Fleeing School Choice? Resident Student Exit from Suburban School Districts[1]

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Abstract: This study examines the movement of students in suburban Detroit through open enrollment, or inter-district school choice. We examine whether absolute levels and changes in the

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district enrollment of Black, economically disadvantaged, and nonresident students are perceived as racial threats by suburban families, leading them to exit their local school districts, through school or residential mobility. Using a multilevel discrete time survival analysis, we found that, for each standard deviation increase in the absolute percentage of Black students in the district, resident students were nearly eight times more likely to use school choice to exit their district the subsequent school year, and for every standard deviation increase in the change of Black enrollment in the district, resident students were 32 times more likely to move to a new district. For every standard deviation increase in the absolute percentage of nonresident students in the district, a resident student was 3.5 times more likely to move to a different district. This study adds to the evidence that school choice policies may contribute to racial inequality and raises questions about the logic of shifting state education resources to nonresident districts, rather than investing in strengthening urban and exurban school systems.
Keywords: school choice; race; parents; suburbs; enrollment

¿Huyendo de la libertad de elección de escuela? Los estudiantes residentes abandonan los distritos escolares suburbanos

Resumen: Este estudio examina el movimiento de estudiantes en los suburbios de Detroit a través de la inscripción abierta o la elección escolar entre distritos. Analizamos si los niveles absolutos y los cambios en la inscripción de estudiantes negros, económicamente desfavorecidos y no residentes en el distrito son percibidos como amenazas raciales por las familias suburbanas, llevándolas a abandonar sus distritos escolares locales mediante movilidad escolar o residencial. Utilizando un análisis de supervivencia multinivel con tiempo discreto, encontramos que, por cada aumento de una desviación estándar en el porcentaje absoluto de estudiantes negros en el distrito, los estudiantes residentes tenían casi ocho veces más probabilidades de usar la elección escolar para salir de su distrito en el siguiente año escolar. Además, por cada aumento de una desviación estándar en el cambio en la inscripción de estudiantes negros en el distrito, los estudiantes residentes tenían 32 veces más probabilidades de trasladarse a un nuevo distrito. Por cada aumento de una desviación estándar en el porcentaje absoluto de estudiantes no residentes en el distrito, un estudiante residente tenía 3.5 veces más probabilidades de mudarse a un distrito diferente. Este estudio aporta evidencia de que las políticas de elección escolar pueden contribuir a la desigualdad racial y plantea preguntas sobre la lógica de transferir recursos educativos estatales a distritos no residentes en lugar de invertir en el fortalecimiento de los sistemas escolares urbanos y periurbanos.
Palabras-clave: elección de escuela; raza; padres; suburbios; matriculación

Fugindo da escolha da escola? Saída de estudantes residentes de distritos escolares suburbanos

Resumo: Este estudo examina o movimento de estudantes nos subúrbios de Detroit por meio da matrícula aberta ou escolha escolar entre distritos. Analisamos se os níveis absolutos e as mudanças na matrícula de estudantes negros, economicamente desfavorecidos e não residentes no distrito são percebidos como ameaças raciais pelas famílias suburbanas, levando-as a abandonar seus distritos escolares locais por meio de mobilidade escolar ou residencial. Utilizando uma análise de sobrevivência multinível com tempo discreto, descobrimos que, para cada aumento de um desvio padrão no percentual absoluto de estudantes negros no distrito, os estudantes residentes tinham quase oito vezes mais chances de usar a escolha escolar para sair de seu distrito no ano letivo seguinte. Além disso, para cada aumento de um desvio padrão na mudança na matrícula de estudantes negros no distrito, os estudantes residentes tinham 32 vezes mais chances de se mudar para um novo distrito. Para cada aumento de um desvio padrão no percentual absoluto de

estudantes não residentes no distrito, um estudante residente tinha 3,5 vezes mais chances de se mudar para um distrito diferente. Este estudo acrescenta evidências de que as políticas de escolha escolar podem contribuir para a desigualdade racial e levanta questões sobre a lógica de transferir recursos educacionais estaduais para distritos não residentes, em vez de investir no fortalecimento dos sistemas escolares urbanos e periurbanos.

Palavras-chave: escolha de escola; raça; pais; subúrbios; registro

Fleeing School Choice? Resident Student Exit from Suburban School Districts

About 65% of K-8 students in the United States switch schools at least two times between kindergarten and eighth grade, increasing their risk of academic decline and contributing to instability in school district enrollment and finances (Welsh, 2017). Michigan law allows local districts to enroll nonresident students via inter-district choice (i.e., open enrollment), which facilitates the movement of more than 88,000 students across Metro Detroit's 82 school districts each year. This movement of students between districts has implications for district finances, as state per pupil funding follows students, as well as for patterns of racial and economic segregation in Metro Detroit schools. While prior research has investigated the relationship between school racial context and enrollment, little research has examined the relationship between changes in school district demographics, nonresident enrollment, and resident student exit. Therefore, this study aims to identify the association between changing district demographics and district-level resident exit, with a particular focus on residential status and the economic and racial makeup of students. Our central hypothesis is that an increase in the enrollment of Black, economically disadvantaged, and/or nonresident students is associated with resident exit from the school district.

Specifically, we tested the following hypotheses: We first hypothesized (H1) that the probability of a student exiting their residential district through open enrollment will increase in response to an increase in Black, economically disadvantaged, or nonresident student enrollment in their school districts (who we call "district exiters"). Second, we hypothesized (H2) that the probability of a family physically relocating their residence to another district will increase in response to an increase in Black, economically disadvantaged, or nonresident student enrollment in their school districts (who we call "district movers").

School Choice and the Possibility of Racial and Economic Integration

Segregation and Open Enrollment Policies

Since most district boundaries mirror patterns of residential segregation based on race and class, historically low-income and racially minoritized students have been concentrated in highly segregated schools marked by lower levels of resources (Massey & Denton, 1988; Orfield & Frankenberg, 2013; Sugrue, 2014). These racially and economically segregated neighborhoods came to exist through decades of credit and lending discrimination that uniquely disadvantaged Black and poor families while advantaging the white middle class (Rothstein, 2017). For example, in 1934, the Federal Housing Administration (FHA) denied mortgages based on race and ethnicity (Ladd, 1998). This same institution created a system to evaluate neighborhood quality and deemed neighborhoods with high numbers of Black families as risky investments, a practice commonly known as redlining. Consequently, banks would not approve loans for minorities or for anyone wanting to live in predominantly Black neighborhoods. This forced many Black families to pay high rental fees to live in undesirable areas (Sugrue, 2014).

These housing policies directly impacted schools in two primary ways. First, because most local school districts were funded through local property taxes, schools in predominantly Black neighborhoods were not able to levy as much funding to support their schools as those in white neighborhoods. Second, these practices led to de facto school segregation in northern states, where mandated school segregation was largely prohibited by state law. The legacy of these practices and the de facto school segregation they wrought are present in school demographics into the 21st century. Nearly 70 years after the Supreme Court banned de jure segregation in *Brown v. Board of Education*, more than half of U.S. students still attend racially segregated schools. Many argue that race remains the most critical social issue confronting American education (Orfield & Pfleger, 2024).

Today, proponents of school choice policy argue that open enrollment allows for more integrated schools because it severs the link between school assignment and highly segregated residential neighborhoods—offering students more educational options, including schools with greater racial and economic diversity (Booker et al., 2009). Even in suburban areas, districts are seeing one fourth of all students in the US participating in some type of school choice option (Holme et al., 2013). Most U.S. states have policies that allow for open enrollment and student transfers between public schools. These school choice policies vary greatly by state and can be mandatory, voluntary, or a combination of both. For instance, some states have court-mandated school choice policies to combat historical racial segregation or state-mandated school choice options for students in low-performing schools. In others, magnet schools are voluntary school choice options that districts have crated to attract students. They also vary in their motivation, with some purposely designed to promote school integration by class and race/ethnicity and others motivated by an interest in expanding market-based competition or in parent choice (Education Commission of the States, 2018).

For example, in Texas, the state requires districts to prioritize the enrollment of nonresident students who are attending low-performing schools and are at risk of dropping out. States with mandatory desegregation provisions allow for open enrollment transfers as long as they do not conflict with any court-ordered desegregation plans (e.g., Arkansas, Delaware, Florida, Georgia, Louisiana, Missouri, and Virginia). States such as Tennessee allow for student transfers as long as they do not conflict with any court order but are vague in addressing specific mandatory desegregation efforts (Education Commission of the States, 2018).

In other states, districts voluntarily follow desegregation provisions that impact open enrollment policies. Under such policies, districts are given discretion to make local decisions that impact the distribution of students based on race and class. Colorado, New York, Massachusetts, Minnesota, and Utah are examples of states guided by such voluntary policies. Nebraska follows similar policy provisions but is unique because it is the only state that bases diversity on the difference in students' socioeconomic status instead of students' racial or ethnic identity (Neb. Rev. Stat. § 79-2110). This type of provision is becoming more popular at the local level, as nearly 100 U.S. districts and charter schools have made socioeconomic diversity a priority for open enrollment (Kahlenberg & Potter, 2014). In these provisions, districts may voluntarily make decisions like limiting open enrollment numbers, following local school board standards, and using data to prove that particular transfers are advantageous because they will reduce racial isolation or ameliorate a racial imbalance.

The most common form of state policy that approaches open enrollment with desegregation considerations uses a hybrid of voluntary and mandatory policies that require or allow districts to participate in open enrollment depending on the circumstances of the district. Under these provisions, districts grapple with meeting mandatory requirements and cooperating with other districts to provide optimal open enrollment options. California, Connecticut, Iowa, New Jersey,

Ohio, Michigan, and Washington are examples of states that combine mandatory and voluntary policies to meet desegregation provisions (Education Commission of the States, 2018). Michigan has combined mandatory and voluntary school choice provisions. Districts are mandated to allow for intradistrict transfers for students zoned into low-performing schools, defined as being unaccredited for three consecutive years. In addition, they are permitted to allow for inter-district choice and are given discretion regarding how many nonresident students they enroll and whether they enroll students from only their intermediate district or also from surrounding intermediate districts (Lenhoff, 2020).

While many open enrollment policies have sought to intentionally integrate schools by race, the 2007 Supreme Court ruling of *Parents Involved in Community Schools v. Seattle School District No. 1* excluded using race as an explicit factor in integrating public schools. Therefore, in many states, the patterns of student mobility through inter-district choice are largely determined by individual parental decision making in an "open market" rather than expressly guided by policy goals related to integration. In addition to the inherent inequalities at the individual level with regards to resources to participate in a market, in many local areas the education market is manipulated to purposely exclude certain groups from accessing effective schools, such as the implementation of complicated district enrollment practices or artificially limiting open seats (Lenhoff, 2020). It is important to note that the interpretation of affirmative action laws has been highly contentious, influenced by both the Obama and Trump administrations. Under Obama, guidance encouraged schools to consider race in admissions to enhance diversity. However, the Trump administration rescinded these guidelines, arguing they imposed undue restrictions and adopting a more stringent approach to race-based admissions policies. This shift supported legal challenges to affirmative action practices, leading to a stricter stance where race is no longer a decisive factor in admissions decisions (Walsh, 2018).

 It is not clear what relationship open enrollment has on school segregation in a regional area. Several studies have documented the "resegregation" of previously integrated schools (Breyer, 2022; Orfield & Jarvie, 2020), and the ways in which school choice can facilitate further racial segregation (Monarrez et al., 2019). In studies of charter school enrollment, Black, white, and Hispanic students have been found to enroll in more racially isolated schools than those they have left (Frankenberg & Lee, 2003; D. R. Garcia, 2007; Weiher & Tedin, 2002). In particular, white families have been found to use school choice policies to transfer from diverse or transitioning assigned schools to schools with larger shares of white or higher income students (Kotok et al., 2017; Renzulli & Evans, 2005; Roda & Wells, 2013). White students entering charter schools are also more likely to be higher achieving than the white students in the school they just left (Zimmer et al., 2009). Additionally, white middle class families often view schools with more white students as better and exercise their social capital to seek inroads into these schools (Holme, 2002; Roda & Wells, 2013). Detroit students who enroll in suburban schools, the vast majority of whom are Black, often attend racially segregated schools where, on average, over half of the student body also lives in Detroit (Singer & Lenhoff, 2022).

However, other studies suggest that charter schools are more racially and ethnically neutral than neighboring traditional schools (Butler et al., 2013; Ritter et al., 2016). For example, charter schools in Little Rock, Arkansas are less likely to be hyper-segregated than traditional public schools (Ritter et al., 2016). Inter-district school choice policies have the potential to undercut these patterns, but continued segregation is likely without explicit attention to that goal, particularly around the local screening process for nonresident enrollees (Finnigan & Scarbrough, 2013).

In their research, Cobb and Glass (2009) examine how regulated and unregulated choices affect segregation in social institutions like education and housing. The researchers argue that regulated choices are those made within a set of rules or guidelines. For instance, in education,

school choice programs might have specific criteria about which schools students can attend, such as zoning laws or performance metrics. These rules are meant to help spread resources and opportunities more fairly and reduce segregation. On the other hand, unregulated choices are made without these kinds of constraints. For example, if families choose schools purely based on personal preferences, without any policies to address segregation, it can lead to more pronounced divides. People tend to cluster in areas or schools with similar socio-economic or ethnic backgrounds, which can deepen segregation. This study suggests that regulated choices are generally better at reducing segregation because they involve policies designed to create fairness. Unregulated choices, however, can make segregation worse by allowing people to self-select into more homogeneous groups

While some advocates view school choice as a potential mechanism for desegregating schools, racial balance does not equate to racial integration or equity. As Bell (1975) famously argued, reform policy should focus less on mixing students by race and more on providing a high-quality education for all students regardless of race. Horsford (2011) built on this idea of challenging racial balance as the sole indicator of equity, suggesting that effective education reform must commit to cross-racial efforts that redefine teaching pedagogy, schooling norms, and curricula to represent ideals from all families. In addition, even within integrated schools, structural racism can allow advantaged parents and students to hoard educational opportunities, such as advanced classes, special programming, and extracurriculars (Lewis & Diamond, 2015). In other words, while school choice may create opportunities for racial desegregation, it is insufficient for disrupting historic inequities and ensuring equal educational opportunity for all children.

Parental Choice and the Value of Integrated Schools

Research suggests that students attending racially and socioeconomically diverse schools perform better academically than their peers in schools with concentrated poverty (Mickelson et al., 2013, 2021). For example, in a study examining mathematics achievement on the fourth-grade NAEP, Card and Rothstein (2007) found that low-income students in more affluent schools scored higher than their counterparts attending high-poverty schools. Students attending racially integrated schools are also less likely to hold racial biases or stereotypes than students who attend racially segregated schools—among many other socio-emotional benefits (Wells et al., 2016). Students in integrated schools are also more likely to form meaningful relationships with students from different racial backgrounds (Davies et al., 2011). Students perceive integrated schools as having better teachers and as being safer (Huidor & Cooper, 2010).

While the parental preferences of schools can be influenced by a variety of factors, such as graduation rates, college enrollment, test results, and curriculum, research suggests that parents are becoming increasingly more interested in peer quality and often use race and class as a proxy for quality leading to further segregation by race and class (Glazerman & Dotter, 2017; MacLeod & Urquiola, 2015). For example, in their study examining how parents chose high schools in New York City, Abdulkadiroglu, et al. (2017) found that parents viewed peer quality as the most important measure of school quality.

From their work examining white parents' school enrollment decisions, Billingham & Hunt (2016) found that the "racial composition of schools' student bodies plays a salient role in parents' selection of the most appropriate school, particularly among white parents" (p. 111). Similarly, in their study investigating student-level racial segregation in Pennsylvania Charter School transfers, Frankenberg et al. (2017) found that Black and Hispanic students strongly oppose enrollment in charter schools with higher percentages of white students. Studies such as these suggest that parents are likely to favor school compositions that mirror their own socioeconomic status and racial

identity and that parents are relying on race and class as significant factors in assessing school quality or fitness for their children (Billingham & Hunt, 2016; Roda & Wells, 2013; Smith & Larimer, 2018).

Some families do see the advantages of racially integrated schools and having peers from different racial backgrounds. In fact, a growing number of white middle-class families are choosing to enroll their children in more diverse residential schools instead of using school choice policy to opt into more racially segregated and often suburban districts (Posey-Maddox, 2014). However, while some white and/or middle-class families see the advantages of racially integrated schools, research suggests that they are willing to accept larger shares of racial minority students only when there is a "critical mass" of white students (Posey-Maddox et al., 2016; Roda & Wells, 2013). As Glazerman and Dotter (2017) describe, white families are willing to enroll their children into more diverse districts until a "bliss point" of racial integration occurs—or roughly when white students account for no less than 26% of the school demographic.

Wealthy families have a unique privilege in the school selection process because of their enhanced ability to access and process information on schools and travel longer distances (Jabbar & Lenhoff, 2019). This advantage over less affluent, and often non-white, families shows how choice policy can be leveraged in ways that conflict with equity and inclusion (Scott & Quinn, 2014). Bell (2009a) found that while parents of different economic backgrounds enact similar school choice processes, the set of schools that parents choose from, or their "choice set", varies significantly by socioeconomic background. Similarly, Altenhofen et al. (2016) found that while both wealthy and low-income parents rely on their social networks, school visits, school websites, and meetings with school personnel to evaluate schools, wealthier families also have access to a "rich set of resources" that are often unavailable for parents from lower socioeconomic backgrounds (p. 11). This often positions them to better access the most coveted schools with limited open seats. In Detroit, Black students have lower quality school choice sets in the city than do non-Black students, even including those schools where their neighborhood peers attend school (Lenhoff et al., 2022).

Additionally, due to historic neighborhood segregation patterns, wealthy families often have a geographic advantage in that they are more likely to live nearer to higher-performing districts than their poor and non-white counterparts (Holme, 2002; Massey & Denton, 1988; Sugrue, 2014). In Metro Detroit, this geographic placement is especially advantageous as the majority of schools deemed "high-quality" on measures such as state test scores are located many miles from the city center in suburban districts—many of which are unreachable by forms of public transportation (Bell, 2009b), do not accept students through open enrollment, or which do not enroll Detroit students because they are located in a different ISD (Lenhoff, 2020).

Though parents seek out information regarding the quality of a school, recent educational reform efforts which grade or rate schools (e.g., Michigan's top-to-bottom school ranking system) may be exacerbating the problem of segregation. Critics of such accountability policies that are primarily tied to academic achievement argue that when choice policy is colorblind (i.e., does not focus on integrating students by race and/or socioeconomic status) it generally leads to more segregation (Roda & Wells, 2013). If parents choose schools based on the best school ratings, they are often also choosing schools that are more segregated (Wells & Crain, 1997). Therefore, when school choice policies are not designed intentionally to promote racial and class integration, they tend to further segregate students by class and race.

The Context of Metro Detroit

Metro Detroit, like many urban centers in America, has extreme racial and economic segregation. Historically, federal housing sanctions allowed for discriminatory bank lending practices against Black residents, leading to segregation within and outside of the city (Sugrue, 2014). Since 1950, approximately 1.4 million white Detroit residents have left the city, many for the suburbs,

making Metro Detroit the second most segregated metro area in America, according to Census data. Michigan is one of four states with the highest levels of Black segregation in its public schools, and the Metro Detroit area's 81 school districts are some of the most segregated in the country (National Equity Atlas, 2017; Orfield & Lee, 2006). The Supreme Court ruling *Milliken v. Bradley* (1974) codified and perpetuated this segregation within schools by ruling that any desegregation plan for Detroit could not force suburban districts to involuntarily participate. Consequently, school districts in Metro Detroit have historically mirrored the segregated neighborhoods they served.

Districts in Michigan have been allowed to enroll nonresident students since 1996, and nearly 90% of districts in the state enroll at least one nonresident student (Pogodzinski et al., 2018). Specifically, districts are allowed to voluntarily choose to enroll nonresident students from within their intermediate school district (ISD) (primarily defined at the county level) and can also choose to enroll nonresidents from contiguous ISDs. In addition, Michigan allows districts considerable discretion in implementing open enrollment policy, including allowing them to review disciplinary records, restricting enrollment to only districts within their intermediate school district, and determining application periods and processes. Districts with greater restrictions are less likely to enroll Black and low-income nonresidents, even controlling for geographic sorting (Lenhoff, 2020). In the beginning of the open enrollment era in Michigan, participants were largely concentrated in rural and urban communities, and nonresident students were more likely to enroll in districts with higher family incomes, higher achievement, and higher proportions of white students than their home districts (Arsen et al., 1999). In more recent years, Michigan's low-income and Black students were more likely to participate in open enrollment than other students. Additionally, nearly 11% of students exited their residentially zoned district through open enrollment, and approximately 30% of those students were located in Metro Detroit (Cowen et al., 2015).

Open enrollment has the potential to fundamentally change the student demographics of individual districts. For example, approximately 8% of Detroit resident students (~8,000) attended a nonresident district in 2015-16, and they were largely concentrated in a handful of bordering districts (Pogodzinski et al., 2018), where many of their own resident students exit to non-district schools. One of those districts, River Rouge, ran buses through Detroit to pick up students. Detroit students made up well over half of the River Rouge school district, while nearly half of their own resident student population exited the local system (Pogodzinski et al., 2018). This example highlights the extent to which students are moving between districts and raises important questions regarding the impact such movement has on schools, including the extent to which they are integrated both racially and economically. It also adds to the narrative on the impact of choice on racial integration and why this problem is context-specific instead of a universal issue (Swanson, 2017).

Theoretical Framework

This study builds on prior evidence using district-level data that suggested resident student exit may be related to high levels of nonresident enrollment and changes in district and community demographics (Pogodzinski et al., 2018). Drawing on the theory of racial threats (Blalock, 1967), we hypothesize that families will perceive increasing shares of low-income students, non-resident students, and Black students as having a negative impact on school quality, motivating them to leave the school via school choice or residential mobility. Racial threat theory was developed by Blalock (1967) originally to explain inequality in criminal justice outcomes between Blacks and whites. It posits that "racialization occurs when Whites use their disproportionate power to implement state-control over minorities and, in the face of a growing minority population, encourage more rigorous, racialized practices in order to protect their existing power and privileges" (Dollar, 2014, p. 1).

Perceived threats can be economic, political, or symbolic. While typically used in the field of criminology to explain increased police presence and activity in areas where Black or immigrant populations increase (for a review, see Dollar, 2014), racial threat theory has also been used to explain the social control mechanisms developed to either hoard scare and valuable resources (Tilly, 1998) or to maintain an advantaged position (Blumer, 1958). Reece and O'Connell (2016) applied the theory to explain school racial segregation in the U.S. Deep South, with a particular emphasis on how whites were less likely than Blacks to enroll in public schools in areas where the historical concentration of enslaved people was higher.

Our focus in this study is on whether nonresident enrollment and school demographic changes, particularly changes in the share of Black student enrollment, are viewed as a threat to the educational opportunities and advantages of resident families, leading to exit from their school systems through school choice or residential moves. Following Blalock (1967), we argue that these enrollment shifts may be viewed by white suburban residents of all social classes as symbolic threats to their children's educational opportunity by introducing what they may perceive as "deviant" behavior into the state-sanctioned educational system (Dollar, 2014). They may also be perceived as threatening the racial hierarchy that allows white children to hoard educational advantages (Murray & Hailey, 2024).

Although racial threat is typically understood to reflect the perceptions and behaviors of whites, non-white residents may also be responding to these changes, either directly via similar perceptions of racial threats or indirectly by perceiving enrollment shifts as an indication of decreasing quality or class shifts within their local schools. Black middle-class residents, in particular, may consider moving in response to these changes (Woldoff, 2011) or using other means (such as school choice) to manage what they may perceive as class changes that could affect the quality of their children's schools (Pattillo, 2010). Other research has documented the interconnected perceptions of race and class (Saperstein & Penner, 2012), suggesting that enrollment changes by nonresident status or economic disadvantage may also be viewed through a racial lens, informing perceived racial threats. Therefore, we use measures of changes in residents' nonresident, race, and economic demographics as proxies of potentially perceived racial threats, analyzing the relationship between these changes and the school enrollment behavior of resident students, first overall and then among white students. We also measure the relationship between the absolute levels of nonresident, economically disadvantaged, and Black students and their relationship to subsequent exit from the district.

Data and Methods of Analysis

Data

Through an agreement with the Michigan Department of Education and the Center for Educational Performance and Information (CEPI), we had access to restricted-use student-level administrative data for the 2010-11 to 2016-17 school years. These data included the complete Michigan Student Data System (MSDS) records at three time points during each academic year for all students who were enrolled in a public school in the Detroit tri-county area at any time during our study period. School districts complete MSDS records in the fall, spring, and end-of-year each school year, and report on students' demographic characteristics, school enrollment and attendance, home address, and residency. We organized the data so that each student-year record was a unique observation, with information on each school the student attended appended as new variables to each observation. To construct district-level average math *Z* scores, we merged in student-level achievement data and calculated a district-level average. We then constructed new variables by collapsing student-level data to produce aggregate measures of student demographics by school and

district. We used the state defined "economically disadvantaged" indicator as a measure of student income status, which categorizes students who qualify for free- or reduced-price lunch, who receive social service benefits such as food stamps, and/or who are migrant or homeless. Additional data, such as "school type," were merged into the dataset from the Common Core of Data from NCES for purposes of excluding students who attended non-general education schools from the analysis.

Population

This study is focused on the observed effects of nonresident student enrollment or demographic changes on resident student exit and enrollment. Therefore, our population of primary interest is students who attended a school in their home district at any point from school year 2010-11 to 2016-17. We do not include students who attended a non-general education school (alternative, special education, or career/vocational) as defined by the CCD because the choice set for these students is likely different and more idiosyncratic than those of general education students. We also exclude the Detroit Public Schools district (now known as the Detroit Public Schools Community District) from the analysis because Detroit resident students' choice sets are more complex than suburban Metro Detroit students, given the prevalence of charter schools in and around the city. Detroit resident students who attend suburban traditional public schools are included in the analysis as "nonresidents".

Analytic Approach

There were two outcome variables of interest: a) whether a student was a resident district "exiter" (i.e., began attending a school not in their own assigned resident district), and b) whether the student was a resident district "mover" (i.e., physically changed their residential address to a different district). We used multilevel (student nested within district) discrete time survival analysis to identify the likelihood that a student exited or moved out of the district as a function of individual characteristics (e.g., grade, race/ethnicity, special education status, etc.), district characteristics (e.g., percent of students classified as economically disadvantaged), and change in district characteristics (t-1 to t). A third model was estimated with the outcome of any event (i.e., either exit or move). This approach is appropriate because it allows us to estimate the odds of exiting the district through school choice or moving, using each school year as the discrete time window during which district characteristics may be related to subsequent year exit.

The following combined multilevel model represents the general approach taken (with 'exit' as the dependent variable):

$$\ln\{P[Exit_{ij} = 1] / 1\text{-} P[Exit_{ij} = 1]\} = \theta_{00} + \theta_{10}\mathbf{S}_t + \theta_{20}\mathbf{I}_t + \theta_{01}\mathbf{D}_t + \theta_{02}\Delta\mathbf{D}_{(t-(t-1))} + u_{0j} + r_{ij} \,(1).$$

The model predicts the likelihood that a resident student exited a district through school of choice as a function of a set of student characteristics (S) measured at time t, interval in the time series (I), district characteristics (D) measured at time t, and change in district characteristics (ΔD) from t-1 to year t (see Table 1 for descriptive statistics). The focal district characteristics and change in district characteristics in the model are the percentage of Black students, percentage of students classified as economically disadvantaged, percentage of non-resident students, and average student math *Z* score on the state-administered standardized test. For the regression analysis, the district-level variables were mean-centered by year. Because the model utilizes a logit link function with a binary outcome variable (using the Proc Glimmix command in SAS v9.4), the error terms are assumed to follow a Bernoulli distribution, with r representing the error term for district j and e representing the student error term nested within district j.

The data were structured to include one row for person-interval event (i.e., person row for every year of data available for a student) over the six-year period (2011-12 to 2016-17). To be

included in the data set, a student had to have been attending their resident district during the 2011-12 school year and have a record for all six years of the time intervals (i.e., remained going to a public school in the tri-county Metro Detroit area). Therefore, a student had to be in Grades 2-6 in 2011-12. Additionally, only students who matriculated to the next grade level following a school year were included. There were several cases where students were retained in grade the next year and several others who either advanced more than one grade level the following year or regressed a grade level. For these latter two categories, we suspect these are special cases or administrative entry errors. Finally, students living in Detroit and attending Detroit Public Schools Community District (DPSCD) were excluded (though they were included in the calculations of nonresident students in neighboring districts). Detroit is a unique case, where approximately 10% of resident students attend a traditional public school outside of the city, and less than 50% of all Detroit resident students attend a school within the DPSCD system.

Table 1

Student and School Characteristics (2011-12)

Variable	Mean	Std Dev	Min	Max
Student Level				
Female	0.494	0.500	0	1
Black	0.109	0.312	0	1
Asian	0.053	0.224	0	1
Hispanic	0.040	0.197	0	1
Other Race/Ethnicity	0.026	0.160	0	1
White	0.772	0.420	0	1
Economically Disadv	0.359	0.480	0	1
Special Education	0.129	0.335	0	1
Grade 2	0.196	0.397	0	1
Grade 3	0.197	0.397	0	1
Grade 4	0.199	0.399	0	1
Grade 5	0.202	0.401	0	1
Grade 6	0.207	0.405	0	1
District Level				
Pct Black	0.142	0.175	0	0.994
Pct Economically Disadv	0.387	0.216	0.055	0.945
Pct Nonresident Enroll	0.080	0.099	0.001	0.572
Avg Math Z Score	0.189	0.386	-1.065	0.862
Δ Pct Black	0.002	0.009	-0.047	0.064
Δ Pct Economically Disadv	0.017	0.029	-0.067	0.343
Δ Pct Nonresident Enroll	0.005	0.013	-0.114	0.222
Δ Avg Math Z Score	0.000	0.052	-0.216	0.119

For modeling "exit" as the outcome, an "event" was coded '1' if a student was attending a school in their resident district during the fall in year t and attending a school in a non-resident district (including a charter school district) in fall year t+1 (otherwise coded '0'). Therefore, intervals were measured fall year t to fall year t+1 (with interval 1 constituting the person-row field for 2011-12). For modeling "move" as the outcome, an "event" was coded '1' if a student was attending a school in their resident district in year t and changed residence to another district in year t+1

(otherwise coded '0'). Students who were either coded as an "exiter" or "mover" during an interval were censored from the data for the subsequent years. Data from 2010-11 were used to calculate change variables for interval 1, and data from 2017-18 were used to indicate event data for interval 6. Table 2 provides further details regarding the analytic sample, including the number of exiters and movers by interval. As shown, there were considerably more "movers" in each interval compared to "exiters". Given the nature of the data and censoring, the percentage of "exiters" and "movers" in each interval declined over time.

Table 2

Exiters and Movers by Year

Year	Sample	% Exiters	% Movers
2011-12	113,295	0.011	0.044
2012-13	107,015	0.010	0.035
2013-14	102,178	0.009	0.028
2014-15	98,446	0.008	0.025
2015-16	95,240	0.006	0.019
2016-17	92,811	0.006	0.017

In addition to estimating models which included data for students across all racial/ethnic categories, we estimated similar models that only included white students in the sample. Although we controlled for student race/ethnicity in the other models, restricting the sample to only include white students allows us to focus on the specific relationship between the focal independent variables (e.g., percent non-resident students and percent Black students) and the likelihood of white student exit/move. White students accounted for 79% of the total sample of students in the other analyses, and this further aligns with the underlying theory of "white flight".

For each outcome, an unconditional model was estimated first, followed by a model that only included the intervals as independent variables, and finally a full model was estimated with all the covariates. Examining the covariance parameters, the full models account for approximately 79% of the variation in student exit across districts, approximately 89% of variation in student moves across districts, and approximately 87% of either exit or move across districts. Additionally, both the –2 Log Likelihood and the Akakie information criterion (AIC) are smallest for the full models, indicating improved model fit. See Appendix Tables A1 and A2.

Tables 3 and 4 report the odds ratios for the estimates for each of the full regression models (see Tables A3 and A4 in the Appendix for logit estimates and standard errors). Odds ratios greater than 1 indicate a higher likelihood of the event occurring, while an odds ratio less than 1 indicates a lower likelihood of the event occurring. The effects of continuous variables were assessed as one-unit offsets from the mean. White students were the reference racial/ethnic category left out of the model.

Findings

We sought to understand whether and how changes in the student composition of suburban Detroit schools led to student residential moves or exit via school choice. We hypothesized that increases in Black, economically disadvantaged, or nonresident student enrollment in resident students' school districts would lead to exit from their districts through school choice open enrollment policy (H1) and residential moves out of the district (H2). We found different resident student responses to changes in Black enrollment in schools than to changes in economically

disadvantaged and nonresident enrollment in schools. As shown in Table 3, we found that greater changes in Black enrollment led to significantly greater odds of moving out of the school district. For each standard deviation increase in the change in the percentage of Black students in the district, students overall were 32 times more likely to move out of the district. For white students, the effect was even larger, with a 99 times greater chance of moving from the district with each S.D. increase in the change in the percentage of Black students in resident students' districts. Conversely, increases in the changes in percent of economically disadvantaged or nonresident students were not associated with greater odds of moving. Contrary to our hypothesis, they were significantly associated with decreased odds of exiting the district via school choice, controlling for Black student change, absolute percentages of nonresident students, and other school characteristics. This finding held for increases in changes in nonresident students for our models that included only white students, suggesting that resident students' families were responding to increases in Black student enrollment by moving their residences, perhaps responding to perceived racial threats, and that this phenomenon occurred regardless of whether these changes were associated with nonresident enrollment through school choice policy. While our main hypotheses did not hold for changes in the percentages of nonresident and economically disadvantaged students, we did find that each standard deviation increase in the absolute percent of nonresident students overall was associated with a 3.5 times greater chance of moving away from the district and a 1.8 times greater chance of moving or exiting via school choice. In addition, each standard deviation increase in the absolute percentage of economically disadvantaged students was associated with a 4.5 times greater chance of using school choice to exit the district, and each standard deviation increase in the absolute percentage of Black students in the district was associated with a 7.9 times greater chance of exiting the district via school choice. Therefore, although changes in the percentages of nonresident and economically disadvantaged students in the district were not associated with increased likelihood of exit, families may still be responding to the absolute percentages of those groups in their schools when deciding whether to switch schools.

Table 3

Discrete Time Survival Estimates (odds ratios shown) (All Students)

Variable	Exiter	Mover	Exiter or Mover
Female	1.074*	1.040*	1.049**
Asian	1.681**	1.129**	1.276**
Black	1.067	2.058**	1.818**
Hispanic	0.876	0.969	0.974
Other Race/Ethnicity	0.987	1.469**	1.366**
Economically Disadv	0.882**	2.187**	1.834**
Special Education	1.182**	1.141**	1.161**
Pct Black	7.877**	1.036	3.337**
Pct Economically Disadv	4.497**	1.736*	1.519
Pct Nonresident Enroll	1.135	3.499**	1.803*
Avg Math Z Score	0.391**	0.732**	0.608**
Δ Pct Black	0.122	32.307**	2.527
Δ Pct Economically Disadv	0.323**	0.738	0.698
Δ Pct Nonresident Enroll	0.134*	1.618	0.875
Δ Avg Math Z Score	0.280**	1.000	0.664**

$* p < 0.05$, $** p < 0.01$.

Exiters

In addition to our main findings, we examined the association between the other covariates in our models and our outcomes. For the model with school choice exit as the outcome, female students, Asian students, and students receiving special education services were slightly more likely to exit their residential district. Conversely, students categorized as being economically disadvantaged were less likely to exit their residential district. Looking at district-level covariates, students were much more likely to exit their residential district with higher percentages of Black students and students classified as being economically disadvantaged. As expected, students were less likely to exit a district with higher average math scores. Finally, students were also less likely to exit when math scores were improving. It is worth noting that the average change in these measures across districts was quite small.

Movers

Similar to the model for exit, female students were more likely to move residences. Asian, Black, and Other Race students were more likely to move compared to white students, *ceteris paribus*. Unlike the model for exit, students who were classified as being economically disadvantaged were more likely to move. Although race/ethnicity and economic disadvantage status are often correlated (e.g., in this sample the correlation between Black and economic disadvantage status was $r = 0.22$), students were more likely to move to a new residential district the higher the percentage of economically disadvantaged students in the district, as well as the higher the percentage of nonresident students. By far the largest predictor of move was the change in percentage of Black students, indicating a significant association between changing school racial characteristics and student residential movement out of the district.

Exiter or Mover

While we suggest that the calculus that families make to exit or move are complex and different from each other, we wanted to include a model that included either of the events. Overall, the results from the last model followed similar patterns based on the results of the separate models for exit and mover. It should be noted that the *p*-values for the percentage of economically disadvantaged students approached statistical significance (0.09). While the *p*-value was larger for change in percentage of Black students (0.23), the coefficient was in the expected direction.

White Student Only Models

Table 4 reports the odds ratios from the estimated models including only white students. A couple of things are worth noting when comparing the results in Table 4 relative to Table 3. First, the odds ratio associated with the district-level measure of percent of economically disadvantaged students is almost double in the white student only model for exit. Second, for the model with "Mover" as the outcome, the measure for district-level "percent Black" is positive and statistically significant in the white student only model, but not statistically significant in the original model.

This suggests that among white students, on average, there was a higher likelihood of moving residences when there was a higher percentage of Black students in the district. This is echoed in the significantly larger odds ratio for the change in "percent Black" measure as well. Overall, although the previous models suggested that on average Asian and Black students were more likely to exit or move compared to white students (holding other variables constant), these additional results suggest that, on average, white families may be more sensitive to the economic and racial makeup of their districts, particularly when there is a greater change in the percentage of Black students in the district.

Table 4

Discrete Time Survival Estimates (odds ratios shown) (White Student Exiter/Mover)

Variable	Exiter	Mover	Exiter or Mover
Female	1.097*	1.033	1.046*
Economically Disadv	0.930	2.284**	1.927**
Special Education	1.428**	1.172**	1.231**
Pct Black	5.212**	2.445**	3.985**
Pct Economically Disadv	8.356**	1.659	2.226**
Pct Nonresident Enroll	1.214	3.668**	2.676**
Avg Math Z Score	0.455**	0.626	0.611**
Δ Pct Black	16.532	98.845**	23.694**
Δ Pct Economically Disadv	0.326	0.718	0.657
Δ Pct Nonresident Enroll	0.016**	0.585	0.275
Δ Avg Math Z Score	1.368	1.186	1.219

* $p < 0.05$, ** $p < 0.01$.

Limitations

First, our design excludes charter school students from the analysis. While charter school students comprise less than 6.5% of suburban Detroit metro area students, enrolling in a charter school is an option for families dissatisfied for whatever reasons with their residential district. However, because our analysis concerns inter-district school choice, we decided to exclude them from the final analysis.

We acknowledge the limitations of our data in capturing more nuanced racial dynamics. As with recent applications of critical race theory (CRT) to quantitative data—or QuantCrit—we recognize that state administrative data provide a limited understanding of why families are exiting districts without considering additional historical, sociopolitical, and economic factors that have shaped power relations in the region overtime (N. M. Garcia et al., 2018). In addition, the measures of economic disadvantage available in state data provide an incomplete picture of how social class may be intersecting with race/ethnicity and school demographics. Students with a wide range of family incomes are categorized as economically disadvantaged, yet they may have drastically different preferences, means to move residences or schools, and constraints on their choices (Singer, 2024). Future research could use more precise measures of student or family socioeconomic characteristics to identify differential patterns among students within and between social classes.

Finally, this study cannot definitively rule out alternative explanations for resident student movement that may be correlated with increasing Black enrollment. Families move for many different reasons, including economic opportunity, family responsibilities, and unstable housing situations. Although we believe our findings strongly point toward the likelihood of perceived racial threat among suburban families who observe increasing percentages of Black students in their local district schools, there may be other factors that explain some of this relationship.

Discussion

In this study, we explored how school choice may be facilitating a type of social control by advantaged families as they respond to perceived racial threats in their local school districts (Blalock, 1967). While "white flight" has been used as a type of social control to avoid living in urban centers with growing Black populations, we apply the concept to schools in suburban Metro Detroit to

determine whether growing shares of Black, economically disadvantaged, and/or nonresident students result in increasing rates of exit from local public school systems. This investigation is important for understanding the down-stream effects of widespread, unregulated school choice in Michigan, where districts have high levels of discretion in admitting students from outside of their boundaries (Lenhoff, 2020).

We hypothesized that students would be more likely to use school choice to exit their residential districts in response to an increased change in Black, economically disadvantaged, or nonresident student enrollment in their school districts (H1). Counter to our hypotheses, students were less likely to exit the greater the change in the percentage of economically disadvantaged and nonresident students in their district, with no difference in their likelihood of moving out of the district. A change in Black enrollment was not significantly related to exit via school choice. The year-over-year population changes are quite small, with the average change in Black enrollment at 0.2%, change in economically disadvantaged enrollment at 1.7%, and change in nonresident enrollment at 0.5%. Therefore, families may instead be responding to absolute population levels rather than change.

We also hypothesized that the probability of a family physically relocating their residence to another district would increase in response to an increase in Black, economically disadvantaged, or nonresident student enrollment in their school (H2). Moving was more common than school choice exit in this population, and we found that the response to absolute levels of enrollment and change in enrollment were somewhat different for moving than exit. We found that, for every standard deviation increase in the percentage of economically disadvantaged or nonresident students in the district, a resident student was 1.7 and 3.5 times, respectively, more likely to move to a different district. Surprisingly, there was no statistically significant relationship between the percentage of economically disadvantaged students and the likelihood of being a "mover" in the white student only analysis.

While the absolute percentage of Black students in the district was not associated with moving in the model with all students included, it was in the white student only model. Additionally, the change in Black enrollment was associated with being a "mover" in both sets of models. The odds ratios for the measures of change in Black enrollment were by far the largest in our models. The change in the percentage of economically disadvantaged and nonresident students were not statistically significant as it relates to the likelihood of being a "mover".

We theorize that district exiters were responding to absolute levels of Black enrollment and movers were responding to racial change in enrollment (Glazerman & Dotter, 2017; Posey-Maddox et al., 2016). These findings reflect how the expansive school choice policies in Michigan's education environment may be encouraging student mobility, potentially disrupting the stability of suburban school districts, and perpetuating patterns of privileged families' "flight" from schools enrolling students perceived as less desirable (Rury & Rife, 2018). We hypothesize that families are using race and socioeconomic class as proxies for school quality rather than student achievement scores (Billingham & Hunt, 2016; Ladd & Turaeva, 2020), despite school-level academic achievement data being readily available online from the state. Therefore, the demographics of the nonresident and resident student populations likely influence parents' decisions to stay or leave their resident district. When school demographic changes are reflective of resident demographic changes, some families choose to enroll in a different district.

Future research on the association between nonresident enrollment and resident exit should examine these phenomena qualitatively and through mixed-methods investigations of particular districts. By pooling all 81 Metro Detroit suburban districts, we are only able to report average effects. We appreciate that underneath these averages may be unique and important cases that would

provide nuance to our understanding of these results. Additionally, there may be interactions between student- and district-level characteristics that need exploration. For example, race/ethnicity is often correlated with economic disadvantage status, so although both measures are included in the regression models there may be intersecting relationships associated with being an exiter or mover. If on average economically disadvantaged students are more likely to move residencies due to housing/job instability, and on average Black students are more likely to be economically disadvantaged, we could expect some mediating relationship between these student-level characteristics and the likelihood of being a mover. In this sample, the correlation between the student measure of Black and economic disadvantaged was moderately low ($r = 0.22$), but a significantly higher percentage of Black students were classified as economically disadvantaged (62%) compared to their white peers (26%). We also suspect that the likelihood of moving is influenced by community conditions (e.g., segregation, concentrated poverty, crime, blight, etc.), which were not controlled for in these analyses.

We further acknowledge that numbers and categories cannot provide us with voice nor insight of families experiencing these changes, such as the nonresident students seeking educational opportunity in schools far from home, or the families moving to what they may perceive as districts with great educational advantages (Gillborn et al., 2018). Those who benefit from the system as designed – typically white, advantaged families –can use school choice or financial means to exit or move away from schools they view as enrolling too many disadvantaged students. Their control over the system in response to this perceived threat maintains their advantage in the educational marketplace and further erodes the educational opportunities of less advantaged students, as resources are stripped away and enrollment declines and instability in the student population wreak havoc on the educator labor market and classroom consistency.

This study expands upon the work of Cowen and colleagues (2015) that found that white and economically advantaged parents in Michigan were more likely to exercise choice in the face of higher percentages of minority and economically disadvantaged students in their home district. This was further reflected in our past descriptive work, which showed significant shifts in student demographics over time in districts that served large numbers of Detroit resident students and experienced massive resident student exit (Pogodzinski et al., 2018). Our findings have implications not only for local action around nonresident enrollment, but also for school choice policy at the state level. Is school choice policy designed to spur competition for students in order to improve the overall system of education by shifting students and their per-pupil funding to better performing schools? Or is school choice policy, potentially by design, oppressing Black and minority families while advantaging white families?

Moreover, the theoretical motivation behind school choice is to lower the transaction costs for families to enroll in better schools by not having to physically relocate into a more desired district (Chubb & Moe, 1990). If choice is leading to the maintenance of well-established patterns of student racial and economic sorting and segregation (or even deepening these patterns), we contend that it is less likely that equitable access to effective education will emerge across the state's public education system, regardless of other efforts to reform education.

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Appendix

Table A1

Covariance Parameters and Model Fit Statistics (All Students)

	Unconditional Model	Intervals Only	Full Model
Exiter			
Covariance Parameter	2.281 (0.366)	2.245 (0.360)	0.475 (0.087)
-2 Log Likelihood	51,019.2	50,973.7	49,789.15
AIC	51,023.2	50,987.7	49,851.15
Mover			
Covariance Parameter	0.773 (0.125)	0.704 (0.114)	0.088 (0.017)
-2 Log Likelihood	151,111.0	149,711.4	145,689.5
AIC	151,115.0	149,725.4	145,751.5
Exiter or Mover			
Covariance Parameter	1.436 (0.238)	1.325 (0.220)	0.187 (0.041)
-2 Log Likelihood	179,312.8	178,017.8	174,254.9
AIC	179,316.8	178,031.8	174,316.9

Table A2

Covariance Parameters and Model Fit Statistics (White Student Exiter/Mover)

	Unconditional Model	Intervals Only	Full Model
Exiter			
Covariance Parameter	2.040 (0.338)	2.028 (0.336)	0.397 (0.078)
-2 Log Likelihood	31,551.8	31,531.1	30,882.1
AIC	31,555.8	31,545.1	30,936.1
Mover			
Covariance Parameter	0.805 (0.133)	0.752 (0.125)	0.096 (0.020)
-2 Log Likelihood	100,092.9	99,279.9	97,365.2
AIC	100,096.9	99,293.9	97,419.2
Exiter or Mover			
Covariance Parameter	1.112 (0.183)	1.055 (0.173)	0.123 (0.026)
-2 Log Likelihood	117,954.2	117,249.6	115,396.1
AIC	117,958.2	117,263.6	115,450.1

Table A3

Logistic Regression Estimates and Standard Errors (All Students)

Variable	Exiter	Mover	Exiter or Mover
Intercept	-5.089	-3.537	-3.235
	(0.111)	(0.051)	(0.063)
Female	0.071	0.039	0.048
	(0.029)	(0.016)	(0.014)
Asian	0.520	0.122	0.244
	(0.060)	(0.040)	(0.034)
Black	0.065	0.722	0.598
	(0.045)	(0.023)	(0.021)
Hispanic	-0.132	-0.032	-0.027
	(0.068)	(0.040)	(0.035)
Other Race/Eth	-0.013	0.385	0.313
	(0.086)	(0.042)	(0.039)
Economically Disadv	-0.125	0.783	0.606
	(0.034)	(0.018)	(0.016)
Special Education	0.1673	0.1317	0.150
	(0.041)	(0.022)	(0.020)
Pct Black	2.064	0.035	1.205
	(0.362)	(0.178)	(0.240)
Pct Economically Disadv	1.503	0.551	0.418
	(0.416)	(0.221)	(0.243)
Pct Nonresident Enroll	0.127	1.253	0.590
	(0.480)	(0.234)	(0.301)
Avg Math Z Score	-0.940	-0.312	-0.498
	(0.211)	(0.117)	(0.117)
Δ Pct Black	-2.105	3.475	0.927
	(1.312)	(0.874)	(0.767)
Δ Pct Economically Disadv	-1.131	-0.304	-0.359
	(0.464)	(0.285)	(0.260)
Δ Pct Nonresident Enroll	-2.009	0.481	-0.133
	(0.977)	(0.594)	(0.548)
Δ Avg Math Z Score	-1.274	0.000	-0.410
	(0.226)	(0.137)	(0.124)

Table A4

Logistic Regression Estimates and Standard Errors (White Students Only)

Variable	Exiter	Mover	Exiter or Mover
Intercept	-5.220	-3.564	-3.297
	(0.123)	(0.058)	(0.060)
Female	0.092	0.032	0.045
	(0.038)	(0.020)	(0.018)
Economically Disadv	-0.072	0.826	0.656
	(0.043)	(0.022)	(0.020)
Special Education	0.356	0.159	0.208
	(0.052)	(0.028)	(0.025)
Pct Black	1.651	0.894	1.382
	(0.401)	(0.217)	(0.225)
Pct Economically Disadv	2.123	0.506	0.800
	(0.464)	(0.258)	(0.255)
Pct Nonresident Enroll	0.194	1.300	0.984
	(0.515)	(0.264)	(0.276)
Avg Math Z Score	-0.787	-0.469	-0.493
	(0.258)	(0.146)	(0.138)
Δ Pct Black	2.805	4.594	3.165
	(1.913)	(1.226)	(1.092)
Δ Pct Economically Disadv	-1.120	-0.332	-0.420
	(0.639)	(0.348)	(0.318)
Δ Pct Nonresident Enroll	-4.106	-0.537	-1.292
	(1.392)	(0.870)	(0.768)
Δ Avg Math Z Score	0.313	0.171	0.198
	(0.306)	(0.175)	(0.157)