

## Unpacking Missouri's Pandemic-Induced Enrollment Changes

By: Andrew Diemer, Aaron Seungyoon Park, & Evan Rhinesmith, Ph.D.



#### KEY POINTS

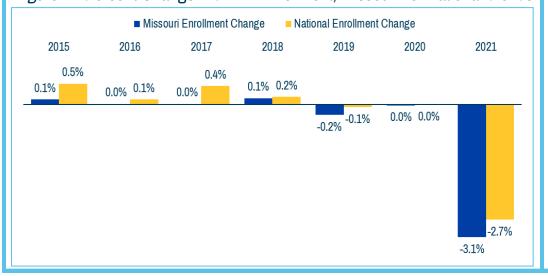
During the 2020-21 school year, public school enrollment across the state of Missouri declined by nearly 30,000 students, representing a 3% decline compared to the 2019-20 school year's statewide enrollment. In this brief, we examine enrollment changes for the 2020-21 school year, highlighting grades and geographic regions experiencing different changes. We find:

- The largest drops in enrollment occurred in pre-Kindergarten and Kindergarten grades, with nearly a 20% and 10% drop, respectively.
- Enrollment in grades 8 through 12 increased from 2020 to 2021.
- Though all regions statewide experienced enrollment declines from 2019-20 to the 2020-21 school year, schools in the St. Louis region experienced the greatest drops.
- While there have been some rebounds in enrollment, Missouri is still below prepandemic levels.

#### Introduction

Following the COVID-19-induced shutdown of 2020, school districts had to announce their plans to reopen in the fall of 2020 that would mitigate the spread of the Coronavirus in schools and the surrounding community. As schools reopened—some fully-distanced and others fully in-person—parents were faced with tough decisions on whether to keep their children enrolled in local public schools, seek out other schooling options when available, or delay enrollment in school entirely. As a result, enrollment in public schools across Missouri and nationally experienced significant fluctuations.

Figure 1: Percent Change in Pk-12 Enrollment, Missouri vs. National Trends



**VOLUME 3, ISSUE 13** 

March 2022

#### Inside this issue:

Enrollment changes by grade 2  Enrollment changes by region 4  Conclusions & Harbitations 4  Notes 5	Introduction	1
region  Conclusions & 4  Implications	· · · · · · · · · · · · · · · · · · ·	2
Implications 4	· · · · · · · · · · · · · · · · · · ·	4
Notes 5		4
	Notes	5

### SAINT LOUIS UNIVERSITY PRIME CENTER

Fitzgerald Hall, 033

Saint Louis, MO 63103

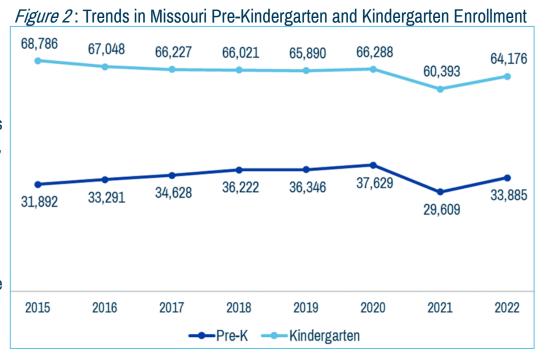
P: 314-977-5373 F: 314-977-3290 Email: prime@slu.edu

**@SLU PRIME** 

www.sluprime.org

Better evidence, better policies, better schools

In a typical year, Missouri's public schools enroll nearly 920,000 students in pre-Kindergarten through 12th grade. Enrollment numbers can vary from year-to-year, but rarely by more than mere tenths of a percent (Figure 1). Enrollment in public schools across Missouri and nationwide saw marked declines in the fall of 2020, with Missouri experiencing a 3% decline in total public school



enrollment, on par with observed declines nationwide.<sup>1</sup> While seemingly small, this represents roughly 28,000 fewer students enrolling in Missouri's public schools. Overall the national average drop in enrollment was 3 percent, eighteen states had declines greater than 3 percent—some substantially greater (e.g., Mississippi at over 5% enrollment decline).<sup>2</sup>

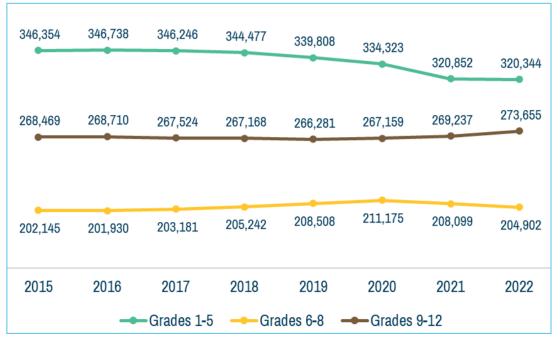
In this brief, we describe these enrollment changes in Missouri public schools, examining changes across different grade levels and regionally. We conclude with some implications these changes may bring to schools.

# Enrollment change varied by grade level and student age

Enrollment declines were steepest among the youngest grades

Between 2015 and 2019, pre-Kindergarten enrollment in Missouri expanded 3.4% per year.<sup>3</sup> However, during the 2020-21 school





VOLUME 3, ISSUE 13 PAGE 2

year, enrollment in Missouri's pre-K enrollment declined by 8,020 students, marking a 21% change from the prior school year. Additionally, declines in pre-K enrollment accounted for 28% of the total decline in enrollment across all grade levels statewide. Similarly, Kindergarten enrollment declined by nearly 6,000 students, representing a nearly 10% change from 2019-20 to 2020-21. All told, declines in Missouri's youngest grades accounted for nearly half of the total enrollment declines. While children are eligible to enroll in public kindergarten at age 5, parents are not compelled to enroll their children in school until age 7. Given the observed enrollment declines, it seems more Missourians took advantage of the option to wait during the pandemic.

Compared to national trends, Missouri's enrollment decline among the youngest students was only marginally better. A Chalkbeat report examining enrollment changes found that enrollment declines in Kindergarten accounted for 30% of the total enrollment declines.<sup>5</sup> An analysis from researchers at the University of Virginia found that pre-K enrollment fell by 20% nationally, putting Missouri's decline on par with national trends.<sup>6</sup>

#### Enrollment in high school grades increased during the 2020-21 school year

While Missouri experienced a substantial decline in enrollment for students in the youngest grades, grades 9 through 12 experienced an increase in student enrollment. In total, just over 2,000 more students enrolled in high school across the state of Missouri during the 2020-21 school year. This was a 0.8% increase, which is slightly above the reported national average of 0.4% increase. This trend has continued into the 2021-22 school year; an additional 4,400 students enrolled in high school, representing a nearly 2% increase in enrollment, with the largest share in the increase occurring in grade 9.

#### Enrollment in grades 1 through 8 decreased during the 2020-21 school year

Across grades 1 through 8, Missouri experienced an overall 3% decline, similar to national trends in similar grade levels.<sup>8</sup> Grade 5 experienced the largest decline, losing over 3,000 students statewide, followed closely by the

Table 1: Change in Enrollment by Region

Regions	Total Enrollment 2019-20	Total Enrollment 2020-21	YoY Enrollment Change 2019-20 to 2020- 21 (%)	Average District Enrollment (2019-20)	Average District Enrollment (2020-21)
Statewide	916,574	888,190	-3.1%	1,640	1,595
St. Louis	271,570	261,081	-3.9%	4,526	4,425
Northeastern	27,962	27,265	-3.9%	595	580
Southwestern	147,690	143,076	-3.1%	1,571	1,522
<b>Western Plains</b>	38,924	37,789	-2.9%	638	619
Ozarks	57,679	56,007	-2.9%	916	889
Northwestern	34,002	33,054	-2.8%	576	570
Central	83,520	81,299	-2.7%	1,465	1,426
Kansas City	188,111	183,172	-2.6%	3,688	3,592
Bootheel	66,505	65,061	-2.2%	1,023	1,001

nearly 2,900 students lost in grade 6. Grades 1 through 4 lost similar numbers of students, between 2,200 and 2,900 student each. Grade 8 was the only grade that experienced increased enrollment, as 1,096 students enrolled statewide.

#### Enrollment decline and subsequent recovery is not uniform statewide

As we have shown, Missouri's declines in enrollment in the year following the COVID-19 shutdown was not equal across grade levels. Similarly, enrollment change was not uniform statewide (Figure 4). In aggregate, all regions across the state experienced significant enrollment declines from the 2019-20 to 2020-21 school year. However, even within region, these changes were not consistently negative. Notably, we see clusters of districts in Northwestern and Ozarks Regions that experienced increases. Districts in these regions have some of the lowest enrollments, making them more sensitive to changes in enrollment increases and declines. Several districts across the state experienced enrollment declines of 7% or more. Similarly, some districts experienced enrollment increases of 4% or more. Districts in the St. Louis and Northeastern Regions experienced the sharpest declines in enrollment (Table 1). The magnitude of these enrollment changes are quite stark, as the average district size in the Northeastern region fell by 15 students, while the average district size shrunk by 101 students in the St. Louis Region.

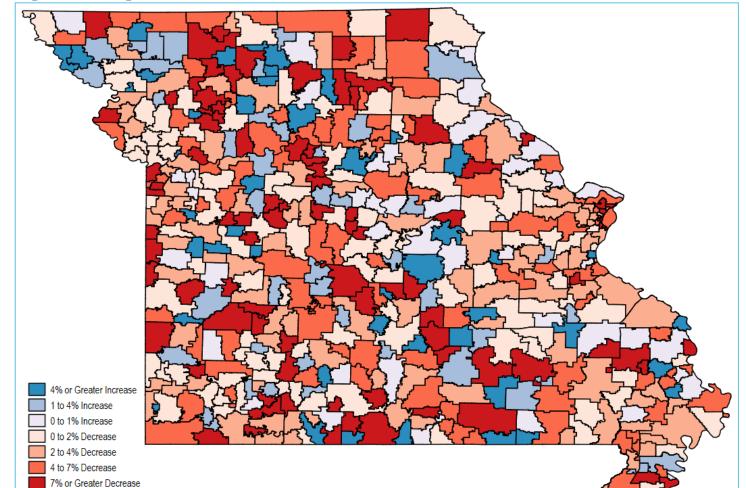


Figure 4: Changes in Enrollment Across Missouri, 2019-20 to 2020-21

VOLUME 3, ISSUE 13 PAGE 4

#### **Conclusions & Implications**

Following the substantial decline in enrollment, Missouri has started to see some bounce back. Nearly 7,000 more students enrolled in Pre-Kindergarten and Kindergarten in 2021-22 as compared to 2020-21. Additionally, enrollment in high school grades are the highest they have been since 2014-15. However, there are still close to 20,000 students who remain missing from the enrollment counts for the 2021-22 school year compared to 2019-20.

In this brief, we show that Pre-K and Kindergarten experienced the largest decline in enrollment without making a complete recovery in the 2021-22 school year, while grades 9 to 12 experienced a mild increase in enrollment in the fall of 2020 and have continued the upward trend into the current school year. These enrollment changes have important implications for students and school funding. Missouri's school funding formula is based on Average Daily Attendance, therefore, fewer students enrolling in and attending school may lead to decreases in per pupil revenues, particularly with the expiration of federal pandemic aid. This may lead to staffing cuts and reduced quality of education for students, similar to what we experienced for several years after the Great Recession. Additionally, these declines and slow recovery for enrollment will have important implications for students as well, especially among the youngest students. Delays in early grade enrollment could have lasting impacts on students. Participating in early childhood education, which has been linked with lower likelihood of receiving special education, reduced rates of grade retention, higher high-school graduation rates, and better adult wages, not only affects our children but also the future of our communities. As schools and students continue to recover from the disruptions and fallout of 2020, it is important there are supports for those students who remained through the reopening and their classmates who are now having their first experiences in classrooms following a delayed start.

#### **About the Authors**

Andrew Diemer is a research associate in the SLU PRIME Center and a doctoral student in Education Policy and Equity at the Saint Louis University School of Education.

Aaron Seungyoon Park is a research associate in the SLU PRiME Center and a doctoral student in Education Policy and Equity at the Saint Louis University School of Education.

Evan Rhinesmith, Ph.D. is the Executive Director of the SLU PRIME Center at the Saint Louis University School of Education.

#### References

- <sup>1</sup> National Center for Education Statistics (2021, June 28). "Nation's Public School Enrollment Dropped 3 Percent in 2020-21", Retrieved from: https://bit.ly/3waonSb
- <sup>2</sup> Ibid
- <sup>3</sup> Anglum, J.C. (2021, October 1). "Public Pre-K Access and Enrollment: Assessing Take-up of Missouri's Early Childhood Education Funding Expansion", *SLU PRiME Center*. Retrieved from: https://www.sluprime.org/policy-brief-database/ece-hb1689
- <sup>4</sup> Missouri Department of Elementary and Secondary Education (2022). "Compulsory Attendance Law". Retrieved from: https://dese.mo.gov/governmental-affairs/freqaskques/Attendance
- <sup>5</sup> Belsha, K., LeMee, G. L., Willingham, L., & Fenn, L. (2020, December 28). Across US, states see public school enrollment dip as virus disrupts education. *Chalkbeat*. Retrieved from: https://www.chalkbeat.org/2020/12/22/22193775/states-public-school-enrollment-decline-covid
- <sup>6</sup> Bassok, D., & Shapiro, A. (2021, August 13). Understanding COVID-19-era enrollment drops among early-grade public school students. *Brown Center Chalkboard*. Retrieved from: https://www.brookings.edu/blog/brown-center-chalkboard/2021/02/22/understanding-covid-19-era-enrollment-drops-among-early-grade-public-school-students/
- <sup>7</sup> See note 1
- 8 See note 1
- <sup>9</sup> Hubler, S., Taylor, K., & Nierenberg, A. (2020, December 22). Public Schools Face Funding 'Death Spiral' as Enrollment Drops. The New York Times. Retrieved from <a href="https://www.nytimes.com/2020/12/22/us/public-schools-enrollment-stimulus.html">https://www.nytimes.com/2020/12/22/us/public-schools-enrollment-stimulus.html</a>
- <sup>10</sup> Baker, B. D., Weber, M., & Atchison, D. (2020). Weathering the storm: School funding in the COVID-19 era. Phi Delta Kappan, 102(1), 8–13. https://doi.org/10.1177/0031721720956839
- 11 See note 6
- <sup>12</sup> McCoy, D. C., Yoshikawa, H., Ziol-Guest, K. M., Duncan, G. J., Schindler, H. S., Magnuson, K., Yang, R., Koepp, A., & Shonkoff, J. P. (2017). Impacts of Early Childhood Education on Medium- and Long-Term Educational Outcomes. *Educational Researcher*, *46*(8), 474–487. https://doi.org/10.3102/0013189X17737739
- <sup>13</sup> Chetty, R., Friedman, J. N., Hilger, N., Saez, E., Schanzenbach, D. W., & Yagan, D. (2011). How Does Your Kindergarten Classroom Affect Your Earnings? Evidence from Project Star. *The Quarterly Journal of Economics*, *126*(4), 1593–1660. https://doi.org/10.1093/qje/qjr041

<sup>14</sup> See note 6

VOLUME 3, ISSUE 13 PAGE 6