

# The Roles of Residential Mobility and Distance in Participation in Public School Choice

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## Overview

School choice advocates argue that choice policies increase access to desirable schools by breaking the link between residence and school placement. However, a growing body of research suggests that the distance from home to school actually influences school choice decisions.

In this study, we examine the relationship between residential decisions, commute time to school, and exit from inter-district and charter school choice in Michigan, and draw the following conclusions:

- A higher percentage of charter and inter-district choice students change residences than students attending schools in their resident district.
- Residentially mobile students are more likely to exit school choice programs than students who do not change residences. The majority of exits from school choice programs are associated with residential moves.
- Additional commute time past a student's nearest school is associated with an increased likelihood of exiting school choice.
- Almost half of students who exit inter-district choice move into the district that they had been attending through a choice program.

Our analyses highlight the interconnectedness of school choice and residential mobility. We also add to the growing body of literature challenging the idea that school choice programs completely decouple residence and schooling options and can alone increase access to high quality schools.

## Background

One advantage of school choice may be the ability for choice programs to increase access to high-performing schools regardless of where families live or can afford to live. But by breaking the traditional link between residence and school placement, the availability of choice programs introduces a different hurdle for families: getting to school. With longer commute times, choice programs may not increase access to effective schools if students are unable to get to them – particularly economically disadvantaged students. Even in areas where school choice is prevalent, it may be hard to access the most effective schools due to lack of transportation or other barriers that make it harder to enroll in choice options over neighborhood schools. [Few states](#) require charter schools and inter-district choice schools to provide transportation, making distance to school a potentially significant challenge to participating in school choice. Thus, proximity to schooling options can often limit families' choices even when they [prefer high-performing schools](#).

Instead of participating in school choice programs, Michigan families may use residential decisions to guarantee enrollment at desired schools because of distance.

In this study, we analyze how residential decisions, commute time to school, and exit from school choice interact in Michigan. Our data allow us to see how where students live in relation to where they attend school is related to school choice participation over time for existing and new choice students. One in four Michigan students participate in either charter or inter-district choice. Although the majority of charter schools are located in urban areas, [rural students disproportionately participate in inter-district choice](#) as seen in Figures 1 and 2. Our research provides some of the first evidence on the roles of residential mobility and commute time to school in participation in and exit from charter and inter-district choice. We analyze two geographic factors that could affect participation in and exit from school choice.

First, we look at **residential mobility**, which is when families move to a different census block than where they resided the previous year. Almost all students in Michigan have residentially assigned schools, guaranteeing their spot in a school in their district of residence regardless of school performance or family preference. Residential mobility therefore changes access to these zoned schools.

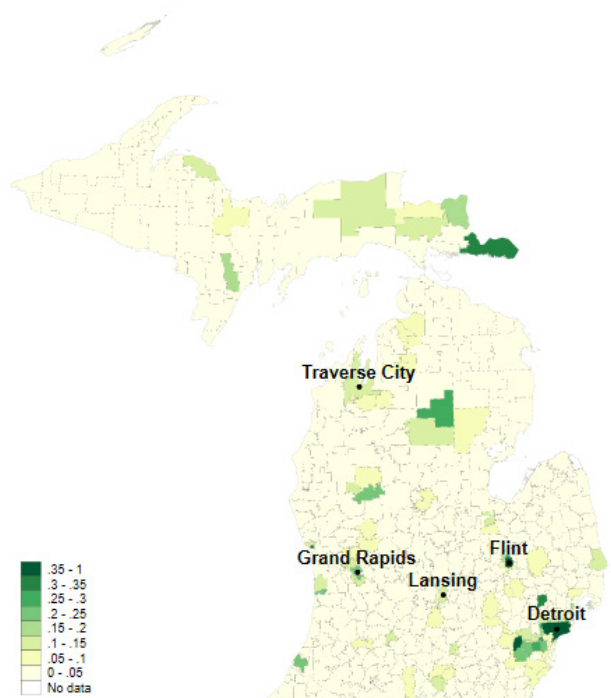


Figure 1. Proportion of students participating in charter school choice during the 2017-18 school year by district of residence. Dark green represents a higher proportion of participants.

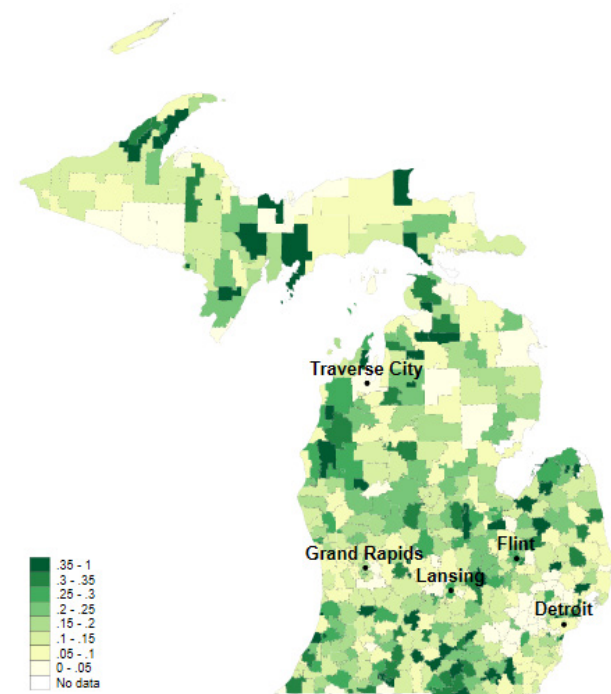


Figure 2. Proportion of students participating in inter-district choice during the 2017-18 school year by district of residence. Dark green represents a higher proportion of participants.

Next, we consider **commute time to school** and how it relates to exits from choice programs. In a system that offers expanded opportunities to attend schools regardless of where students live, it is important to examine the length of the commute to assigned and attended schools and related transportation implications. Whereas previous research has analyzed commuting and school choice focusing on one grade or one period of time, we track student enrollment and housing moves over time for students who started kindergarten in 2012-13 and advanced through 5th grade.

Many families move at least once during elementary school years. Understanding how residential mobility interplays with schooling decisions, who leaves school choice programs, and the factors that influence these activities is imperative to understand whether school choice policies are effective, for whom, and why. Overall, our findings indicate that residency and schooling decisions interact to inform nuanced considerations in school selections.

## **Are Choice Students More Likely to Move Than Resident Students?**

A higher percentage of charter and inter-district choice students change residences than students attending schools in their district of residence. Figure 3 shows the percentage of inter-district, charter, and resident students who moved at least once by the end of elementary school. A **resident student** is one who attends a traditional public school located in the district in which they live. (This is not necessarily the “neighborhood school” because some districts allow choice within districts.)

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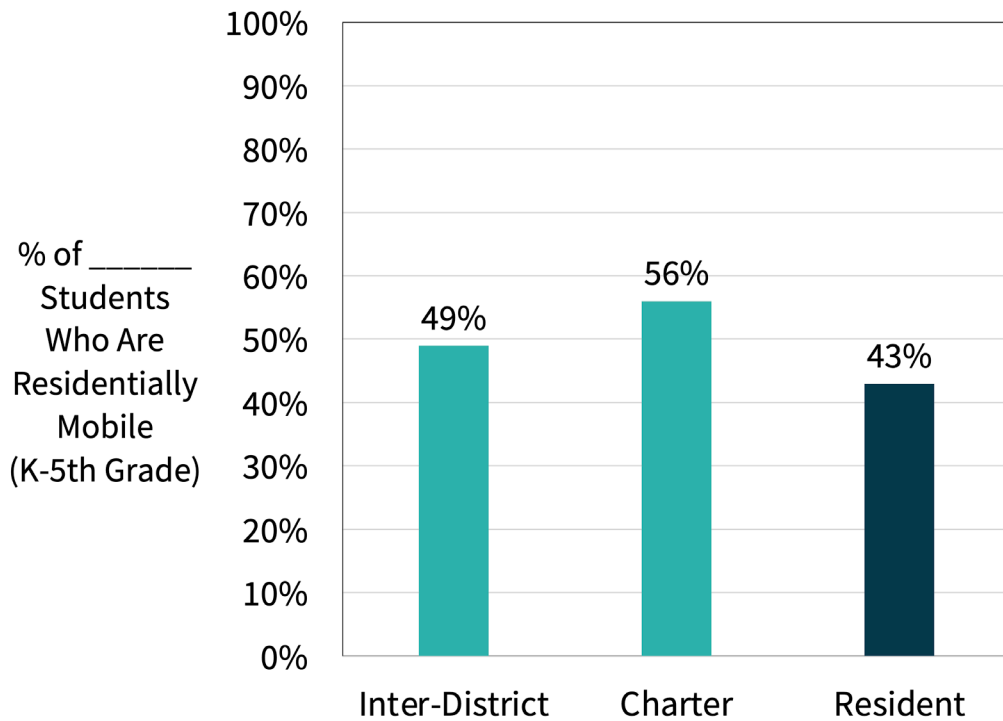
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By the end of 5th grade, 49% of students who used inter-district choice in kindergarten moved and 56% of students who began in charter schools moved. In comparison, less than half (43%) of students who attended school in their district of residence in kindergarten moved at least once in the same period.

These differences could mean that the types of families who choose charter and inter-district schools also happen to be more residentially mobile. Or families might choose a choice school because they anticipate a residential move that will allow them continued access to a single school. The following analyses help clarify the connection between these decisions.

**Figure 3. A Higher Percentage of Charter and Inter-District Choice Students Change Residences than Students Attending Schools in Their District of Residence**

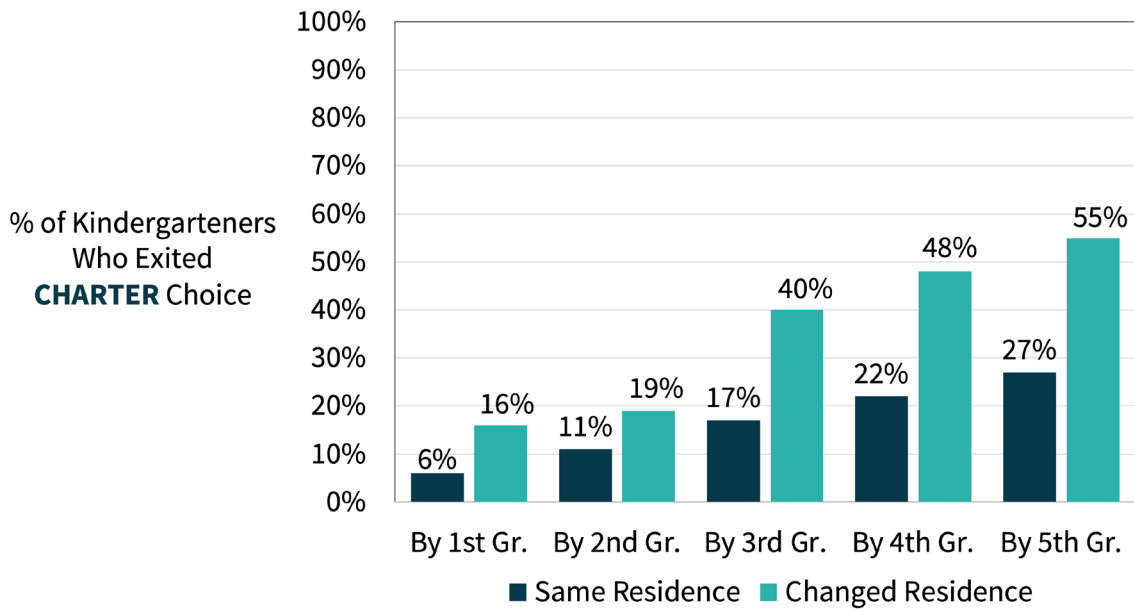
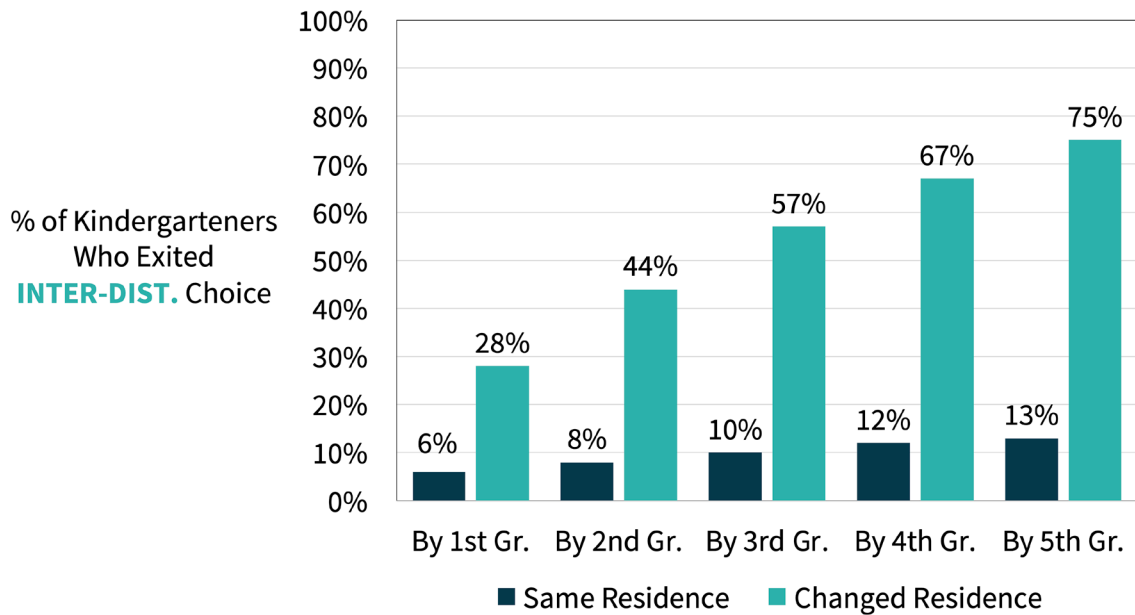


Notes: “Resident” refers to students who attend any traditional public in their district of residence. The numbers reflect the percentage of kindergartners in each category who make a residential move between kindergarten and 5th grade.

### **Are Residential Mobility and Exit From Choice Associated?**

As Figure 4 illustrates below, a significant number of students who begin in choice programs and move by the 5th grade exit their initial school choice. By 5th grade, 75% of students who used inter-district choice in kindergarten and changed residences during elementary school also exited inter-district choice. But only 13% of students who began using inter-district choice in kindergarten and never moved exited inter-district choice (see second to last bar in the top panel of Figure 4). This highlights the interconnection between school and residential choices. Changes in one are associated with changes in the other.

**Figure 4. Residentially Mobile Students are More Likely to Exit School Choice Programs**



Notes: “Changed Residence” refers to a move to a different census block at any point from kindergarten through indicated grade.

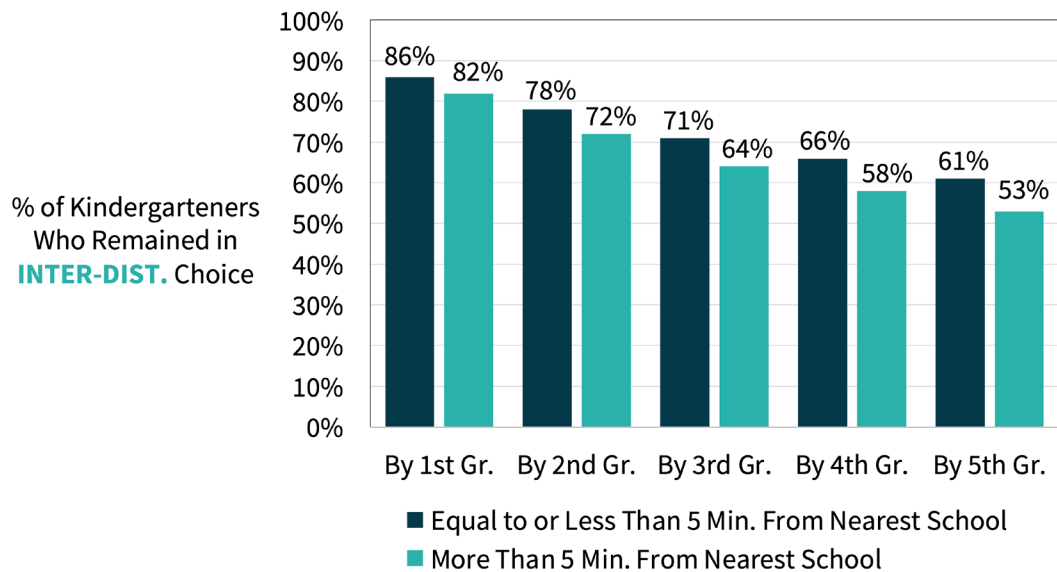
The same general pattern holds with charter schools, but to a lesser extent. Students who change residences are also more likely to exit charter schools, but the gap between this group and those who do not change residences is much smaller. This may be because charter school students do not exit school choice when they move residences in the way that inter-district choice students get reclassified as resident students. We explore this later in the brief.

## Is Additional Commute Time Associated with Exit from Choice?

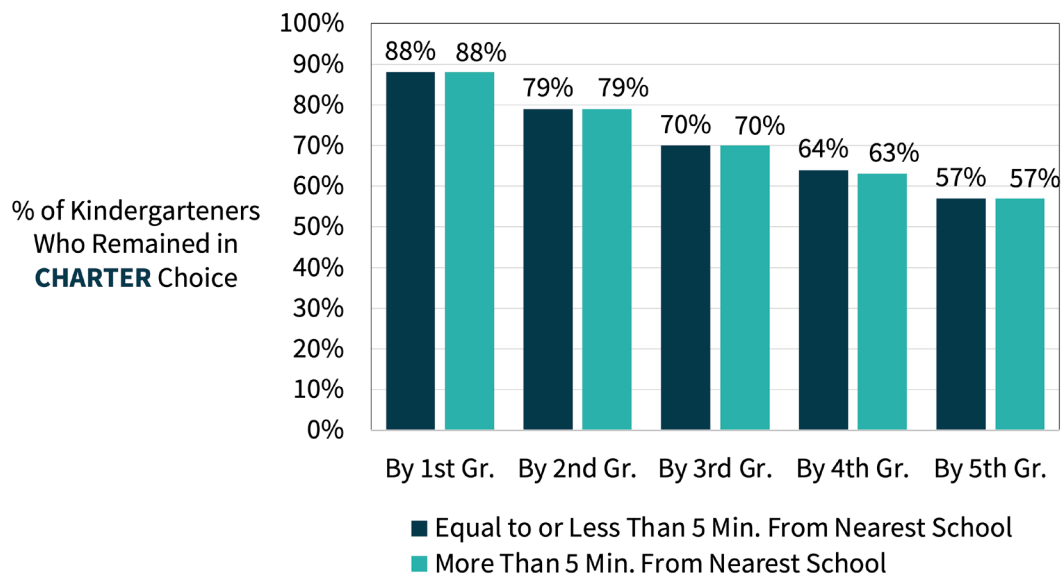
A key objective of this study is to emphasize how exits from school choice are related to the commute times to students' nearest schools and attended schools. In this case, we measured the difference in commute time between the nearest school and attended school to better understand how families weigh commute times when making school choice decisions. Our findings indicate that additional commute time past the nearest school is associated with an increased likelihood of exiting school choice.

Figure 5 shows how the additional distance families must travel to school relative to other nearby options impacts continued participation in school choice. By 5th grade, 61% of students who started using inter-district choice in kindergarten and had a commute time to their attended school that was equal to or less than five minutes from the nearest school in their resident district (approximately the median value) were still using inter-district choice. However, only 53% of these students who had a commute time to their attended school that was more than five minutes farther than their nearest school were still using inter-district choice. Although the relationship was not as apparent with charter school students (see second panel of Figure 5), the inter-district results suggest that students are more likely to consistently participate in school choice when the cost of commuting is lower. It may be that families living close to a traditional public school ultimately decide that the added distance that comes with inter-district choice is not worth it when there is a traditional public school close by.

**Figure 5. Additional Commute Time Past a Student's Nearest School is Associated with an Increased Likelihood of Exiting School Choice**



**Figure 5. Additional Commute Time Past a Student’s Nearest School is Associated with an Increased Likelihood of Exiting School Choice (Continued)**

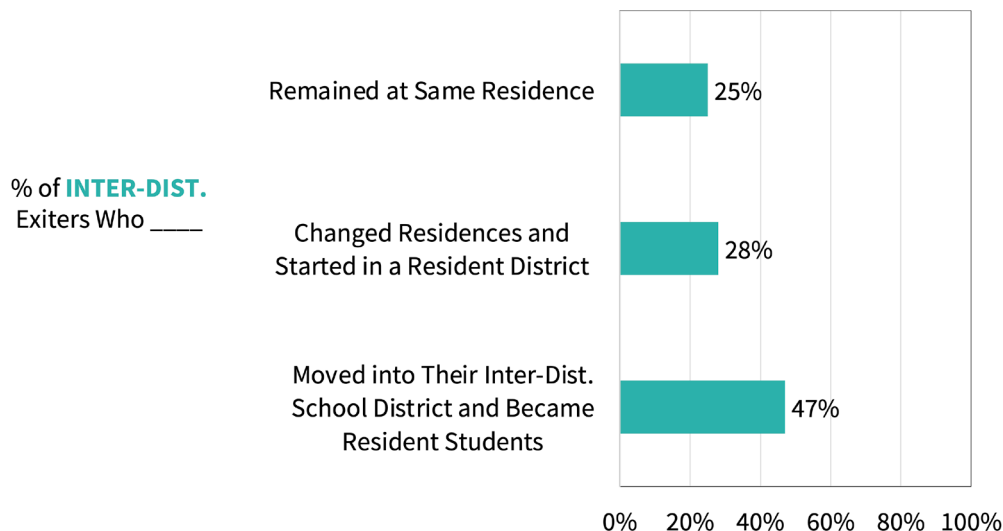


Notes: Commute time from nearest school is calculated from where students reside beginning in kindergarten.

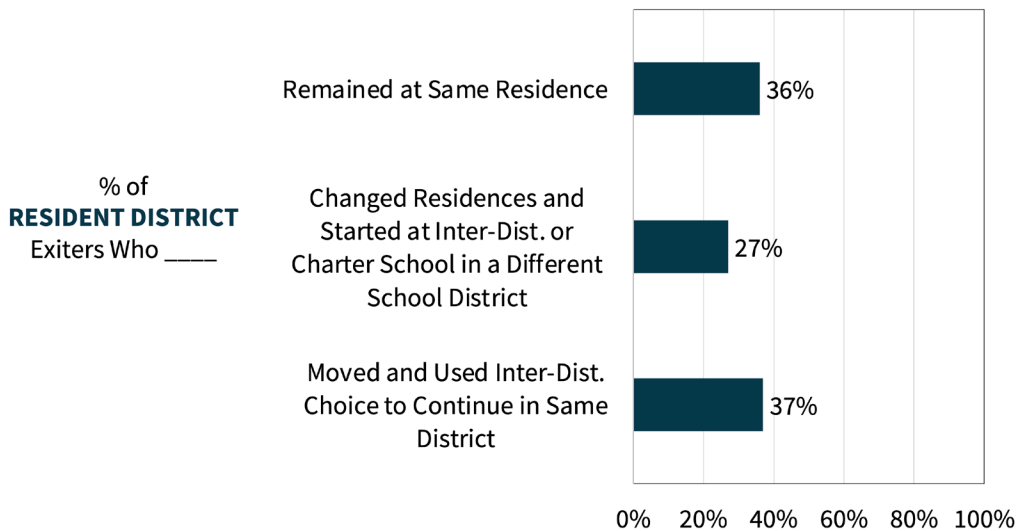
## When Students Exit Choice Programs, Where do They Go?

Almost half (47%) of students who exited inter-district choice moved into the district that they were attending through a choice program, effectively exiting school choice and becoming resident students. These families used residency to opt into a school instead of continuing through inter-district participation. In-district students who attend traditional, residence-assigned public schools follow a similar pattern, but to a lesser extent. Thirty-seven percent of students who attended any school in their district of residence in kindergarten and started using either inter-district or charter school choice moved out of their district and used school choice programs to send their children back to the district where they used to live. In these situations, a residential decision may be forcing families to move away from their desired districts, but these decisions are also triggering entry into choice. In both instances, we see how families might use school choice to maintain educational stability for residentially mobile students.

**Figure 6. Almost Half of Students Who Exit Inter-District Choice Move Into the District That They Had Been Attending Through a Choice Program**



Notes: The 28% share of inter-district exiters who changed residences and started in a resident district refers to two possible scenarios 1) these students could have moved to a different census block within the same resident district where they were already living and become students in their residential district; or 2) they could have moved into a new resident district and started attending school there.



Notes: Both figures above show residential behaviors for K-5th graders who began in kindergarten in 2012-13. Because charter students cannot exit charter school choice and remain in the same school, one of the foci of this analysis, charter patterns have been omitted.



## Conclusion

In the debate over who benefits most from school choice and how choice programs operate, policymakers should have a better understanding of factors related to exit from school choice to inform decisions moving forward. This study provides local and state policymakers with a closer look at the interplay between residence and school choice decisions. Our findings highlight two significant contributions to the analysis of exit from school choice. First, we discover that even with choice programs in place, the link between a student's residence and school remains. School proximity and residential choice still play a role in school choice participation. This makes it unlikely that school choice policies alone will increase equitable access to high-performing schools or force schools to compete for students. Second, our observations show how choice can bring educational stability to students who are residentially mobile, allowing educational continuity when students move from one residence to another.

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## How Did We Carry Out the Analysis?

To examine the relationships between residential mobility and the use of choice, we examine changes in student residence, school choice, and district attended for a cohort of kindergarten students in Michigan and followed them through 5th grade. Our sample consists of over 75,000 students who were in kindergarten in 2012-13, had a normal grade progression (not held back or skipped a grade), only attended brick-and-mortar traditional public schools and charter schools offering general education, and were present in all six years of our panel. We exclude students attending virtual schools because residential moves are less likely to affect these students' school choices. Additionally, we exclude students who leave Michigan public schools during the panel because we are no longer able to track their residential mobility when they leave for private schools or leave the state. We do not include students who were ever homeless in our sample because they do not have a stable residence by definition. Students in our analysis are considered to be residentially mobile if they live in a different census block than the previous year regardless of whether the new residence is within the boundaries of the same district.

Our main sources of data are student-level enrollment and achievement records from the Michigan Department of Education (MDE) and Center for Educational Performance and Information (CEPI). These data include student demographic information (e.g., race and ethnicity, gender, disability status, English Learner status, and economically disadvantaged status), student test scores on state standardized achievement exams (either the Michigan Educational Assessment Program, MEAP, or its successor the Michigan Student Test of Educational Progress, M-STEP), and student addresses geocoded at the census block level for all Michigan public school students from 2012-13 to 2017-18.

## How Does This Relate To Other REACH Research?

Transportation is a critical resource for school choice accessibility and one of the five policy levers of REACH. In forthcoming REACH studies, our team will analyze how changes to the public transit system in Baltimore affects families' access to high-performing schools, as well as their likelihood of graduating high school and attending college. We will also examine how students' transportation options in New York City affect a wide range of outcomes, including academic achievement, attendance, participation in after school activities, and parental engagement.

## About the National Center for Research on Education Access and Choice (REACH)

Founded in 2018, REACH provides objective, rigorous, and applicable research that informs and improves school choice policy design and implementation, to increase opportunities and outcomes for disadvantaged students. REACH is housed at Tulane University with an Executive Committee that includes researchers from Tulane, Michigan State University, Syracuse University, and the University of Southern California.

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## Disclaimer

This research result used data structured and maintained by the MERI-Michigan Education Data Center (MEDC). MEDC data is modified for analysis purposes using rules governed by MEDC and are not identical to those data collected and maintained by the Michigan Department of Education (MDE) and/or Michigan's Center for Educational Performance and Information (CEPI). Results, information and opinions solely represent the analysis, information and opinions of the author(s) and are not endorsed by, or reflect the views or positions of, grantors, MDE and CEPI or any employee thereof.

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## Corresponding Technical Paper

Danielle Sanderson Edwards and Joshua Cowen. "The Farther You Go, the Closer You Get: Understanding the Roles of Residential Mobility and Distance in Participation in Public School Choice." National Center for Research on Education Access and Choice, July 2021.