Education Research Center

POLICY BRIEF

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School Mobility: A Growing and Inequitable Headwind to Educational Achievement

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What We Studied

Each time children change schools, they leave behind friends, and must adapt to a new environment. This new environment may include not only a new school, but also a new home, a new neighborhood, a new part of town, and, potentially, a new family arrangement. This larger array of possible changes will determine if the move causes overall benefit or harm to a student's educational achievement. Consequently, when analyzing the causes and effects of school mobility, one must consider multiple factors that occur before and after a student relocates to a new school.

Why study this complicated phenomenon? If you are concerned about equity in education, addressing the root causes of school mobility must be on your agenda. In Bexar County, the evidence suggests that when students change schools unrelated to structural school factors outside of their control (i.e. grade promotion, changes in school feeder patterns) educational achievement declines. The negative effects grow with each change in schools and follow students into their college years. The negative consequences of school mobility are most likely to be felt by our most vulnerable children: children in need of special education services, from economically disadvantaged families, or experiencing socialemotional challenges.

Furthermore, economic trends in Bexar County and across Texas forewarn of increasing levels of school mobility. Rising income inequality, declining access to affordable housing, and increasing school-choice opportunities under the current accountability and funding rules combine to make school mobility more likely and more severe. If we ignore this issue, our increased investments and efforts to improve education will be met by a growing headwind, preventing real forward progress in raising educational attainment rates.

Previous research has examined different aspects of school mobility such as the demographics of high mobility populations (Hartman, 2003; Ream, 2005; Temple, 1999), causes for mobility (Gruman, Harachi, Abbott, Catalano, & Fleming, 2008; Swanson & Schneider, 1999), and its effects (Gruman, et al., 2008). Based on the understanding that schools are designed to provide educational experiences that build upon each other over time and that individual learning takes place most effectively within relationships and community, our findings suggest that changing schools interrupts these natural educational processes and ultimately harms our children's growth (Wenger, 2018).

Our research problem in this study was to close gaps in our knowledge about the prevalence of nonstructural school mobility within Bexar County and its effects on teaching and learning. To do so, we conducted a mixed-methods investigation of the following research questions:

- (1) How likely do public school students experience nonstructural school mobility?
- (2) Which students are most likely to experience nonstructural school mobility?
- (3) What causes nonstructural school mobility for those with the highest rates?



Nonstructural school mobility describes when a student changes schools unrelated to grade promotion, change in attendance zones or school feeder patterns, or school closures. In this policy brief, we will refer to this type of school mobility simply as "school mobility."

How We Analyzed the Data

Our mixed-methods research design involved longitudinal multivariable regression analyses. Our primary regression model estimated how student attributes and school experiences related to school mobility. We also modeled the effect school mobility has on losing special education services and, in a separate equation, on gaining special education services. In three separate equations, we modeled the cumulative effect of school mobility on four-year high school graduation, college enrollment in the fifth year following high school entry, and college degree completion six years later.

Our target population consisted of public school students enrolled in a Bexar County public school between 1st and 12th grade at any time from 2007 to 2018, excluding those who attended schools in institutional settings such as alternative education, juvenile justice or residential care centers. We excluded students who moved to schools outside of Bexar County to control for school changes associated with long-distance family relocations, a motivation outside our interest in school mobility.

This study relied on data collected from administrative data systems and semi-structured interviews. The administrative data was student-level longitudinal data collected by the Texas Education Agency and the Texas Higher Education Coordinating Board and stored at the University of Texas Education Research Center. Data consisted of 2,409,605 student-year records.

This research project also included qualitative case study research, which used in-depth interviews, open-ended questioning, direct observation, and written documents for the purposes of data collection. For more details about this part of the project, and for the full report of quantitative findings, please see the complete report, accessible online at https://uei.utsa.edu/ in December 2020.

What We Discovered

As shown in Table 1, our study population reflects the demographics and socioeconomics of Bexar County public school students.

Table 1Student Attributes & Experiences of Study Population

| Variables | Mean | SD |
|---|----------|-------|
| Received special education services in current year | 0.105 | 0.307 |
| Acquired special education services in next year | 0.010 | 0.098 |
| Received disciplinary report in current year | 0.147 | 0.354 |
| Female | 0.482 | 0.500 |
| Limited English proficient in current year | 0.088 | 0.283 |
| Limited English proficient previously | 0.068 | 0.251 |
| Hispanic | 0.688 | 0.463 |
| White | 0.185 | 0.388 |
| Black | 0.081 | 0.273 |
| Asian | 0.021 | 0.144 |
| Other | 0.008 | 0.091 |
| Economically disadvantaged | 0.762 | 0.426 |
| Enrolled in charter school in current year | 0.047 | 0.211 |
| Enrolled in charter school in next year | 0.045 | 0.207 |
| Enrolled in DAEP in current year | 0.002 | 0.040 |
| Enrolled in DAEP in next year | 0.001 | 0.036 |
| Enrolled in JAEP in current year | 0.000 | 0.015 |
| Enrolled in JAEP in next year | 0.000 | 0.012 |
| Enrolled in alternative education in current year | 0.018 | 0.134 |
| Enrolled in alternative education in next year | 0.015 | 0.121 |
| Grade | 5.872 | 3.145 |
| Year | 2012.159 | 3.176 |

Note: Data were structured in long-format by student and year. Sample size equaled 2,409,605 student-year records of Bexar County public school students who were ever enrolled in public school from 2007 to 2018.



Charter schools enrolled a different student population than traditional public schools, as shown in Table 2. The following student attributes and experiences were found to be statistically significant (p-value < .05).

It is worth noting that we use a simplistic definition to classify schools as being either charter schools or traditional public schools because of data limitations. In this study, charter schools are all public schools created by the state's charter authorization process and not created by traditional school districts; all other schools in this study are traditional public schools. This binary definition masks the reality that some traditional public schools create in-district charter schools; while some state-created charter schools adopt policies and practices more similar to traditional public schools when it comes to student enrollment and retention. Due to data limitations we were unable to identify these finer distinctions and include them in our analysis. As a result, our findings that infer charter school effects on school mobility represent group averages, not school-specific descriptions.

 Table 2

 Student Attributes & Experiences of Study Population Enrolled in Traditional Public and Charter

| | Charter | | Traditio | Traditional | |
|---|----------|-------|----------|-------------|--|
| Variables | Mean | SD | Mean | SD | |
| Received special education services in current year | 0.084 | 0.277 | 0.106 | 0.308 | |
| Acquired special education services in next year | 0.013 | 0.113 | 0.010 | 0.098 | |
| Received disciplinary report in current year | 0.094 | 0.292 | 0.150 | 0.357 | |
| Female | 0.489 | 0.500 | 0.482 | 0.500 | |
| Limited English proficient in curent year | 0.118 | 0.323 | 0.083 | 0.275 | |
| Limited English proficient previously | 0.054 | 0.227 | 0.072 | 0.259 | |
| Hispanic | 0.711 | 0.453 | 0.687 | 0.464 | |
| White | 0.106 | 0.308 | 0.189 | 0.392 | |
| Black | 0.130 | 0.337 | 0.079 | 0.269 | |
| Asian | 0.020 | 0.141 | 0.021 | 0.144 | |
| Other | 0.008 | 0.091 | 0.008 | 0.091 | |
| Economically disadvantaged | 0.867 | 0.340 | 0.757 | 0.429 | |
| Enrolled in charter school in next year | 0.703 | 0.457 | 0.013 | 0.111 | |
| Enrolled in DAEP in current year | 0.000 | 0.000 | 0.002 | 0.041 | |
| Enrolled in DAEP in next year | 0.000 | 0.019 | 0.001 | 0.036 | |
| Enrolled in JAEP in current year | 0.000 | 0.000 | 0.000 | 0.015 | |
| Enrolled in JAEP in next year | 0.000 | 0.006 | 0.000 | 0.013 | |
| Enrolled in alternative education in current year | 0.312 | 0.463 | 0.004 | 0.062 | |
| Enrolled in alternative education in next year | 0.185 | 0.388 | 0.007 | 0.080 | |
| Grade | 5.784 | 3.053 | 5.876 | 3.149 | |
| Year | 2013.111 | 3.198 | 2012.112 | 3.168 | |

Note: Data were structured in long-format by student and year. The study sample of students enrolled in Bexar County traditional public schools equaled 2,296,647 student-year records from 2007 to 2018. The study sample of students enrolled in Bexar County traditional public schools equaled 112,958 student-year records from 2007 to 2018.

School Mobility Patterns

In Bexar County, public school students had an 18.3% probability of changing schools in any given year. Students had the highest rates of school mobility during the early grades. As students progressed, school mobility declined from a high of 27% in 1st grade to 21% in 11th grade.



Enrollment in a charter school was most strongly associated with changing schools. Students enrolled in a charter school had an expected school mobility rate of 29.5%, a rate about 1.7 times that of students enrolled traditional public schools. Traditional public school students had an expected school mobility rate of 17.9%.

The strength of the link between receiving a school disciplinary report in a given year and school mobility was a close second to that of charter school enrollment. Students who received a school disciplinary report in a given year had an expected probability of enrolling in a new school the following year equal to 26.8%, a rate 1.6 times that of students who did not receive a disciplinary action. Students who did not receive a disciplinary report had a expected school mobility rate of 16.9%.

Children experiencing poverty were more likely to change schools. Students from economically disadvantaged families had a likelihood of changing schools equal to 19.8%, a rate 1.4 times as that of students who were not economically disadvantaged. The non-economically disadvantaged students changed schools at a rate of 14.1%.

School mobility varied by race and ethnicity. After controlling for all other student attributes and experiences, students who were classified as Other (a group that includes multiracial and ethnic students and Native Americans and Pacific Islanders) had the highest predicted rate of school mobility rate at 25.5%. In close second, Black students had a predicted school mobility rate of 24.0%. Students who were White or Asian had a predicted school mobility rates equal to 19.7% and 19.6%, respectively. Hispanic students had the lowest predicted rate of school mobility equal to 17.2% after controlling for all other student variables.

Students who received special education services had a likelihood of changing schools equal to 19.4%. Students who never received special education services had a school mobility rate of 18.2%. Students who lacked special education services one year but gained them the next had a predicted school mobility rate of 22.3%. This third group represents students who did not receive special education services in a given year but may have needed them since they acquired them the following year.

Students who were currently identified as limited English proficient had a predicted school mobility rate equal to 19.1%. In contrast, students who were previously identified as limited English proficient had a lower predicted school mobility rate equal to 11.6%. Those who were never identified as limited English proficient had a predicted school mobility rate equal to 18.8%.

Gaining and losing special education services was also found to be linked to school mobility. Students who changed schools acquired special education services 1.7% of the time; while those who remained in the same school acquired special education 1.4% of the time, a 22% reduction in likelihood of gaining special education services. Students receiving special education services lost those services at a predicted rate of 10.7%; while those who remained in the same school lost special education 7.4% of the time, a 31% reduction in the likelihood of losing special education services.

Charter Schools

The subgroup of charter students that were most likely to change schools were those who received a disciplinary report. When a charter school student received a disciplinary report, their predicted probability of changing schools increased from 27.5% to 41.3%. Had these students been enrolled in a traditional public school their predicted likelihood of school mobility would have been 26.2%. The least likely to change schools were students who did not receive a school disciplinary report and who were enrolled in a traditional public school. These students had a predicted school mobility rate of 16.5%.

Students who were not receiving special education services in a given year but began receiving them in the following year had a predicted school mobility rate of 31.3% at charter schools and 22.0% at traditional public schools. Based on case study research, this group represents students being deprived of special education services. Students who were not receiving special education services in any given year had a predicted school mobility rate of 29.7% at charter schools and 17.8% at traditional public schools. Students who received special education services had a predicted school mobility rate of 28.3% at charter schools and 19.1% at traditional public schools.



School mobility by racial and ethnic subgroups had a unique pattern at charter schools. Asian, White, and Other students had the highest predicted rates of school mobility equal to 36.6%, 35.2%, and 35.2%, respectively. Black students had a predicted school mobility rate of 33.3%. While, Hispanic students were the least likely to change schools with a predicted school mobility rate of 27.0%.

Students of each ethnic and racial subgroup experienced lower school mobility rates when enrolled in a traditional public school, but their ranking by mobility differed from charters. Asian and White students had predicted school mobility rates of 18.9% and 19.1%. Black students and other students who were multiracial. multiethnic, Native American, or Pacific Islander had predicted school mobility rates of 23.6% and 25.1%. Once again, Hispanic students were the least likely to change schools with a predicted school mobility rate of 16.8% when enrolled in a traditional public school.

Charter students from non-economically disadvantaged families were more likely to change schools. These students had a predicted school mobility rate of 32%; while their classmates who were economically disadvantaged had a predicted school mobility rate of 28.7%. Had economically disadvantaged students enrolled in a traditional public school their predicted school mobility rate would have equaled 19.4%--a rate 58% lower than their charter school peers.

School Mobility & Educational Achievement

School mobility had a negative relationship to secondary and postsecondary educational achievement. Every time a student changed schools, the predicted probability of on-time high school graduation, enrollment in college (2- or 4-year institution), and completion of a postsecondary degree declined, as shown in Figures 1-3.

Figure 1

Expected Probability of On-Time High School Graduation by Number Nonstructural Annual School Changes and by Student's Economically Disadvantaged Status

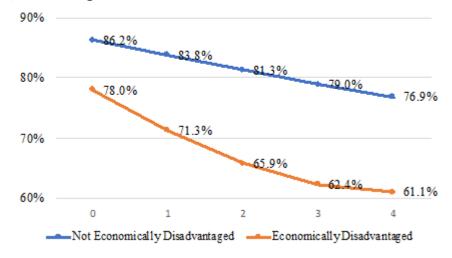
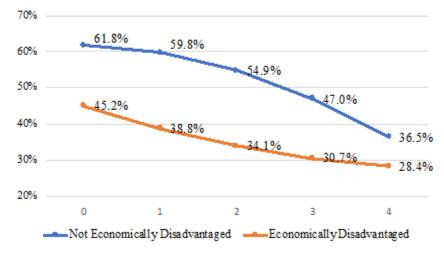


Figure 2

Expected Probability of Postsecondary Enrollment by Number

Nonstructural Annual School Changes and by Student's Economically

Disadvantaged Status



Policy Recommendations

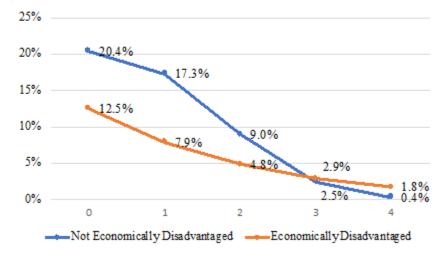
Poverty. Texas policymakers must recognize the link between poverty and educational attainment by pursuing policies that strengthen our state's safety net. Access to quality, affordable health care, food security, quality childcare, and affordable housing would stabilize the life of working families. With these basic needs met, parents would be under less stress and better able to create a nurturing home environment for their children.

High Stakes, Punitive Accountability.

Texas policymakers should lower the high stakes and punitive nature of the state's accountability system. State legislators should consider joining eight other states that have ended or reduced

Figure 3

Expected Probability of Postsecondary Degree Completion by Number Nonstructural Annual School Changes and by Student's Economically Disadvantaged Status



the use of student tests to evaluate teachers. They should eliminate the A-to-F school grading system, which lacks any evidence of measurement validity and effectiveness on accomplishing its stated policy goals.

Money Matters. The Texas legislature should commission an independent study of the actual costs of educating students with special needs, English language learners, and economically disadvantaged students. The study should consider regional cost variations. Legislators should then amend school finance law to cover the actual costs of educating these student populations.

Technical Fixes to Level the Playing Field. While the above recommendations represent fundamental solutions for addressing school mobility's root causes, the following recommendations represent more technical and discrete fixes to the existing system. All of these recommendations aim to prevent schools from being rewarded for meeting accountability standards through strategic enrollment.

State Legislature

- 1. State law should be amended to remove the ability of charter schools to exclude students who have a history of school disciplinary reports.
- 2. Schools should be required to enroll and keep enrolled a student body the reflects the demographics and socioeconomic characteristics of their county or regional area. If they fail to do so, consequences could include (a) a decrease in a school district's or school's accountability grade, (b) a requirement to submit a remediation plan, and (c) a freeze on adding more schools. The remediation plan should address enrollment issues, identification of special education students, provision of special education services, and evidence of sufficient dedication of resources.
- 3. For accountability purposes, schools that receive mobile students should share the state-mandated test scores and Career and College Readiness metrics of their mobile students with the schools who sent them. This would reduce the incentive to push out students with predicted low performance metrics.

The Texas Education Agency (TEA)

1. TEA should use existing data to flag public schools for targeted audits. These flags should identify schools that have unusual rates of low enrollment and high levels of school mobility of students with special needs. A flag



- should also be created for under-identification of students with special needs by identifying students who gain or lose special education services after changing schools. See Appendix B for an example of this type of report.
- 2. TEA should also proactively monitor schools with persistent violations and hold them accountable including revocation, nonrenewal, and closure to address significant failures in educating students with special needs.

School Districts

- School districts should introduce greater flexibility in their attendance zone policies to accommodate students
 who need to change residences due to family circumstances with the goal of minimizing school change related
 to poverty.
- 2. School districts should reexamine their disciplinary policies and practices and consider adopting alternative approaches known as restorative justice. Early descriptive research suggests these alternative approaches may reduce disparities in punitive actions against minority and low-income students and improve student outcomes (Fronius et al., 2019).
- 3. School districts should review the systems that result in under-identification of students with special needs and inadequate service provision. In conducting this review, they should interview parents and students with special needs to understand how they experience school systems intended to help them.

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