the Spring 2023 below-benchmark rates did not fully return to pre-pandemic levels, these improvements highlight educators' progress as they work to reverse the consequences of pandemic-era learning disruptions.

Below-benchmark rates for students who are Black, Hispanic, economically disadvantaged, English learners, or have a disability, were typically higher than the overall Virginia-wide below-benchmark rate and also higher than the below-benchmark rates for students who are Asian, White, non-economically disadvantaged, or non-English learners. These rates signify disproportionate risk for reading difficulties among these historically marginalized student subgroups whose below-benchmark rates were also furthest from a return to their pre-pandemic level. However, these student subgroups tended to show greater improvement from Spring 2022 to Spring 2023 than their Asian, White, non-economically disadvantaged, and non-English learners peer groups.

This report focuses on the PALS below-benchmark rate because of the implications of the benchmark for EIRI funding allocations. However, as with any cut point, students who score at or just above the benchmark are also considered to be at elevated risk for reading difficulties. As such, we include Key Takeaway #2, which draws attention to the shifting proportion of students categorized as at low-, medium-, and high-risk for reading difficulties. Educators are encouraged to account for the medium-risk group when planning instruction and support services.

Taken together, these data showcase recent improvement in Spring PALS below-benchmark rates for Virginia's young learners. Still, lingering effects of pandemic-related learning disruptions are apparent. Many students, particularly those in first and second grade from historically marginalized groups, continue to face challenges developing the literacy skills they need to help them be successful readers and learners across academic subjects.

A critical step in supporting the literacy and reading development of Virginia's K-2 students is supporting the teachers, specialists, coaches, and interventionists that work most closely with these learners. It is imperative that educators are confident in their knowledge and application of science-based reading instruction, and that they have access to high-quality resources to intensify reading instruction and intervention. The Virginia Literacy Partnerships (VLP) Office encourages administrators and educators to visit the [VLP website](#) for access to resources to aid in the use and interpretation of PALS data to guide decisions pertaining to students' literacy needs. VLP resources include training tools to support the implementation of high-quality literacy instruction for all students and resources related to the delivery of individualized support to those students in need of more targeted and explicit instruction, including students below, at, and just above the PALS benchmark.