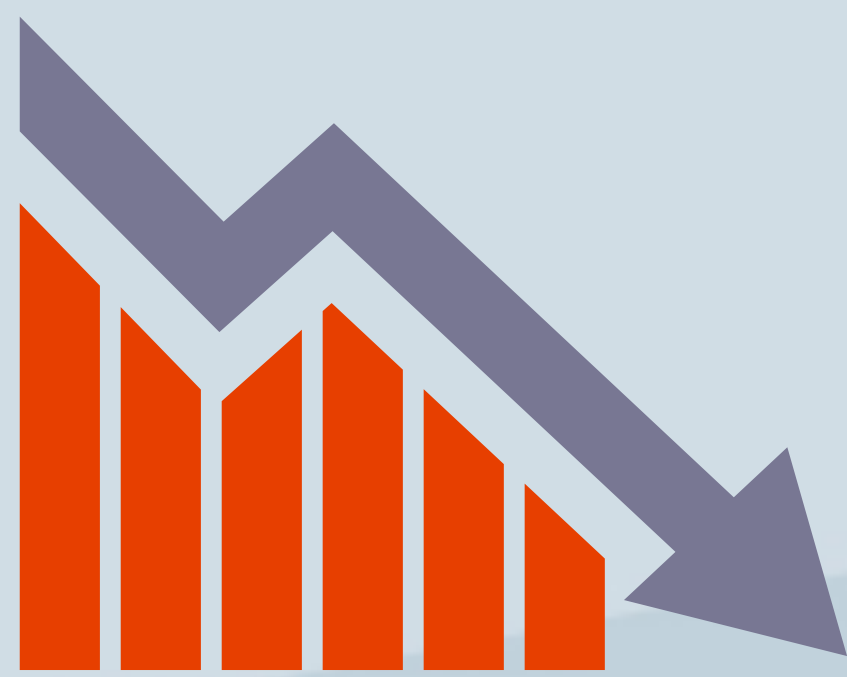# Student Unenrollment in Arizona

Using data visualizations to illustrate changes in student enrollment during the COVID-19 pandemic

December 2021

School districts across the country have experienced declines in student enrollment numbers during the COVID-19 pandemic.[1] The disengagement that may occur when students unenroll can widen existing educational gaps and have long-term effects on education outcomes and career prospects, especially for students with low socioeconomic status.[2]

The purpose of this infographic is to show recent trends in student enrollment and provide examples of data visualization. The infographic explores student unenrollment in Arizona in 2020/21 and 2021/22, then dives deeper into an example district to display unenrollment rates by student characteristics. It includes visualization tips and key findings highlighted throughout the document.

TWO TYPES OF UNENROLLMENT

Students Who Unenrolled in 2020/21

This category includes students who were enrolled in 2020/21 but withdrew before the scheduled end of the school year, withdrew during the summer of 2021, or had a status unknown.

4% of Arizona students who were enrolled in 2020/21 unenrolled.

Students Who Unenrolled in the Fall of 2021/22

This category includes students who were enrolled in 2021/22 but withdrew before the scheduled end of the school year (as of November 2021).

4% of Arizona students who were enrolled in 2021/22 unenrolled as of November 2021.
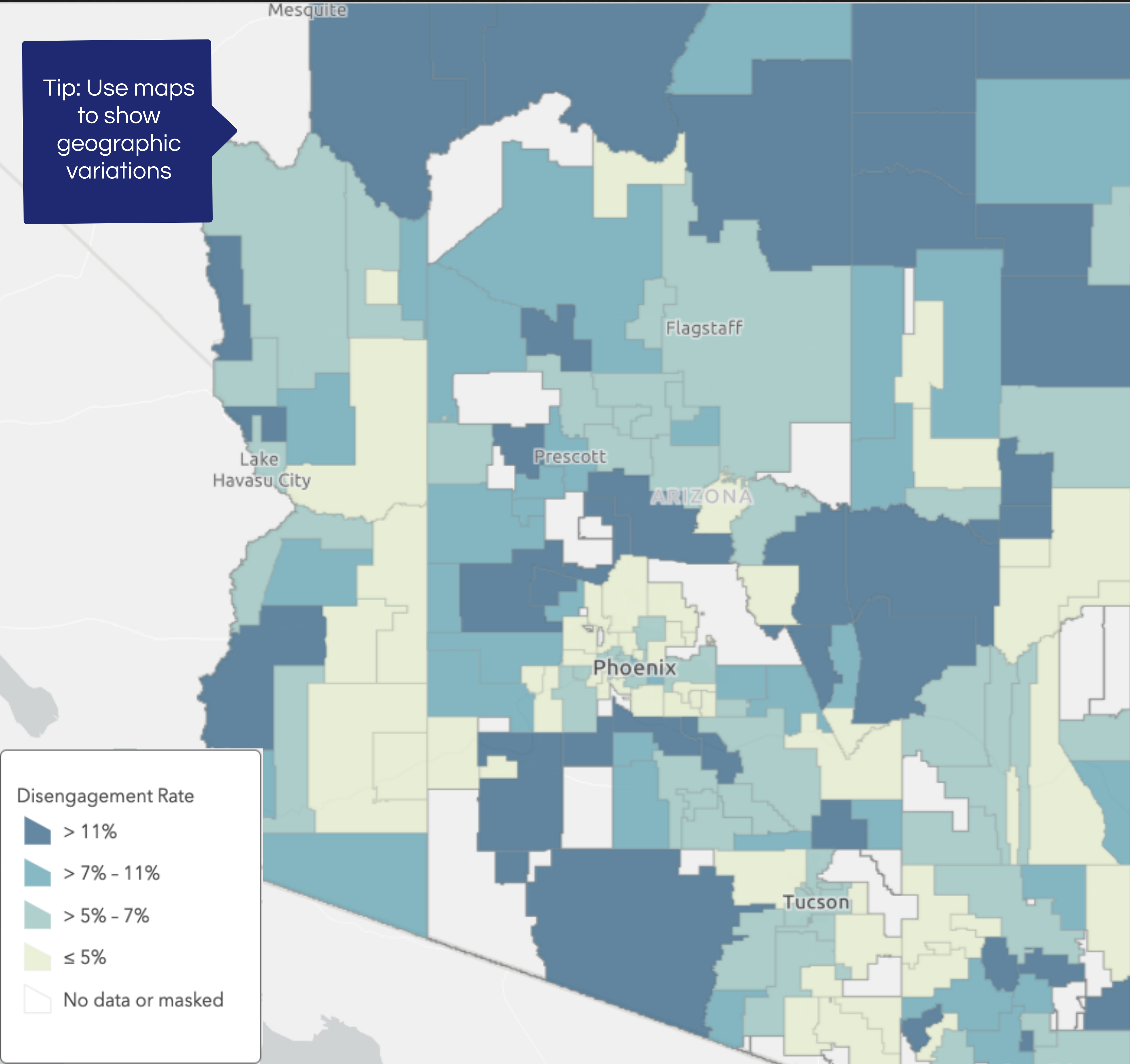
In total

87,034

Tip: Clearly define the data you are using

K-12 students unenrolled throughout the state of Arizona in 2020/21 and 2021/22, representing 8% of the student population in October 2020

ARIZONA TOTAL UNENROLLMENT RATES BY DISTRICT

Mesquite

Flagstaff

Lake Havasu City

Prescott

ARIZONA

Phoenix

Tucson

Disengagement Rate

- \> 11%
- \> 7% – 11%
- \> 5% – 7%
- ≤ 5%
- No data or masked

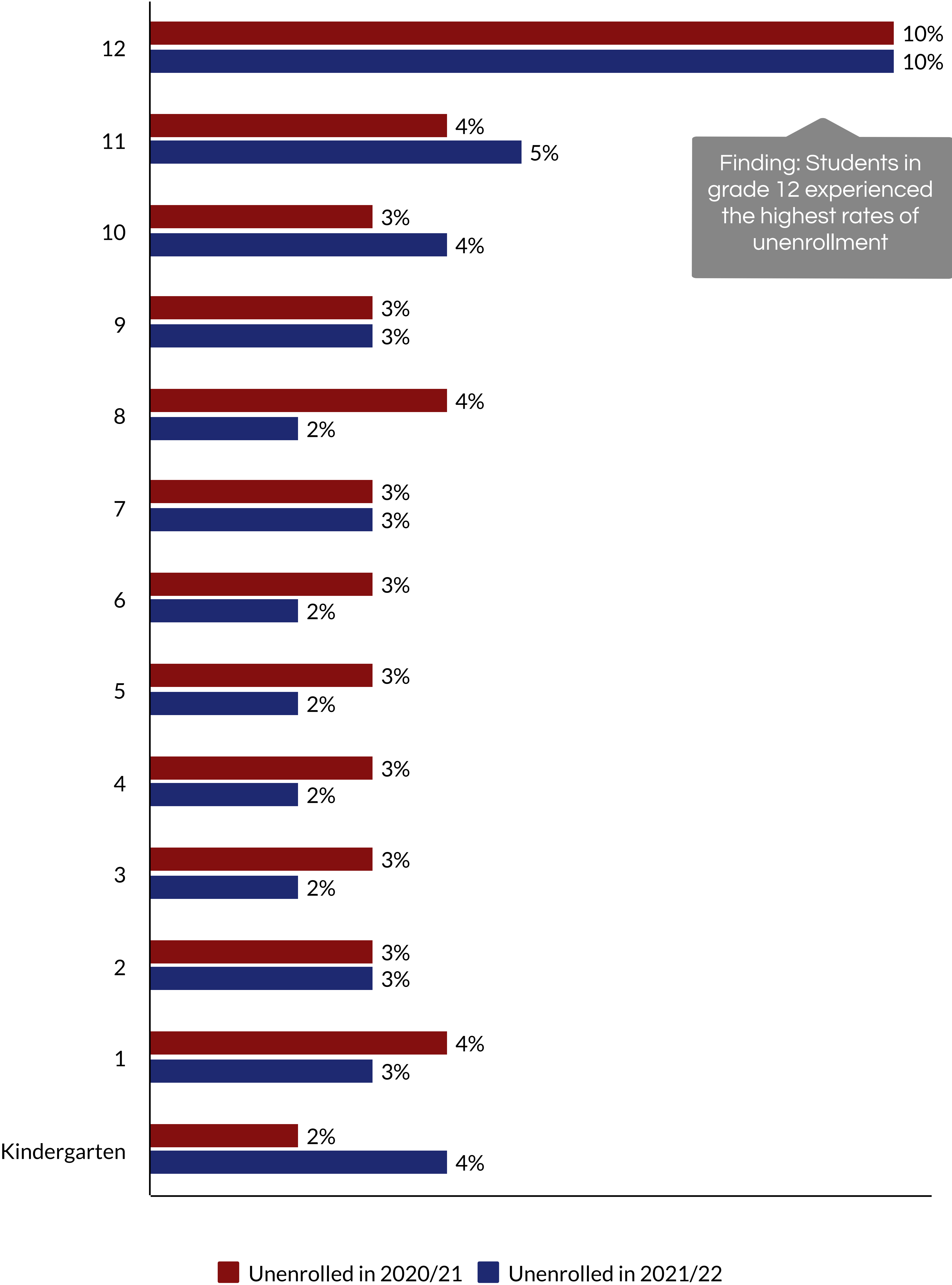** Map does not include charter or private school districts*

Unenrollment rate 2020/21 $=\dfrac{\text{Unenrollment 2020/21}}{\text{Students Enrolled in October 2020}}$

Unenrollment rate 2021/22 $=\dfrac{\text{Unenrollment 2021/22}}{\text{Students Enrolled in October 2021}}$

Total Unenrollment rate $=\dfrac{\text{Unenrollment 2020/21 + Unenrollment 2021/22}}{\text{Students Enrolled in October 2020}}$

ARIZONA UNENROLLMENT RATES BY GRADE, 2020/21 and 2021/22

Grade	Unenrolled in 2020/21	Unenrolled in 2021/22
12	10%	10%
11	4%	5%
10	3%	4%
9	3%	3%
8	4%	2%
7	3%	3%
6	3%	2%
5	3%	2%
4	3%	2%
3	3%	2%
2	3%	3%
1	4%	3%
Kindergarten	2%	4%

Finding: Students in grade 12 experienced the highest rates of unenrollment

Legend:
■ Unenrolled in 2020/21   ■ Unenrolled in 2021/22

Unenrollment Statistics for an Example District

The following data visualizations show unenrollment rates for an example district in 2020/21 and 2021/22

EXAMPLE DISTRICT UNENROLLMENT RATES, 2020/21 AND 2021/22

Students Who Unenrolled in 2021/22

4% of students in the example district who were enrolled in 2020/21 unenrolled.

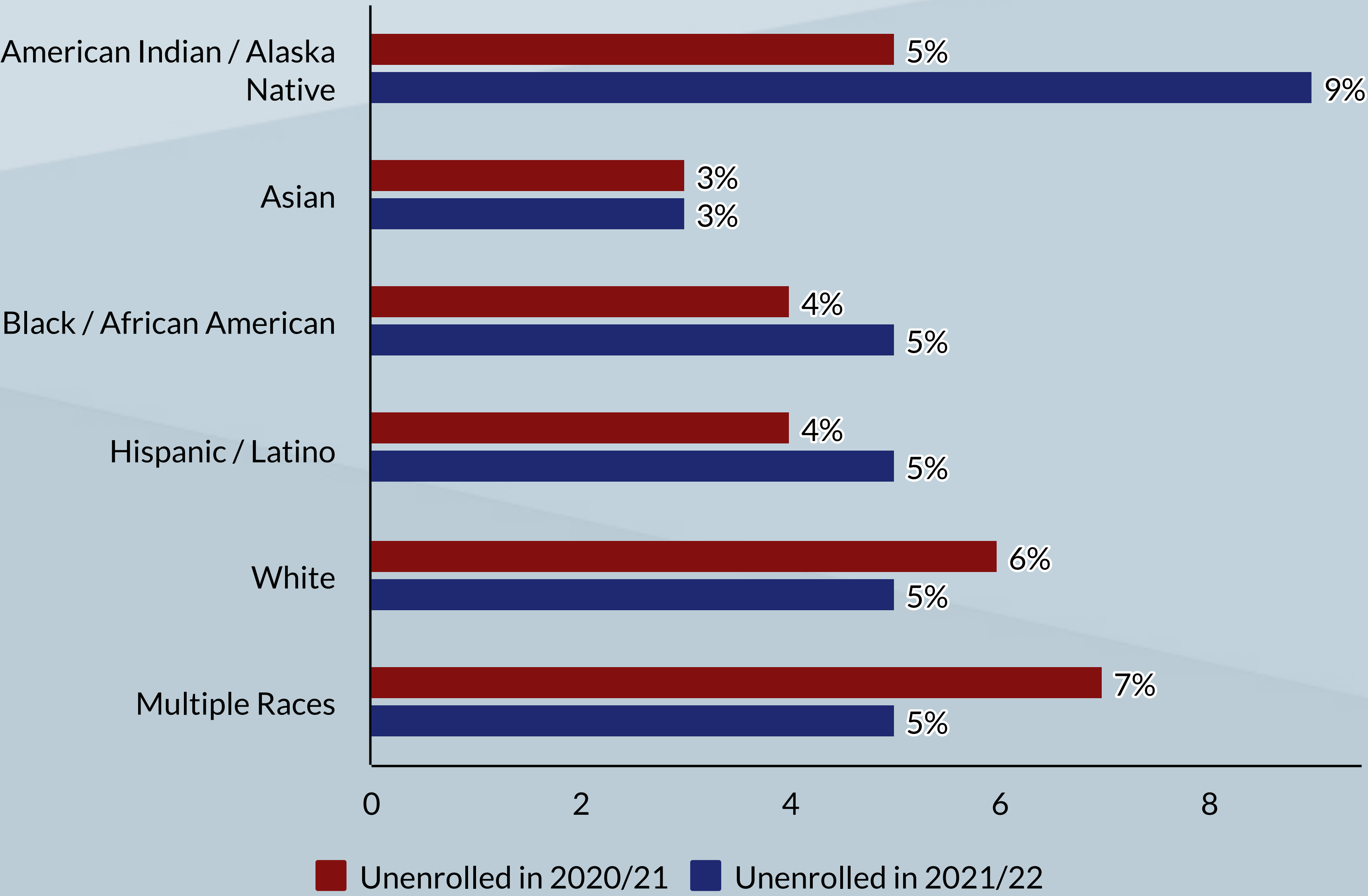**Students Who Unenrolled in the Fall of 2021/22**

5% of students in the example district who were enrolled in 2021/22 unenrolled as of November 2021.
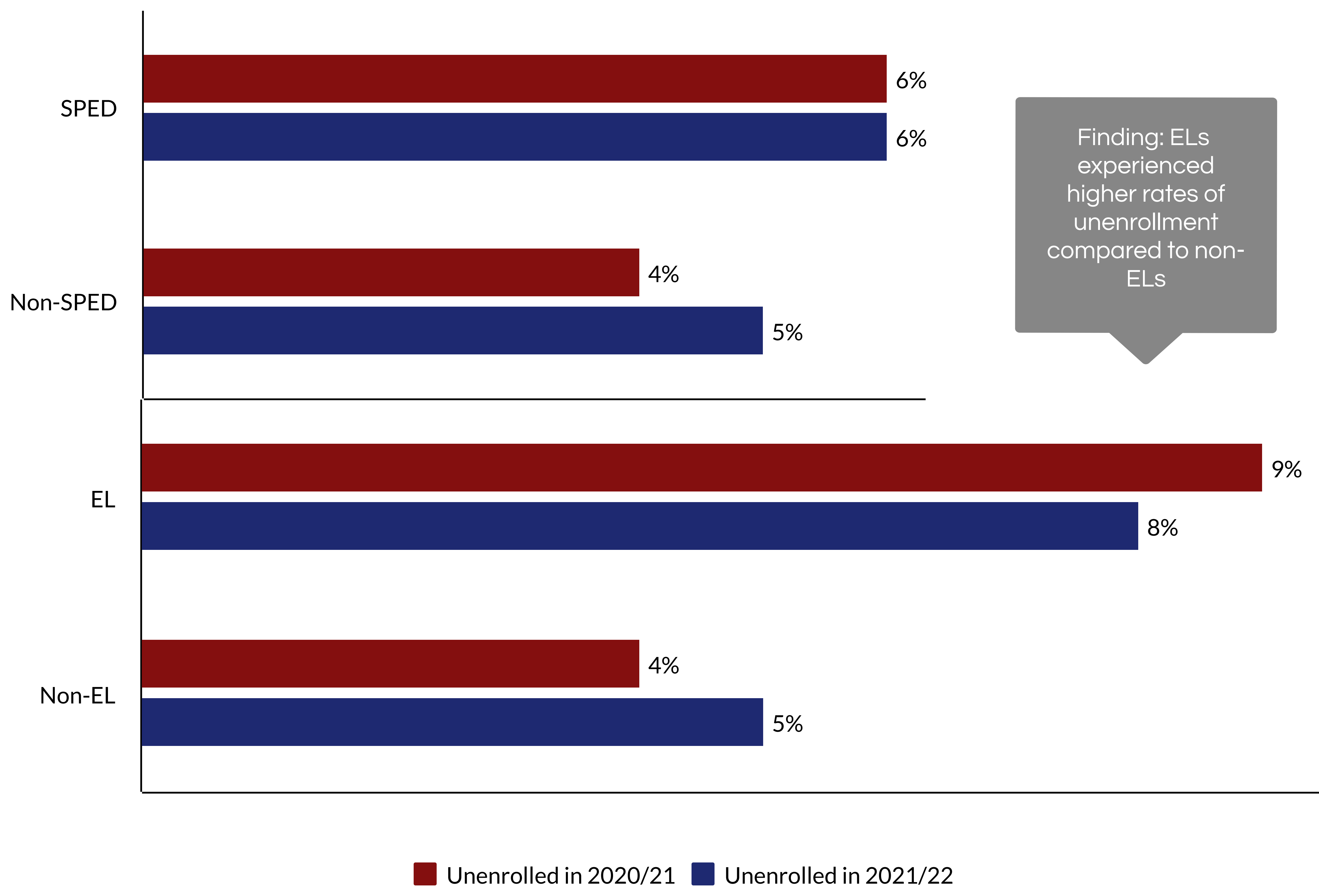
In total

971

students unenrolled in the example district in 2020/21 and 2021/22, representing 9% of the student population in October 2020

EXAMPLE DISTRICT UNENROLLMENT RATES BY STUDENT RACE/ETHNICITY, 2020/21 AND 2021/22

Race/Ethnicity	Unenrolled in 2020/21	Unenrolled in 2021/22
American Indian / Alaska Native	5%	9%
Asian	3%	3%
Black / African American	4%	5%
Hispanic / Latino	4%	5%
White	6%	5%
Multiple Races	7%	5%

■ Unenrolled in 2020/21 ■ Unenrolled in 2021/22

EXAMPLE DISTRICT UNENROLLMENT RATES BY STUDENT CHARACTERISTICS, 2020/21 AND 2021/22

SPED
- 6%
- 6%

Non-SPED
- 4%
- 5%

EL
- 9%
- 8%

Non-EL
- 4%
- 5%

Finding: ELs experienced higher rates of unenrollment compared to non-ELs

■ Unenrolled in 2020/21   ■ Unenrolled in 2021/22

EL = English learner student
SPED = Special education student

VISUALIZATION TIPS

Standardize
Standardize the use of colors to allow readers to quickly make connections between the data

Less is More
Simplify and reduce complexity to drive home key points

Juxtapose
In some cases, presenting contrasting information in close proximity can help tell the story

1 Dee, T. S., & Murphy, M. (2021). Patterns in the pandemic decline of public school enrollment. *Educational Researcher, 50*(8), 566-569.

2 Lawson, H. A., & Lawson, M. A. (2020). Student engagement and disengagement as a collective action problem. *Education Sciences, 10*(8), 212.

IES Institute of Education Sciences