When Schools Open: Student Mobility and Racial Sorting Across New Charter Schools In Kansas City, Missouri

Working Paper 237

National Center for the Study of Privatization in Education

Teachers College, Columbia University

June 25, 2019

Patrick Denice¹
Michael DeArmond²
Matthew Carr³

Suggested citation: Patrick Denice, Michael DeArmond, and Matthew Carr, When Schools Open: Student Mobility and Racial Sorting Across New Charter Schools in Kansas City, Missouri, Working Paper 237, National Center for the Study of Privatization in Education, Teachers College, Columbia University, June 25, 2019, accessed at http://ncspe.tc.columbia.edu/working-papers/WP237.pdf.

Abstract

Does the opening of new schools of choice in urban areas lead to increased racial isolation among students? We test whether and how the availability of new charter schools in Kansas City, Missouri, has influenced patterns of racial segregation using a five-year panel of student-level data from 2011-12 to 2015-16. We find that white students are over-represented among students who switch into new charter schools relative to their representation in Kansas City's public school system, especially in later years. White students also appear to be switching into new schools with a lower proportion of black students and a higher proportion of other white students. We also find that beneath these broad patterns much of the increase in racial segregation was associated with two new schools. These findings suggest that the sorting pattern of students in Kansas City into new charter schools between 2012 and 2016 led to slightly increased levels of racial segregation. But rather than a generalized phenomenon, this sorting appears to be a function of particular schools with particular characteristics. The importance of school-level characteristics, in addition to broader school choice policy, underscores the important role that charter school authorizing and oversight plays in shaping school choice outcomes in our cities.

Keywords: Student mobility; School choice; Race/ethnicity; Segregation

Acknowledgments: We are grateful to Ewing Marion Kauffman Foundation for their generous financial support of this project. The authors also thank Alice Opalka for her excellent research assistance, Brett Hembree and Noah Devine for their comments on prior drafts, and the Missouri Department of Elementary and Secondary Education (DESE) for providing access to the data. Any opinions, findings, and conclusions or recommendations expressed in this paper are those of the authors and do not necessarily reflect the views of the Kauffman Foundation or of DESE. All errors are our own.

² Center on Reinventing Public Education, University of Washington; dearmond@uw.edu

³ Ewing Marion Kauffman Foundation; mcarr@kauffman.org

¹ Department of Sociology, University of Western Ontario; pdenice@uwo.ca

Introduction

Parents with resources have long had opportunities to choose where to send their children to school, either by moving to neighborhoods where higher-performing schools or schools that better match their students' interests are located or by enrolling their children in private schools (Lareau and Goyette 2014). Proponents of school choice policies argue that non-neighborhood public school options, such as charter schools, extend such opportunities to more families by breaking the link between where children live and where they attend school (Archbald 2004; Betts 2005) and providing choice to all families regardless of their socioeconomic resources or where in the district they happen to live (Berends and Zottola 2009; Hoxby 1998; Schneider, Teske, and Marschall 2002).

Although evidence suggests that charter schools are succeeding in expanding access to high-performing schools for individual students, especially in urban areas (CREDO 2015), researchers have found that school choice may have negative consequences. In places where school choice has expanded, for example, some researchers have found corresponding increases in segregation and inequality by race/ethnicity as well as by socioeconomic status (e.g., Kimelberg and Billingham 2013; Orfield and Frankenberg 2013; Saporito and Sohini 2007; Weiher and Tedin 2002). These increases in segregation may stem from a host of issues: Non-white and lower-income families, for instance, have been shown to experience difficulties taking advantage of school choice (Fong and Faude 2018; Sattin-Bajaj and Roda 2018); researchers have also found that white families tend to avoid schools with higher proportions of nonwhite students (Bifulco, Ladd, and Ross 2009b; Saporito 2003; Saporito and Sohini 2007).

Furthermore, higher-performing and better-resourced schools tend to be located nearby white

and higher-income families, facilitating their children's enrollment in those schools (Denice and Gross 2016). While illuminating, the literature on school choice and school segregation has paid less attention to the relationship between student mobility and school segregation in urban schools districts, and to how that relationship might be shaped given changes in the amount of choice available over time. The persistent racial/ethnic segregation in America's cities, coupled with the expansion of school choice policies, make it important to better understand the interactions among school choice, student mobility, and school segregation.

In this article, we take advantage of an influx of new charter schools in Kansas City, Missouri, between 2011-12 and 2015-16 to examine the sorting of students by race/ethnicity across schools as school choice options have expanded. Relying on student-level panel data, we track students as they switch into and populate these new charter schools. In general, we are interested in the relationship between school choice and segregation, and investigate whether student mobility prompted by the rapid expansion of the charter school sector in one urban district exacerbates racial/ethnic isolation among students. More specifically, we consider the following three research questions: First, how does the choice to select into a new charter school vary by a student's race? Second, among students who switch into a newly opened charter school, how do their previous schools compare with their new schools? Third, how has the racial composition of Kansas City's schools—and especially of its charter schools—changed over time with the introduction of new schools? In addressing these questions, our article contributes to the growing body of research on the interactions among student assignment and mobility, school choice, and patterns of segregation.

Background

More than half a century after Brown v. Board of Education of Topeka (1954) and the desegregation efforts of the 1970s, public schools in the U.S. remain highly segregated by race/ethnicity (Logan, Oakley, and Stowell 2008). Today, the average nonwhite student attends a school with fewer white students than the average nonwhite student did in 1970 (Fiel 2013). This is particularly the case in many of the nation's urban areas: As the U.S. public school population has become less white, white and nonwhite students have increasingly enrolled in different schools both across districts in the same metropolitan areas and across schools within the same school districts (Billingham 2019). While white students are the most racially isolated racial/ethnic group, segregation for black and Hispanic students is on the rise (Frankenberg et al. 2003). Although researchers debate whether progress toward desegregation has slowed or stalled in recent decades (Logan, Oakley, and Stowell 2008; Reardon and Owens 2014) or whether segregation has actually increased (Orfield and Frankenberg 2014), the literature generally finds that (1) between-district segregation is higher than within-district segregation, (2) betweendistrict segregation has held steady or increased even as within-district segregation has declined, and (3) schools remain equally or more segregated than the neighborhoods in which they are located (Fiel 2013; Logan, Oakley, and Stowell 2008; Reardon and Owens 2014; Saporito and Sohini 2006, 2007; Stroub and Richards 2013).

Racial segregation in schools separates students from one another, and stratifies the quality of schools that students attend (Welsh 2018). Evidence suggests that white and Asian students attend higher-performing and better-resourced schools than black or Hispanic students (Logan, Minca, and Adar 2012). Segregation is also associated with racial achievement gaps in math and reading (Condron et al. 2013; Reardon 2016; Reardon, Kalogrides, and Shores 2019)

and poor college achievement outcomes for students of color (Giersch et al. 2016). Students who attend predominately black or Hispanic schools are less likely to complete their high school education or attain a bachelor's degree by age 26 than their counterparts in predominately white schools (Goldsmith 2009). The consequences of school segregation stretch far beyond academic achievement and attainment, and are related to lifelong patterns of racial isolation. For instance, white students who attend high schools with higher shares of white students end up in jobs with higher proportions of white coworkers, while nonwhite students who attend schools with higher shares of white students go on to have fewer same-race coworkers (Gamoran, Barfels, and Collares 2016).

Explanations for the on-going segregation in urban public education are multifaceted. Some scholars point to the abandonment of desegregation policies and the lifting of governmental and judicial oversight of how school districts assign students to schools (Frankenberg 2013; Reardon et al. 2012). In particular, school segregation between black and white students has increased in districts that have been granted "unitary" status and thus released from court supervision of their student assignment practices (Billings, Deming, and Rockoff 2014; Clotfelter, Vigdor, and Ladd 2006; Gamoran and An 2016). Others point to the uneven distribution of students across school districts in the same area (Fiel 2013). Still others point to the gerrymandering of districts and attendance zones within districts (Richards 2014). These are all plausible explanations, but the central concern of this paper is the extent to which school choice policies (and, in particular, the expansion of school choice options available to families) contribute to the persistence of racial/ethnic segregation in public education.

Prior research suggests that school choice policies, like the introduction and growth of charter schools, can exacerbate racial/ethnic segregation among students (Bifulco and Ladd

2007; Kimelberg and Billingham 2013; Orfield and Frankenberg 2013; Renzulli and Evans 2005; Saporito and Sohini 2007; Weiher and Tedin 2002). Rather than weakening the link between home address and school enrollment, residential segregation continues to shape patterns of school segregation, even among charter schools. One study of Washington, D.C., charter schools, for example, showed that as a school's share of students that come from the surrounding neighborhood increases, the school's level of racial segregation increases as well (Jacobs 2011).

The presence of charter schools in a neighborhood may offer opportunities for families to further segregate their students by race/ethnicity. In comparing the racial/ethnic composition of schools with the composition of school-aged children living in the schools' attendance zones, Saporito and Sohoni (2006) found that charter schools were more segregated than the neighborhoods in which they were located. Similarly, in a study of public schools in Arizona, students left district-run schools with greater exposure to students of other racial/ethnic groups than their new charter schools (Garcia 2008). It may also be the case that patterns related to who does *not* select into a charter school contribute to segregation. Indeed, when charter schools become increasingly available in an area, the percentage of white students attending their locally zoned schools increases (Bischoff and Tach 2018).

The segregative potential of school choice policies is due to both demand—and supply-side constraints. On the demand-side, not every family has equal opportunity to participate in the school choice process. School choice systems are often complicated, decentralized, and opaque (Fong and Faude 2018; Sattin-Bajaj and Roda 2018). Enrolling in a chosen (as opposed to assigned) public school may be especially difficult for nonwhite and lower-income families, who are less likely to have access to the kinds of information and social networks that could facilitate

their participation in the choice process (Holme 2002; Lareau 2014; Sattin-Bajaj and Roda 2018).

Furthermore, if parents select schools based on nonacademic factors such as their student composition, in addition to or instead of schools' ability to improve students' academic achievement, then school choice policies can reinforce or worsen patterns of segregation (Bifulco, Ladd, and Ross 2009a; Renzulli and Evans 2005; Saporito and Sohini 2006). While parents across racial/ethnic groups state that the racial composition of a school is the least important factor in making decisions about where to enroll their children, black, Hispanic, and white students all increase their levels of same-race/ethnicity isolation after choosing a nonassigned public school (Weiher and Tedin 2002). Many charter schools in urban areas are located in disproportionately nonwhite areas, which could be why they are, on average, more segregated and less white than neighborhood schools (Burdick-Will and Schuble 2013). At the same time, white families turn to disproportionately white charter schools (Renzulli and Evans 2005). White families may also avoid choosing charter or other public school options with higher shares of nonwhite students, as schools whose attendance zones encompass more racially and socioeconomically diverse households have lower shares of white students than schools drawing from more racially and socioeconomically homogeneous neighborhoods (Bischoff and Tach 2018). In this way, white families' desire for schools with higher shares of white students and lower shares of nonwhite students may be facilitated by the availability and spatial distribution of "exit options."

On the supply-side, the efficacy of school choice policies to break the link between residence and school assignment, and lower racial/ethnic segregation, also depends on *where* options like public charter schools are located within a district and *whether* families have

reasonable access to them (Denice and Gross 2016). Even though families from across a district can enroll in charter schools, families still have to consider how the location of a school interacts with the constraints of a family's time, scheduling, and availability of transportation (Bell 2007). Indeed, geographic proximity to a school stands out as a key factor in whether or not parents exercise school choice and in the decision about which school to enroll in (Denice and Gross 2016; Hastings, Kane, and Staiger 2006). One study found that parents researching schools online paid more attention to a map displaying the locations of schools than to information about the schools' facilities, staff, academic and extracurricular programs, or test scores (Schneider and Buckley 2002).

The expanding opportunities to select into a non-residentially assigned public school likely have important implications for patterns of student mobility and segregation. While a host of school or family factors may initiate student mobility (including changes to a family's structure, and a desire to find a higher performing or better matched school), the majority of school changes are accompanied by changes in a family's residence (Rumberger 2003; Welsh 2017). Yet the expansion of school choice—and in particular the massive influx of new charter schools in a relatively short period of time in urban districts like Kansas City, MO—opens the door for mobility that is uncoupled from residence or residential changes. Additionally, much of the literature on student mobility has focused on school changes from the perspective of students, focusing on how changing schools affects their academic achievement and attainment (e.g., Gasper, DeLuca, and Estacion 2012; Swanson and Schneider 1999; Welsh 2017). But mobility is also important for schools and districts. Student mobility may affect the climate, available resources, and average performance at the sending and receiving schools (Hanushek, Kain, and Rivkin 2004; Kerbow 1996). At the district-level, the re-sorting of students across schools may

reduce, maintain, or worsen racial/ethnic segregation. Our study examines the relationship between student mobility into the new schools of choice and shifting patterns of segregation in one urban public school system that has experienced recent expansion of its school choice options.

The context in Kansas City, MO

In the fall of 2016, Kansas City's public school system (KC)¹ in Missouri enrolled roughly 26,000 students in about 70 district-run and public charter schools. In some ways, the system resembles other moderately sized urban districts in the United States. A majority of its students are non-white and come from socioeconomically disadvantaged backgrounds. About 57% of students in KC are black, 27% are Hispanic, and 10% are white (a smaller share—about 6%—belong to other racial/ethnic groups); 71% are eligible for free or reduced-price lunches. Like other urban districts, KC's student composition has become less white and more Hispanic over the past few decades: In the late 1990s, a little over 70% were black, just about 7% were Hispanic, and roughly 1 in 5 students were white. Students in KC attend schools that are quite segregated. In the fall of 2010 (the year prior to the start of this study's observation period), just under two-thirds of KC's schools were over 60% black, and over half (about 56%) were at least 80% black.

KC has a particularly robust school choice environment. Nearly half (about 45%) of the students in KC attend charter schools, making it one of only a handful of urban districts in the country with charter enrollment shares above 40% (David, Hesla, and Pendergrass 2017). Additionally, the system has undergone profound changes over the past couple decades.

-

¹ Throughout this article, we refer to the entire constellation of public schools—traditional district-run schools and charter schools—operating within the city as "KC."

Following substantial contraction of the system's student enrollment in the 2000s, the system has experienced explosive growth of its charter school sector. Enrollment across all public schools (district-run and charter) in KC fell from over 35,600 students in 2000 to roughly 26,000 in 2016, and a large number of schools were closed. Since 2010, however, nearly 30 new public schools have been opened or re-opened in KC, most of which have been charter schools.

Looking just at the years between 2011-12 and 2015-16 (the period covered by our data), 17 new charter schools were opened in KC. Table 1 lists these schools and their grade-levels in each year of our observation period. Most of the schools opened in the first two years: 8 schools opened in 2011-12, and 4 opened for the 2012-13 school year. The remaining 5 schools opened between 2013-14 and 2015-16.² These schools also cover a range of grade spans. There are 5 new elementary and middle schools, 1 school that consists of elementary and middle school grades, and 6 new high schools.

Table 1 about here

FIGURE 1 ABOUT HERE

The map in Figure 1 shows where the 17 newly opened charter schools are located in Kansas City. Compared to the locations of the system's pre-existing schools, the neighborhoods in which the new charter schools opened have lower shares of black and Hispanic children living in them and higher shares of white children. Children aged 5 to 17 years old in census tracts in which the newly opened charter schools are located are 43% black, 17% Hispanic, and 32% white—compared to 52% black, 22% Hispanic, and 20% white among tracts hosting pre-existing

9

-

² An additional three district-run schools opened in the 2014-15 school year: Central Middle School, Hale Cook Elementary, and Northeast Middle School.

schools.³ As noted above, the location of new schools in a district is important for patterns of student segregation (Burdick-Will and Schuble 2013). Families are more likely to select a school nearby their home, even when given the option of choosing from among charter schools with open enrollment boundaries (Denice and Gross 2016). At the same time, research has shown that even when charter schools in urban districts are located in predominantly white neighborhoods, their enrollments over-represent *non* white students (Gulosino and d'Entremont 2011).

In this context, our study examines whether and how student mobility into these new charter schools attenuates or reinforces patterns of racial/ethnic segregation. We focus on these new schools because they represent a rather sudden infusion of new schools into the overall supply of schools in the system, and they are schools in which any student in the district could theoretically enroll. Which students are most likely to select into one of these 17 new charter schools, and how do their previous schools compare? That is, are students who move into new schools moving to relatively more or less segregated environments compared to their prior school? Additionally, how has this redistribution of students shaped the racial/ethnic composition and segregation of KC schools overall?

Data and methods

We draw on a five-year panel of student-level data from 2011-12 through 2015-16 for all public district-run and charter schools in Kansas City's public school system (KC). These data were provided by Missouri's Department of Early and Secondary Education (DESE). Our data cover the 46,052 students who attended a KC public school at any time during the observation

10

³ Data about neighborhood racial/ethnic composition among 5-to-17-year-old children come from the 2011-2016 American Community Survey (ACS) 5-year estimates. Schools are geo-located in census tracts using their latitude and longitude coordinates from the NCES Common Core of Data (CCD).

period, and consist of 163,657 student-year records. We selected these years because this time period captures substantial growth in the number of charter schools operating in KC; as noted above, 17 charter schools were newly opened during this time.

For each student in the district, our data include the schools in which a student was enrolled throughout our 5-year observation period as well as demographic characteristics such as their race/ethnicity. We link school-level information—including schools' student composition (the proportion of students who are black, Hispanic, white, and other) and physical address—from the National Center for Education Statistics' Common Core of Data (CCD) and DESE to students' records. We also use the CCD data to categorize schools as either district-run or charter schools, and to indicate whether schools are newly opened in each given year.

Unique student identifiers allow us to track students in the data through consecutive years as they change schools. For most of our analyses, we focus on the 5,350 students who enrolled in a newly opened charter school during 2012–2016. These students may have been enrolled in a new charter school since the first year of our observation period (2011-12), or they may have changed into one of these schools from another public school in Missouri at some point between 2011-12 and 2015-16. We term both sets of these students "switchers." We compare these switchers to two other groups of students: (i) students who switch into other KC schools (i.e., district-run or charter schools that existed prior to the start of our observation period), and (ii) students in KC schools more generally.

Analytic strategy

The goal of this article is to describe patterns of racial/ethnic sorting among students who enroll in a newly opened charter school in KC. To that end, among those who switch into one of

the 17 newly opened charter schools, we compare the racial/ethnic composition of students' previous schools with their current school. If students are using the new open-access schools in KC to sort into schools with fewer students of color, we expect to find substantial differences between the racial/ethnic composition of students' previous and current schools. We also examine changes in school composition among students who make other kinds of changes within KC (e.g., students who switch between two district-run schools, or students who switch from a district-run school to a pre-existing charter school in KC). Comparing these changes to students who enroll into the newly opened charter schools helps us assess whether the new charter schools offer a particular opportunity for racial/ethnic sorting.

Furthermore, we calculate school-level diversity indices to examine the degree of racial diversity in switchers' previous and current schools. The diversity index, *DIs*, provides the probability that any two students selected at random from school *s*'s population of students will be from different racial groups (Simpson 1949). The index is defined as follows:

$$DIs=1-(Blacks2+Hispanics2+Whites2+Others2)$$
 (1)

where the sum of the squared proportions of racial groups (black, Hispanic, white, and other) making up school *s*'s total enrollment is subtracted from 1. Given the four racial groups here, the *DIs* can range from 0 (not at all diverse; school consists of only one racial group) to 0.75 (all four racial groups are equally represented). Consider a school in which 97% of students are black and 1% of students each belong to the other three racial groups. This school would have a *DIs* equal to 0.0588. If we were to randomly select two students from this school, then in more than 94 out of 100 random draws, the two students would come from the same racial group. Consider instead a school in which each racial group is equally represented at 25% of the enrollment. This

school's *DIs* would be 0.75, suggesting that if we were to draw two students at random, then there is a 75% chance that those two students would come from different racial groups.

We compare the *DIs* in the schools in which students were enrolled immediately prior to switching into one of the 17 newly opened charter schools to the *DIs* of their new school. If new charter schools in the system are contributing to increased racial/ethnic segregation, we would expect to find a decrease in this school-level measure of diversity as students move from their previous school to their newly opened charter school.

Additionally, we use the index of dissimilarity to measure the racial segregation of students across schools in the school system (Massey and Denton 1988b, 1988a). As a measure of evenness, the dissimilarity index, D, indicates the proportion of the population that would have to be reassigned to other schools so that each school would have the same composition as the system overall. The index of dissimilarity examining evenness among black and white students is calculated as follows:

$$D=12s=1nBlacksBlackd-WhitesWhited$$
 (2)

where *Blacks* and *Whites* represent the number of black and white students in school *s*, and *Blackd* and *Whited* represent the number of black and white students in district *d*. *D* ranges from 0 (perfect racial balance in all schools) to 1.0 (perfect imbalance; all black students would need to be reassigned). Values below 0.30 generally indicate low levels of segregation, values between 0.30 and 0.60 indicate moderate levels of segregation, and values above 0.60 indicate high levels of segregation. We repeat this calculation for Hispanic students and for students of other racial/ethnic groups. Additionally, in order to compare levels of segregation in KC overall

to segregation in the system's charter sector, we compute D separately for the whole system and for charter schools only.

Findings

Between 2011-12 and 2015-16, the share of students enrolled in the 17 newly opened charter schools increased substantially. As Figure 2 shows, in the 2011-12 school year, 4% of all KC students and 10% of KC's charter school students were enrolled in the 8 charter schools that were in their first year of operation. By the 2015-16 school year, nearly 15% of all KC students and over one-third of the system's charter school students had switched into the 15 new charter schools that were still open.⁴

FIGURE 2 ABOUT HERE

How do the students who switched into a newly opened charter school compare in terms of their race/ethnicity to other students in the district? Table 2 shows the racial composition of the 5,350 students who switched into one of the new charter schools at some point between 2011-12 and 2015-16, and compares these students to those in pre-existing charter schools, to students in the district's non-charter schools, and to all students in KC. While the racial composition of students attending the newly opened charter schools roughly mirrors the overall racial composition of the district as a whole, new charter schools have lower shares of black students and higher shares of white students compared to the district's pre-existing charters (i.e., those charter schools that were open prior to the start of the 2011-12 school year). Among the newly opened charter schools, 68% of students are black, 22% are Hispanic, and just under 9%

14

_

⁴ Two of the charter schools—Derrick Thomas College Prep and Hope Academy–Bennington Campus—had closed before the fall of 2015.

are white. By contrast, 77% of students in pre-existing charter schools are black, 18% are Hispanic, and 4% are white. Black students are also somewhat over-represented in the new charter schools relative to their representation in KC's district-run schools.

TABLE 2 ABOUT HERE

The overall shares of students by race/ethnicity in Table 2 belie important changes in student composition over time. Table 3 compares the racial composition of the newly opened charter schools to the district's pre-existing charters and to its district-run schools in each of the 5 years between 2011-12 and 2015-16. Figure 3 illustrates these results by plotting the ratios of the share of each racial/ethnic group in new charter schools to (i) KC's pre-existing charter schools and (ii) the system's district-run schools. Consider the first panel in the figure: A value of 1.0 indicates an equal share of black students is enrolled in the newly opened charter schools as is enrolled in either KC's pre-existing charter schools or its district-run schools; values above 1.0 indicate that a higher share of black students is enrolled in the new charter schools; and values below 1.0 indicate that a lower share of black students is enrolled in the new charter schools.

TABLE 3 ABOUT HERE

FIGURE 3 ABOUT HERE

In 2011-12, when 8 of the 17 new charter schools had opened, black students accounted for a higher share in these schools than they did in either the pre-existing charter schools or KC's district-run schools. Whereas 77% of the new charters' students were black, black students accounted for 70% of the total enrollment in KC's pre-existing charter schools and 66% of the enrollment in district-run schools. However, by 2015-16, across the 15 newly opened charter schools, black students accounted for a lower share than in KC's two other types of schools. Black students accounted for just over half of the enrollment in the new charter schools, but 65%

of the enrollment in the system's pre-existing charters and nearly 60% of the system's district-run schools. Put differently, Figure 3 shows that in 2015-16, the share of black students in the newly opened charter schools was 80% as high as in the district's other charters and 87% as high as in the district-run schools.

White students followed the opposite trend. In 2011-12, white students made up about 6% of the new charters' total enrollment, and 9 or 10% of the pre-existing charter and district-run schools. By 2015-16, the share of white students in the new charter schools was over 2 times as high as in the pre-existing charters and nearly 1.6 times as high as in KC's district schools. This reversal in the representation of white students in the new charter schools appears largely to occur at the start of the 2014-15 school year—when a new elementary school (Academie Lafayette–Cherry) opens its doors, several schools (including a STEM-focused high school, Frontier) add additional grade levels, and another newly opened high school (Hope Academy–Bennington Campus) closes.

How do switchers' previous schools compare to their new schools? In other words, how different are the schools students are coming from in terms of their racial/ethnic composition and their level of segregation compared to the newly opened charter schools students enter? Table 4 compares the racial composition of students sending and receiving schools, both among students who switch into one of the 17 newly opened charter schools and among students who make other school changes (e.g., into a district-run school or into a pre-existing charter school).

Table 4 about here

Overall, students who switch into the newly opened charter schools are moving to schools that enroll lower shares of black and white students, and higher shares of Hispanic students, than their previous schools. Both white and black students appear to be switching into

new charter schools with lower shares of black students than their previous schools. The new charter schools attended by black students enroll 4.4 percentage points fewer black students than their previous schools; similarly, the new charter schools in which white students enroll are 3.4 percentage points less black.

This is in contrast to the moves students make to other types of schools. When black students switch into a district-run or pre-existing charter school, their new school has a similar share of black students as their previous school. White students who switch into a district-run or pre-existing charter school enroll in schools with black student shares that are 5.1 percentage points *higher* than their previous schools. Additionally, white students are also switching into new charter schools with higher shares of white students than their previous schools. In this way, white students in particular appear to be using the newly opened charter schools as a vehicle for choosing schools that enroll more students like themselves and fewer black students.

Table 5 about here

What is the effect of student mobility into newly opened charter schools on the overall diversity of KC's schools? Generally, as the top row in Table 5 suggests, students who switch into one of the new charter schools are moving into schools that are roughly as diverse as the schools they are leaving. However, when disaggregating the pattern by students' racial/ethnic group, a different picture emerges. While black students' previous and new schools have similar levels of diversity, Hispanic and white students (as well as students of other racial groups) are entering schools with lower levels of diversity than their previous schools. For Hispanic students, this appears to be due to the increase in the share of other Hispanic students they experience in their new schools. For white students, this is likely the result of leaving schools with higher shares of other white students. White

students who switch into one of KC's existing charter or district-run schools experience no meaningful change in diversity; it is only when they switch into one of the 17 newly opened charter schools that their peers become significantly less diverse.

FIGURE 4 ABOUT HERE

This relationship between student mobility into less diverse newly opened charter schools compared to students' previous schools is reflected in the indices of dissimilarity, plotted in Figure 4. Between 2011-12 and 2015-16, the level of segregation between black and white students in KC overall does not change substantially; it hovers around 0.54 across all 5 years, indicating a moderate to high level of segregation between these two groups. Segregation between black and white students in KC's charter sector, on the other hand, is markedly higher—and it increases over time, as more charter schools open their doors. The index of dissimilarity measuring segregation between black and white students in charter schools increases from 0.63 in 2011-12 to 0.73 in 2015-16. Similarly, segregation between Hispanic and white students is much higher in the charter sector than in KC overall, and segregation between these two groups grows over time at roughly comparable rates in both sets of schools. Finally, segregation between students of other racial groups and white students holds fairly steady across the five years and, again, segregation in the charter sector is somewhat higher than in the district overall.

So far, our results suggest that levels of racial segregation—particularly between white and black students—increased between 2011-12 and 2015-16, with the introduction of the 17 new charter schools. But these aggregate patterns may mask school-specific variation in the racial/ethnic distribution of students across the new schools, as well as changes in each school's racial composition over time. Figure 5 explores this possibility by showing the percentage of black, Hispanic, and white students over time by school.

FIGURE 5 HERE

Indeed, as illustrated by Figure 5, two schools appear to be driving much of the increase in aggregate segregation by race/ethnicity. Academie Lafayette–Cherry (an elementary school that first opened for the 2014-15 school year) and Crossroads Academy of Kansas City (which opened to elementary and middle school students in the fall of 2012) appear to enroll lower-than-average shares of black students compared to the other new charter schools, and much higher shares of white students. This is especially evident in the third panel of the figure. White students make up roughly 69% of the total enrollment at Academie Lafayette–Cherry, and between 32 and 38% at Crossroads Academy. In contrast, just around 6% of students at the other new charter schools and around 9% of students in KC's district and charter schools overall are white. This suggests that the introduction of these two schools in the system account for much of the aggregate trends in increasing segregation observed above.

Conclusion

This article sought to examine the implications of new charter schools with open attendance boundaries in one urban public school district for student mobility and the redistribution of students by race/ethnicity. Over a five-year period, 17 new charter schools were opened in Kansas City's public school system (KC) in Missouri. These schools tended to be located in neighborhoods with higher shares of white school-aged children than the typical existing schools in the system. By focusing on new charter schools, we are able to track the enrollment and sorting of students when their families are faced with new options.

While KC's new charter schools are attracting students from across racial/ethnic groups, the tendency of white students to avail themselves of these new school options increased over

time. At the start of our observation period (in 2011-12) when just 8 new charter schools had opened, white students were underrepresented in the new charters relative to their enrollment in the system's other schools. However, by the 2015-16 school year, white students were about twice as likely to be enrolled in one of the new charter schools than they were to be enrolled in KC's other charter and district-run schools. Furthermore, students appear to be leaving more diverse schools and entering schools that enroll more students of their own racial/ethnic group. This is especially true for white students, who are entering schools with lower proportions of black students, higher proportions of white students, and lower levels of racial/ethnic diversity compared to the schools they are leaving.

By dis-aggregating changes in students' racial/ethnic composition by school, as in our final analysis, we found that two new charter schools in particular have enrolled disproportionate shares of white students, thereby contributing to increasing segregation between students. This is a surprising and notable finding. Even in a system in which nearly half of the students attend charter schools, a relatively small set of schools (in this case, just two) can affect aggregate levels of racial/ethnic segregation. This has implications for how policymakers regulate the market of school choice options available to parents, including the need to pay attention to school authorizing, siting, and growth. Simply expanding the school choice options available to families does not directly address the twin realities that desirable schools are unevenly distributed across cities in the United States and that neighborhoods and schools remain segregated by race/ethnicity (Denice and Gross 2016; Saporito 2003).

In the years since Figure 5 left off, these two schools have received additional financial support from philanthropic groups in Kansas City to support their growth and especially to increase their enrollment of students of color. What has been the return on that investment?

Preliminary indications suggest that little has so far changed, as the racial/ethnic composition of these two schools has held relatively steady since our observation period ended in 2015-16. In the 2017-18 school year (the most recently available school-level data from DESE), Academie Lafayette–Cherry enrollment was about 65% white, 17% black, and 5% Hispanic. The school has redoubled its efforts to enroll markedly more diverse kindergarten classes, the aim being to diversify through cohort replacement (Williams 2018). This suggests that even when policymakers are attune to the compositional challenges facing particular schools, change can take time.

Enrollment at Crossroads Academy in 2017-18 was about 40% white, 35% black, and 17% Hispanic. As a "diverse-by-design" school located in the downtown core of Kansas City, part of Crossroads Academy's enrollment strategy is to build a student body that reflects the city's broader demographic makeup.⁵ On the one hand, this strategy appears to be attracting students—especially white, middle-class students—back into the city's public school system following decades of white flight (Bifulco and Ladd 2007; Frankenberg, Lee, and Orfield 2003; Martin 2018). While direct strategies for integration such as desegregation orders and busing typically discourage white families away from local public schools and districts, public schools of choice (including charter and magnet schools) are thought to keep white families in or attract them back to a city's public education system. As a result, such schools have the potential to counteract the consequences of school segregation by promoting a diverse learning environment, which has been shown to boost academic outcomes, promote interracial friendships, and reduce prejudice among students (Pettigrew and Tropp 2006; Wells, Fox, and Cordova-Cobo 2016).

⁵ See the school's "Core Values" on its website (http://www.crossroadsschoolskc.org/about/core_values), as well as Tach (2014) for a broader overview of the "diversity-by-design" policy initiative.

And, indeed, Crossroads Academy has a relatively high level of diversity (with a diversity index of 0.66 in 2016) compared to KC's other new charter schools (0.38) and its district-run schools (0.44). Yet we would not necessarily expect any given school to enroll equal shares of white, black, Hispanic, and other students (as a higher diversity index would indicate, with a maximum value of 0.75) since the district as a whole is not made up evenly of these student groups. Indeed, white students in this particular school are substantially over-represented relative to their share in KC public schools overall (about 10%) and to the share of school-aged children in the surrounding neighborhoods who are white (about 15%). Further, the share of white students in this school appears to have increased since its inception, while black enrollment has declined. There is also some evidence that that the educational attainment of students from poorer neighborhoods suffers when they attend schools with more white and higher income peers (Owens 2010). In this way, policymakers need to be attentive to how nonwhite and lower-income students are integrated into largely white and higher-income schools in order for interventions like "diverse-by-design" to succeed. An "oasis" of white enrollment in a city's urban core does not necessarily translate to meaningful diversity or integration.

This study is not without its limitations and caveats. First, we do not expect the results of our study to generalize to all urban public school systems in the U.S. While student enrollment in charter schools continues to grow nationwide, particularly in urban districts, few other districts have the same degree of market penetration by charter schools as Kansas City (David, Hesla, and Pendergrass 2017), and even fewer have experienced so rapid an expansion of their charter sectors. Yet other research has found similar patterns of the segregative effects of charter schools and other school choice policies in various contexts. For instance, one researcher found that students in Arizona left district-run schools with greater exposure to students of a different

race/ethnicity than at their receiving charter schools (Garcia 2008). Another study found that student mobility between Michigan's district-run and charter schools exacerbated the isolation of nonwhite and lower-income students in lower-performing schools that serve high shares of similarly disadvantaged students (Ni 2012). Furthermore, by focusing on a particular public school district as it undergoes a substantial market shift given the opening of new charter schools, we are able to provide a more granular assessment of segregation at the school level rather than looking only at aggregate patterns and trends.

Second, we are only able to observe students and schools across a relatively short period of five years. It would be beneficial to observe these new schools over longer periods of time as their student compositions and reputations continue to evolve and solidify (Goyette, Farrie, and Freely 2012). It could also prove instructive to follow students over a longer period of time as they enter and potentially then subsequently *leave* the system's new charter schools. Research shows that students change schools multiple times at nontrivial rates, and that such frequent changes shape students' achievement as well as system-wide patterns of segregation (Welsh 2017, 2018). Finally, future research should consider the impact of student mobility into new charter schools—particularly in a context like Kansas City when so many new schools opened in such a short period of time—on students' individual academic achievement and on schools' average performance. When many new school options are suddenly available, some families may be better positioned to take advantage of these new opportunities given their social and cultural capital as well as where the new schools are located, while other students are left behind (Denice and Gross 2016; Fong and Faude 2018; Holme 2002; Lareau 2014; Sattin-Bajaj and Roda 2018). By the same token, some schools may see large swings in their average performance depending on whether they are on the sending or receiving end of student transfers.

In the abstract, some proponents argue that school choice policies might raise the racial/ethnic and socioeconomic diversity of schools in a system by removing the constraints of residential-based assignment and allowing parents to enroll their children in higher-performing and more integrated schools (Frankenberg, Siegel-Hawley, and Wang 2011). By enabling families to select from among an expanded set of public school options, charter schools might initiate a sorting process that could redistribute students of diverse racial, ethnic, and socioeconomic backgrounds across a system. The results presented here, however, underscore the extent to which such outcomes depend on market management and oversight, including authorizing, siting, and facilities decisions. As others have noted, simply expanding the options available to students and their families will not meaningfully ameliorate the connection between residential and school segregation in America's cities (Denice and Gross 2016; Saporito 2003). Providing new options for exercising school choice can reinforce or worsen racial/ethnic segregation among students as a result of where the new schools are located and who takes advantage of them.

References

- Archbald, Douglas A. 2004. "School Choice, Magnet Schools, and the Liberation Model: An Empirical Study." *Sociology of Education* 77 (4): 283–310.
- Bell, Courtney A. 2007. "Space and Place: Urban Parents' Geographical Preferences for Schools." *The Urban Review* 39 (4): 375–404.
- Berends, Mark, and Genevieve C. Zottola. 2009. "Social Perspectives on School Choice." In *Handbook of Research on School Choice*, edited by Mark Berends, Matthew G. Springer, Dale Ballou, and Herbert J. Walberg, 35–53. New York, NY: Routledge.
- Betts, Julian R. 2005. "The Economic Theory of School Choice." In *Getting Choice Right: Ensuring Equity and Efficiency in Education Policy*, edited by Julian R. Betts and Tom Loveless. Washington, DC: Brookings Institution Press.
- Bifulco, Robert, and Helen F. Ladd. 2007. "School Choice, Racial Segregation, and Test-Score Gaps: Evidence from North Carolina's Charter School Program." *Journal of Policy Analysis and Management* 26 (1): 31–56.
- Bifulco, Robert, Helen F. Ladd, and Stephen L. Ross. 2009a. "Public School Choice and Integration Evidence from Durham, North Carolina." *Social Science Research* 38 (1): 71–85.
- ——. 2009b. "The Effects of Public School Choice on Those Left Behind: Evidence from Durham, North Carolina." *Peabody Journal of Education* 84 (2): 130–49.
- Billingham, Chase M. 2019. "Within-District Racial Segregation and the Elusiveness of White Student Return to Urban Public Schools." *Urban Education* 54 (2): 151–81.

- Billings, Stephen B., David J. Deming, and Jonah E. Rockoff. 2014. "School Segregation, Educational Attainment, and Crime: Evidence from the End of Busing in Charlotte-Mecklenburg." *Quarterly Journal of Economics* 129 (1): 435–376.
- Bischoff, Kendra, and Laura Tach. 2018. "The Racial Composition of Neighborhoods and Local Schools: The Role of Diversity, Inequality, and School Choice." *City and Community* 17: 675–701.
- Burdick-Will, Julia, and Todd Schuble. 2013. "Closing and Opening Schools: The Association Between Neighborhood Characteristics and the Location of New Educational Opportunities in a Large Urban District." *Journal of Urban Affairs* 35 (1): 59–80.
- Center for Research on Education Outcomes (CREDO). 2015. *Urban Charter School Study Report on 41 Regions: 2015*. Stanford, CA: Stanford University.
- Clotfelter, Charles T., Jacob Vigdor, and Helen F. Ladd. 2006. "Federal Oversight, Local Control, and the Specter of 'Resegregation' in Southern Schools." *American Law and Economics Review* 8: 347–89.
- Condron, Dennis J., Daniel Tope, Christina R. Steidl, and Kendralin J. Freeman. 2013. "Racial Segregation and the Black/White Achievement Gap, 1992 to 2009." *The Sociological Quarterly* 54 (1): 130–57.
- David, Rebecca, Kevin Hesla, and Susan Pendergrass. 2017. *A Growing Movement: America's Largest Public School Charter Communities*. 12th ed. Washington, DC: National Alliance for Public Charter Schools.
- Denice, Patrick, and Betheny Gross. 2016. "Choice, Preferences, and Constraints: Evidence from Public School Applications in Denver." *Sociology of Education* 89 (4): 300–320.

- Fiel, Jeremy E. 2013. "Decomposing School Resegregation: Social Closure, Racial Imbalance, and Racial Isolation." *American Sociological Review* 78 (5): 828–48.
- Fong, Kelley, and Sarah Faude. 2018. "Timing Is Everything: Late Registration and Stratified Access to School Choice." *Sociology of Education* 91 (3): 242–62.
- Frankenberg, Erica. 2013. "The Role of Residential Segregation in Contemporary School Segregation." *Education and Urban Society* 45 (5): 548–70.
- Frankenberg, Erica, Chungmei Lee, and Gary Orfield. 2003. *A Multiracial Society with Segregated Schools: Are We Losing the Dream?* Cambridge, MA: The Civil Rights Project, Harvard University.
- Frankenberg, Erica, Genevieve Siegel-Hawley, and Jia Wang. 2011. "Choice Without Equity: Charter School Segregation." *Education Policy Analysis Archives* 19 (1): 1–92.
- Gamoran, Adam, and Brian P. An. 2016. "Effects of School Segregation and School Resources in a Changing Policy Context." *Educational Evaluation and Policy Analysis* 38 (1): 43–64.
- Gamoran, Adam, Sarah Barfels, and Ana Cristina Collares. 2016. "Does Racial Isolation in School Lead to Long-Term Disadvantages? Labor Market Consequences of High School Racial Composition." *American Journal of Sociology* 121 (4): 1116–67.
- Garcia, David R. 2008. "The Impact of School Choice on Racial Segregation in Charter Schools." *Educational Policy* 22 (6): 805–29.
- Gasper, Joseph, Stefanie DeLuca, and Angela Estacion. 2012. "Switching Schools: Revisiting the Relationship between School Mobility and High School Dropout." *American Educational Research Journal* 49 (3): 487-519.

- Giersch, Jason, Martha Cecilia Bottia, Roslyn Arlin Mickelson, and Elizabeth Stearns. 2016.

 "Exposure to School and Classroom Racial Segregation in Charlotte-Mecklenburg High Schools and Students' College Achievement." *Education Policy Analysis Archives* 24

 (32): 1–24.
- Goldsmith, Pat Rubio. 2009. "Schools or Neighborhoods or Both? Race and Ethnic Segregation and Educational Attainment." *Social Forces* 87 (4): 1913–41.
- Goyette, Kimberly A., Danielle Farrie, and Joshua Freely. 2012. "This School's Gone Downhill: Racial Change and Perceived School Quality Among Whites." *Social Problems* 59 (2): 155–76.
- Gulosino, Charisse, and Chad d'Entremont. 2011. "Circles of Influence: An Analysis of Charter School Location and Racial Patterns at Varying Geographic Scales." *Education Policy Analysis Archives* 19 (8): 1–26.
- Hanushek, Eric A., John F. Kain, and Steven G. Rivkin. 2004. "Disruption versus Tiebout Improvement: The Costs and Benefits of Switching Schools." *Journal of Public Economics* 88 (9-10): 1721-46.
- Hastings, Justine S., Thomas J. Kane, and Douglas O. Staiger. 2006. "Parental Preferences and School Competition: Evidence from a Public School Choice Program." NBER Working Paper 11805. National Bureau of Economic Research.
- Holme, Jennifer Jellison. 2002. "Buying Homes, Buying Schools: School Choice and the Social Construction of School Quality." *Harvard Educational Review* 72 (2): 177–205.
- Hoxby, Caroline M. 1998. "What Do America's Traditional Forms of School Choice Teach Us About School Choice Reforms?" *Economic Policy Review* 4 (1): 47–59.

- Jacobs, Nicholas. 2011. "Understanding School Choice: Location as a Determinant of Charter School Racial, Economic, and Linguistic Segregation." *Education and Urban Society* 45 (4): 459–82.
- Kerbow, David. 1996. "Patterns of Student Mobility and Local School Reform." *Journal of Education for Students Placed at Risk* 1 (2): 147-69.
- Kimelberg, Shelley McDonough, and Chase M. Billingham. 2013. "Attitudes Toward Diversity and the School Choice Process: Middle-Class Parents in a Segregated Urban Public School District." *Urban Education* 48: 198–231.
- Lareau, Annette. 2014. "Schools, Housing, and the Reproduction of Inequality." In *Choosing Homes, Choosing Schools*, edited by Annette Lareau and Kimberly A. Goyette, 169–206.

 Russell Sage Foundation.
- Lareau, Annette, and Kimberly A. Goyette. 2014. *Choosing Homes, Choosing Schools*. New York, NY: Russell Sage Foundation.
- Logan, John R., Elisabeta Minca, and Sinem Adar. 2012. "The Geography of Inequality: Why Separate Means Unequal in American Public Schools." *Sociology of Education* 85 (3): 287–301.
- Logan, John R., Deirdre Oakley, and Jacob Stowell. 2008. "School Segregation in Metropolitan Regions, 1970-2000: The Impacts of Policy Choices on Public Education." *American Journal of Sociology* 113 (6): 1611–44.
- Martin, David. 2018. "Families that once fled the Kansas City school district are staying put. But it's on their terms." *The Pitch* (March 27). Accessed:

 https://www.thepitchkc.com/news/article/20994533/in-the-kansas-city-school-district-families-that-once-fled-are-staying-put-but-its-on-their-terms.

- Massey, Douglas S., and Nancy A. Denton. 1988a. "Suburbanization and Segregation in U.S. Metropolitan Areas." *American Journal of Sociology* 94 (3): 592–626.
- ——. 1988b. "The Dimensions of Residential Segregation." *Social Forces* 67 (2): 281–315.
- Ni, Yongmei. 2012. "The Sorting Effect of Charter Schools on Student Composition in Traditional Public Schools." *Educational Policy* 26 (2): 215–42.
- Orfield, Gary, and Erica Frankenberg. 2013. *Educational Delusions? Why Choice Can Deepen Inequality and How to Make Schools Fair*. Berkeley, CA: University of California Press.
- ———. 2014. "Increasingly Segregated and Unequal Schools as Courts Reverse Policy." *Educational Administration Quarterly* 50 (5): 718–34.
- Owens, Ann. 2010. "Neighborhoods and Schools as Competing and Reinforcing Contexts for Educational Attainment." *Sociology of Education* 83 (4): 287-311.
- Pettigrew, Thomas F., and Linda R. Tropp. 2006. "A Meta-Analytic Test of Intergroup Contact Theory." *Journal of Personality and Social Psychology* 90 (5): 751-783.
- Reardon, Sean F. 2016. "School Segregation and Racial Academic Achievement Gaps." *RSF: The Russell Sage Foundation Journal of the Social Sciences* 2 (5): 34–57.
- Reardon, Sean F., Elena Tej Grewal, Demetra Kalogrides, and Erica Greenberg. 2012. "Brown Fades: The End of Court-Ordered School Desegregation and the Resegregation of American Public Schools." *Journal of Policy Analysis and Management* 31 (4): 876–904.
- Reardon, Sean F., Demetra Kalogrides, and Kenneth Shores. 2019. "The Geography of Racial/Ethnic Test Score Gaps." *American Journal of Sociology* 124 (4): 1164–1221.
- Reardon, Sean F., and Ann Owens. 2014. "60 Years After Brown: Trends and Consequences of School Segregation." *Annual Review of Sociology* 40: 199–218.

- Renzulli, Linda A., and Lorraine Evans. 2005. "School Choice, Charter Schools, and White Flight." *Social Problems* 52 (3): 398–418.
- Richards, Meredith P. 2014. "The Gerrymandering of School Attendance Zones and the Segregation of Public Schools: A Geospatial Analysis." *American Educational Research Journal* 51 (6): 1119–57.
- Rumberger, Russell W. 2003. "The Causes and Consequences of Student Mobility." *Journal of Negro Education* 72 (1): 6-21.
- Saporito, Salvatore. 2003. "Private Choices, Public Consequences: Magnet School Choice and Segregation by Race and Poverty." *Social Problems* 50 (2): 181–203.
- Saporito, Salvatore, and Deenesh Sohini. 2006. "Coloring Outside the Lines: Racial Segregation in Public Schools and Their Attendance Boundaries." *Sociology of Education* 79: 81–105.
- ———. 2007. "Mapping Educational Inequality: Concentrations of Poverty Among Poor and Minority Students in Public Schools." *Social Forces* 85 (3): 1227–53.
- Sattin-Bajaj, Carolyn, and Allison Roda. 2018. "Opportunity Hoarding in School Choice Contexts: The Role of Policy Design in Promoting Middle-Class Parent' Exclusionary Behaviors." *Educational Policy*, 1–44.
- Schneider, Mark, and Jack Buckley. 2002. "What Do Parents Want from Schools? Evidence from the Internet." *Educational Evaluation and Policy Analysis* 24: 133–44.
- Schneider, Mark, Paul Teske, and Melissa Marschall. 2002. *Choosing Schools: Consumer Choice and the Quality of American School*. Princeton, NJ: Princeton University Press. Simpson, E. H. 1949. "Measurement of Diversity." *Nature* 163: 688.

- Stroub, Kori J., and Meredith P. Richards. 2013. "From Resegregation to Reintegration: Trends in the Racial/Ethnic Segregation of Metropolitan Schools, 1993-2009." *American Educational Research Journal* 50 (3): 497–531.
- Swanson, Christopher B., and Barbara Schneider. 1999. "Students on the Move: Residential and Educational Mobility in America's Schools." *Sociology of Education* 72 (1): 54-67.
- Tach, Laura M. 2014. "Diversity, Inequality, and Microsegregation: Dynamics of Inclusion and Exclusion in a Racially and Economically Diverse Community." *Cityscape* 16 (3): 13-46.
- Weiher, Gregory R., and Kent L. Tedin. 2002. "Does Choice Lead to Racially Distinctive Schools? Charter Schools and Household Preferences." *Journal of Policy Analysis and Management* 21: 79–92.
- Wells, Amy Stuart, Lauren Fox, and Diana Cordova-Cobo. 2016. Research Fact Sheet: The

 Educational Benefits of Diverse Schools and Classrooms for All Students. Washington,

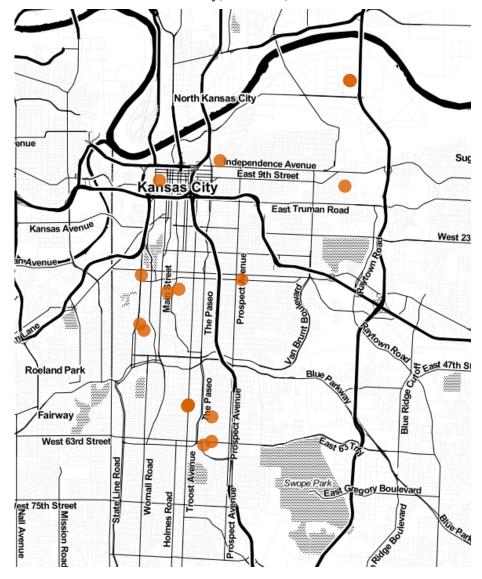
 DC: American Educational Research Association.
- Welsh, Richard O. 2017. "School Hopscotch: A Comprehensive Review of K-12 Student Mobility in the United States." *Review of Educational Research* 87 (3): 475–511.
- ——. 2018. "Student Mobility, Segregation, and Achievement Gaps: Evidence from Clark County, Nevada." *Urban Education* 53 (1): 55–85.
- Williams, Mara Rose. 2019. "This Public Charter School Became the Whitest In the KC District.

 It's Trying to Change That." *The Kansas City Star* (May 2). Accessed:

 https://www.kansascity.com/news/local/article209874119.html.

Tables and Figures

Figure 1. New charter schools in Kansas City, Missouri, 2012-2016



Notes: Map shows the location of charter schools that newly opened in Kansas City, MO, between 2011-12 and 2015-16.

Table 1. New charter schools in Kansas City, Missouri, 2012-2016

		Grade open in year:					
	Opened in:	2011-12	2012-13	2013-14	2014-15	2015-16	
Academie Lafayette - Cherry	2014-15				K-2	K-3	
Academy for Integrated Arts	2012-13		K-2	K-3	K-4	K-5	
Allen Village High School	2013-14			9-12	9-12	9-12	
Alta Vista Elementary School	2012-13		K	K-1	K-2	K-3	
Brookside Charter Middle School	2011-12	6-7	6-8	6-8	6-8	6-8	
Crossroads Academy of Kansas City	2012-13		K-5	K-6	K-7	K-8	
Della Lamb at Woodland	2015-16					K-1	
Derrick Thomas College Prep ^a	2011-12	9-10	9-11				
Ewing Marion Kauffman High School	2015-16					9	
Ewing Marion Kauffman Middle School	2011-12	5-8	5-8	5-7	5-8	5-8	
Frontier School of Excellence - Middle	2011-12	6-8	6-8	6-8	6-8	6-8	
Frontier School of Excellence - Upper	2011-12	9-12	9-12	9-12	9-12	9-12	
Frontier School of Innovation - Middle	2011-12	6-8	6-8	6-8	6-8	6-8	
Frontier STEM High School	2013-14			9	9-10	9-11	
Hogan Preparatory Academy Middle	2011-12	6-8	6-8	6-8	6-8	6-8	
Hope Academy - Bennington Campus ^b	2012-13		9-12	9-12			
Hope Leadership Academy	2011-12	K-2	K-3	K-4	K-5	K-4	
N newly open schools		8	12	13	13	15	

Notes: Table shows charter schools that opened for the first time during the observation period (2011-12 to 2015-

^{16).} Data come from the National Center for Education Statistics' Common Core of Data (CCD).

^a Derrick Thomas College Prep closed after the 2012-13 school year.

b Hope Academy – Bennington Campus closed after the 2013-14 school year.

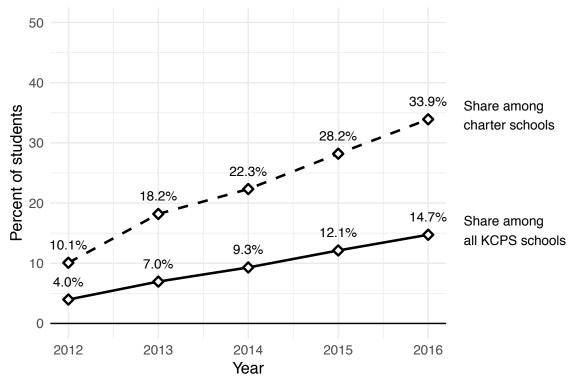


Figure 2. Share of students enrolled in newly opened charter schools, 2012-2016

Notes: Figure shows the percentage of students who were enrolled in a charter school that newly opened between 2011-12 and 2015-16. Solid line represents the share of students among all KC students; dashed line represents the share among students enrolled in charter schools.

Table 2. Racial composition of Kansas City, MO, schools

	Students in new	Students in pre-	Students in	Students in KC
	charter schools	existing charter	district-run	overall
		schools	schools	
Black	68.1	77.1	63.7	68.2
Hispanic	22.1	18.0	23.8	21.9
White	8.6	4.1	9.2	7.7
Other	1.3	0.8	3.3	2.3
N	5,350	13,660	27,042	46,052

Notes: Table shows the percentage of students who were enrolled in KC at any point between 2011-12 and 2015-16 and were (i) enrolled in a newly opened charter school, (ii) enrolled in a pre-existing charter school, or (iii) enrolled in a district-run school.

Table 3. Racial composition of Kansas City, MO, schools, 2012-2016

	2011-12	2012-13	2013-14	2014-15	2015-16
Newly opened	charter schools (n=17			
Black	76.8	63.7	63.1	57.2	76.8
Hispanic	15.3	23.9	26.7	23.1	15.3
White	6.1	8.4	8.1	15.4	6.1
Other	2.1	4.1	3.8	4.4	2.1
Pre-existing c	harter schools (n=	=28)			
Black	70.0	68.4	67.5	65.4	70.0
Hispanic	18.0	18.7	20.3	23.4	18.0
White	9.1	9.6	9.8	8.0	9.1
Other	3.2	3.8	3.7	3.5	3.2
District-run so	chools (n=36)				
Black	66.3	64.3	63.1	60.0	66.3
Hispanic	28.4	29.3	30.1	31.5	28.4
White	9.9	9.7	9.3	9.9	9.9
Other	3.6	4.4	5.4	6.2	3.6

Notes: Table shows the percentage of students by race/ethnicity and year who were (i) enrolled in a newly opened charter school, (ii) enrolled in a pre-existing charter school, or (iii) enrolled in a district-run school.

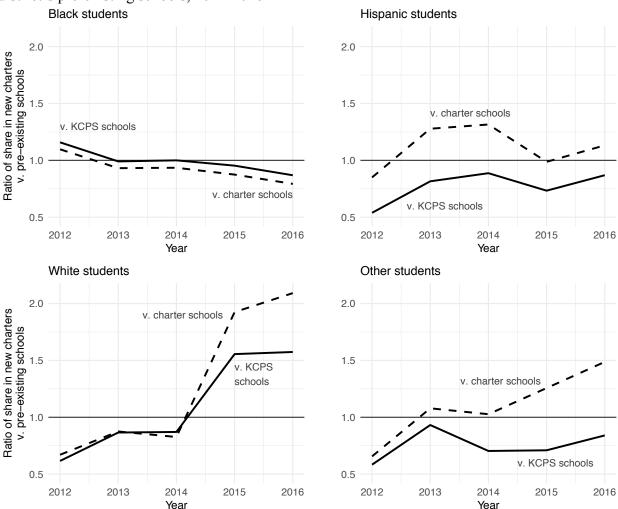


Figure 3. Ratio comparing student racial composition in newly opened charter schools to the district's pre-existing schools, 2012-2016

Notes: Figure shows the ratio of the percentage of students who are black (or Hispanic, white, or of another racial group) in newly opened charter schools relative to the percentage of students who are black (or Hispanic, white, or of another racial group) in the district's pre-existing schools in each year. Solid line compares the share of students in new charter schools to pre-existing district KC schools; dashed line compares the share of students in new charter schools to pre-existing charter schools.