

NEPC Review: From Surviving to Thriving: K-12 Choice and Opportunity for Rural Texas Students and Teachers (The Heritage Foundation, August 2023)



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Summary

The Heritage Foundation recently published *From Surviving to Thriving: K-12 Choice and Opportunity for Rural Texas Students and Teachers*, a report that claims increased competition has improved academic achievement in Arizona's rural public schools and that similar policies will be good for rural Texas. However, this report overstates the similarities between Arizona and Texas, ignores relevant research literature, and presents simplistic and inaccurate analyses to support its claims. By addressing a narrow set of possible benefits of school choice, it also overlooks issues related to fiscal impacts for district schools, segregation, and exclusionary practices for students who require specialized services in schools. The report is an exercise in advocacy for expanding school choice policies, and its usefulness as a guide for policy and practice is minimal.



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I. Introduction

Arizona has a long-standing market-based school choice system that includes charter schools, inter- and intra-district school choice, private and public tax credit donation programs, education savings accounts, and homeschooling. Because of its wide array of school choice policies, Arizona is often considered a model for school choice proponents interested in expanding school choice policies in other states.

Such is the case in the report published by the Heritage Foundation, *From Surviving to Thriving: K-12 Choice and Opportunity for Rural Texas Students and Teachers*, authored by Matthew Ladner and Jason Bedrick. The report argues that students in Texas rural areas could thrive if school choice options were expanded to include those available to students in rural Arizona. The report also claims that expanding choice in rural Texas will not harm, but rather help, traditional public schools.

II. Findings and Conclusion of the Report

The report claims that increased competition has improved academic achievement in Arizona's rural public schools. It encourages rural Texans and lawmakers to expand school choice and pushes the state's educators to create new schools in rural areas both inside and outside of the traditional education system. By adopting policies like those in Arizona, the report

asserts that Texas rural schools will thrive.

The report makes three main arguments in favor of this conclusion. First, Arizona and Texas are border states that have large and growing cities and vast rural areas, but, it claims, the outcomes of Arizona's K-12 education system are superior to those of Texas. Second, Texas' education system has declined in many rural areas, even though the state economy is strong. Third, Texas lawmakers can look at how Arizona's school choice policies affected students and schools in rural areas to forecast the effects of school choice policies in Texas. The report argues that like Arizona's rural students, rural students in Texas will benefit from the expansion of school choice policies.

III. The Report's Rational for Its Findings and Conclusions

To support its claims, the report compares the distribution of charter schools in Arizona with Texas and the academic achievement of rural students attending traditional public schools in the two states. The report also provides information about private school enrollment in rural areas in Arizona to make the case that there is demand for school choice in rural Arizona. The report concludes with anecdotal evidence about the benefits of microschoools¹ for teachers and students in Arizona.

IV. The Report's Use of Research Literature

The report has no designated literature review section and none of the 24 sources cited throughout the report are from academic peer-reviewed journals.² Instead, the report cites a variety of reports from think tanks that support the expansion of school choice, news media stories, and opinion pieces. The report focuses heavily on the amount of choice available in Arizona, describing the rural education choice marketplace as "robust" and "vigorous." Missing from the report is a more balanced picture of the how school choice works in Arizona.³

For education choice marketplaces to flourish, it is vital that students have high-quality schooling options. The report lacks findings, however, about the quality of education in rural choice marketplaces. Past research has found that rural students are more likely to enroll in cyber charter schools than brick-and-mortar charters.⁴ This is problematic because, in most cases, the cyber charters students transferred to had lower math and reading proficiency rates than the traditional public schools the students had previously attended.⁵ Research has also shown that rural charters are slightly less innovative and less likely to use high-expectation instructional models than other charters nationwide.⁶

Research can also provide insight into the quality of education provided through education choice⁷ as measured by academic achievement. Although the report cites a research summary⁸ describing how choice affects academic achievement in traditional public schools, it does

not address the findings of studies that investigate the achievement of students in private⁹ or charter schools.¹⁰ If students will be offered a “pluralistic and diverse system of schools,”¹¹ it is important to consider how students at all schools are performing to determine the overall effects of choice on educational achievement.

Finally, the rural school choice literature raises other important issues that must be considered when predicting how expanding school choice would affect students living in rural areas. Policymakers would need to consider transportation and logistical issues,¹² choice deserts,¹³ and the limited supply of teachers in rural areas¹⁴ before concluding that “rural Texans have nothing to lose and much to gain from education choice.”¹⁵

V. Review of the Report’s Methods

Some of the evidence cited in the report is drawn from previously published reports from organizations that promote school choice such as EdChoice, the Arizona Charter Schools Association, and the Private School Review, a consumer-oriented school ratings website. Other analyses were conducted using online data dashboards from the National Alliance for Public Charter Schools, the National Assessment for Educational Progress (NAEP), and the Educational Opportunity Project at Stanford University.

Many of the analyses presented in the report are misleading. In some cases, alternative methods of reporting the data suggest different conclusions than those presented in the report. There are also some inconsistencies and inaccuracies in how the report uses and interprets some of these data sources.

Misleading Presentation

The report claims that Arizona’s rural district schools are thriving even while school choice in rural areas has expanded. However, a closer look at the data suggests this is not the case.

The report claims that Arizona has more charter schools in rural areas than most other states, including Texas. To support this claim, the report’s Table 2¹⁶ lists the number of charter schools in 2019-20 by state and community type (rural, town, suburban, urban). However, using the figures the report provides, if the figures in Table 2¹⁷ are converted to percentages for the 17 states with 100 or more charter schools,¹⁸ seven states have a greater percentage of their charter schools located in rural areas: Oregon, North Carolina, Utah, Minnesota, Colorado, Michigan, and Wisconsin.

A similar table from the original data source¹⁹ provides the percentages of traditional public schools and charter schools by community type. Arizona does have a large percentage of charter schools located in rural areas (2.3%) relative to other states. But a substantially larger proportion of Arizona’s public schools (9.3%) are traditional public schools located in rural areas. Given that charter schools are generally much smaller than traditional public schools, traditional public schools continue to serve a majority of Arizona’s rural students

Similarly, the report provides analyses of NAEP data that compare the achievement differences in math, reading, and science for rural schools in Texas and the U.S. pre- and post-COVID (Charts 1 and 2 in the report)²⁰ to make the case that achievement in Texas' rural schools in Texas is declining. In a subsequent section these charts are expanded to include Arizona (Charts 3 and 4 in the report), to support the claim that Arizona's rural schools are succeeding while Texas's rural schools are not.²¹ The report's charts were created by subtracting the composite scale scores for rural students attending public schools in 2007 from the scores of students attending rural schools in 2019 (pre-COVID) and 2022 (post-COVID), respectively.

The pattern looks different if we look at the full picture of scores from 2007 through 2022, instead of just comparing scores at the ends of that timeline. Using the same NAEP Data Explorer as the report used, we examined eighth-grade math and reading scores over time for rural students in Arizona, Texas, and across the nation (see our Figures 1 and 2 below). The Texas students' scores did indeed decline, but the comparison to their counterparts in Arizona is problematic. The Arizona scores started out significantly lower, and have *never* been significantly higher than the Texas scores. Moreover, since 2017, there are virtually no differences in scores between AZ, TX, and the US more generally. This is the case for both eighth-grade math and reading.

Figure 1

NAEP 8th Grade Mathematics Scale Scores, Rural Schools: 2007-22

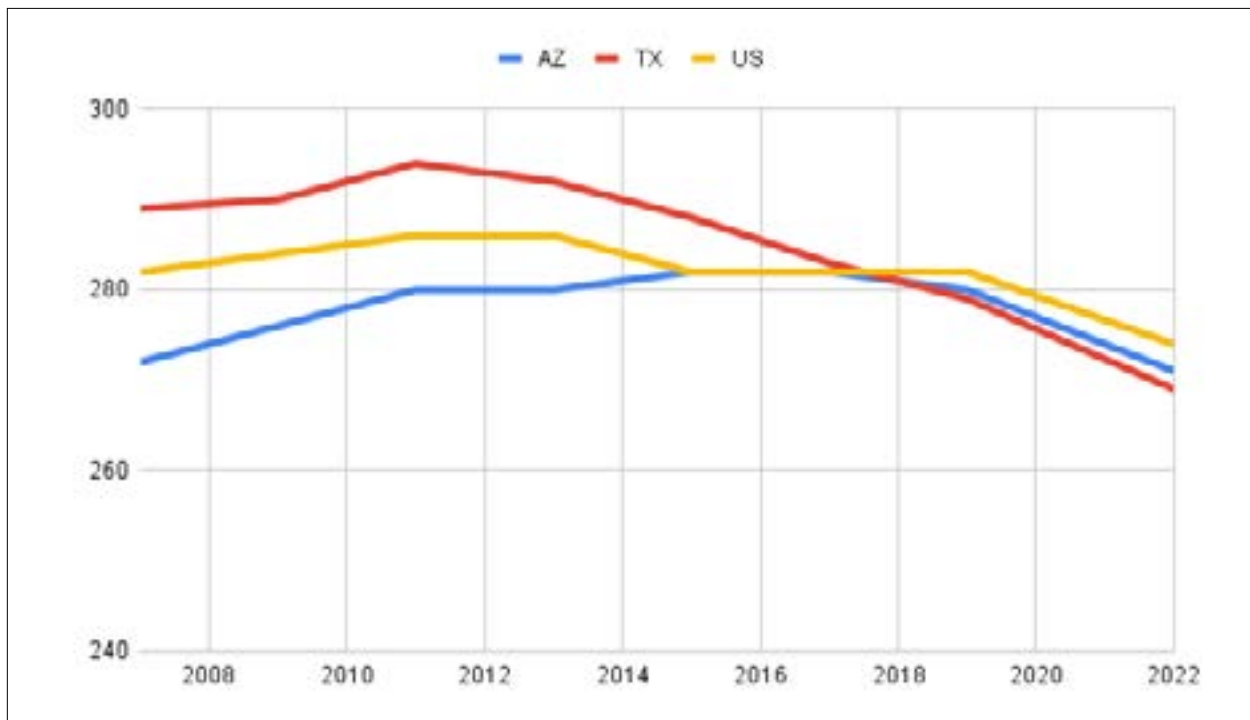
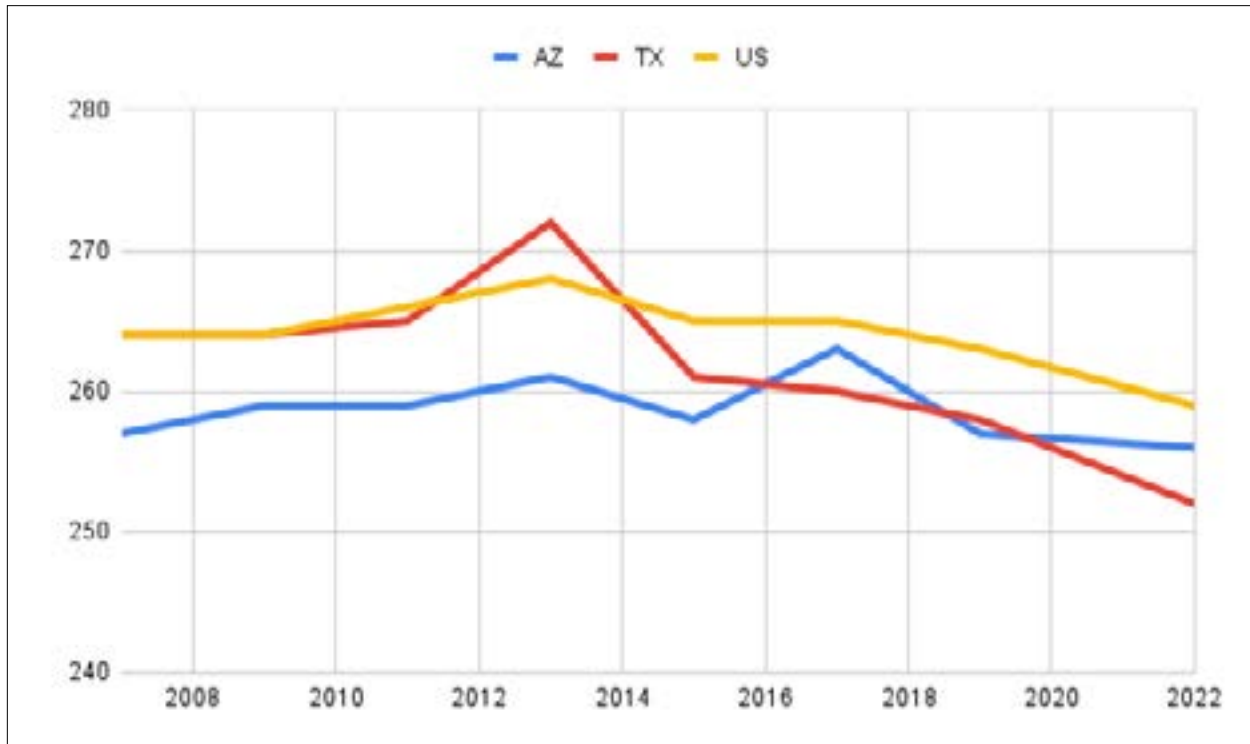


Figure 2

NAEP 8th Grade Reading Scale Scores, Rural Schools: 2007-22



Data Inconsistencies and Inaccuracies

The report's Table 3 presents enrollment in four rural Arizona counties that suggests considerable expansion of private school enrollment between 2013-14 and 2021-22. However, the data presented in Table 3 is inflated. That is, Table 3 data was identified by using a different definition of rural than the one used in the report's Table 1 and comes from a different data source. It is standard practice in rigorous research to use consistent definitions of key terms and to disclose any irregularities in the data that might bias the results. In Table 1, the categories for community type are those used by the National Center for Education Statistics (NCES).²² NCES defines rural areas by their distance from urban or urbanized areas. In contrast, Table 3 of the report uses the definition of rural used by the Federal Office of Rural Health Policy (FORHP), which designates seven Arizona counties as rural. The report compares student enrollment in private schools in the two years for the four counties "for which data was available." The reason why there were no data for the other three counties in the report from which the 2013-14 figures were drawn is because there was only one private school in these three counties in 2013-14. Moreover, if the definition of rural that was used in Table 1 to categorize charter schools as rural was also used in Table 3, none of the private schools in Santa Cruz County, the county identified in Table 3 as having the largest number of private schools, would be rural schools. Likewise, four of the nine private schools in Navajo County that were operating in 2013-14 would not be classified as rural schools.²³

Inaccurate reporting falsely suggests exponential growth in Arizona’s private school enrollment in rural areas. The report uses different data sources for the comparison of private school enrollment in rural Arizona for 2013-2014 and 2021-22, resulting in a 98% increase. The report drew the private school enrollment figures for 2013-14 from an EdChoice publication that used NCES’s Private School Survey²⁴ data for its analyses. The 2021-22 figures were drawn from the Private School Review, a consumer-oriented school ratings website. While NCES administers the Private School Survey every two years, the Private School Review’s process of collecting data is less systematic.²⁵ The figures presented in the report for 2021-22 are also substantially higher than those reported for 2023-24 currently available on the Private School Survey website for the four counties listed in Table 3 (figures by county from 2021-22 are no longer available). Using the 2023-24 figures currently available from Private School Review suggests that growth in private school enrollment over the 10-year period between 2014 and 2024 in those four counties was 30% rather than 98%—a stark difference.²⁶

VI. Review of the Validity of the Findings and Conclusions

When examined carefully, it becomes apparent that the data do not support the report’s contention that rural Texas would do well to copy Arizona’s example. The data do not indicate that Arizona’s rural schools perform better than Texas’s rural schools, nor do they support claims made throughout the report that rural Arizonans are enrolling in private schools at extreme rates.

Importantly, the report ignores implications of other factors associated with expanding school choice for rural district schools that would be valuable for policymakers to consider. Among these are fiscal implications and the potential for increased racial and socioeconomic segregation.²⁷ Expanding school choice may also have unintended negative consequences for students who are English Language Learners or who have Individual Education Plans (IEPs).²⁸ Furthermore, the literature regarding transportation and logistical issues associated with rural choice, the existence of rural choice deserts, and the limited supply of teachers in rural areas would shed doubt on some of the report’s claims that “Texas students and educators will not merely survive with choice, they will thrive with it.”²⁹

VII. Usefulness of the Report for Guidance of Policy and Practice

This report is bald advocacy for school choice expansion that overstates the similarities between Arizona and Texas, ignores the research literature, and presents simplistic and inaccurate analyses to support its claims. In making its case, it also ignores possible problems associated with the expansion of school choice policies that would be important for policymakers to consider, such as the fiscal impacts of choice programs on school districts, increased segregation, and negative consequences for students who require specialized services in school. The usefulness of the report to guide policy and practice is minimal.

Notes and References

- 1 The report defines microschoools as “small clusters of families that pool resources and collaborate to educate their children.”

Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (p. 13). Washington, DC: The Heritage Foundation.

- 2 The report does cite two articles from *Education Next*, a journal that publishes a mix of “worthy research, sound ideas, and responsible arguments.” *Education Next* is published by the Hoover Institution—so the source is not surprising for the report. Only articles published in the “research” section of the journal are subjected to peer review, and neither of the articles cited in the current report are from this section. Thus, it seems reasonable to expect that the two cited articles were not subjected to peer review.
- 3 Regarding school choice “contexts,” we recognize that this is a broad term. That said, the report cites the authors of this same report (see reference in this note) to discuss Arizona context. In our view, this provides neither full nor fully appropriate context about school choice in the state of Arizona:

Bedrick, J., & Ladner, M. (2023, January 9). *Rustic renaissance: Education choice in rural America*. Washington, DC: The Heritage Foundation. Retrieved September 22, 2023, from <https://www.heritage.org/education/report/rustic-renaissance-education-choice-rural-america>

Samples of academic literature that provide empirical data related to school choice in Arizona include, but are not limited to:

Cobb, C.D. & Glass, G.V (1999, January 14). Ethnic segregation in Arizona charter schools. *Education Policy Analysis Archives*, 7(1). Retrieved September 22, 2023, from <https://doi.org/10.14507/epaa.v7n1.1999>

Garcia, D.R. (2008, November). The impact of school choice on racial segregation in charter schools. *Educational Policy*, 22(6), 805-829. Retrieved September 15, 2023, from <https://doi.org/10.1177/0895904807310043>

Jabbar, H. & Creed, B. (2020, August 24). Choice, competition, and cognition: How Arizona charter school leaders interpret and respond to market pressures. *Peabody Journal of Education*, 95(4), 374-391. Retrieved September 22, 2023, from <https://doi.org/10.1080/0161956X.2020.1800174>

Potterton, A.U. (2020, October 14). Parental accountability, school choice, and the invisible hand of the market. *Educational Policy*, 34(1), 166-192. Retrieved September 22, 2023, from <https://doi.org/10.1177/0895904819881155>

Vergari, S. (2000). The regulatory styles of statewide charter school authorizers: Arizona, Massachusetts, and Michigan. *Educational Administration Quarterly*, 36(5), 730-757. Retrieved September 22, 2023, from <https://doi.org/10.1177/00131610021969182>

Powers, J.M., Topper, A.M., & Potterton, A.U. (2019). Interdistrict mobility and charter schools in Arizona: Understanding the dynamics of public school choice. *Journal of Public Management & Social Policy*, 25(3), 56-87. Retrieved September 22, 2023, from <https://digitalscholarship.tsu.edu/jpmsp/vol25/iss3/1>

- 4 Mann, B., Kotok, S., Frankenberg, E., Fuller, E., & Schafft, K. (2016). Choice, cyber charter schools, and the educational marketplace for rural school districts. *The Rural Educator*, 37(3), 17-29. Retrieved September 7, 2023, from <https://doi.org/10.35608/ruraled.v37i3.248>
- 5 Mann, B., Kotok, S., Frankenberg, E., Fuller, E., & Schafft, K. (2016). Choice, cyber charter schools, and the educational marketplace for rural school districts. *The Rural Educator*, 37(3), 17-29. Retrieved September 7, 2023, from <https://doi.org/10.35608/ruraled.v37i3.248> \$14.20

- 6 These conclusions are drawn based on a comparison of rural brick and mortar charters to brick and mortar charters nationwide; cyber charter schools were excluded from the analysis.

Marshall, D.T., Neugebauer, N.M., Huang, L., & White, J. (2022, August 22). Describing rural charter schools in the United States. *Journal of School Choice*, 16(4), 562-587. Retrieved September 7, 2023, from <https://doi.org/10.1080/15582159.2022.2110460>

- 7 Here it is understandable that the report does not cite rural-specific studies because the majority of research done in this area has been in an urban context.

- 8 The report cites a report from EdChoice to support the claim,

“There have been 28 empirical studies on the effects of education choice policies on the academic performance of students who remain at their traditional public schools. Of these, 25 find statistically significant positive effects on test scores, while only two find small negative effects and one finds no visible effect. Education choice is the rising tide that lifts all boats.” (p. 12)

Ladner, M. & Bedrick, J. (2023, August,15). *From surviving to thriving: K-12 choice and opportunity for rural Texas students and teachers* (p. 12). Washington, DC: The Heritage Foundation. Retrieved September 22, 2023, from <https://www.heritage.org/sites/default/files/2023-08/BG3783.pdf>

However, the original EdChoice report leaves out key studies that examine the competitive effects of choice on student achievement in traditional public schools, and it only addresses private school choice (ignoring the impact of charters). The findings of recent studies on the competitive effects of school choice are more mixed than those cited by EdChoice and include:

Bifulco, R. & Ladd, H.F. (2006, Winter). The impacts of charter schools on student achievement: Evidence from North Carolina. *Education Finance and Policy*, 1(1), 50-90. Retrieved September 8, 2023, from <https://doi.org/10.1162/edfp.2006.1.1.50>

Buddin, R. & Zimmer, R. (2009, August 4). Is charter school competition in California improving the performance of traditional public schools? *Public Administration Review*, 69(5), 831-845. Retrieved September 8, 2023, from <https://doi.org/10.1111/j.1540-6210.2009.02033.x>

Cordes, S.A. (2018, August 1). In pursuit of the common good: The spillover effects of charter schools on public school students in New York City. *Education Finance and Policy*, 13(4), 484-512. Retrieved September 6, 2023, from https://doi.org/10.1162/edfp_a_00240

Imberman, S.A. (2011, August). The effect of charter schools on achievement and behavior of public school students. *Journal of Public Economics*, 95(7-8), 850-863. Retrieved September 9, 2023, from <https://doi.org/10.1016/j.jpubeco.2011.02.003>

Jinnai, Y. (2014, September). Direct and indirect impact of charter schools' entry on traditional public schools: New evidence from North Carolina. *Economics Letters*, 124(3), 452-456. Retrieved September 8, 2023, from <https://doi.org/10.1016/j.econlet.2014.07.016>

Ni, Y. (2009, October). The impact of charter schools on the efficiency of traditional public schools: Evidence from Michigan. *Economics of Education Review*, 28(5), 571-584. Retrieved September 8, 2023, from <https://doi.org/10.1016/j.econedurev.2009.01.003>

Sass, T. (2006, January 1). Charter schools and student achievement in Florida. *Education Finance and Policy*, 1(1), 91-122. Retrieved September 8, 2023, from <https://doi.org/10.1162/edfp.2006.1.1.91>

Winters, M.A. (2012, April). Measuring the effect of charter schools on public school student achievement in an urban environment: Evidence from New York City. *Economics of Education Review*, 31(2), 293-301. Retrieved September 7, 2023, from <https://doi.org/10.1016/j.econedurev.2011.08.014>

Furthermore, a recent national study found significant negative effects of charter competition on student achievement in traditional public schools, a finding that contrasts with the EdChoice conclusion that choice generally has a positive effect on student achievement.

Han, E.S. & Keefe, J. (2020, April 20). The impact of charter school competition on student achievement of traditional public schools after 25 years: Evidence from national district-level panel data. *Journal of School Choice*, 14(3), 429-467. Retrieved September 7, 2023, from <https://doi.org/10.1080/15582159.2020.1746621>

- 9 Studies have found that switching to a private school can negatively affect student achievement. The last decade of research on school vouchers suggests that the negative effects of vouchers on student achievement were similar to or larger than estimates of the effects of the COVID-19 pandemic, as Cowan summarizes in this Brookings article:

Cowan, J. (2023, August 15). *Research on school vouchers suggests concerns ahead for education savings accounts*. Washington, DC: Brookings Institution. Retrieved November 16, 2023, from <https://www.brookings.edu/articles/research-on-school-vouchers-suggests-concerns-ahead-for-education-savings-accounts/>

See also:

Abdulkadiroğlu, A., Pathak, P.A., & Walters, C.R. (2018, January). Free to choose: Can school choice reduce student achievement? *American Economic Journal: Applied Economics*, 10(1), 175-206. Retrieved November 11, 2023, from <https://doi.org/10.1257/app.20160634>

Berends, M. & Waddington, R.J. (2018, Spring). School choice in Indianapolis: Effects of charter, magnet, private, and traditional public schools. *Education Finance and Policy*, 13(2), 227-255. Retrieved September 22, 2023, from https://doi.org/10.1162/edfp_a_00225

Cowan, J. (2022). *Voucher impacts on student outcomes as harmful as natural disasters (measured in standard deviation)*. National Coalition for Public Education. Retrieved November 11, 2023, from <https://greatschoolwars.files.wordpress.com/2022/11/voucher-program-3d-graph.png>

Dynarski, M., Rui, N, Webber, A., & Gutmann, B. (2018, May 29). *Evaluation of the DC Opportunity Scholarship Program: Impacts after two years*. Washington, DC: Institute of Education Sciences. Retrieved November 11, 2023, from <https://ies.ed.gov/ncee/pubs/20184010/pdf/20184010.pdf>

Figlio, D. & Karbownik, K. (2016, July 7). *Evaluation of Ohio's EdChoice Scholarship Program: Selection, competition, and performance effects*. Washington, DC: The Thomas B. Fordham Institute. Retrieved November 11, 2023 from <https://fordhaminstitute.org/ohio/research/evaluation-ohios-edchoice-scholarship-program-selection-competition-and-performance>

Lubienski, C., & Canbolat, Y. (2022, November). *Evolving evidence of school voucher effects*. Bloomington, IN: Center for Evaluation and Education Policy. Retrieved November 11, 2023, from <https://ceep.indiana.edu/education-policy/policy-briefs/2022/evolving-evidence-on-school-voucher-effects.pdf>

Mills, J.N. & Wolf, P.J. (2017, September). Vouchers in the bayou: The effects of the Louisiana Scholarship Program on student achievement after 2 years. *Educational Evaluation and Policy Analysis*, 39(3), 464-484. Retrieved September 7, 2023, from <https://doi.org/10.3102/0162373717693108>

Waddington, R.J, & Berends, M. (2018). Impact of the Indiana Choice Scholarship Program: Achievement effects for students in upper elementary and middle school. *Journal of Policy Analysis and Management*, 37(4), 783-808. Retrieved October 18, 2023, from <https://doi.org/10.1002/pam.22086>

- 10 Studies have also found that switching to a charter school can negatively affect student achievement.

See:

Bifulco, R. & Ladd, H.F. (2006, Winter). The impacts of charter schools on student achievement: Evidence from North Carolina. *Education Finance and Policy*, 1(1), 50-90. Retrieved September 8, 2023, from <https://doi.org/10.1162/edfp.2006.1.1.50>

Gulosino, C. & Liebert, J. (2020, July 20). Examining variation within the charter school sector: academic achievement in suburban, urban, and rural charter schools. *Peabody Journal of Education*, 95(3), 300-329. Retrieved September 6, 2023, from <https://doi.org/10.1080/0161956X.2020.1776074>

- 11 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (p.18). Washington, DC: The Heritage Foundation. Retrieved September 6, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>

- 12 For an example of research focused on the role of travel time and distance from school in student choice decisions, see:

Edwards, D.S. (2021, March 15). Over the river and through the woods: The role of distance in participation in rural school choice. *Journal of School Choice*, 15(4), 624-654. Retrieved September 6, 2023, from <https://doi.org/10.1080/15582159.2021.1885969>

- 13 School choice deserts refer to a lack of school choice options across sectors (public, private, charter, etc.). Examples of recent work providing evidence of choice deserts include:

Blagg, K. & Chingos, M.M. (2017, March). Who could benefit from school choice? *Mapping access to public and private schools*. Washington, D.C.: Economic Studies at Brookings. Retrieved September 7, 2023, from https://www.brookings.edu/wp-content/uploads/2017/03/es_20170330_chingos_evidence_speaks.pdf

Catt, A.D. & Shaw, M. (2019, November 27). Rural communities lacking multi-sector schooling options: Indiana's school choice deserts. *Journal of School Choice*, 13(4), 576-598. Retrieved September 8, 2023, from <https://doi.org/10.1080/15582159.2019.1691850>

- 14 This should be of particular interest to policymakers. In rural areas, schools already face a shortage of qualified teachers due to challenges related to recruitment and retention. Relevant research in this area includes:

Ingersoll, R.M. & Tran, H. (2023, March). Teacher shortages and turnover in rural schools in the US: An organizational analysis. *Education Administration Quarterly*, 59(2), 396-431. Retrieved September 7, 2023, from <https://doi.org/10.1177/0013161X231159922>

Williams, S.M., Swain, W.A., & Graham, J.A. (2021, January-December). Race, climate, and turnover: An examination of the teacher labor market in rural Georgia. *AERA Open*, 7(1), 1-23. Retrieved September 7, 2023, from <https://doi.org/10.1177/2332858421995514>

- 15 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers*. (p. 12). Washington, DC: The Heritage Foundation. Retrieved September 6, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>

- 16 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (p. 12). Washington, DC: The Heritage Foundation. Retrieved September 26, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>

- 17 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (pp. 10-11). Washington, DC: The Heritage Foundation. Retrieved September 26, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>

- 18 Authors' tabulations. Two states with identical entries in the table, New Jersey and New Mexico, were not included, although the results reported here would not change.
- 19 National Alliance for Public Charter Schools (2022, December 6). *Charter vs. district enrollment by locale breakdown 2020-2021* [webpage]. Retrieved October 23, 2023, from <https://data.publiccharters.org/digest/tables-and-figures/charter-vs-district-enrollment-by-locale-breakdown-2019-20/>
- 20 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (pp. 4-5). Washington, DC: The Heritage Foundation. Retrieved September 26, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>
- 21 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (pp. 14-15). The Heritage Foundation. Retrieved September 26, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>
- 22 NCES follows the conventions of the U.S. Census. NCES (n.d.). *Locale classifications and criteria*. Retrieved September 7, 2023, from https://nces.ed.gov/programs/edge/docs/LOCALE_CLASSIFICATIONS.pdf
- 23 The EdChoice report that provided the source of the figures for 2013-14 provided a breakdown of the number of private schools in the 12 counties with three or more private schools in Arizona without reference to community type. A different table in the same report provided the figures for the number and percentage of private schools and students by community type.
- Catt, A. (2016). *Exploring Arizona's private education sector*. EdChoice. Retrieved September 7, 2023, from <https://www.edchoice.org/wp-content/uploads/2016/12/2016-12-AZ-Private-School-Survey.pdf>
- We consulted the same data source as the 2013-14 report, the Private School Survey, to determine the community types of the schools in each county.
- 24 According to National Center for Education Statistics (NCES): "The target population for the survey consists of all private schools in the U.S. that meet the NCES definition (i.e., a private school is not supported primarily by public funds, provides classroom instruction for one or more of grades K-12 or comparable ungraded levels, and has one or more teachers. Organizations or institutions that provide support for home schooling without offering classroom instruction for students are not included.)."
- Institute for Education Sciences, National Center for Education Statistics (NCES) (n.d.) *About the data*. Retrieved on September 7, 2023, from <https://nces.ed.gov/ccd/elsi/>
- 25 According to Private School Review's "About Us" page on its website, "Schools directly update the information on our site at regular intervals, to help provide the most current data for families. Schools also respond to inquiries sent from our site, so that families can conveniently use our standardized forms to ask schools questions and receive free informational materials."
- Private School Review (2023) *About us*. Retrieved September 7, 2023, from <https://www.privateschoolreview.com/about-us>
- 26 According to Private School Review, private school enrollment in the four counties listed in Table 3 in 2023-24 was 2,389 students. Using the figure listed in Table 3 for 2013-14 (1,834 students), this means that enrollment in private schools in the three counties did not double in 10 years; rather it increased by 30%.
- Private School Review (2023). *Best Arizona private schools*. Retrieved October 23, 2023, from https://www.privateschoolreview.com/arizona#google_vignette
- 27 Scholars have found that school choice can lead to increased racial and socioeconomic segregation. For more about choice's effect on segregation, see, as examples:

Bifulco, R., Ladd, H., & Ross, S. (2008, October). Public school choice and integration evidence from Durham, North Carolina. *Social Science Research*, 38(1), 71-85. Retrieved September 15, 2023, from <https://doi.org/10.1016/j.ssresearch.2008.10.001>

Frankenberg, E., Kotok, K., Schafft, K., & Mann, B. (2017, January). Exploring school choice and the consequences for student racial segregation within Pennsylvania's charter school transfers. *Education Policy Analysis Archives*, 25(22), 1-34. Retrieved September 15, 2023, from <https://doi.org/10.14507/epaa.25.2601>

Garcia, D.R. (2008, November). The impact of school choice on racial segregation in charter schools. *Educational Policy*, 22(6), 805-829. Retrieved September 15, 2023, from <https://doi.org/10.1177/0895904807310043>

Kotok, S., Frankenberg, E., Schafft, K.A., Mann, B.A., & Fuller, E.J. (2017, June). School choice, racial segregation, and poverty concentration: Evidence from Pennsylvania charter school transfers. *Educational Policy*, 31(4), 415-447. Retrieved September 15, 2023, from <https://doi.org/10.1177/0895904815604112>

Marcotte, D.E. & Dalane, K. (2019, October 23). Socioeconomic segregation and school choice in American public schools. *Education Researcher*, 48(8), 493-503. Retrieved September 15, 2023, from <https://doi.org/10.3102/0013189X19879714>

Wilson, D. & Bridge, G. (2019, July). School choice and the city: Geographies of allocation and segregation." *Urban Studies*, 56(15), 3198-3215. Retrieved September 15, 2023, from <https://doi.org/10.1177/0042098019843481>

- 28 Scholars have found that school choice can have negative effects for students who are English language learners or/and who have Individual Education Plans (IEPs). See, as examples:

Bacon, J.K. (2019, January 2). The impact of neoliberal school choice reforms on students with disabilities: Perspectives from New York City. *Disability & Society*, 34(1), 24-45. Retrieved October 18, 2023, from <https://doi.org/10.1080/09687599.2018.1509768>

Waitoller, F.R. (2020, August 8). *Excluded by choice: Urban students with disabilities in the education marketplace*. New York: NY. Teachers College Press.

- 29 Ladner, M. & Bedrick, J. (2023, August). *From surviving to thriving: K-12 choice opportunity for rural Texas students and teachers* (p. 3). Washington, DC: The Heritage Foundation. Retrieved September 26, 2023, from <https://www.heritage.org/education/report/surviving-thriving-k-12-choice-and-opportunity-rural-texas-students-and-teachers>