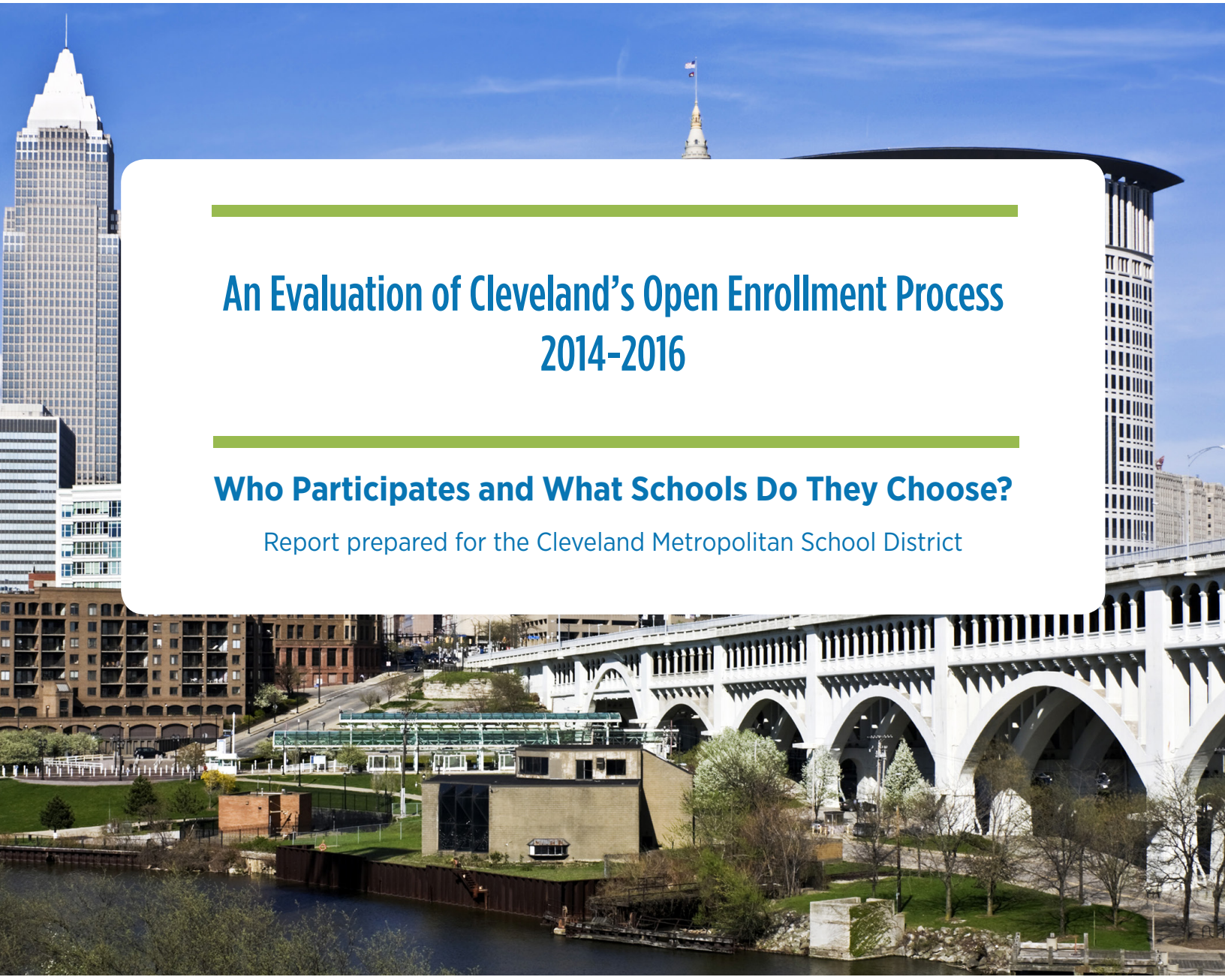
CLEVELAND METROPOLITAN SCHOOL DISTRICT

CRPE REINVENTING PUBLIC EDUCATION



An Evaluation of Cleveland's Open Enrollment Process 2014-2016

Who Participates and What Schools Do They Choose?

Report prepared for the Cleveland Metropolitan School District

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I. Introduction

New schools, renovated schools, and improving schools are changing the face of public schools in Cleveland and parents are taking notice. Cleveland's parents have long been able choose schools outside their neighborhood or charter schools that operate independently of the Cleveland Metropolitan School District (CMSD). Recently, CMSD and community partners have stepped up efforts to support parents in making the best school choices for their children. The Cleveland Transformation Alliance now provides website with information on school programs and quality for all CMSD and all of the city's charter schools. The Alliance has provided between twenty and thirty School Quality Ambassadors who distribute school guides, information to families on how to access the interactive school choice website, and collect and publish school reviews provided by parents. Last year, CMSD hosted eleven information sessions in the city's highest need neighborhoods and made training and resources available at thirty public library branches. The district also implemented a new school application system allowing parents to apply to any of the CMSD schools using a single application form.

These efforts seem to be paying off. Over the last three years increasing numbers of parents and students have submitted applications to the school choice system. They have shown a growing preference for the city's highest performing schools and are less likely to select failing schools.

White and Latino students are more likely to match to the city's new schools and the city's African American families opt for longer standing innovative schools with higher performance levels, though it isn't clear yet if those decisions are more driven by preferences for school types or, as CMSD presumes, the location of schools.

In this report, we examine data from CMSD's application system asking:

- How many students are choosing through the CMSD application system? And who are these students?
- What schools do parents and students apply to and what schools are students matched to by the enrollment system? How do these selection and match patterns differ across the city?
- Which students seem to be leveraging choice to gain access to highly rated schools and which are not?

II. Choosing a School in Cleveland

Cleveland offers students considerable choice in where they go to school. Students in Cleveland can apply to attend any CMSD school in the city offering their grade, though there are limits. At the elementary level, students living within the school's neighborhood attendance boundaries have priority and will be enrolled before students who reside outside the boundary until the school reaches maximum capacity for the requested grade level. In addition, six schools across the city have selective criteria and require students to complete an exam or submit materials to be eligible for acceptance.

Students seeking to enroll in any CMSD high school or a CMSD elementary school can submit an on-line application requesting up to eight CMSD schools during the district's open enrollment period, which runs from January to mid-March. This is the time period in which students have the greatest opportunity to be matched to a school outside their neighborhood. Students can still apply to schools after the March deadline through the enrollment portal but spaces are more limited and can not be guaranteed even for students living in the school's neighborhood attendance zone.

Cleveland also hosts several charter schools. Students who are interested in attending a charter school must apply to each of these schools separately using the school's specific application materials and in accordance with the school's deadlines.

This report utilizes information from the CMSD enrollment application system and considers only the placement of students submitting applications. This report does not examine applications to charter schools or students who did not look at options beyond their neighborhood school.

III. Examining CMSD School Applications

This report examines student level applicant and match data from the CMSD enrollment system for enrollment for the 2014-15, 2015-16, and 2016-17 school years. These data include student IDs, demographic data, current grade, application grade, residential addresses, matched schools, and the position in which the students ranked the matched school on the enrollment application.

It is important to note that, the data available for this analysis only provides us with the school to which the students matched. The data do not include the full list of schools to which students applied (students can list up to eight schools). This condition limits our ability to fully assess the demand for schools.[1] For example, when students match to their second or lower ranked choice, we cannot say which schools ranked higher on the student's' application. Higher ranked schools are the priority for students and should be factored into demand calculations. Similarly, and more significantly, because the majority of students matched to their first choice school, we have no information on where, if anywhere, the parent or student might have considered enrolling as a second choice. Prior research indicates that often, second choice schools are often viable choices for students and parents and should be considered when considering the overall demand for schools.[2]

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1 The limitations of the data available for this analysis are an artifact of the prior enrollment system. The current school choice portal does provide the full complement of schools selected and matched. Analyses going forward will be able to use these more complete data to assess the demand for schools.

2 A 2014 survey of parents in Cleveland showed that just under half of Cleveland parents felt there was at least one school other than the one their child currently attends that they would be happy for their child to attend. See Ashley Jochim, Michael DeArmond, Betheny Gross and Robin Lake. (2015) *How Parents Experience Public School Choice.* Center on Reinventing Public Education. Seattle, WA.

We combined the student level application and match data with student level data from the district's Conditions for Learning (CFL) survey, a survey capturing students' perceptions of school climate and culture. We aggregate the student level CFL data to create school level CFL scores, which we consider a proxy for schools' culture and environment -- how students feel in the school.

Finally, we included school performance ratings from the 2014-2015 school year. Each year the CMSD and the Cleveland Transformation Alliance combine school performance and growth data to rate schools classifying schools as failing, low performing, middle performing, or high performing.[3] In addition to these four ratings, we also identify "new schools," which are not yet rated for performance.

IV. Participation in CMSD Choice is Rising But Students Still Getting their Top Choices

In the last three years the number of students submitting an application through CMSD has nearly doubled from 1,840 to 3,644 and these students come from across the city. Eighth grade students applying to ninth grade are the largest share of the applicants each year though a small but growing number of families who are applying for kindergarten through the enrollment system. (See Figure 1) Sixty-seven percent of students who enrolled in CMSD ninth grades in the fall of 2016 submitted a choice application. Just over nine percent of students who enrolled in CMSD kindergartens for the fall of 2016 submitted a choice application.

3 To obtain specific school rating use: http://www.clevelandta.org/choose-your-school

Figure 1: The number of applicants in the CMSD enrollment system has risen for three consecutive years

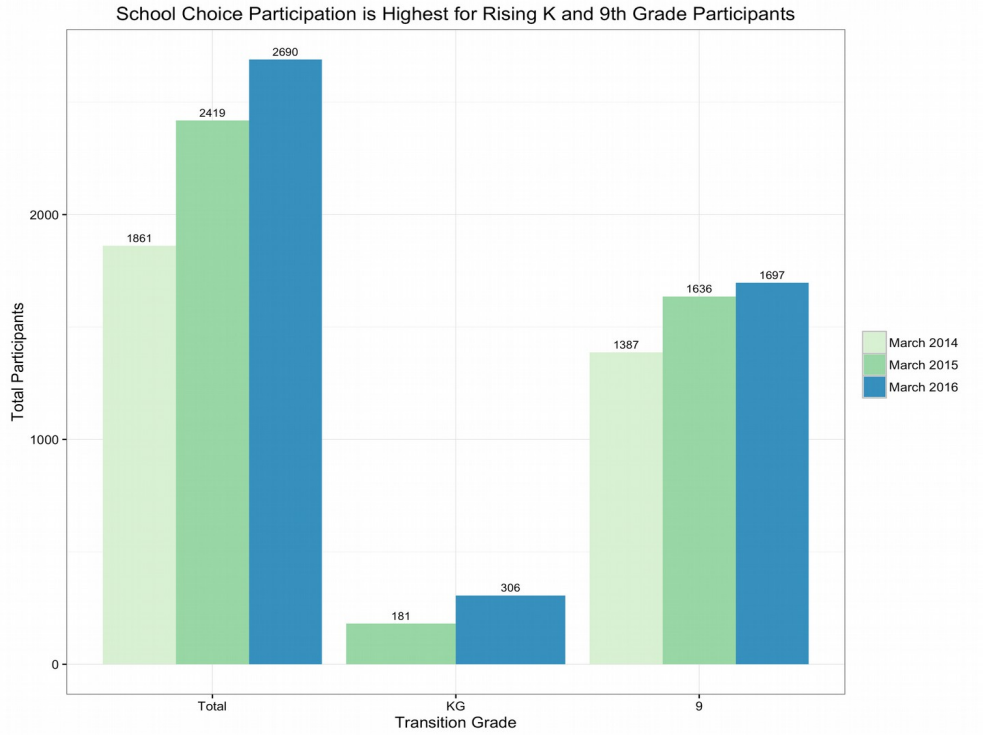


Figure 2: Cleveland high school zones

Throughout this report we consider the variation in choice participation across the city. For reference we segmented the city into the historic high school attendance zones as mapped below.

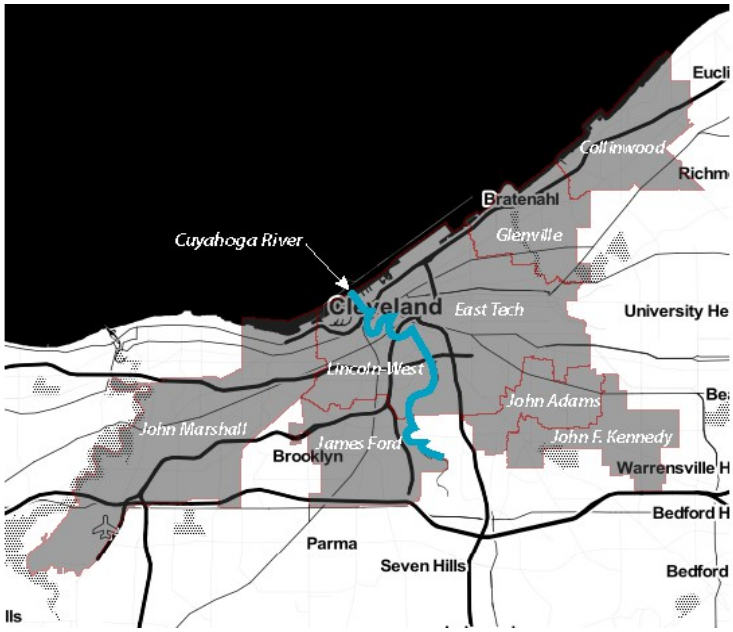
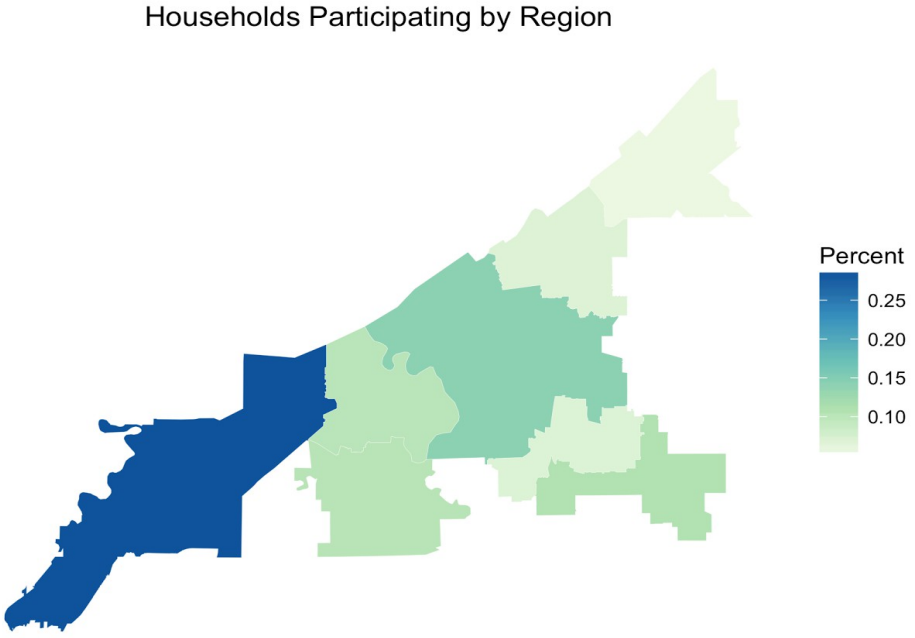


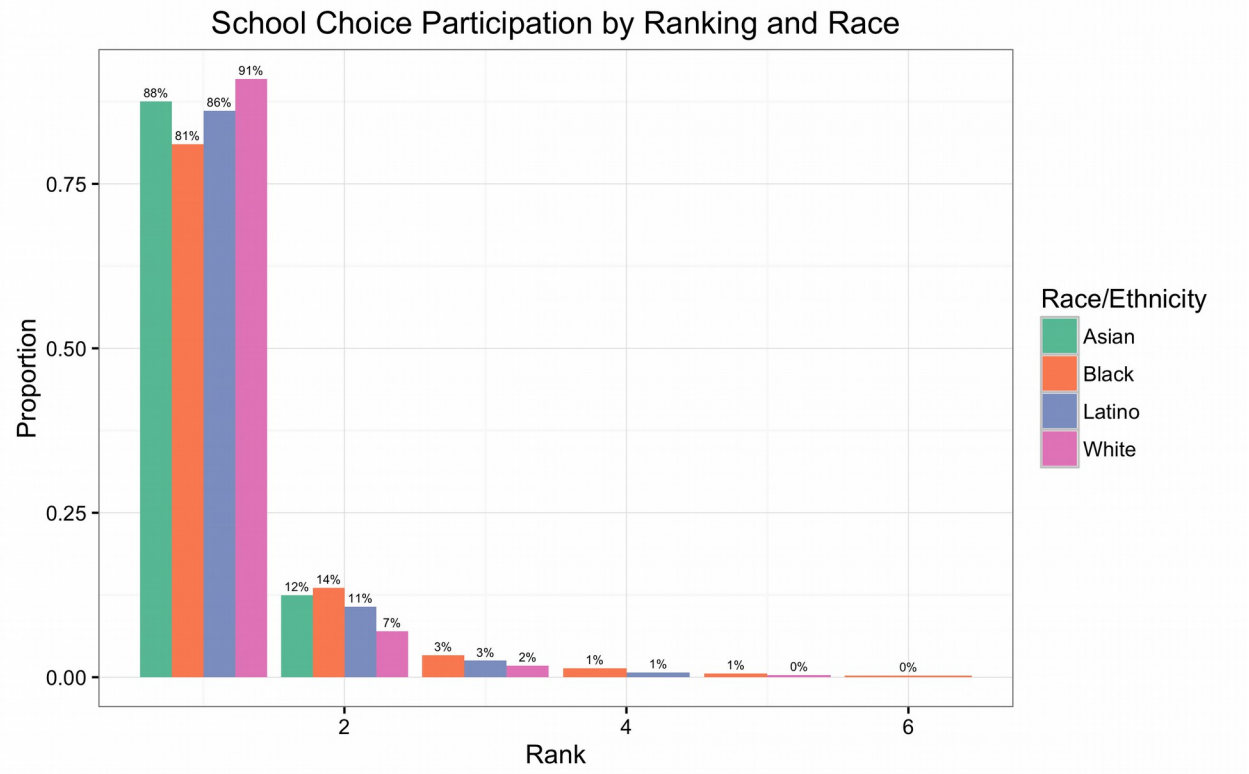
Figure 3: Applicants come from across the city



In 2016 89 percent of students submitting a choice application matched to their first choice and another 7 percent matched to their second choice school. Notably, however, only 81 percent of the African American applicants matched to their first choice. Notably, African American students do apply in high numbers to schools in which demand exceeds the available space.[4] Over 90 percent of applicants for elementary grades (in all subgroups) matched to their first choice school. High school trends are consistent with the overall trends for the subgroups in Figure 4.

4 For example, MC²STEM is among the most requested and matched schools for African American applicants but in 2016, this school had more applicants than available enrollment and students were placed onto a waiting list.

Figure 4: Most applicants match to their first choice though African American applicants match at lower rates than other students



V. More Students are Matching to Higher Performing Schools and Fewer are Matching to Failing Schools

One of the most encouraging trends in the application data is that Cleveland students are increasingly requesting and matching to the city's highest performing schools. We examined the rate at which applicants matched to schools using the school's 2014-2015 performance rating as a proxy for the school's performance.[5] In 2014 only 27 percent of students matched to schools with the city's highest performing rating. In 2016, however, 38 percent of applicants matched to the highest rated schools. At the same time fewer students are requesting and matching to the city's lowest performing schools. In 2014, 31 percent of applicants matched to what was deemed "failing" in 2016 but only two years later, half as many selected and matched to a failing school.

5 We use the 2014-2015 performance rating for all years because state testing and ranking changed significantly during this period of time. Assigning the 2015 ranking to all years also means that any changes in observed matches by quality reflect changes in school choices not just changings in school rankings.

Figure 5: Applicants are increasingly matching to high performing schools

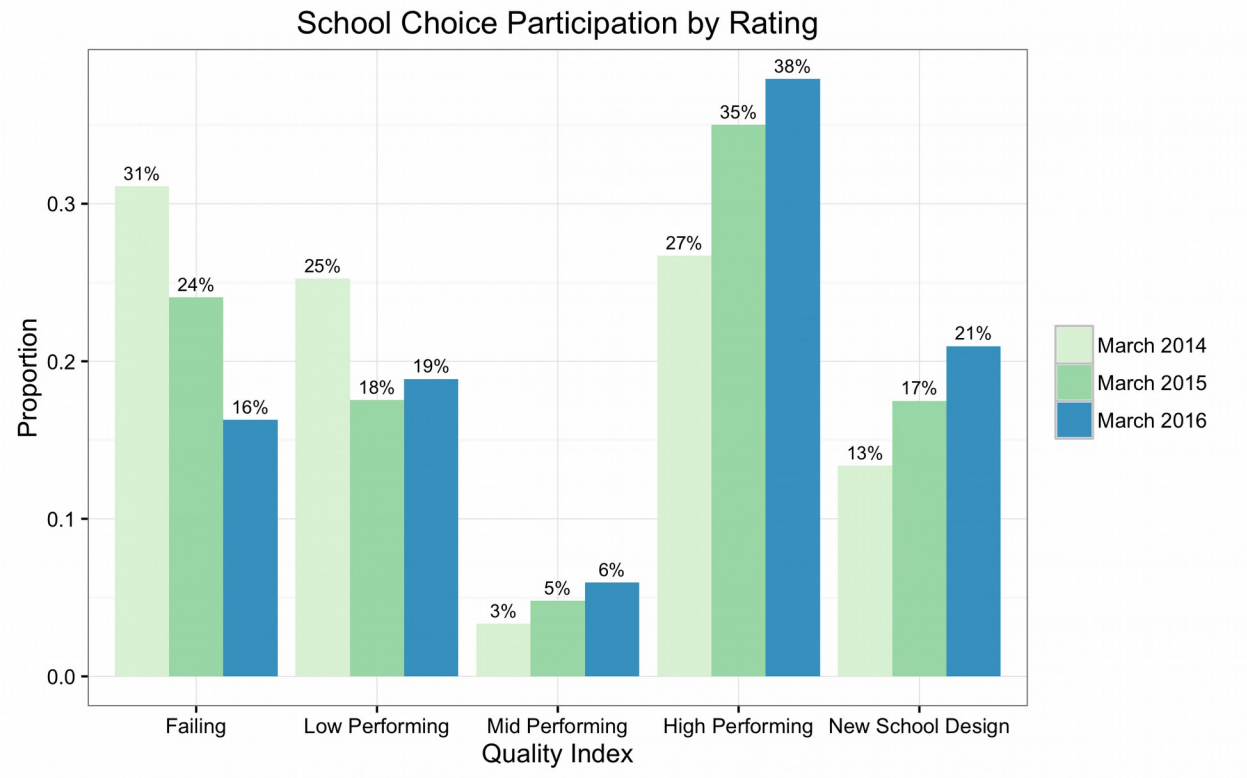


Table 1: Top 5 most frequently matched elementary and high schools

	Top Matched K-8 school		Top matched HS	
	2014	2016	2014	2016
1st	Campus International	Campus International	James Ford Rhodes	Max S. Hayes High School
2nd	Riverside	Clark	Max S. Hayes High School	MC^{2}STEM
3rd	Warner Girls' Leadership Academy	Tremont Montessori	Bard High School Early College	Bard High School Early College
4th	Garfield	Riverside	John Marshall High School	Cleveland High School for Digital Arts
5th	Buhrer Dual Language	Warner Girls' Leadership Academy	MC^{2}STEM	Cleveland School of the Arts

Note: The table shows the most frequently matched schools not necessarily the most requested schools. In 2014-15 demand for Campus International exceeded availability. In 2015-16 Campus International, Max S. Hayes, and MC^{2}STEM had more requests than available openings.

We considered whether scores on the Conditions for Learning (CFL) survey - a survey that captures students' perception of schools culture and climate - correlated with the schools to which students applied.[6] Once we account for the academic performance rating of the school, the schools CFL score shows no relationship to the schools parents and students select and match to. It should be noted, however, there is very little variation in the school level CFL scores across schools. In essence, at least as far as these scores are concerned, there is very little difference for parents to choose among.[7]

VI. Many Students are Willing to Travel for High Performing Schools

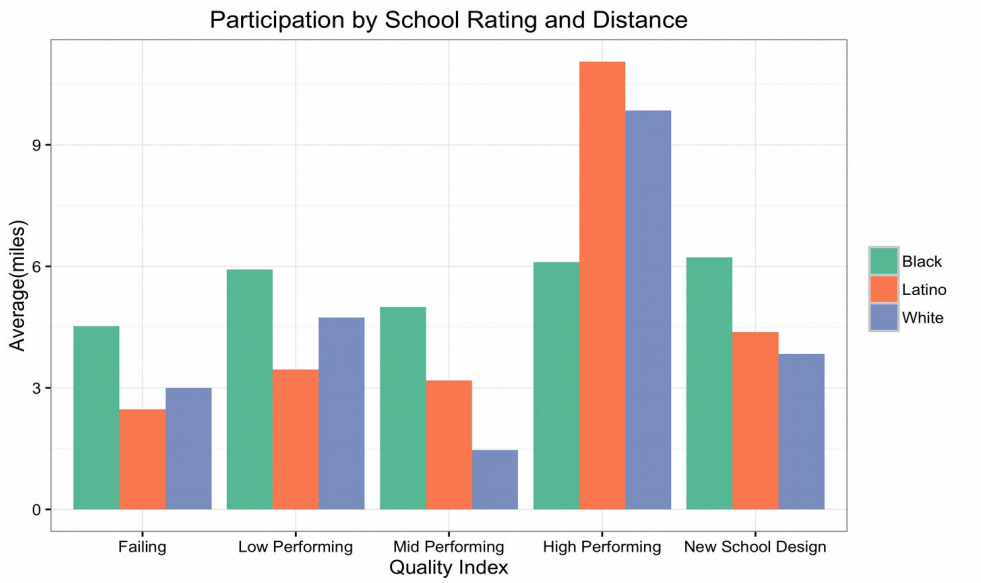
Students, especially high school students, that applied through the enrollment system are travelling some distance to get to the schools they choose. On average, in 2016, high school applicants matched to schools 5.5 miles from home. Elementary applicants matched to 3 miles from home. Students seem particularly willing to travel to reach highly rated schools. Figure 5 shows that on average white and Latino students match to a high performing school will travel upwards of 10 miles to reach the school. African American students, who most frequently requested and matched to top rated schools located in the center of the city, on average, travel six miles to the school.[8]

6 We employed a logistic regression model to determine the influence of all student level CFL measures on a family's decision to choose a school outside their home school zone.

7 Another concern with the CFL is that it might be correlated with academic performance making it difficult to identify any relationship between CFL and the demand for schools once we control for academic performance. Interestingly, we found the correlation between CFL and the performance ranking of schools to be relatively modest and not a concern for identification.

8 Although African American applicants travel less far to get to a high ranked school, they seem to be more willing to travel to schools in 2016 than in 2014. In 2014 African American students most frequently matched to Martin Luther King High School, an average of three miles from home. In 2016, however, African American students most frequently matched to MC^2 STEM, an average of 8 miles from home.

Figure 6: Many students travel long distances to attend high performing schools (2016 Applicants



Note: These distance measures by subgroup reflect only a subset of applicants. Approximately 1,020 records of applicants for high schools are missing a unique student identifier and, as such, do not have demographic data included in our dataset. These applicants are, therefore, not included in this analysis.

Although interest in high performing schools is rising and many students seem willing to travel to reach these schools, many students from all racial and ethnic backgrounds in the city continue to request low performing schools. In 2016, 16 percent of applicants (almost 500 applicants) selected and were matched to failing schools. When students apply to failing schools, they tend to be schools that are close to home (within ~3 miles).

VII. Applicant Choices Disrupt Prior Enrollment Trends; Show Weaknesses in the Supply of Southeastern Neighborhood Schools

The choice patterns by students completing CMSD enrollment applications are different from residential and enrollment trends in the city. Demographic maps of Cleveland show that the city's white families are most heavily concentrated in the city's west side neighborhoods, the city's Latino community concentrates in central west neighborhoods, and the African American community concentrates in a band central neighborhoods stretching from the north to the south of the city. (See Figure 7) By and large, current CMSD enrollment patterns mirror these residential trends. (See Panel 1 in Figures 8-10).

Central region schools, however, are drawing Latino and white applicants to this region at much higher rates than can be seen in the 2016 enrollment patterns. (See Panel 3 in Figures 7 to 9). African American applicants are also drawn to the schools in the central neighborhoods though this choice pattern is consistent with 2015-16 enrollment patterns.

Among African American applicants, it is the exit from the southern neighborhoods that appears most stark. Twenty-five percent of African American students are enrolled in the John Adams and John F. Kennedy zones in 2015-16. Respectively, 10 and 18 percent of African American applicants reside in these neighborhoods. However, less than 5 percent of African American applicants select and match to schools in these neighborhoods.

Figure 7: Cleveland has distinct neighborhoods: Concentration of Population by Subgroups and Census Tract

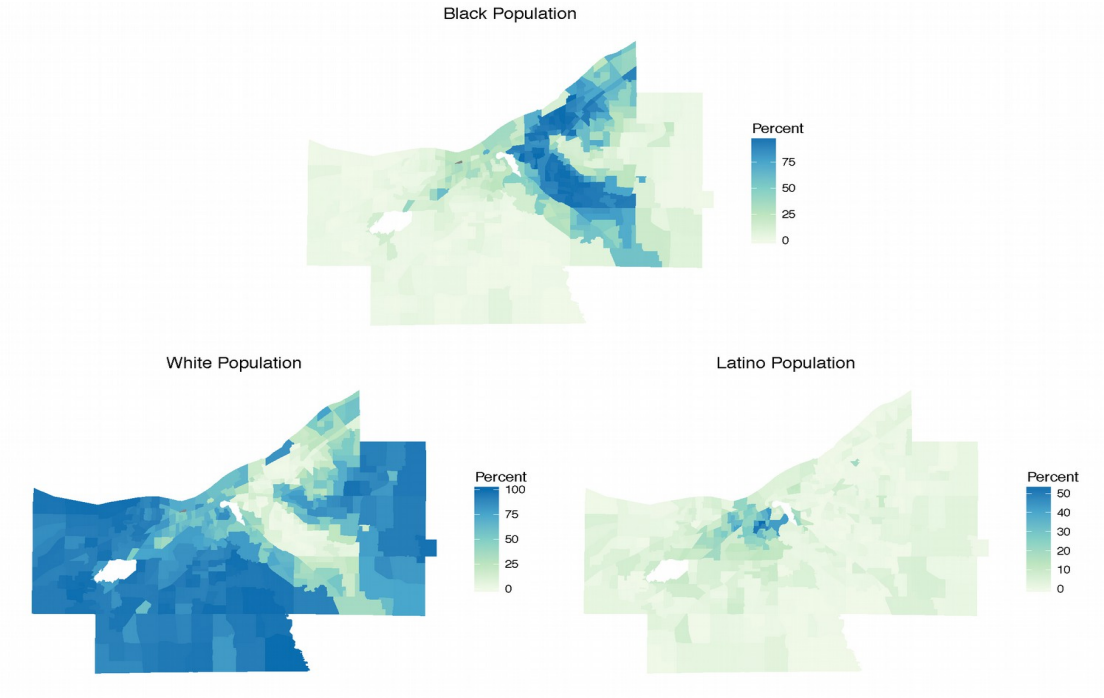


Figure 8: White applicants more frequently apply to schools beyond the boundaries where they typically enroll

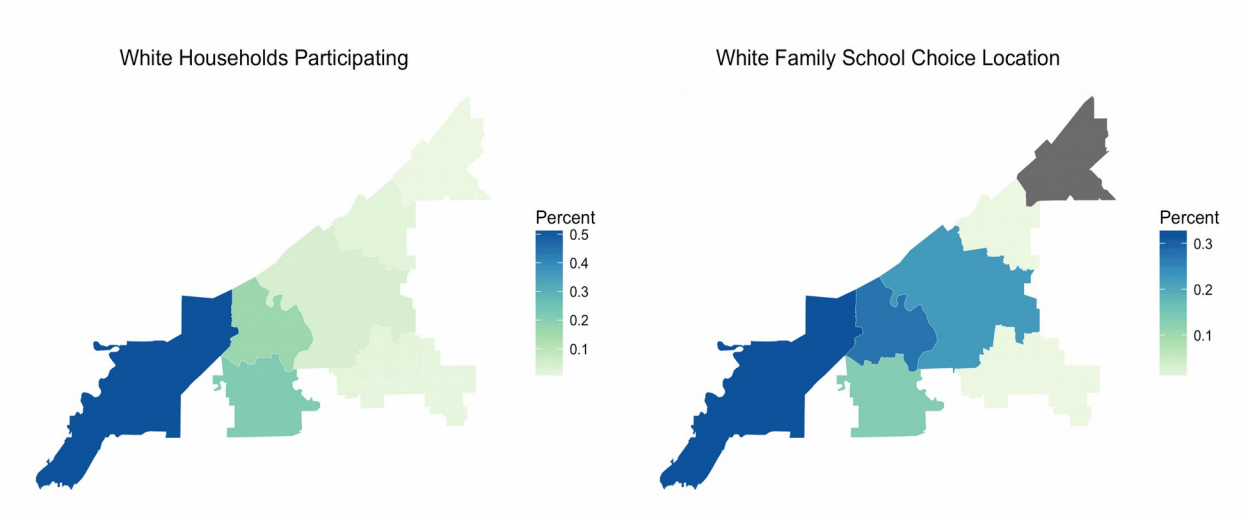


Figure 9: Latino applicants more frequently apply to schools beyond the boundaries where they typically enroll

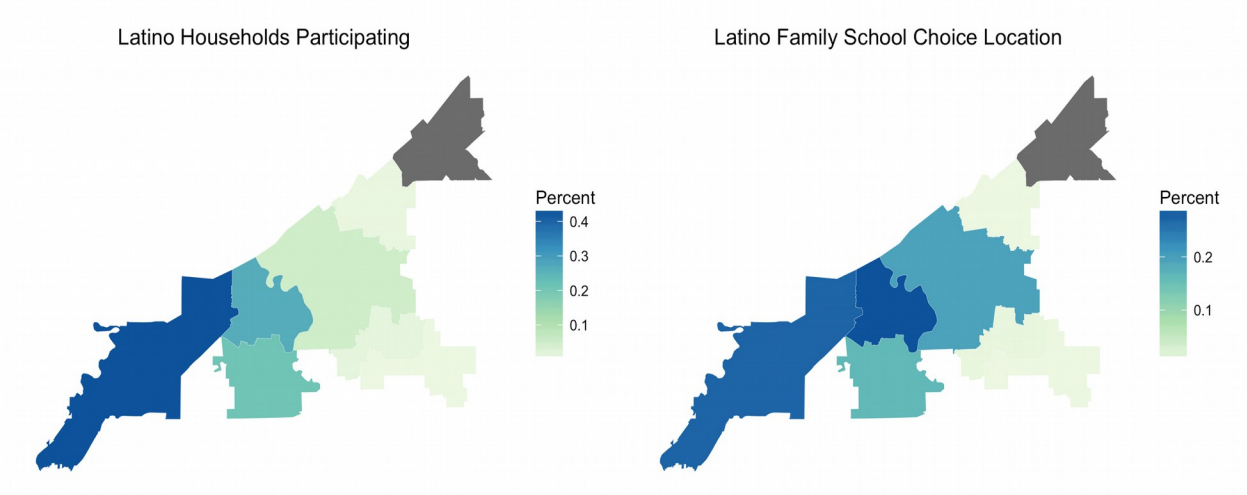
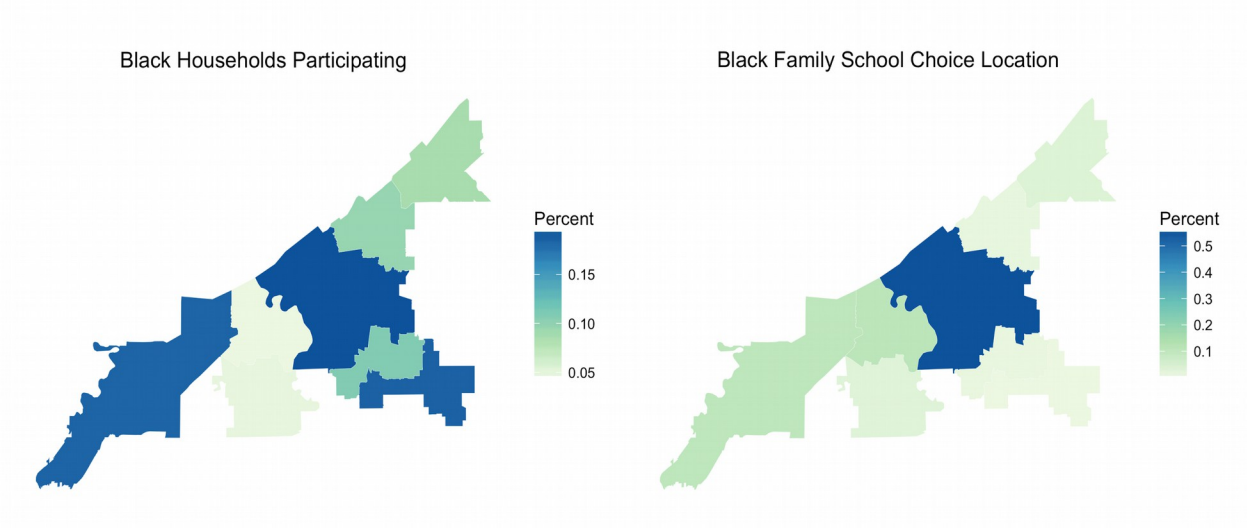


Figure 10: African American applicants concentrate in central region schools; exit the southeastern schools



VIII. School Location is Still a Factor Driving Choice

Despite the willingness of students to travel to schools, residential location is, unsurprisingly, still a factor in the choices students are parents are making. As a result, school location remains a salient factor determining the types and quality of schools to which the students apply and match too. For example, several new design schools are located closer to white and Latino applicants than they are African American students.[9] Of the applicants for which we have demographic information,[10] only 24 percent of African American applicants selected and matched to a new design school while 32 and 36 percent of Latino and white students, respectively, matched to new design schools.[11]

The neighborhoods in which Latino and African American families are most heavily concentrated host most of the city's failing schools. Twenty-seven percent of Latino applicants and 23 percent of African American applicants recently selected and matched to failing schools, while only 16 percent of white applicants did so.

Over the last three years CMSD has accompanied its efforts to engage families in choice with a complementary effort to improve the supply of schools. The district has launched new programs strategically placing them around the city to provide new options in neighborhoods that lacked

9 White and Latino applicants on average lived less than five miles from new design schools. African American applicants, by contrast, lived, on average, more than six miles from these schools.

10 We only have demographic data for applicants that are applying from CMSD schools. Several applicants, however, are newly entering CMSD schools from charter or private schools and our files lack demographic data on these students.

11 An earlier wave of new design schools, however, are located in the central neighborhoods. These schools, which now have several years of track record, are sought by African American applicants.

quality options. The district is also investing in the improvement of low performing schools.[12] While parents are clearly shifting their demand to highly rated options, location is still an important concern for families suggesting that continued (and indeed already planned) investments in the supply of schools remains as important as ever.

IX. Continuing the Progress: Keep the Focus on School Supply, Supporting Families to Choose, and Unifying Enrollment Processes

Cleveland parents have broad opportunity to seek and select the best school for their child. But for years, some of the city's best schools operated with empty seats. This tide is turning in Cleveland. In the last three years the number of students applying to CMSD schools through the district's new enrollment system has not only increased but these applicants are more frequently opting into the district's higher rated schools. Many students are travelling outside their neighborhood to reach their schools of choice. In particular, the city's white and Latino applicants are also more readily seeking and matching to schools in the city's central region. The Cleveland Transformation Alliance reported last summer that the city's highest rated schools were reaching full enrollment.

As encouraging as these trends are, it is also clear that there is more work to be done to help parents and students make the most of the choices they have. Students' proximity to schools remains a factor in determining the types of and quality of schools students attend. On-going efforts to improve and strategically site new school programs is still an important strategy for improving all students' access to a diverse portfolio of quality schools. The southeastern neighborhoods of the city are a particular priority when it comes to providing new school options. These neighborhoods host primarily low rated schools and applicants are readily opting away from these schools. It begs the question: Where can families in these neighborhoods that don't have ready access to transportation for their children turn to for good school options?

More than two thirds of 9th graders may be enrolling in CMSD high schools through the enrollment system but only a small fraction of the district's kindergarten students are using this system. Certainly, many parents of kindergarteners are likely to favor neighborhood schools for their small child and are free to enroll in these schools after the main matching process concludes (though space is not guaranteed and the district does encourage them to submit an application for these schools anyway). However, parents of only 11 percent of kindergarten students in 2015 submitted a choice application suggesting that many parents of rising kindergarteners may not be aware of their school options and how to avail themselves of them. A comprehensive and systematic effort to reach out to the city's preschool programs could go a long way toward ensuring that these families, many of whom may be new to school choice, know how to make the most of their school choice options.

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12 The Cleveland Transformation Alliance reports that since 2012 CMSD has opened five new schools and redesigned another large building to host three new schools. The district has also targeted 23 schools for turnaround support. See Cleveland Transformation Alliance. (2015) *A Report to the Community on the Implementation and Impact of the Cleveland Plan for Transforming Schools.* Cleveland Transformation Alliance, Cleveland, OH.

A significant number of students continue to apply to failing schools. While students and parents selecting these schools may have very good reasons for choosing them, it is also possible that they aren't fully informed on the performance of the school, other options available to them, or the implications of choosing a school that has been rated as failing. Efforts from CMSD and their educational partners throughout the city to support families in making school choices should be an on-going priority.

Finally, this report only offers a limited view into students and parent choosing in Cleveland. Nearly 30 percent of Cleveland's students attended charter schools in the city.[13] The current enrollment system, however, can only be used to access district schools. Parents and students seeking enrollment in charter schools must still complete separate applications for these schools - though several charter schools that are sponsored by or partner with the district have coordinated their application timelines with the district. This fragmented approach to enrollment means that parents must often familiarize themselves with multiple application processes and complete multiple applications. The fragmented approach also makes it more difficult to fully understand the patterns of choice across the city.

Charter and district leaders in cities across the country including Camden, Denver, D.C., Newark, and New Orleans have forged partnerships to unify their enrollment systems. With these partnerships cities provide their families with a more streamlined and transparent enrollment system and provide their school and system leaders with clear information on the schools parents and students are seeking.

Similar conversations have been started in Cleveland.[14] Now, with so many families making school choices and an increasing number of them made through the new enrollment system, it is a good time for the city, district, and charter leaders, who have committed to coordination and collaboration, to prioritize these conversations.

13 The National Alliance of Public Charter Schools Dashboard reports that 28 percent of Cleveland public school students attended charter schools in the 2011-12 school year.

14 See also *Unified Enrollment in Cleveland: Insights from Cross Sector Conversations* from Cleveland Metropolitan School District, March 2016