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Integration in Little Rock, Part 2: Racial and Socioeconomic Integration in Little Rock Metro Area Public Schools

Elise Swanson

Sarah C. McKenzie

Gary W. Ritter

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**INTEGRATION IN LITTLE ROCK, PART 2:
RACIAL AND SOCIOECONOMIC INTEGRATION IN LITTLE ROCK
METRO AREA PUBLIC SCHOOLS**

By:

**Elise Swanson
Sarah C. McKenzie
Gary W. Ritter**

December 5, 2016

**Office for Education Policy
University of Arkansas
211 Graduate Education Building
Fayetteville, AR 72701
Phone: (479) 575-3773
Fax: (479) 575-3196
E-mail: oe@uark.edu**

Executive Summary

This report is a continuation of our analysis of racial and socioeconomic integration and segregation in the Little Rock Area between 2008-09 and 2014-15. The Little Rock Metropolitan Area is characterized by a variety of schooling options for students and families, including traditional public schools, public charter schools, private schools, and homeschooling. In this report, we focus on the current level of racial and socioeconomic integration in traditional public schools and charter schools, as well how student moves into and out of public schools in the Little Rock Area affect levels of integration in the schools they choose to leave and enter. This report is structured around four main research questions. Our research questions and a summary of our findings are below:

1. What are the racial, socioeconomic, and academic differences between the schools students exited and entered?

- Over 10,000 students transferred between traditional public schools (TPSs) and charters in the Little Rock Area between 2008-09 and 2014-15.
- On average, students moving into charters from TPSs entered schools with a lower concentration of students receiving free or reduced price lunch (FRL); conversely, all students moving into TPSs from charters entered schools with a higher concentration of FRL students.
- There is no evidence that students transferred into schools with higher concentrations of students of the same race.
- Overall, students moved into schools with similar academic performance as the schools that they exited. There is no clear pattern of differences in academic performance between the schools student transferred between.

2. What is the current level of segregation and integration in the Little Rock Area?

- 6% of charter students, 5% of LRMA TPS students, and 7% of LRSD students attended schools where 90% or more of the students were of the same race.
- A slightly higher percentage of students in the charter sector (49.8%) attended integrated-black schools compared to the percentage of students in either LRMA TPSs (47.0%) or LRSD TPSs (41.9%).
- Charter schools were more likely to be representative of the broader community with regards to the percent of white students enrolled, with 60% of charter students attending integrated-white schools, compared to 37% of LRMA TPS students and 27% of LRSD students.
- Fewer than 50% of students in any sector attended racially integrated schools (racially integrated schools have a racial composition within +/- 10 percentage points of the area average racial composition).

- 3% of charter students, 18% of LRMA TPS students, and 22% of LRSD students attended schools where 90% or more of students were eligible for free or reduced price lunch.
- Traditional public schools were more likely than charter schools to be socioeconomically integrated, with 37% of LRMA TPS students attending socioeconomically integrated schools, compared to 25% of LRSD students and just 14% of charter students.
- Fewer than 38% of students in any sector attended socioeconomically integrated schools (percent of FRL students is within +/- 10 percentage points of area average FRL concentration).
- Students in all sectors in LRMA were more likely to attend a racially integrated school than a socioeconomically integrated school.

3. How do student moves impact the level of integration in LRMA?

- Between 2008-09 and 2014-15, 52% of moves had a racially integrative impact on the LRMA TPSs that students exited, while 32% of moves were racially neutral, and 16% were racially segregative.
- In the seven years examined, 56% of moves had a socioeconomically integrative impact on the LRMA TPSs that students exited, while 23% had a neutral impact, and 21% had a socioeconomically segregative impact.
- Overall, student moves had a neutral to integrative impact on the LRMA schools affected by student movements during this period.

3A. How do moves to Charter Schools impact the level of integration in LRMA?

- Between 2008-09 and 2014-15, 48% of student moves from LRMA TPSs to charters had a racially integrative impact on the LRMA TPSs students exited, while 35% of moves had a neutral impact, and 17% had a segregative impact.
- Across the years examined, 56% of student moves from LRMA TPSs to charters had a socioeconomically integrative impact on the exited TPSs, while 22% had a neutral impact, and 22% had a segregative impact.
- Overall, student moves from LRMA TPSs to charters tended to have racially and socioeconomically integrative impacts on the exited TPSs. However, student moves from outside the Little Rock area to LRMA charters tended to increase the level of racial and socioeconomic segregation in charters.

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I. Introduction

In our [first AER examining integration in the Little Rock Area](#), we focused on two research questions:

1. How many students were enrolled in the Little Rock Area between 2008-09 and 2014-15, and what were their racial and socioeconomic characteristics?;
2. How many students voluntarily switched schools in the Little Rock Area between 2008-09 and 2014-15, and what were their racial, socioeconomic, and academic characteristics?

We found that traditional public schools (TPSs) enrolled larger shares of black students and students receiving free or reduced price lunch than did charters, but that the fraction of black and FRL students enrolled in charters was increasing over time. We also found that most students who exited LRMA TPSs left not for charters, but for public schools in other areas of the state or for non-public options. Among students who transferred to public schools, we found that black students and FRL students were disproportionately less likely to transfer from TPSs to charters or other areas of the state, given their share of the TPS student body. Black students and FRL students were also underrepresented among students transferring from charters to TPSs or other areas of the state. Finally, we found that students were much more likely to exit schools in the bottom 1/3 of the area's academic performance distribution than schools in the top 1/3 of the area's academic distribution. Our first report focused on characteristics of students in LRMA schools, particularly students who chose to switch schools between the 2008-09 and 2014-15 school years. In this report, we examine the impacts of those moves on the level of racial and socioeconomic integration in the Little Rock Metro Area school system. We pick up where we left off, analyzing the characteristics of schools students chose to enter to determine if students tend to enter schools in which more students are racially and economically similar to them than

in the schools they exited, then examine current levels of integration in charters and TPSs in LRMA before directly addressing the impact of student moves on the level of integration in LRMA schools. Finally, we examine the actual magnitude of schoolwide demographic changes in schools that lost or gained students in the years between 2008-09 and 2014-15. Specifically, our research questions in this AER are as follows:

1. What are the racial, socioeconomic, and academic differences between the schools students exited and entered?
2. What is the current level of integration in the Little Rock Area?
3. How do student moves impact the level of integration in the Little Rock Area?
4. How much do school demographics change year-to-year in schools with exiting or entering students?

Before diving into these questions and our findings, we begin by laying the definitions of key terms used throughout our first AER and this paper.

II. Definitions

In this report, we examine the current (static) and changing (dynamic) level of integration in the LRMA school system. Throughout the report, we refer to the following terms to conduct our analyses:

1. **Little Rock Metro Area (LRMA):** Geographic area in which students who attend charter schools in Little Rock generally live. The LRMA includes the Little Rock School District (LRSD), North Little Rock School District (NLRSD), and the Pulaski County Special School District (PCSSD).
2. **Traditional public school (TPS):** Schools with geographic catchment areas, organized and operated by state-authorized school districts. Funded by local, state, and federal revenue, with the ability to raise local property taxes for school funding. Traditional public schools (TPSs) are the default for students—students are assigned to specific schools depending on where they live, and must actively work to attend another school if they do not want to attend their neighborhood TPS.
3. **Open enrollment charter school (charter school):** Public schools without defined geographic catchment areas, authorized by the state Board of Education. Admissions are non-competitive, and determined by lottery if the school is over-subscribed. Open-enrollment charter schools can be run by for-profit charter management organizations, non-profit charter management organizations, or locally by the administration at that particular school. Charter schools are funded by the state, but do not have the authority to raise funds from local taxes. In this report, we focus solely on charters in the Little Rock Metro Area—Academics Plus, College Prep Academy, Covenant Keepers, eStem, Exalt Academy, Flightline Upper Academy, Jacksonville Lighthouse, Lisa Academy, Lisa Academy North, Little Rock Prep, Premier High, Quest High, and Siatech High.
4. **Private schools:** Private schools are beyond the jurisdiction of the state Board of Education, and are financed through tuition, fundraising, and other private sources. Private schools are not required to administrate state assessments or to publicly report data. For this reason, we cannot include private schools in this analysis. However, private schools need to be considered when thinking about the educational landscape in Little Rock—in the 2011-12 school, 21,333 K-12 students were enrolled in private schools in Arkansas, attending schools that were on average 81% white.¹
5. **Little Rock Metro Area public school system:** All charters and traditional public schools within the boundaries of the Little Rock, North Little Rock, and Pulaski County Special School Districts.

¹ Data drawn from the National Center for Education Statistics' Table Generator function; located here: <http://nces.ed.gov/ccd/elsi/tableGenerator.aspx>

6. **Student moves:** We track student moves by looking at student enrollment data in October of year 1 and the following October (year 2). A student is classified as a switcher if they voluntarily transferred schools (they did not graduate and were not entering kindergarten) during this time. Our Move 09 variable refers to students who were enrolled in one school in October of the 2008-09 school year, and another school in October of the 2009-10 school year.
7. **Free or reduced price lunch (FRL):** Program administered by the federal Department of Agriculture to ensure students have access to adequate nutrition through their schools. Students qualify for reduced price lunch if their household income is 185% or less of the federal poverty line, and for free lunch if their household income is 130% or less of the federal poverty line. FRL receipt is used as an indicator of student socioeconomic status.
8. **Z-score:** This is a measure of student academic achievement. For each assessment taken by students, we calculate a standardized score measured in standard deviation units that allows us to compare scores across subjects and grades, which we cannot do if student test scores are reported in scale scores (points), because scales change across grades and subject. We then average each student's scores across all subjects so that we have one indicator of academic achievement for each student, rather than having multiple points of reference based on the number of standardized assessments the student took in that year. We can also calculate a z-score for each school by averaging the individual z-scores of the students enrolled in each school to compare the academic performance of individual schools.
9. **Racially hyper-segregated:** 90% or more students enrolled in the school are of the same race.
10. **Economically hyper-segregated:** 90% or more of students enrolled in the school receive free or reduced price lunch.
11. **Integrated:** The demographics of the students enrolled at a school are similar to those of the public school students in the LRMA as a whole. We examine whether schools are integrated racially (similar to the percent of black and white students in the area, respectively) and socioeconomically (similar to the percent of FRL students in the area).
12. **Integrative and segregative moves:** We label student moves as integrative if they serve to move a school's demographics closer to the area's demographics. For example, if a black student exits a school that has an above-average concentration of black students, that move is integrative. Conversely, if a white student enters a school that has an above-average concentration of white students, that move is integrative. If a student exits or enters a school whose demographics are roughly similar to the area's demographics (within 10 percentage points), we label that move as neutral.

III. Data and Conceptual Challenges

Data

This report uses student level data from the 2008-09 through 2014-15 school years, provided by the Arkansas Department of Education. We have seven years of data, allowing us to analyze six years of student moves: students who moved between October of the 2008-09 school year and October of the 2009-10 school year, from October 2009 to October 2010, from October 2010 to October 2011, etc. until October of the 2013-14 school year to October of the 2014-15 school year.

Our dataset includes 841,295 student level observations, and includes data on where students are enrolled (including charters versus TPSs), grade level, FRL status, ELL status, gender, race, and standardized scores in math, science, and literacy on their grade appropriate state assessment. While we focus on differences between the TPS and charter sectors, we recognize that this level of aggregation tends to ignore the variation within each sector—not all TPSs are alike, nor are all charters.

Conceptual Challenges

In order to analyze integration in the Little Rock Area, we must adopt an operational definition of the term ‘integration’. We approach this question in multiple ways throughout this report, but recognize that an operational definition of integration is difficult to reach, and our measures may not fully capture the interpersonal nuances of integration in schools. While we can analytically examine school enrollment and demographic characteristics, we cannot examine within-school measures of integration, including integration within classes (particularly between different academic tracks offered by schools) or integration in the lunch room, when student

choose whom to fraternize with and meaningful relationships are forged. However, our analysis still offers a window into whether and to what extent students in the Little Rock Area attend diverse schools, and have the opportunity to build connections with students who have different backgrounds and identities than they do. This is an important step in assessing the level of integration in the area, and how schools can move forward to promote and respect diversity.

In short, our conception and operational definition of 'integration' is based on the concept of representativeness. That is, we consider a school to be racially integrated, or racially balanced, if the composition of the student body is reflective of the student composition in the broader community. This line of thinking has support in the research literature.

However, before we venture into the question of integration, we begin by assessing the extent to which students move into schools with students who are more likely to be similar themselves, racially and economically. This question is also addressed in the research literature on racial integration in schools.

IV. What are the racial, socioeconomic, and academic differences between schools students exited and entered, 2008-09 through 2014-15?

We begin by addressing the question of whether, when students decide to transfer between sectors, they move to schools with student populations that are more or less similar to them; e.g., whether white students are more likely to transfer to schools with higher concentrations of white students, or whether FRL-eligible students are more likely to transfer to schools with higher concentrations of FRL-eligible students. We address this question here, before moving in the next section to an examination of the current level of integration in LRMA.

Demographic Changes Experienced By Students Switching Sectors—LRSD

In this section, we focus on students voluntarily switching public school sectors in Little Rock: from a charter to a traditional public school or from a traditional public school to a charter. These data allow us to explore the relationship between school characteristics and parent or student choices about which school to attend. Do students tend to leave schools with low achievement for schools with high achievement? Do students tend to leave schools in which they are in a minority racial group for schools in which they are in the majority? Do students tend to leave schools with high concentrations of FRL students for schools with low concentrations of FRL students? This does not tell us how each move impacts the composition of the school the student leaves or enters, but rather gives us a static snapshot of the characteristics of the schools that students choose to leave and enter. Table 1 illustrates the changes experienced by the students who switched between sectors in each year examined—the change in the percent of black, white, and FRL students from their old school to their new school, and the change in average academic performance from their old school to their new school. Each school’s average academic performance is the weighted average standardized score on state math, literacy, and science exams. Scores are standardized across the state population of test takers, within year, grade, and subject to have a mean of 0 and a standard deviation of 1, enabling the comparison of scores across time. Students performing above the state average will have a positive Z score, and students performing below the state

average will have a negative Z score. We use a weighted average of results from math, literacy, and science to give a high-level snapshot of the school’s academic performance, rather than examining each subject separately. Demographic comparisons are measured as the difference in percentage of students in a particular group between the schools. If students experience a positive change in the percent black of the student body from the school they leave to the school they enter, then the school they entered had a higher concentration of black students than the school they left. If students experience a negative change in the percent FRL of their school when they move, then the school they left had a higher concentration of FRL students than the school they enter.

Table 1: Change in Demographics between LRSD and Charter Schools Students Entered and Exited, Fall of 2008-09 to Fall of 2014-15

	Row	School Demographics	Move F08-F09	Move F09-F10	Move F10-F11	Move F11-F12	Move F12-F13	Move F13-F14	
LRSD-Charter	1	Change in % Black	-3.1	3.6	-10.3	-8.1	-3.1	-9.1	
	Black Students	2	Change in % FRL	-10.1	-15.5	-17.9	-18.7	-14.4	-6.7
		3	Change in Average Z	0.1	0.1	0.0	0.0	-0.2	0.0
		4	Change in % White	6.2	-2.1	-1.5	-1.0	-2.7	8.4
	White Students	5	Change in % FRL	-20.6	-18.4	-15.0	-18.2	-12.9	-22.2
		6	Change in Average Z	0.2	0.0	-0.1	0.0	-0.1	-0.2
		7	Change in % White	1.7	-2.4	3.7	2.2	0.0	4.5
	FRL Students	8	Change in % FRL	-12.1	-15.7	-16.6	-18.7	-15.5	0.3
		9	Change in Average Z	0.1	0.1	-0.1	0.0	0.0	0.0
Charter-LRSD	10	Change in % Black	13.7	7.0	-9.2	2.2	2.8	1.3	
	Black Students	11	Change in % FRL	24.6	9.6	10.0	9.7	7.0	9.3
		12	Change in Average Z	-0.2	0.2	-0.1	0.1	0.1	0.3
		13	Change in % White	-10.5	1.4	-3.0	-12.6	-6.0	-4.0
	White Students	14	Change in % FRL	20.3	17.9	15.2	20.3	13.1	19.4
		15	Change in Average Z	-0.4	-0.3	0.0	-0.1	0.0	0.0
		16	Change in % White	-13.8	-3.3	4.1	2.5	-0.5	3.4
	FRL Students	17	Change in % FRL	26.7	8.8	10.3	8.7	11.3	7.6
		18	Change in Average Z	-0.3	0.0	-0.1	0.1	0.1	0.4

LRSD to Charters

The top half of Table 1 (rows 1-9) examines the changes experienced by students

transferring from LRSD schools to charters. In row 1, we see that black students on average transfer from LRSD TPSs to charters with lower percentages of black students in the student body. In 2010, 2011, and 2014 this difference was less than 4 percentage points; in 2012, 2013, and 2015, this difference was about 10 percentage points or less.

We also see that black students transfer from LRSD TPSs to charters that on average enroll a much lower percentage of FRL students, shown in row 2. This difference was in the double digits from 2010-2014, and dipped to 6.7 percentage points in 2015. In 2015, in the average LRSD school, 75% of students were eligible for free or reduced price lunch; if a black student transferred from such a school to a charter, the on average they would enroll in a school where about 68% of the student body was eligible for free or reduced price lunch. Black students were consistently enrolling in charters that served an economically more advantaged population than the LRSD schools they left.

Row 3 shows the changes in school academic performance experienced by black students transferring from LRSD schools to charters between 2008-09 and 2014-15. In all years, there is virtually no difference in performance between the TPSs students exited and the charters student entered. In 2009 and 2010, charters on average performed 0.1 standard deviations better than the TPSs students exited, while in 2013 charters on average underperformed the TPSs black students exited by 0.2 standard deviations. In all other years, there was no difference in academic performance between the TPSs students exited and the charters they entered.

From 2011-2014 we see white students switching into charters where on average white students represent 1-3 percentage points less of the student body than they had in the TPS they exited, as illustrated in row 4. In these 4 years, white students were not transferring into schools that were more racially similar to them. However, in 2010 and 2015 white students did transfer

into charters where white students represented a larger share of the student body. In 2015, white students transferred into charters where on average the portion of white students in the student body increased by 8.4 percentage points over the LRSD schools they exited.

Row 5 examines the change in the share of FRL students in schools white students exited and entered. White students transferring from LRSD schools to charters entered schools where on average a significantly smaller share of the student body received free or reduced price lunch. The difference was least in 2014, when white students transferred into charters that, on average, had a 12.9 percentage point smaller fraction of students receiving free or reduced price lunch than in the TPS students exited. In 2015, the difference was 22.2 percentage points. White students transferring to charters were consistently transferring into schools with an economically better off student body from 2010-2015.

Row 6 shows differences in academics between LRSD schools white students exited and charters white students entered during this time. White students transferred from LRSD schools to charters generally transferred into schools that performed at about the same level on state standardized assessments. In 2010, students transferring from LRSD to charters entered schools that on average performed about 0.2 standard deviations better on standardized assessments; in 2015, this was reversed, with students transferring into charters that on average performed about 0.2 standard deviations worse than the LRSD schools they left.

Finally, rows 7-9 highlight the changes experienced by FRL students transferring from LRSD schools to charters between 2008-09 and 2014-15. FRL students transferring from LRSD schools to charters switched between schools that on average had roughly similar racial compositions. In all years 2010-2015 the difference in the percent of white students enrolled in

the LRSD schools FRL students exited and the charters FRL students entered was less than 5 percentage points, and generally was 2 percentage points or less.

FRL students transferring from LRSD schools to charters between 2010 and 2014 transferred into schools where FRL students comprised a much smaller fraction of the student body than they had in the school they exited, shown in row 8. Over these 5 years, FRL students transferred into charters serving students who were economically more advantaged than the students enrolled in the LRSD schools FRL students exited. However, in 2015, this difference virtually disappeared, with FRL students transferring into charters that on average had a slightly higher percentage of FRL students enrolled.

In all years examined, FRL students transferred from LRSD schools into charters that were performing at virtually the same level on state standardized assessments. In 2010 and 2011 FRL students transferred into charters that on average scored 0.1 standard deviations better than the LRSD schools FRL students left; in 2012 FRL students transferred into charters that on average scored 0.1 standard deviations worse than the LRSD schools FRL students left. From 2013-2015, there was no difference in academic performance between the LRSD schools FRL students exited and the charters FRL students entered.

Charters to LRSD

The bottom panel of Table 1 (rows 10-18) examines the changes experienced by students transferring from charters to LRSD schools. In row 10, we see that on average in 2010, black students who switched from a charter to a LRSD school entered a school where the share of black students was 13.7 percentage points higher than it had been in the school that they left. So, if a black student attended a charter school with 100 students and 50 of those students were

black, they would transfer to a LRSD school with 100 students where about 64 of those students were black. This difference was greatest in 2010; by 2015 the change in the percent of black students enrolled at the switching student's school from the charter to the TPS was 1.3 percentage points, or about one student in a school of 100 students.

Row 11 in Table 1 examines the change in the percentage of students receiving free or reduced price lunch between the charter the student exited and the LRSD TPS the student entered. In 2010, a black student transferring from a charter to LRSD on average transferred into a school in which the share of FRL students was 24.6 percentage points higher than it had been in the school they exited. This difference has decreased over the years examined, but remained close to 9 percentage points in 2015. This reflects the increasing enrollment of black and FRL students in charter schools over time, discussed in our first AER. Despite this shrinking difference over time, black students still consistently transferred into LRSD schools that enroll a more economically disadvantaged student population than charters.

Row 12 presents the changes in academic performance between the charter the student exited and the LRSD TPS the student entered. In 2010, a black student transferring from a charter to LRSD on average transferred into a school performing 0.2 standard deviations worse on state standardized assessments than the school they left. However, in 2011, 2013, 2014, and 2015, a black student transferring from a charter to LRSD on average transferred into schools that were performing 0.1-0.3 standard deviations better on state standardized assessments.

Rows 13-15 present the average changes in demographics and academic performance experienced by white students transferring from charters to LRSD schools between 2010 and 2015. In 2010, 2012, 2013, 2014, and 2015, white students on average transferred into schools where white students comprised a smaller share of the student body than they had in the charter

they exited. This difference was greatest in 2013, when on average a white student transferring from a charter to an LRSD school entered a school where white students comprised 12.6 percentage points less of the student body than they had in the charter they exited. In 2015, the difference was 4 percentage points.

Similar to black students transferring from charters to LRSD schools, in all years white students on average transferred into schools where FRL students comprised a greater share of the student body than in the school they left. This difference was generally greater for white students than for black students; white students consistently transferred into schools where on average FRL students represented 13-20 percentage points more of the student body than in the charters they left, while black students generally transferred into schools where FRL students comprised a roughly similar portion of the student body, and in 2012 black students on average transferred into LRSD TPSs with a smaller share of FRL students. White students consistently transferred into LRSD schools serving students who were less economically advantaged than the students in the charters they left.

In general, white students transferred from charters into LRSD schools that were performing at about the same level on state standardized assessments. In 2010 and 2011, white students on average transferred to schools that performing 0.4-0.3 standard deviations worse than the charters they left, but between 2012 and 2014 there was virtually no difference in achievement between the charters white students exited and the TPSs white students entered.

Finally, we can look at the changes experienced by FRL students transferring from charters to LRSD schools in 2010-2015, shown in rows 15-18. In 2010, FRL students transferring from charters to LRSD entered schools where on average white students represented

13.8 percentage points less of the student body; however from 2011-2015 FRL students entered LRSD TPSs with a roughly similar racial composition as the charters they exited.

FRL students consistently entered LRSD TPSs with higher percentages of FRL students in the total student body than had been present in the charter schools they exited. This difference was greatest in 2010, when FRL students entered LRSD schools where on average FRL students comprised 26.7 percentage points more of the student body than in the charters they exited. In 2015, the difference was 7.6 percentage points. FRL students consistently transferred into LRSD schools serving a more economically disadvantaged student body than the charters they left.

As with both black students and white students, FRL students switched between schools with minimal differences in academic achievement when going from charters to LRSD schools. In 2010, FRL students transferred into LRSD schools that on average performed 0.3 standard deviations worse on state standardized assessments than the charters they left, but there was virtually no difference in performance from 2011-2014. In 2015, FRL students transferred into LRSD schools that on average performed 0.4 standard deviations better on state standardized assessments than the charters they exited.

Overall, the most consistent and striking pattern to emerge from Table 1 is the difference in the share of FRL students enrolled in charters and LRSD schools that students transfer between. Black, white, and FRL students consistently transfer from LRSD schools serving less advantaged students to charters with fewer students eligible for free or reduced price lunch. Conversely, when black, white, and FRL students transfer from charters to LRSD schools, the transfer into schools consistently serving a greater fraction of economically disadvantaged students. We also observe black students transferring from charters to LRSD schools where a greater percentage of the student body is black, and black students transferring from LRSD

schools to charter where a smaller percentage of the student body is black. We do not see as clear a pattern when looking at the racial composition changes experienced by white or FRL students switching between sectors. There is also no clear pattern in differences in academic performance between the LRSD schools and charters students transfer between.

Demographic Changes Experienced By Students Switching Sectors —LR Metro Area

Above, we examined the differences in demographics between the schools students transferred into and out of in the Little Rock School District (LRSD) and Little Rock charters. Here, we broaden our focus to examine demographic differences in schools affected by student movements in the broader Little Rock metro area. In this section, TPSs include schools in LRSD, NLRSD, and PCSSD, and charters include all charters in the Little Rock Metro Area (or LRMA). Table 2 presents the school level differences in demographics between the schools students exited and entered from 2010 to 2015.

Table 2: Change in Demographics between Little Rock Metro Traditional Public Schools and Charter Schools Students Entered and Exited, Fall of 2008-09 to Fall of 2014-15

	Row	School Demographics	Move F08-F09	Move F09-F10	Move F10-F11	Move F11-F12	Move F12-F13	Move F13-F14
LR Metro to Charter	1	Change in % Black	-2.65	5.68	-6.23	-3.98	-0.26	-6.17
	2	Change in % FRL	-15.18	-13.62	-15.33	-13.77	-11.23	-7.76
	3	Change in Average Z	0.09	0.05	-0.05	-0.02	-0.03	0.02
	4	Change in % White	3.76	-0.86	-1.11	1.18	-2.24	6.03
	5	Change in % FRL	-20.21	-17.43	-16.77	-13.77	-13.97	-19.42
	6	Change in Average Z	0.06	0.00	-0.02	0.05	0.09	-0.04
	7	Change in % White	0.86	-4.90	0.88	-0.48	-3.83	2.23
	8	Change in % FRL	-17.45	-14.79	-16.01	-14.50	-12.30	-5.94
	9	Change in Average Z	0.12	0.10	-0.04	-0.01	0.00	0.08
Charter to LR Metro	10	Change in % Black	10.45	3.35	-12.77	0.54	-1.24	-1.90
	11	Change in % FRL	23.48	9.75	6.13	9.73	4.62	6.10
	12	Change in Average Z	-0.22	0.02	-0.02	0.07	0.07	0.23
	13	Change in % White	-11.34	-7.89	-5.17	-6.98	-7.53	-5.80
	14	Change in % FRL	21.39	21.33	15.84	15.76	13.45	15.11
	15	Change in Average Z	-0.28	-0.14	-0.04	-0.10	-0.13	-0.17
	16	Change in % White	-9.25	-1.40	8.58	4.19	3.18	6.23
	17	Change in % FRL	24.08	10.91	6.67	9.09	8.37	5.27
	18	Change in Average Z	-0.22	0.03	-0.02	0.08	0.05	0.26

Transfers from LRMA TPSs to Charters

The top portion of Table 2 illustrates the changes experienced by students transferring from LRMA TPSs into Little Rock area charters. Row 1 shows the shifts in racial composition experienced by black students transferring from TPSs to charters. In all years, black students transferred into charters where a smaller share of the student body was black than in the traditional public school that they exited; this mirrors sector enrollment trends with LRMA TPSs generally enrolling a greater proportion of black students than area charters.

In row 2, we see that black students transferring out of traditional public schools enroll in charters with lower concentrations of FRL students than at the traditional public schools they leave, although the gap has decreased over time. In 2010, black students transferred from Little Rock metro area traditional public schools to area charters where on average FRL students comprised 15 percentage points less of the

student body than in the traditional public schools they left. In 2015, black students transferred from traditional public schools to area charters where on average FRL students represented an 8 point smaller percentage of the student body than in the students' previous traditional public schools.

Similarly, white students and FRL students transferring from LRMA TPSs to area charters attend schools where a smaller percentage of the student body is eligible for free or reduced price lunch in all years examined here, shown in rows 5 and 8. White students transferred to area charters where on average FRL students represented a 14-20 percentage point smaller share of the student body than in the Little Rock metro area traditional public school they exited, and FRL students transferred to area charters where on average FRL students represented a 6 to 18 percentage point smaller share of the student body than in the traditional public school they had attended. The difference between the percent of FRL students enrolled in Little Rock metro area traditional public schools and the area charters attended by sector switchers has decreased over time.

There were no substantial differences in the academic performance of the LRMA TPSs students exited and the area charters students entered during this time, regardless of the demographic characteristics of the student, as shown in rows 3, 6, and 9. On average, the traditional public schools and the area charters that students transferred between were within less than 0.1 standard deviations of each other terms of academic performance in the years examined.

White students generally transfer to charters where white students represent a similar share of the student body as the Little Rock metro area traditional public school that the students are exiting, as evidenced in row 4. In 2010 and 2015, white students transferred into area charters where white students represented a 4-6 percentage point greater share of the student body, but in other years the difference between the traditional public schools the students left and the area charters they entered was less than 1 percentage point.

Row 7 demonstrates that FRL students also transferred from Little Rock metro area traditional public schools to area charters with a similar racial composition; the change in the percent of white students from the traditional public schools that FRL students left to the area charters that they transferred

into was less than 1 percentage point in three of the years examined, and less than 5 percentage points in all years examined.

Transfers from Charters to LRMA TPSs

The bottom portion of Table 2 details the changes experienced by students leaving Little Rock area charters to attend traditional public schools in the Little Rock metro area. In rows 10-12, we see the changes experienced by black students transferring from area charters to traditional public schools in the Little Rock metro area. In 2010, 2011, and 2013, black students transferred to traditional public schools in the Little Rock metro area with higher concentrations of black students than had been enrolled in the area charter schools they exited; this change was only substantial in 2010. In 2012, 2014, and 2015 black students enrolled in traditional public schools in the Little Rock metro area where black students comprised a smaller share of the study body than the charter schools they exited; however, this shift was only substantial in 2012. In 2012, black students transferred into traditional public schools in the Little Rock metro area where on average black students comprised 12 percentage points less of the student body than in the area charters they had exited.

In all years examined, black students transferred from area charters into traditional public schools where a greater proportion of the student body qualified for free or reduced price lunch, as shown in row 11. In 2010, black students transferred to traditional public schools in the Little Rock metro area where on average the share of FRL students was 23 percentage points higher than in the area charter school that they transferred out of. In 2015, black students transferred to traditional public schools in the Little Rock metro area where on average the share of FRL students was 6 percentage points higher than in the area charter school that they transferred out of.

As illustrated in row 12, there were no real differences in academic performance between the area charters black students transferred out of and the traditional public schools in the LRMA that they transferred into in 2011-2014, with any differences less than 0.1 standard deviations in size. In 2015, black students transferred into traditional public schools in the LRMA that on average performed 0.23

standard deviations better than the charters the students left; this was a reversal from 2010, when black students transferred into traditional public schools that on average performed 0.22 standard deviations worse than the charters they left.

Rows 13-15 illustrate the changes experienced by white students transferring from charters to TPSs in LRMA. In every year examined, white students transferring from area charters to traditional public schools in the LRMA entered schools where the percent of white students in the student body was less than the percent of white students in the student body of the area charter school that they transferred out of. The change was greatest in 2010, when the share of white students in the traditional public schools in the LRMA that the white students transferred into was on average 11 percentage points less than in the area charters from which white students transferred. In 2015, the change in the percent of white students in the student body in the traditional public schools in the LRMA relative to the percent of white students in the student body at the area charter that the students had exited was -6 percentage points.

Similar to black students, white students transferring from area charters to traditional public schools in the LRMA went to schools where a higher percentage of the student body qualified for free or reduced price lunch. The share of FRL students in the traditional public schools in the Little Rock metro area that white students transferred into relative to the share of FRL students in the area charters white students transferred from was 13 to 21 percentage points higher in the six years examined.

Row 15 shows the academic differences between TPSs white students entered and the charters they exited. White students transferred to traditional public schools in the Little Rock metro area that academically underperformed the area charters that they transferred out of in all years examined. On average, across all six years, white students transferred to traditional public schools in the LRMA that performed 0.14 standard deviations below the area charter schools they exited. This downward shift in academic performance for white students stands in contrast to the upward academic shift for black students, who on average entered traditional public schools in the LRMA that performed 0.03 standard deviations better than the area charters they exited.

Finally, rows 16-18 show the changes experienced by FRL students transferring from charters to LRMA TPSs, beginning with shifts in racial composition in row 16. Students who were eligible for free and reduced lunch and attending area charters tended to transfer into LRMA TPSs with higher concentrations of white students beginning in 2012. In 2012-2015, FRL students transferred from area charters to traditional public schools in the LRMA where white students represented a 3 to 9 percentage point greater share of the student body than in the area charters that they transferred out of. In 2010 and 2011, FRL students transferred into TPSs in the LRMA where white students represented a lower share of the student body than in the area charters that the students had exited.

Students who were eligible for free and reduced lunch and attending area charters consistently transferred into traditional public schools in the LRMA that had higher shares of FRL students than the charters they transferred out of, although the difference has been declining over time. In 2010, FRL students transferred to traditional public schools in the Little Rock metro area where on average FRL students represented 24 percentage points more of the student body than in the area charter they exited; in 2015, FRL students transferred to traditional public schools in the Little Rock metro area where on average the share of FRL students was 5 percentage points greater than in the area charter they exited.

Row 18 shows that there is no clear pattern in academic performance between the schools students who were eligible for free and reduced lunch and attending area charters transfer out of and into in the six years examined here. On average, FRL students transferred into traditional public schools in the Little Rock metro area that academically outperformed the area charters FRL students left by 0.03 standard deviations, but the difference is negligible. In 2010, FRL students transferred to traditional public schools in the Little Rock metro area that on average substantially underperformed the area charters they transferred out of, while in 2011-2014 there were no clear differences between the area charters and Little Rock metro area traditional public schools that the students moved between. In 2015, the Little Rock metro area traditional public schools substantially outperformed the area charters that FRL students left. This pattern mirrors the changes experienced by black students transferring to Little Rock metro area traditional public schools from charters over the same time.

The only consistent pattern in this section is the difference in the fraction of FRL students in charters and TPSs that students transferred between. All students from LRSD and LRMA TPSs who moved to charters entered schools serving a more economically advantaged student body than did the schools they exited. Conversely, all students moving from charters to TPSs entered schools serving a more economically disadvantaged student body. In 2014-15, for example, 47% of charter students received FRL, while 69% of LRMA TPS students received FRL, indicating the difference in socioeconomic status between the sectors.

Whether we are considering only the Little Rock School District or the broader Little Rock Metropolitan area, some common themes emerge in our analyses of student transfers:

- When black students exit the TPS sector and enter charter schools, they enter schools with slightly lesser concentrations of black students and fewer FRL students
- When white students exit the TPS sector and enter charter schools, they enter schools with very similar concentrations of white students but with fewer FRL students
- Students moving between TPSs and charters do not move between schools with substantially different levels of academic achievement.

This above analysis, while helpful and important, does not tell us how the student transfers between school sectors affect the composition of schools they enter and exit. It also does not answer the question of whether these moves are serving to help integrate or segregate the schools in the Little Rock area public school system. Thus, in the next section, we examine current levels of integration in LRMA before turning to the question of how student moves impact integration in the LRMA public school system.

V. What is the current level of segregation and integration in the Little Rock TPS and Charter sectors?

We use two measures of segregation and two measures of integration to examine the current levels of racial balance and of socioeconomic balance in the LRMA public school system. First, to measure segregation, we define hyper-segregated schools as school in which over 90% of the student body are either of the same race (racially hyper-segregated) or in which over 90% of the student body receives FRL (socioeconomically hyper-segregated). We believe this definition is important to examine because it demonstrates whether students are in isolated environments in which they have little to no opportunities to interact with students of different backgrounds and identities.

We move from this classification of schools to an analysis of integration; here, we conceive of integration as the extent to which the demographic composition of schools is representative of the composition of the area as a whole. This allows us to see not only whether students are exposed to diversity, but also recognizes that schools can only be as diverse as the communities in which they are located. We do this in two ways: first, by examining the number of schools whose demographics are within 15 and 10 percentage points, respectively, of the community demographics; and, second, by calculating a continuous measure of the difference between the schools' demographics and the demographics of the area.

Hyper-Segregated Schools

Our first analysis examines the percent of students who attend hyper-segregated public schools—TPSs and charters—in the LRMA between the 2008-09 and 2014-15 school years. We

classify schools as hyper segregated² if 90% or more of the student body is white, 90% or more of the student body is black, or 90% or more of the student body receives FRL. There are no schools in the LRMA in which the share of students receiving FRL was less than 10%, so we do not present those numbers here.

Table 3 presents the percent of students in the LRMA enrolled in schools we identified as hyper-segregated in each year 2008-09 through 2014-15, and across all years combined.

² This measure of hyper-segregation has been previously employed by researchers on this question.

Table 3: Percentage of Little Rock Area Students Enrolled in Hyper-Segregated Schools by Sector, 2008-09 through 2014-15

	Sector (# Students)	All Students in Racially Hyper-Segregated Schools	Students in Hyper-Segregated White Schools	Students in Hyper-Segregated Black Schools	Students in Hyper-segregated FRL Schools
2008-09	Charters (2,119)	0.0%	0.0%	0.0%	0.0%
	LRMA TPSs (53,261)	6.7%	0.7%	6.0%	15.8%
	LRSD (25,760)	8.4%	0.0%	8.4%	19.6%
2009-10	Charters (2,900)	2.9%	0.0%	2.9%	0.0%
	LRMA TPSs (53,141)	5.4%	0.7%	4.7%	18.0%
	LRSD (25,795)	6.8%	0.0%	6.8%	25.4%
2010-11	Charters (3,708)	11.5%	0.0%	11.5%	0.0%
	LRMA TPSs (52,358)	4.0%	0.0%	4.0%	18.8%
	LRSD (25,610)	7.0%	0.0%	7.0%	24.3%
2011-12	Charters (4,408)	6.1%	0.0%	6.1%	3.8%
	LRMA TPSs (52,172)	5.4%	0.6%	4.7%	17.9%
	LRSD (25,497)	8.6%	0.0%	8.6%	24.3%
2012-13	Charters (4,833)	7.9%	0.0%	7.9%	2.6%
	LRMA TPSs (25,055)	4.6%	0.6%	4.0%	20.6%
	LRSD (52,097)	7.2%	0.0%	7.2%	27.4%
2013-14	Charters (5,084)	8.1%	0.0%	8.1%	0.0%
	LRMA TPSs (51,881)	5.0%	0.0%	5.0%	11.0%
	LRSD (25,078)	7.7%	0.0%	7.7%	7.1%
2014-15	Charters (5,709)	4.4%	0.0%	4.4%	11.6%
	LRMA TPSs (51,055)	3.9%	0.6%	3.4%	21.5%
	LRSD (24,725)	5.6%	0.0%	5.6%	28.7%
Total 2008-2015	Charters (28,761)	6.3%	0.0%	6.3%	3.3%
	LRMA TPSs (365,965)	5.0%	0.5%	4.6%	17.7%
	LRSD (177,520)	7.3%	0.0%	7.3%	22.4%

Table 3 reveals a few striking patterns. First, not surprisingly based on the racial composition of students in Little Rock, students who attend racially hyper-segregated schools overwhelmingly attend schools at which 90% or more of the student body is black, rather than schools at which 90% or more of the student body is white. This was true in all years examined. Fewer than 1% of students in any sector attended a hyper-segregated white school in any of the

years examined. Second, a similar percentage of charter students and TPS students attended racially hyper-segregated schools overall, but there are differences between years. For example, in 2008-09, 0.0% of charter students attended hyper-segregated black schools, while 8.4% of LRSD students and 6.0% of LRMA TPS students attended hyper-segregated black schools. However, in 2010-11, 11.5% of charter students attended hyper-segregated black schools, while only 7.0% of LRSD students and 4.0% of LRMA TPS students attended hyper-segregated black schools. Across all years examined, however, the percentages were more consistent across sector: 6.3% of charter students, 7.3% of LRSD students, and 4.6% of LRMA TPS students attended hyper-segregated black schools.

Table 3 also demonstrates that students in all sectors were more likely to attend a socioeconomically hyper-segregated school than a racially hyper-segregated school. There are also clear differences by sector in the concentration of FRL students. In 2008-09, 2009-10, 2010-11, and 2013-14, 0.0% of charter students attended a socioeconomically hyper-segregated school. (Remember also that no students in any sector in any year attended a school at which 90% or more of students did NOT receive FRL). In contrast, in no year did fewer than 11% of TPS students attend a socioeconomically hyper-segregated school. Across all years examined, 3.3% of charter students, 17.7% of LRMA TPS students, and 22.4% of LRSD students attended socioeconomically hyper-segregated schools. Socioeconomic hyper-segregation affected more students than racial hyper-segregation in LRMA between the 2008-09 and 2014-15 school years.³

Our measure of hyper-segregated schools is useful because it creates a clear distinction between schools using a set criterion, and it is important to determine how isolated students of a

³ One of the reasons that schools in the TPS sector were more likely to be socioeconomically hyper-segregated is that TPS schools served a higher proportion of FRL students during all years examined here.

particular race or socioeconomic status are. This analysis does not consider, however, the demographic composition of the community in which schools are located. It could thus be argued that this analysis penalizes schools that are located in less diverse areas. For this reason, we turn now to measures of integration that compare the demographic composition of schools to the demographic composition of the LRMA as a whole.

Integrated Schools: The Details of Defining and Identifying

To determine whether a school is integrated or not, we must determine a reasonable comparison group for the school; otherwise, we just know the composition of the school, but not how to interpret the numbers. We are essentially answering the question of what makes a school integrated—if it reflects the demographics of the country? The state? The city? The neighborhoods surrounding the school? Some might claim that an ideal integrated environment should be a mosaic of different cultures, races, ethnicities, and socioeconomic backgrounds, but that does not set a quantitative bar next to which we can hold up the actual schools in the LRMA and say whether the school is meeting that goal or not. Others could suggest that integrated schools should look like the country as a whole, but different regions have such diverse demographic make-ups that it seems unlikely that any school would look like the United States average. Perhaps schools in Little Rock should look like Arkansas demographics statewide to be considered integrated, but that seems an unfair standard by which to measure schools because of historic patterns of settlement, immigration, and economic opportunities.

That takes us to comparing the demographics of individual LRMA public schools to the demographics of the LRMA, or the neighborhoods in which the schools are situated. Comparing schools to the neighborhoods in which they are located is to say that schools should reflect the

demographic composition of neighborhoods that have been shaped by a history of racial and socioeconomic residential segregation and housing discrimination—to hold schools to this bar would thus seem to perpetuate the broader problem of segregation and discrimination in society, while failing to acknowledge schools’ role in that discrimination. To compare schools simply to Little Rock as a city would also fall into this trap, ignoring the enduring impact of suburban development and sprawl on residential segregation. We believe, therefore, that best point of comparison is the Little Rock Metro Area—this is the area that schools can feasibly resemble, but one that is large enough to not excuse schools for perpetuating historical patterns of segregation. By comparing schools to the LRMA, which encompasses the broader community of Little Rock, North Little Rock, and Pulaski County, we are able to account for a broader, more diverse population and overcome the influences of suburban development and urban residential segregation.

Once the geographic reference point of a socially acceptable level of integration is determined, further questions arise. Should schools reflect the entire population of the LRMA, including adults and young children, or the K-12 population that is eligible to be in the public schools we are interested in studying? If we exclude individuals outside the K-12 age range, should we compare schools to all the demographics of all K-12 aged individuals in the area, or just those children who are enrolled in public schools? The distinction could have an important impact—the US Census bureau estimates that about 20% of K-12 students in Little Rock are enrolled in private schools.⁴ If we include students enrolled in private schools in our definition of integration, however, are we holding public schools to a standard they cannot reach unless the students enrolled in private schools were to choose to re-enter the public school system? These

⁴ Data from the US Census Bureau American Community Survey interactive data tool, available at <http://factfinder.census.gov/faces/nav/jsf/pages/index.xhtml#>.

are questions without obvious right or wrong answers. Thus, we make our choices here and attempt to make them clear to the reader, acknowledging that other researchers might make other choices.

In this section, we compare schools' composition to the composition of students enrolled in public schools in the LRMA. This encompasses the area from which charter schools draw students, the students who could attend area TPSs, and is broad enough to transcend neighborhood-based residential segregation, which often reflects patterns of housing discrimination. We do not compare school demographics to the demographics of all people in the LRMA, because many families choose to send their students to private school, and it is not necessarily fair to think that schools can reflect the demographics of students who would never attend them.

Now that we have established our definition of the "broader community", we next need to determine how closely school must resemble that comparison group in order to be defined as 'integrated'—do schools need to perfectly match the community composition in order to be integrated, or can there be slight differences? We define integration in two ways: first, by looking at all schools whose composition is within 15 percentage points of the community composition, and second, by looking at all schools whose composition is within 10 percentage points of the community composition.

Integrated Schools: +/- 15 Percentage Points of Community Composition

Table 4 shows the percentage of students in LR Area charters, LRMA TPSs, and LRSD TPSs who attended integrated schools across all seven years examined in this analysis. In this table, we define integrated schools as those whose demographics are within 15 percentage points

of the community’s demographics. The demographics of students enrolled in LRMA public schools changed year to year; for example, in 2008-09, 58% of public school students in the LRMA were black, while in 2014-15, about 56% of students in LRMA public schools were black. We calculated the percent of students in integrated schools for each sector in each year, then aggregated the number of students in integrated schools across years to determine the overall percentages of students in integrated schools across years.

Table 4: Percentage of Students in Integrated Schools (+/- 15 percentage points of LRMA average) By Sector, 2008-09 to 2014-15

	Row		Charters	LRMA TPSs	LRSD TPSs
Integrated-Black	1	% of Students	49.8%	47.0%	41.9%
	2	Average N of Schools	7	38	16
Integrated-White	3	% of Students	59.9%	36.5%	27.4%
	4	Average N of Schools	8	29	9
Integrated-FRL	5	% of Students	13.9%	37.1%	25.0%
	6	Average N of Schools	3	33	10

Rows 1-2 show the percentage of charter and TPS students enrolled in schools where the percent of black students was similar to the percent of black students enrolled in the LRMA public school system overall. The first column shows that across the seven years examined, 49.8% of charter students attended schools in which the percent of black students in the student body was within 15 percentage points of the share of black students in LRMA public schools. Row 2 shows the average number of schools that were labeled as integrated in a year. The first column shows that on average 7 charter schools were integrated in a given year. In 2014-15, 10 charter schools were integrated, while in 2008-09 3 charter schools were integrated. In 2014-15, about 56% of LRMA public school students were black, and 52.9% of charter students were in integrated schools, meaning more than half of charter students were in schools where 41-71% of students were black.

The second column shows the percent of students in LRMA TPSs who attended schools where the share of black students in the student body was within 15 percentage points of the fraction of black students in the LRMA public school system overall. 47.0% of LRMA TPS students attended integrated-black schools between 2008-09 and 2014-15. In 2014-15, 51.0% of LRMA TPS students attended integrated-black schools, meaning more than half of LRMA TPS students attended schools where 41-71% of students were black. In 2014-15, 40 LRMA TPSs were integrated, while in 2008-09, 43 LRMA TPSs were integrated.

Finally, column 3 shows the percent of students in LRSD TPSs where the fraction of black students was within 15 percentage points of the share of black students in the LRMA public school system. Across all years, 41.9% of LRSD students attended integrated-black schools, a slightly smaller share than that seen in the charter sector or across all LRMA TPSs during this time. In 2014-15, 47.1% of LRSD students attended schools where 41-71% of the student body was black. In that same year, 18 LRSD schools were integrated, while in 2008-09 16 schools enrolled a share of black students that was within 15 percentage points of the share of black students in LRMA public schools overall.

Rows 3 and 4 show the percent of students in each sector enrolled in schools where the share of white students was within 15 percentage points of the share of white students in LRMA public schools, and the number of schools across the seven years examined that were integrated-white. Across all years examined, 59.9% of charter students, 36.5% of LRMA TPS students, and 27.4% of LRSD students attended integrated-white schools. In 2014-15, 53.8% of charter students attended schools at which the share of white students was within 15 percentage points of the fraction of white students enrolled in LRMA public schools, as did 36.5% of LRMA TPS students, and 32.0% of LRSD students. In 2014-15, 9 charters were integrated-white, while in

2008-09 5 charters were integrated-white. In 2014-15, 28 LRMA TPSs and 10 LRSD TPSs were integrated white, while in 2008-09, 24 LRMA TPSs and 7 LRSD TPSs were integrated-white. Students in charter schools were more likely than students in TPSs to attend integrated-white schools across all seven years examined.

Finally, rows 5 and 6 show the percentage of students enrolled in schools where the share of students receiving free or reduced price lunch was within 15 percentage points of the share of FRL students enrolled in LRMA public schools during this time. Across the seven years examined, only 13.9% of charter students, 37.1% of LRMA TPS students, and 25.0% of LRSD students attended socioeconomically integrated schools. Students in TPSs were more likely to attend socioeconomically integrated schools than students in charters; however, only a small share of students in any sector actually attended socioeconomically integrated schools during this time.

In 2014-15, 17.4% of charter students attended 5 socioeconomically integrated schools, while in 2008-09 no charter students attended socioeconomically integrated schools. In 2014-15, 35.0% of LRMA TPS students attended 31 socioeconomically integrated schools, while in 2008-09, 40.6% of LRMA TPS students attended 36 socioeconomically integrated schools. Finally, in 2014-15, 19.8% of LRSD students attended 8 socioeconomically integrated schools, while in 2008-09, 23.9% of LRSD students attended 9 socioeconomically integrated schools. The number of charter schools and the share of charter students attending socioeconomically integrated schools has increased over the seven years examined, while the number of socioeconomically integrated TPSs and the share of TPS students attending socioeconomically integrated TPSs has decreased over this period. However, in both sectors the share of students attending socioeconomically integrated schools remains low.

In this analysis of integration, we classify schools within 15 percentage points (on either side) of the community average as integrated. With regard to the percentage of black students, charter schools appear to be slightly more integrated with 50% of charter students attending integrated schools, compared to 47% of student in the LRMA TPS sector and 42% of students in LRSD. With regard to the percentage of white students, charter schools are much more likely to be representative of the broader community, with 60% of charter students attending integrated schools, compared to 37% of student in the LRMA TPS sector and 27% of students in LRSD. Finally, with regard to socioeconomic integration, the charter sector is less likely to be integrated, with only 14% of charter students attending FRL-integrated schools, compared to 37% of student in the LRMA TPS sector and 25% of students in LRSD.

Integrated Schools: +/- 10 Percentage Points of Community Composition

Table 5 shows the percentage of students and the number of schools at which the school’s demographics are within +/- 10 percentage points of the community composition. This is a slightly more restrictive threshold of integration than the one used in the previous section, which labeled schools as integrated if they were within +/- 15 percentage points of the community composition.

Table 5: Percentage of Students in Integrated Schools (+/- 10 percentage points of LRMA Average) By Sector, 2008-09 to 2014-15

	Row		Charters	LRMA TPSs	LRSD TPSs
Integrated-Black	1	% of Students	33.2%	37.3%	35.6%
	2	Average N of Schools	5	28	13
Integrated-White	3	% of Students	40.9%	29.5%	24.3%
	4	Average N of Schools	5	22	7
Integrated-FRL	5	% of Students	10.5%	23.0%	12.0%
	6	Average N of Schools	2	21	5

Row 1 in Table 5 shows the percentage of students in each sector who attended schools where the share of black students was within 10 percentage points of the percent of black students enrolled in LRMA public schools during this time, while row 2 shows the average number of schools in each sector that were integrated-black between 2008-09 and 2014-15. Across the seven years examined, 33.2% of charter students, 37.3% of LRMA TPS students, and 35.6% of LRSD students attended integrated-black students. The number of integrated-black schools varied between years. In 2008-09, 3 charter schools, 30 LRMA TPSs, and 13 LRSD schools were integrated-black, while in 2014-15, 6 charter schools, 27 LRMA TPSs, and 14 LRSD schools were integrated-black.

Rows 3 and 4 show the percentage of students and number of schools in each sector in which the share of white students was within +/- 10 percentage points of the fraction of white students enrolled in LRMA public schools. Charter students were more likely to attend integrated-white schools than were TPS students in either the LRMA or LRSD. Across the seven years examined, 40.9% of charter students, 29.5% of LRMA TPS students, 24.3% of LRSD students attended integrated-white schools. In 2014-15, 41.7% of charter students attended 7 integrated-white schools compared to 52.8% of charter students attending 4 integrated-white schools in 2008-09. In 2008-09, 30.9% of LRMA TPS students attended 24 integrated-white schools, while in 2014-15, 29.7% of LRMA TPS students attended 21 integrated-white schools. Finally, in 2008-09, 23.8% of LRSD students attended 7 integrated-white schools, while in 2014-15, 28.3% of LRSD students attended 8 integrated-white schools.

Finally, rows 5 and 6 show the percentage of students enrolled in and the average number of schools that were socioeconomically integrated during the seven years of this analysis. In contrast to the pattern observed in Table 4, here we see that when we define integration as being

within 10 percentage points of the community average, TPS students are more likely to attend socioeconomically integrated schools than are charter students. However, we again see that only a small fraction of students in any sector attended socioeconomically integrated schools during this time. Across the seven years examined, 10.5% of charter students, 23.0% of LRMA TPS students, and 12.0% of LRSD TPS students attended socioeconomically integrated schools. In 2008-09, no charter students attended socioeconomically integrated schools, while 26.2% of LRMA TPS students attended 23 socioeconomically integrated schools, as did 23.9% of LRSD students (in 9 schools). In 2014-15, 17.4% of charter students attended 5 socioeconomically integrated schools, while 25.4% of LRMA TPS students attended 20 socioeconomically integrated schools. In 2014-15, 11.6% of LRSD students attended 4 socioeconomically integrated schools.

Whether integrated schools are defined as being within 15 percentage points of the community's composition or within 10 percentage points of the community's composition, we see roughly similar shares of students from both the charter and TPS sector attending integrated-black schools, a slightly higher share of charter students attending integrated-white schools, and low shares of students attending socioeconomically integrated schools in either sector.

In this analysis, we use a stricter definition of integration and classify schools within 10 percentage points (on either side) of the community average as integrated. With regard to the percentage of black students, charter schools appear to be slightly less integrated with 33% of charter students attending integrated schools, compared to 37% of student in the LRMA TPS sector and 36% of students in LRSD. With regard to the percentage of white students, charter schools are more likely to be representative of the broader community, with 41% of charter students attending integrated schools, compared to 30% of student in the LRMA TPS sector and

24% of students in LRSD. Finally, with regard to socioeconomic integration, the charter sector is less likely to be integrated, with only 11% of charter students attending FRL-integrated schools, compared to 23% of student in the LRMA TPS sector and 12% of students in LRSD.

Differences in Composition

In the previous section, we labeled schools as integrated if their composition was within a certain range of the community demographic composition. While a fixed criterion is helpful for labeling schools, it is necessarily somewhat arbitrary in nature. In this section, we avoid the arbitrary benchmarks and instead calculate a continuous measure of integration based on the difference between the demographic composition of each sector and the demographic composition of the community. We calculate the difference between the school's demographics and the demographics of all LRMA public school students. The greater the "distance" between the school's composition and the community's composition, the more segregated the school; conversely, integration increases as that "distance" shrinks. Primarily, we focus on the absolute value of the difference between each sector's composition and the composition of the LRMA as a whole; we also look at the components of this figure by presenting the difference from the community average for schools that enroll a higher share of black, white, or FRL students and for schools that enroll a lower share of each student group.

Table 6 presents these measures by sector for all years between 2008-09 and 2014-15.

Table 6: Distance from the LRMA Demographic Composition by Sector, 2008-09 to 2014-15

		Charters	LRMA TPSs	LRSD TPSs
	Absolute Distance From Metro Area % Black	±19.5	±16.6	±17.8
% Black	Average Diff. For Students <u>Above</u> LRMA % Black	+27.2	+18.5	+21.0
	Average Diff. For Students <u>Below</u> LRMA % Black	-18.3	-15.0	-11.8
	Absolute Distance From Metro Area % White	±17.2	±18.3	±20.2
% White	Average Diff. For Students <u>Above</u> LRMA % White	+16.9	+16.3	+14.7
	Average Diff. For Students <u>Below</u> LRMA % White	-20.1	-20.8	-22.7
	Absolute Distance From Metro Area % FRL	±27.8	±19.6	±22.1
% FRL	Average Diff. For Students <u>Above</u> LRMA % FRL	+18.1	+20.5	+22.1
	Average Diff. For Students <u>Below</u> LRMA % FRL	-29.7	-18.7	-22.7

Integration as Measured by % Black

The first three rows of Table 6 show the difference between the average percent of black students enrolled in charter schools, LRMA TPSs, and LRSD TPSs, and the percent of black students in the LRMA public school sector. On average, the gap between the percent of black students in the community and percent of black students in charter was greater than the gap between the percent of black students in the community and the percent of black students enrolled in TPSs, although the difference was over 15 percentage points in all sectors. Across all years, the average absolute difference between the percent of black students at a charter school and the percent of black students enrolled in LRMA public schools was 19.5 percentage points. The average absolute difference between the percent of black students at a TPS and the percent of black students enrolled in LRMA public schools was 16.6 percentage points among all LRMA TPSs and 17.8 percentage points among LRSD TPSs.

Row 2 illustrates the average difference between the community composition and schools if they enrolled a larger share of black students than were enrolled in LRMA public schools as a whole. Across all years, charters with a disproportionately large share of black students enrolled

a 27.2 percentage point higher fraction of black students than the community composition, while LRMA TPSs enrolled an 18.5 percentage point higher share of black students and LRSD TPSs enrolled a 21.0 percentage point higher share of black students than the community composition.

Finally, row 3 shows the average difference in composition between schools that enrolled a disproportionately small share of black students and the share of black students in the LRMA public school system overall. Across the seven years examined, charters that under-enrolled black students on average had an 18.3 percentage point smaller share of black students than the community composition, while LRMA TPSs had a 15.0 percentage point smaller share of black students than the LRMA public school system overall, and LRSD TPSs on average had an 11.8 percentage point smaller share of black students than the LRMA public school system overall.

Integration as Measured by % White

The next three rows show the average difference between the share of white students enrolled in schools in each sector and the share of white students enrolled in the LRMA public school system. Row 4 shows that the average absolute difference between the share of white students in TPSs and the share of white students in the LRMA public school system is slightly larger than the average absolute difference between the share of white students in charters and the LRMA public school system. On average, the share of white students in charters was ± 17.2 percentage points of the share of white students in the LRMA public school system, while the share of white students in LRMA TPSs was ± 18.3 percentage points of the area average, and the share of white students in LRSD TPSs was ± 20.2 percentage points of the area average.

Taken together, rows 5 and 6 show that difference between the share of white students enrolled in each sector and the share of white students enrolled is roughly similar across charter

and TPSs, but the magnitude of the difference is greater when looking at schools that enroll a disproportionately small share of white students relative to the fraction of white students in LRMA public schools. On average, schools that enrolled a disproportionately larger share of white students enrolled a 15-17 percentage point higher fraction of white students than the area as a whole, while schools that enrolled a disproportionately small share of white students enrolled a 20-23 percentage point lower fraction of white students than the area as a whole.

Finally, rows 7-9 show the difference between the share of FRL students enrolled in schools in each sector and the share of FRL students enrolled in LRMA public schools. On average, the absolute difference between the share of FRL students in charters and the share of FRL students in LRMA public schools was slightly greater than the difference between the share of FRL students in TPSs and in LRMA public schools overall. However, the difference between the share of FRL students in charters in which FRL students were overrepresented was greater on average than the difference between the share of FRL students in TPSs (LRMA or LRSD) in which FRL students were overrepresented relative to the community. Finally, the average difference between the share of FRL students in charters in which FRL students underrepresented was 29.7 percentage points lower than the share of FRL students in the LRMA public school system, while the average difference for LRMA TPSs was -18.7 percentage points, and was -22.7 percentage points for LRSD TPSs.

Overall, differences in the share of black students enrolled in schools relative to the share of black students enrolled in the LRMA public school system were slightly greater in charter schools than in TPSs, while differences in the share of white students enrolled in schools relative to the community were roughly similar across sectors. The largest differences were seen when examining the representation of FRL students in each sector relative to the share of FRL students

in the community as a whole. TPSs in general had more similar shares of FRL students relative to the community than did charter schools during this time.

Because there is no single, agreed-upon definition of an “integrated” school or system, we employed multiple analytic strategies. Whether we identified particular cutoffs (such as being with 10 or 15 percentage points of the community average) or we looked at the average differences between the school composition and the broader community, we arrived at roughly similar conclusions.

- *First of all, with regard to the percentage of black students, charter schools and TPS appear to be similarly integrated. Depending on the cutoffs employed, somewhere between 30% and 50% of the students attend schools identified as integrated and the figure for charter schools was quite similar to that for TPS. On average, students in each sector attended schools with percentages of black students roughly 17 to 20 percentage points different from the community average.*
- *Second, with regard to the percentage of white students, charter schools appear to be slightly more representative of the broader community than are TPS in LRSD or LRMA. Regardless of the cutoffs employed, a significantly greater fraction of the students in the charter sector attended integrated schools. However, in terms of the average deviation from the broader community, students in charter schools attended schools with percentages of white students roughly 17 percentage points different from the community average. This figure was just over 18 points for LRMA and 20 points for LRSD. Thus, the difference between sectors is not large.*

- *Finally, with regard to socioeconomic integration, the charter sector is less likely to be integrated, regardless of the measure chosen. While neither sector can boast of being socioeconomically representative, students in the charter sector are much less likely to attend school with student bodies that have an FRL percentage similar to that in the overall community. Indeed, on average, students in the charter sector attended schools with percentages of FRL students roughly 27 percentage points different from the community average. This figure was 20 points for LRMA and 22 points for LRSD.*

This section has examined static measures of integration in schools in the LRMA. We next turn to examining the impact individual student moves have on the level of integration in the schools the exit and enter.

VI. How do student moves impact the level of integration in LRMA public schools?

Conceptual Challenges of Determining Schools' Level of Integration

Determining the impact of an individual student transfer between schools on the segregation of the Little Rock Area public school system as a whole is a different and challenging undertaking. However, the primary difficulty lies in determining what an integrated school is supposed to look like – and we described our decision rules on this topic in the prior section. After benchmark metric for integration has been established, it is a relatively easy task to determine whether students leaving make the school look more or less like the ideal integrated school, and whether students entering the school make the school look more or less like the ideal integrated school. In this section, we examine whether individual student moves tend to make the schools they leave and enter look more or less like the LRMA average, which is our definition of ‘integrated’. Thus, student moves that result in a school looking more like the LRMA average, and thus more representative of the broader community, are categorized as ‘integrative’.

Impact of Student Movement on School-Level Integration

Our chosen methodology first requires schools be classified as above average, integrated, or below average with respect to the percent of white, black, and FRL students at the school in each year. We use a +/- 10 percentage point bandwidth (we used this metric in the above section) around the LRMA public school enrollment average to make this designation. For example, in the 2008-09 school year, 58% of the students enrolled in any LRMA public school—charter or traditional public—were black. Schools at which 48-68% of enrolled students were designated as integrated with respect to black students in that year; schools where more than 68.1% of enrolled students were black were designated as above average in percent black students, and schools

where less than 47.9% of the student body was black were designated as below average in percent black students. We repeated this process with respect to white students and FRL students and for each of the six years examined. For each transfer out of a LRMA TPS, we determine whether the student left an above average, integrated, or below average black, white, or FRL school. For each transfer into a LRMA charter school, we similarly determine whether the student entered a school with an above average, integrated, or below average percentage of black, white, or FRL students. We then break this down by sector—what kind of schools are students transferring out of from LRMA TPSs, and what kind of charters are students transferring into in the Little Rock area? We investigate whether black students leave schools with below average shares of black students for schools with above average shares of black students (which would be segregative), or if FRL students leave schools with above average shares of FRL students for schools with below-average shares of FRL students (which would be integrative). We examine whether there are patterns of students leaving integrated TPSs for more

segregated charter schools, or whether there are patterns of students leaving integrated charters for integrated TPSs, for example.

Impact on LRMA Schools Students Exit

Table 7 examines the TPSs that students exited between 2008-09 and 2014-15.

Table 7: ALL Student Transfers out of Little Rock Metro Area Traditional Public Schools, by Demographic of Student and Related School Integration, Selected Years, Fall of 2008-09 to Fall of 2014-15

		Move F08-F09		Move F11-F12		Move F13-F14		2008-09 to 2014-15	
		# of	% of	# of	% of	# of	% of	# of	% of
		Students	Transfers	Students	Transfers	Students	Transfers	Students	Transfers
Black Students Leaving	Above Avg % Black	1,421	24.6%	1,635	27.4%	1,425	25.2%	9,166	26.1%
	Integrated Black	1,162	20.1%	1,089	18.2%	1,054	18.6%	6,601	18.8%
	Below Avg % Black	593	10.3%	643	10.8%	722	12.8%	3,860	11.0%
White Students Leaving	Above Avg % White	1,395	24.2%	1,591	26.6%	1,529	27.1%	9,059	25.8%
	Integrated White	912	15.8%	730	12.2%	665	11.8%	4,668	13.3%
	Below Avg % White	290	5.0%	286	4.8%	257	4.5%	1,767	5.0%
N, Black and White Moves		5,773		5,974		5,652		35,121	
FRL Students Leaving	Above Avg % FRL	1,735	26.4%	2,354	34.6%	2,095	31.4%	13,238	32.9%
	Integrated FRL	1,077	16.4%	896	13.2%	874	13.1%	5,564	13.8%
	Below Avg % FRL	994	15.1%	887	13.0%	957	14.4%	5,778	14.4%
Non-FRL Students Leaving	Below Avg % FRL	1,610	24.5%	1,613	23.7%	1,599	24.0%	9,370	23.3%
	Integrated FRL	777	11.8%	566	8.3%	642	9.6%	3,558	8.8%
	Above Avg % FRL	380	5.8%	481	7.1%	497	7.5%	2,699	6.7%
N, FRL and Non-FRL Moves		6,573		6,797		6,664		40,207	

We label moves where black students leave schools with an above average percentage of the student body is black as having an integrative impact on the schools they leave, because it brings the school’s racial composition closer to the average of the LRMA. Conversely, incidences of white students leaving schools with below average percentages of white students have a segregative effect, as these moves shift the school’s racial composition further from the

LRMA composition. We classify student moves from schools that are integrated as having a neutral effect on the overall level of integration of the LRMA public school system.

In 2009, 5,773 black and white students exited LRMA public schools. Slightly less than 25% of those moves were black students exiting schools with an above-average share of black students—these moves were integrative. Similarly, about 24% of those moves were white students exiting schools with an above-average share of white students—these moves were also integrative. In the same year, 20.1% of moves were black students making neutral moves, and 15.8% were white students making neutral moves. In 2009, 10% of moves were black students leaving schools in which black students were underrepresented, and the final 5% of moves were white students leaving schools in which white students were underrepresented. These moves were segregative. In 2009, 2,816 moves (48.8%) were racially integrative, while 35.9% were neutral, and just 15.3% were segregative.

Across all seven years examined, we see a similar story. 26.1% of all moves were black students leaving schools in which black students were overrepresented, and another 25.8% of moves were white students leaving schools in which white students were overrepresented. Slightly less than 19% of moves were neutral moves made by black students, and another 13% were neutral moves made by white students. Finally, 11% of moves were segregative moves made by black students, and 5% were segregative moves made by white students. In total, 18,225 of 35,121 (52%) of moves were racially integrative, 32% were racially neutral, and 16% were racially segregative. The majority of student exits from LRMA TPSs had a racially integrative impact on the schools students chose to leave.

The bottom half of Table 7 shows the impact of student exits on the level of socioeconomic integration in LRMA TPSs. Across all seven years, there were 40,207 student

exits from LRMA TPSs.⁵ Of those moves, 32.9% were made by FRL students exiting schools in which FRL students were overrepresented, and another 23.3% were non-FRL students exiting schools in which non-FRL were overrepresented—the moves were integrative. Between the 2008-09 and 2014-15 school years, 13.8% of moves were made by FRL students and had a neutral impact on the level of socioeconomic integration in the schools they exited, while another 8.8% were moves made by non-FRL students that had a neutral impact on the level of socioeconomic integration in the schools they exited. Finally, 14.4% of moves were made by FRL students and had a segregative impact on the exited schools, and 6.7% of moves were made by non-FRL students and had a segregative impact. In total, 56% of moves were socioeconomically integrative (22,608 of 40,207), while 23% were neutral, and 21% had a segregative impact on the LRMA TPSs that students chose to exit.

Over the seven years of this analysis, the majority of moves made by students exiting LRMA TPSs had a racially and socioeconomically integrative impact on the exited schools, because the majority of moves were students leaving schools in which they were demographically overrepresented.

Impact on LRSD Schools Students **Exit**

Table 7 examined the impact of student transfers on LRMA TPSs students exited between the 2008-09 and 2014-15 school years. We are also interested specifically on the impact student exits had on the single central city school district (LRSD) during this time. Table 8 presents this analysis.

⁵ This total is different from the total number of black and white student moves because it includes students with other racial identities.

Table 8: ALL Student Transfers Out Of LRSD TPSs, by Demographic of Student and Related School Integration, Selected Years Fall of 2008-09 to Fall of 2014-15

		Move F08-F09		Move F11-F12		Move F13-F14		Overall	
		#	% of	#	% of	#	% of	#	% of
		Students	Transfers	Students	Transfers	Students	Transfers	Students	Transfers
Black Students Leaving	Above Avg % Black	1,701	54.9%	1,867	59.9%	1,391	48.3%	9,725	53.5%
	Integrated Black	540	17.4%	437	14.0%	606	21.0%	3,082	17.0%
	Below Avg % Black	59	1.9%	161	5.2%	142	4.9%	695	3.8%
White Students Leaving	Above Avg % White	220	7.1%	370	11.9%	314	10.9%	1,769	9.7%
	Integrated White	265	8.5%	22	0.7%	198	6.9%	1,244	6.8%
	Below Avg % White	315	10.2%	262	8.4%	228	7.9%	1,661	9.1%
N, Black and White Moves		3,100		3,119		2,879		18,176	
FRL Students Leaving	Above Avg FRL	1,470	42.0%	2,221	59.1%	1,319	38.7%	10,924	52.1%
	Integrated FRL	590	16.8%	131	3.5%	280	8.2%	1,554	7.4%
	Below Avg % FRL	310	8.9%	348	9.3%	132	12.7%	2,080	9.9%
Non-FRL Students Leaving	Below Avg % FRL	556	15.9%	586	15.6%	760	22.3%	3,507	16.7%
	Integrated FRL	319	9.1%	82	2.2%	326	9.6%	1,020	4.9%
	Above Avg FRL	257	7.3%	390	10.4%	287	8.4%	1,867	8.9%
N, FRL and Non-FRL Moves		3,502		3,758		3,404		20,952	

Table 8 presents the impact on LRSD schools exited by students. Moves are integrative if students leave schools where they are already overrepresented (for example, black students leaving above average black schools), neutral if they leave schools where they are proportionately represented (for example, white students leaving integrated white schools), and segregative if they leave schools where they are disproportionately underrepresented (for example, FRL students leaving below average FRL schools).

The top half of Table 8 examines the impact of student movements on the level of racial integration in the LRSD schools students exited. Across all seven years examined, 18,176 black and white students exited LRSD TPSs. Of those, 11,494 moves (63%) had a racially integrative impact on the exited schools, as they were made by black or white students leaving schools in

which they had been demographically overrepresented. During the same period, 24% of moves were neutral, and just 13% of moves had a racially segregative impact on the exited LRSD schools.

The bottom half of Table 8 examines the impact of student movements on the level of socioeconomic integration in the LRSD schools students chose to leave. In the years analyzed, 20,952 students exited LRSD schools for other options. Of these moves, 14,431 (69%) had an integrative impact on the exited schools, as they were made by FRL or non-FRL students exiting schools with a disproportionately large share of FRL or non-FRL students, respectively. An additional 12% of moves had a neutral impact, and the remaining 19% of moves (3,947) had a segregative impact on the exited schools.

Across the seven years examined, a majority of student exits from LRSD schools had a racially and socioeconomically integrative impact on the schools exited, as most students left schools in which they had been demographically overrepresented.

Impact on LRMA TPSs Students **Exit** for Charters

The previous sections have examined the impact of student exits from all LRMA TPSs and LRSD TPSs into all different school settings, including other TPS schools, out-of-state schools, private schools, and charter schools. Despite the fact that a relatively small number of these transfers include students moving into charter schools, transfers into charters are often controversial and of great interest to policymakers. Thus, policymakers focused on the Little Rock School District are very interested in the question of how student movements from transfers to charters impact the level of integration in LRMA TPSs. Table 9 shows the impact of this subset of moves.

Table 9: Student Transfers Out Of LRMA TPSs for LRMA *Charters*, by Demographic of Student and Related School Integration, Selected Years Fall of 2008-09 to Fall of 2014-15

		Move F08-F09		Move F11-F12		Move F13-F14		Overall	
		#	% of	#	% of	#	% of	#	% of
		Students	Transfers	Students	Transfers	Students	Transfers	Students	Transfers
Black Students Leaving	Above Avg % Black	120	17.3%	275	34.2%	246	28.6%	1,283	28.1%
	Integrated Black	195	28.2%	175	21.8%	214	14.9%	1,109	24.3%
	Below Avg % Black	73	10.5%	112	13.9%	105	12.2%	619	13.6%
White Students Leaving	Above Avg % White	151	21.8%	152	18.9%	202	23.5%	916	20.1%
	Integrated White	122	17.6%	67	8.3%	63	7.3%	483	10.6%
	Below Avg % White	31	4.5%	22	2.7%	29	3.4%	149	3.3%
N, Black and White Moves		692		803		859		4,559	
FRL Students Leaving	Above Avg FRL	220	28.3%	331	35.1%	333	31.2%	1,753	32.7%
	Integrated FRL	115	14.8%	99	10.5%	128	12.0%	629	11.7%
	Below Avg % FRL	54	6.9%	106	11.2%	152	14.3%	574	10.7%
Non-FRL Students Leaving	Below Avg % FRL	174	22.4%	219	23.2%	259	24.3%	1,267	23.6%
	Integrated FRL	150	19.3%	82	8.7%	83	7.8%	541	10.1%
	Above Avg FRL	65	8.4%	106	11.2%	111	10.4%	601	11.2%
N, FRL and Non-FRL Moves		778		943		1,066		5,365	

The message of Table 9 is similar to that of Tables 7 and 8, although it is smaller in scale than Table 7 because only a small share of student exits from LRMA TPSs is due to students moving to area charters. Across the seven years examined, 4,559 black and white student exited LRMA TPSs for area charters. Of those moves, 2,199 (48%) were racially integrative, as they represented black or white students leaving schools with an above average share of black or white students, respectively. Another 1,592 moves (35%) were racially neutral, and the remaining 768 moves (17%) were racially segregative, as they were black or white students exiting schools with a below average share of black or white students, respectively.

The bottom half of Table 9 shows the impact of student exits from LRMA TPSs to LRMA charters on the level of socioeconomic integration in the exited LRMA TPSs. In the seven years examined, 5,365 students exited LRMA TPSs for area charters. Of those, 3,020

(56%) had an integrative impact on the exited schools, as FRL and non-FRL students exited schools in which they had been demographically overrepresented. Another 1,170 moves (22%) were neutral, while the remaining 1,175 moves (22%) were segregative.

When looked at as a whole, student exits from LRMA TPSs to LRMA charters had a racially and socioeconomically integrative impact on the schools students chose to leave, as students exited schools in which they had been demographically overrepresented.

Impact on LRSD Schools Students **Exit** for Charters

While LRMA charters draw students from all TPSs in the area, the impact of student movements from LRSD schools may be of particular interest to policymakers. Table 10 highlights the impact of student exits from LRSD schools to LRMA charters on the level of integration in the exited LRSD schools.

Table 10: Student Transfers Out Of LRSD TPSs for LRMA Charters, by Demographic of Student and Related School Integration, Selected Years Fall of 2008-09 to Fall of 2014-15

		Move F08-F09		Move F11-F12		Move F13-F14		Overall	
		#	% of	#	% of	#	% of	#	% of
		Students	Transfers	Students	Transfers	Students	Transfers	Students	Transfers
Black Students Leaving	Above Avg % Black	111	41.4%	256	57.3%	209	46.2%	1,116	48.7%
	Integrated Black	58	21.6%	69	15.4%	110	24.3%	480	20.9%
	Below Avg % Black	12	4.5%	33	7.4%	23	5.1%	118	5.1%
White Students Leaving	Above Avg % White	21	7.8%	32	7.2%	52	11.5%	206	9.0%
	Integrated White	39	14.6%	39	8.7%	37	8.2%	242	10.6%
	Below Avg % White	27	10.1%	18	4.0%	21	4.6%	131	5.7%
N, Black and White Moves		268		447		452		2,293	
FRL Students Leaving	Above Avg FRL	108	34.8%	299	55.8%	221	39.3%	1,255	46.3%
	Integrated FRL	42	13.5%	11	2.1%	38	6.8%	180	6.6%
	Below Avg % FRL	20	6.5%	46	8.6%	89	15.8%	287	10.6%
Non-FRL Students Leaving	Below Avg % FRL	65	21.0%	96	17.9%	123	21.9%	539	19.9%
	Integrated FRL	54	17.4%	16	3.0%	31	5.5%	152	5.6%
	Above Avg FRL	21	6.8%	68	12.7%	60	10.7%	297	11.0%
N, FRL and Non-FRL Moves		310		536		562		2,710	

The first section of Table 10 shows the impact of student moves from LRSD schools to LRMA charters on the level of racial integration in LRSD schools. Across the years examined, 2,293 students exited LRSD schools for LRMA charters. Of those moves, almost half (48.7%) were black students leaving schools with an above-average share of black students. Another 9% of moves were white students leaving schools in which they were demographically overrepresented. In total, 1,322 (57.7%) student exits from LRSD for charters had a racially integrative impact on the schools they left behind. Another 31% of moves had a racially neutral impact on LRSD schools, and 11% had a racially segregative impact on the LRSD schools students exited.

The bottom section of Table 10 shows the impact of LRSD student exits for charters on the level of socioeconomic integration in the exited LRSD schools. There were 2,710 student moves across the seven years of our analysis, 1,794 of which were FRL or non-FRL students leaving schools in which they had been demographically overrepresented. In other words, 66% of student moves had a socioeconomically integrative impact on the LRSD schools they exited. 332 moves (12%) had a socioeconomically neutral impact on the exited LRSD schools, and 584 (22%) had a socioeconomically segregative impact.

Across the seven years examined, student exits from LRSD TPSs to LRMA charters tended to have an integrative impact on the schools that students left, because black, white, and FRL students tended to exit schools in which they had been demographically overrepresented.

Net Impact of Student Moves from LRMA TPSs to LRMA Charters on Integration

Policymakers thinking about the LRMA public school system as a whole should be concerned about the overall impact of student movements on the level of integration on the system as a whole. Whether students are in an integrated or segregated environment matters regardless of whether the student attends a charter or a traditional public school. When thinking about education policy moving forward, and whether the charter sector should continue to grow and how admissions into charters should be handled, policymakers need to understand the net impact of student movements on the system as a whole. However, as we have shown, much of the student movement affecting LRMA schools is the result of education sectors outside of LRMA policymakers' decisions—students move into the area from other parts of the state or from outside the public school system, and students leave the area for traditional schools in other parts of the state or options outside the public school system. Thus, when we look at the net

impact of student movements, we need to limit our scope just to move within the LRMA in order to capture the impact of each student move both on the school they exit and on the school they enter. Table 11 summarizes the impact of student moves on the LRMA TPSs students exited and on the LRMA charters students entered during the seven years of our analysis.

Table 11: Net Impact of Student Moves from LRMA TPSs to LRMA Charters, 2008-09 to 2014-15

		Exits from TPS	Entrances to Charters	Total Moves	Overall %
Black Students	Integrative	1,283	1,173	2,456	26.9%
	Neutral	1,109	699	1,808	19.8%
	Segregative	619	1,139	1,758	19.3%
White Students	Integrative	916	29	945	10.4%
	Neutral	483	450	1,023	11.2%
	Segregative	149	979	1,128	12.4%
FRL Students	Integrative	1,753	1,370	3,123	29.1%
	Neutral	629	352	981	9.1%
	Segregative	574	1,234	1,808	16.8%
Non-FRL Students	Integrative	1,267	205	1,472	13.7%
	Neutral	541	163	704	6.6%
	Segregative	601	2,041	2,642	24.6%

Table 11 shows the net impact of students moving from TPSs to charters on the LRMA public school system as a whole. This analysis takes into account the fact that each student move has two impacts—one on the school they exit, and one on the school they enter. This analysis adds both of those impacts together so we can see whether student moves from TPSs to charters is increasing, decreasing, or not affecting the level of integration experienced by students in LRMA public schools.

In the top section of Table 11, we see the impact of student moves on the level of racial integration in both LRMA TPSs and LRMA charters. Across the years examined, 26.9% of moves were integrative moves made by black students, while an additional 10.4% of moves were

integrative moves made by white students. In total, 3,401 of 9,028 (37.7%) of moves made by black and white students had a racially integrative impact either on the TPS students exited or on the charter students entered. About 20% of moves made during these seven years were moves made by black students that had a neutral impact; another 11.2% of moves were moves made by white students that had a neutral impact. In total, 2,741 moves (30.4%) made by black and white students had a neutral impact on either the TPS students exited or the charter students entered during this time. Finally, we see that 19.3% of moves were moves by black students that had a racially segregative impact, as were 12.4% of moves made by white students. In total, 2,886 moves (32.0%) made by black and white students had a racially segregative impact on either the TPSs students left, or the charters they entered. Overall, a plurality of moves (37.7%) made by black and white students had an integrative impact on the LRMA public school system as a whole.

The bottom section of Table 11 shows the impact of student exits from LRMA TPSs to LRMA charters on the level of socioeconomic integration in the LRMA public school system. Across the years examined, 29.1% of moves were made by FRL students and had an integrative impact on the LRMA public school system. An additional 13.7% of moves were made by non-FRL students and had an integrative impact on the LRMA public school system. Overall, 4,595 (42.8%) of moves had a socioeconomically integrative impact on either the TPSs students exited or the charters students entered. The smallest share of moves had a socioeconomically neutral impact on the LRMA public school system, highlighting the polarization of LRMA schools into having either an above or below average share of FRL students. Across the years examined, 1,685 (15.7%) of moves had a socioeconomically neutral impact on either the TPSs students exited or the charter they entered into. Finally, we see that 16.8% of moves were made by FRL

students and had a segregative impact, and another 24.6% of moves were made by non-FRL students and had a segregative impact. Taken together, 41.5% of moves had a socioeconomically segregative impact on the LRMA public school system.

When we consider the impact of a student move on both sides—on the school left behind and on the school entered—we see that student moves from LRMA TPSs to charter tended to be slightly more racially and socioeconomically integrative than segregative across the seven years included in this analysis.

Impact on Charter Schools Students **Enter**

When thinking about the LRMA public school system as a whole, we are interested in how student moves impact both the schools that students **exit** and the schools that students **enter**. In the past section, we focused on students moving into charters from LRMA charters, but a larger share of charter students come from outside the LRMA public school system. Charter schools only exist because students choose to enter them, and it is important to know if students who currently attend charters are in integrated environments (which we discussed in section V), and whether the charter environment has grown more or less racially and socioeconomically integrated over time. We turn now to whether the moves of students into charters from all other schools (LRMA TPSs, other areas of the state, or non-public options) had an integrative, neutral, or segregative impact on the charters they entered. We focus here on charters because, over time, all of their students entered as the result of student movements.

When examining **all** entrants to charters, we see different patterns emerge than when we only look at students coming into LRMA charters from LRMA TPSs. Across the seven years examined, 1,388 of 6,472 (21%) moves made by black and white students had a racially integrative impact, while 29% were racially neutral, and 49% were racially segregative. Students

coming into LRMA charters from outside the LRMA tended to enter into charters in which they were already demographically overrepresented. Similarly, when looking at the impact of all student transfers into LRMA charters on the level of socioeconomic integration in LRMA charters, we find that 2,072 of 7,699 (27%) were socioeconomically integrative, while 9% were neutral, and a full 64% were socioeconomically segregative. Again, we see that students entering charters from outside the Little Rock area enroll in schools in which they are demographically overrepresented.

The charter sector in the Little Rock Area has grown in recent years, and there is clear demand among families for charter options. However, as it is also important for public schools to create diverse, affirming environments for students of all backgrounds, we need to look at whether student moves into charters are helping to integrate or segregate the student body. By doing so, we can have a better discussion about policy questions such as having weighted lotteries for charter admission to ensure that students of different backgrounds are proportionately represented in charter schools.

VII. Conclusions

We began this report with three research questions probing the current level of integration in Little Rock Area public schools, and how student movement is impacting integration in both charters and TPSs. Broadly, the conclusions from these analyses are as follows:

- All students moving into charters from TPSs entered schools with a lower concentration of FRL students; conversely, students moving into TPSs from charters entered schools serving a less economically advantaged student body.

- Overall, students moved into schools with similar academic performance as the schools they exited.
- 6% of charter students, 5% of LRMA TPS students, and 7% of LRSD students attended racially hyper-segregated schools.
- 3% of charter students, 18% of LRMA TPS students, and 22% of LRSD students attended socioeconomically hyper-segregated schools.
- Public school students in the LRMA were more likely to attend racially integrated than socioeconomically integrated schools; however, fewer than 50% of students in any sector attended racially integrated schools, and fewer than 38% of students in any sector attended socioeconomically integrated schools.
- Transfers of black, white, and FRL students tended to have an integrative impact on the LRMA TPSs they exited.
- Black, white, and FRL students tended to enter charters in which they were already demographically overrepresented. However, when only looking at students moving from LRMA TPSs to LRMA charters (not including students entering charters from outside the area) moves tended to be both racially and socioeconomically integrative.
- The primary reason that student transfers from TPS into charters were more likely to have an integrative effect than a segregative one is straightforward: students who transferred to charters generally exited TPS schools that were segregated. About half of all moves were made by students exiting schools in which they had been demographically overrepresented.