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Trends, Policies, and Practices Related to Racial, Socioeconomic, and Linguistic Segregation in California's Charter Schools, 1998-2013

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Trends, Policies, and Practices Related to Racial, Socioeconomic, and Linguistic Segregation in California's Charter Schools, 1998-2013

A dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Education

## by

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## ABSTRACT OF THE DISSERTATION

Trends, Policies, and Practices Related to Racial, Socioeconomic, and Linguistic Segregation in California's Charter Schools, 1998-2013

## by

Jennifer Baucom Ayscue<br>Doctor of Philosophy in Education<br>University of California, Los Angeles, 2016<br>Professor Gary A. Orfield, Chair

California became the nation's second state to approve charter schools when it passed legislation in 1992, and it currently has more charter schools than any other state. Developed during a post-civil rights era, charter schools are not attached to civil rights policies. This study is based on the integration theory of choice and uses an explanatory sequential mixed methods design to explore racial, socioeconomic, and linguistic segregation in California's charter schools compared to traditional public schools (TPSs), and in some cases, magnet schools, and the ways in which charter policies and practices relate to level of segregation. Segregation trends are analyzed for the state, Riverside Core Based Statistical Area (CBSA), Sacramento CBSA, and Los Angeles Unified School District using measures of concentration and exposure/isolation. The relationship between segregation and academic achievement in charter schools compared to TPSs is analyzed using ordinary least squares regression. Interviews with leaders, teachers, and
parents at three charter schools in Los Angeles are analyzed to identify mechanisms related to varying levels of segregation.

Findings indicate that segregation is intensifying in California's charters and TPSs. While the disparities in enrollment and segregation between charters and TPSs are generally modest, charters tend to enroll disproportionately large shares of advantaged students and small shares of historically disadvantaged students. Charters tend to be more segregated than TPSs. High levels of segregation are correlated with lower academic achievement in both charters and TPSs. The relationship between segregation and academic achievement in charters compared to TPSs varies among geographic areas, but generally in segregated schools, charters outperform TPSs, and in desegregated schools, TPSs outperform charters. Three categories of school-level mechanisms are related to segregation: 1 . founding decisions about the mission, type, location, and facility; 2. policies and practices around outreach, recruitment, enrollment, transportation, curriculum and instruction, student support services, and teacher diversity; and 3. responses to families' attitudes toward diversity and approaches to information sharing. District and state policies also influence these mechanisms.

The findings generate implications for policy and practice in multiple areas, including diversity goals, siting decisions, transportation, facilities, information dissemination, enrollment, curriculum and instruction, teacher hiring, and housing.

The dissertation of Jennifer Baucom Ayscue is approved.

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2016

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Ayscue, J. B., Siegel-Hawley, G., Kucsera, J., \& Woodward, B. (online first). School segregation and resegregation in Charlotte and Raleigh, 1989-2010. Educational Policy.

Ayscue, J. B. (2016). Promising or potentially harmful? Suburban school responses to racial change. Peabody Journal of Education, 91(3), 326-347.

Frankenberg, E., Ayscue, J. B., \& Tyler, A. C. (2016). Diversifying high schools in racially changing suburban districts: Expanding opportunity, creating barriers? Peabody Journal of Education, 91(3), 383-403.

Tyler, A. C., Frankenberg, E., \& Ayscue, J. B. (2016). Race and place: How suburban schools respond to increasing racial diversity. Peabody Journal of Education, 91(3), 283-288.

Ayscue, J. B., \& Frankenberg, E. (2016). Desegregation and integration. Oxford Bibliographies in Education. Ed. Luanna H. Meyer. New York: Oxford University Press.

Ayscue, J. B. (2016). Review of Yesterday, today, and tomorrow: School desegregation and resegregation in Charlotte, by R. A. Mickelson, S. S. Smith, \& A. H. Nelson (Eds.). Education Review, 23.

Ayscue, J. B., \& Orfield, G. (2016). Perpetuating separate and unequal worlds of educational opportunity through district lines: School segregation by race and poverty. In P. A. Noguera, J. C. Pierce, \& R. Ahram (Eds.), Race, equity, and education: Sixty years from Brown (pp. 45-74). New York, NY: Springer.

Ayscue, J. B., \& Siegel-Hawley, G. (2016 April). How to equalize access to competitive schools of choice. Paper presented at the annual meeting of the American Educational Research Association, Washington, D. C.

Woodward, B., Ayscue, J. B., \& Orfield, G. (2016 April). How researchers can give voice to a marginalized community. Paper presented at the annual meeting of the American Educational Research Association, Washington, D. C.

Orfield, G., Ee, J., \& Ayscue, J. (2015). Deepening educational segregation in a policy vacuum. In D. J. B. Mitchell (Ed.), California Policy Options 2015 (pp. 165-184). Los Angeles, CA: UCLA School of Public Affairs.

Orfield, G., Ayscue, J., Ee, J., Frankenberg, E., Siegel-Hawley, G., Woodward, B., \& Amlani, N. (2015 May). Better choices for Buffalo's students: Expanding and reforming the criteria schools system. Los Angeles: The Civil Rights Project/Proyecto Derechos Civiles.

Ayscue, J. B., \& Orfield, G. (2014). School district lines stratify educational opportunity by race and poverty. Race and Social Problems, 7(1), 5-20.

Ayscue, J. B., \& Jau, S. with Flaxman, G., Kucsera, J., \& Siegel-Hawley, G. (2014 September). Diversity in the distance: The onset of racial change in Northern New England schools. Los Angeles: The Civil Rights Project/Proyecto Derechos Civiles.

Ayscue, J. B., \& Woodward, B. with Kucsera, J., \& Siegel-Hawley, G. (2014 May). Segregation again: North Carolina's transition from leading desegregation then to accepting segregation now. Los Angeles: The Civil Rights Project/Proyecto Derechos Civiles.

Frankenberg, E., \& Ayscue, J. B. (2013). New faces in suburban spaces: How diversifying districts and schools are responding to marked change in their racial makeup. School Administrator, 70(11), 23-27.

Ayscue, J. B., \& Greenberg, A. with Kucsera, J., \& Siegel-Hawley, G. (2013 May). Losing ground: School segregation in Massachusetts. Los Angeles: The Civil Rights Project/Proyecto Derechos Civiles.

Ayscue, J. B. with Flaxman, G., Kucsera, J., \& Siegel-Hawley, G. (2013 April). Settle for segregation or strive for diversity? A defining moment for Maryland's public schools. Los Angeles: The Civil Rights Project/Proyecto Derechos Civiles.

## CHAPTER ONE

## INTRODUCTION TO CHARTER SCHOOLS AND SEGREGATION

Across the United States, charter schools are growing in number and popularity. While there has long been a drive for privatization of public schools, as long as middle- and upper-class predominantly white families could enroll their children in their "own" neighborhood schools, there was not a major concern nor was action taken to privatize public schools. However, shifting demographics and an increasing frustration with schools in low-income communities of color that were drop-out factories led people from both ends of the political spectrum to seek another kind of schooling. Charter schools were an answer to the "problem" of having to send children to schools that many parents might have considered inferior or "too diverse;" they were also an answer to some very frustrated educators who wanted to experiment with something different than the schools that had been failing poor students of color.

As of 2014, 42 states and the District of Columbia have enacted charter school legislation. Currently, there are 5,700 charter schools serving 2.1 million students throughout the nation (National Center for Education Statistics, 2014). California has the most charter schools of any state, enrolling more than 519,000 students at 1,130 schools during the 2013-2014 school year (California Charter Schools Association, 2013a). These figures suggest that there is widespread support for charter schools across the nation and particularly in California. However, the charter school debate is complex and as charters become ever more popular, this debate deserves careful consideration.

While there appears to be political consensus in support of charter schools, they are a lightning rod for debate both within the public sphere as well as within educational research. There is controversy over the theoretical premises on which charter schools have been developed
to provide choice and competition to traditional public schools (TPSs). This debate questions whether an autonomous system of charter schools is necessarily superior to the traditional public school system and whether such a system is fair to students who remain within public schools, schools that no longer receive the totality of the public's investment because charter schools receive some of the attention and resources. There is also concern that charter schools work with a different population of students, that is, they do not necessarily enroll all the various students that public schools enroll. Inconclusive findings on whether or not the academic performance of charter schools is superior to that of TPSs also contribute to the debate over the charter movement. Despite these controversies in the public sphere and educational research, policies of both Republicans and Democrats have supported the growth of charters since their inception in 1991. However, these policies merit careful attention, as unregulated choice in the form of charter schools can result in segregation, a crucial consideration in the controversy over the charter school movement. Even well-meaning educators might have fallen into a trap of not paying sufficient attention to what students were missing out on as charters became more segregated, and at the least, have not directly attacked the problem of segregation. In this study, segregation is defined as the separation and isolation of students based on demographic characteristics, such as race, socioeconomic status, or linguistic background.

Segregated schools raise concerns because decades of social science research demonstrate that segregation is associated with unequal educational opportunities and outcomes whereas diverse schools are linked to important benefits for students of all races (Linn \& Welner, 2007; Mickelson \& Nkomo, 2012). In addition, legal guidance from the Department of Education and the Department of Justice continues to affirm the importance of racial diversity in schools by suggesting ways that school districts can work within the current legal framework to
reduce racial isolation in schools. Given the legal guidance in support of racial diversity and the research demonstrating the harms of segregation and the benefits of desegregation, it would be prudent to implement charter school policies that will lead to diversity rather than segregation.

Further exploration is needed to examine whether charter schools are more segregated than TPSs and to identify the mechanisms that could be related to segregation in charter schools. This analysis would be helpful for designing policy to target the mechanisms related to segregation in order to create more diverse charters that would provide students with the important benefits associated with diversity. Therefore, this study revolves around the central query: How does racial, socioeconomic, and linguistic segregation in California's charter schools compare to that of the state's traditional public schools, and how have these trends changed over time?

California holds a prominent position in the charter school movement. As charter schools entered the educational landscape in the 1990s, California became the second state in the nation to approve charter school legislation with the passage of the Charter Schools Act of 1992. As noted above, California currently has more charter schools than any other state, accounting for approximately $11 \%$ of the state's public schools during the 2013-2014 school year (California Charter Schools Association, 2013a). Within the state, during the 2013-2014 school year, 328 charter schools were in operation in Los Angeles County and 262 of those charters were located within the boundaries of Los Angeles Unified School District (LAUSD), accounting for approximately 25\% of all schools in LAUSD (California Charter Schools Association, 2013b). As an early pioneer of charter schools in the United States and with such a large charter enrollment, California, and LAUSD in particular, are optimal locations for conducting research on charter schools.

Given the growth and prominence of charter schools, particularly in California and LAUSD, it is important to explore the types of opportunities that are provided to students who attend charter schools. Among these considerations, the racial, socioeconomic, and linguistic composition of a school can largely enhance or constrain the educational opportunities afforded to students. Thus, a careful examination of segregation in California's charter schools is needed.

## Purpose

In the current investigation, an explanatory sequential mixed methods design is used to explore segregation trends in charters during 15 years of their existence in California compared to these trends for TPS, and in some cases magnet schools, a different form of school choice that was used historically as a tool for desegregation, and the ways in which charter policies and practices are related to various levels of segregation. First, this study analyzes school-level demographic data from all charters and TPSs in California in order to describe trends in charter school enrollment and segregation from 1998 to 2013 and to compare charter segregation trends to those of the state's TPSs. Geographic areas studied include the state of California, LAUSD, and two other areas that are the most segregated and the least segregated in the state. In addition, where adequate data exists, segregation trends in charter schools were also compared to trends in magnet schools. Next, the study describes the relationship between segregation and academic performance and how this relationship differs in charters and TPSs. Finally, qualitative methods are used as a follow-up to identify various charter policies and practices that impact segregation and to develop an understanding of the ways in which they are related to the trends identified in the quantitative analysis. In this phase, the study explores the policies and practices that contribute to varied levels of segregation in three Los Angeles charter schools. Thus, the study
uses an explanatory sequential mixed methods approach to explore the following four research questions:

1. What are the racial, socioeconomic, and linguistic trends in enrollment and segregation of California's charter schools between 1998 and 2013?
2. How do levels of racial, socioeconomic, and linguistic segregation in California's charter schools compare to levels of racial, socioeconomic, and linguistic segregation in California's traditional public schools between 1998 and 2013, and in some cases, to magnets?
3. How is segregation related to academic performance in California's charter schools as compared to traditional public schools?
4. How do the charter policies and practices, as described by school leaders, teachers, parents, and board members, in selected LAUSD charter schools relate to varying levels of racial, socioeconomic, and/or linguistic segregation in charter schools?

This research expands upon the larger body of educational research focusing on school segregation in charter schools and contributes to knowledge of how policy could be used to promote diversity, rather than segregation, in charter schools.

## Organization of the Dissertation Study

This chapter has provided an introduction to the dissertation study. Chapter Two describes the theoretical framework, provides background information about the charter movement, and reviews the literature related to segregation trends, academic performance of charter schools, and the mechanisms that contribute to segregation, particularly in charter schools. Chapter Three provides an overview of the analytic approach. Chapters Four, Five, and Six present the dissertation findings. Each of these three chapters begins with a detailed description of the specific methods employed for that chapter, followed by the presentation of
findings and a discussion of the findings. Chapter Four compares trends in racial, socioeconomic, and linguistic segregation in charter schools to the trends in TPSs, and in some cases, also to magnet schools. Chapter Five explores the relationship between segregation and academic achievement in charter schools compared to TPSs. Chapter Six examines three case study schools to identify mechanisms that are related to varying levels of racial, socioeconomic, and linguistic segregation in charter schools. The dissertation concludes with Chapter Seven, which discusses findings, implications for policy and practice, and future research possibilities.

## CHAPTER TWO

## THEORETICAL FRAMEWORK AND LITERATURE REVIEW

This chapter begins with a description of the study's use of the integration theory of choice, as opposed to the market theory of choice, to explore segregation in charter schools. It proceeds by describing the charter movement and the policies that govern charter schools in California and Los Angeles Unified School District (LAUSD). Next, this chapter identifies trends in segregation, with a particular focus on charter schools, and concludes by analyzing the mechanisms that contribute to segregation, including the unique ways in which charter schools contribute to intensifying segregation.

## Theoretical Framework

Depending on the underlying purpose for creating a system of choice, school choice policies can be used to achieve the goals of desegregation or to further stratify students based on their race, class, and/or language. Two competing theories of choice-the integration theory of choice and the market theory of choice-lead to very different outcomes for school segregation. In both cases, the goal of choice is to provide better educational opportunities for students than the opportunities provided by their low-performing neighborhood public schools. However, the theories differ in their underlying premises and in the extent to which they value individual versus community goals and equity versus excellence.

## Integration Theory of Choice

The integration theory of choice emerged from the civil rights era and focuses on regulated choice as a tool for pursuing equity and equality of opportunity (Cobb \& Glass, 2009; Goldring \& Smrekar, 2000; Orfield, 2013a). This theory is based on the idea that social inequality underlies school inequality; therefore, rather than viewing choice as an end goal, the
integration theory of choice uses the voluntary approach of choice to achieve desegregation. It relies on providing schooling options that are better than segregated neighborhood schools so that students from across school boundary lines ultimately choose to attend better schools or schools that are a better fit. Although perhaps not the primary goal for students and families, this process results in students attending schools with more diverse groups of peers. This theory prioritizes group and community goals.

Magnet schools are the ideal example of the integration theory of choice. In the late 1960s and early 1970s, as resistance and opposition to mandatory forms of desegregation, such as busing, grew stronger, magnet schools developed as a way to achieve desegregation through voluntary means. Magnet schools have a theme around which the curriculum and instruction are developed. Because magnet schools are not tied to a catchment area, diverse families from across traditional attendance zones often choose magnet schools that are a better fit for their children. Although diversity alone is not what most families are seeking in selecting a magnet school, magnets also provide the opportunity for greater diversity by attracting diverse groups of students who are interested in the school theme and who would otherwise likely be enrolled in their segregated neighborhood schools. In effect, diversity becomes the positive by-product of this model. As the first policy option to combine school choice with the goal of achieving racial diversity, magnets historically included civil rights protections and although that is no longer the case for all magnets, present-day magnets that include diversity goals, conduct outreach to diverse communities, and provide free transportation are associated with higher levels of racial integration (Siegel-Hawley \& Frankenberg, 2013).

The integration theory of choice is grounded in decades of social science research demonstrating that racially desegregated schools have a variety of benefits for students,
including improved academic outcomes, improved near-term intergroup relations, and advantageous long-term effects (Linn \& Welner, 2007; Mickelson, 2008; Mickelson \& Nkomo, 2012). Conversely, segregated schools are systematically linked to unequal educational opportunities and outcomes.

Benefits of desegregation. In general, the academic effects of racially desegregated learning environments are positive for students of all races who attend such schools. Students of color tend to achieve at higher levels in racially diverse schools than in segregated schools (Hallinan, 1998). The earlier that students experience desegregated learning environments, the greater the positive impacts on academic success (Mickelson, 2005). For white students attending racially diverse schools, there is no corresponding detrimental impact on academic achievement (Crain \& Mahard, 1983).

Based on intergroup contact theory, Pettigrew and Tropp's (2006) meta-analysis of more than 500 studies confirms that increased contact between members of different groups can have positive impacts on all groups by reducing prejudice, negative attitudes, and stereotypes while at the same time increasing friendships among members of different groups. In examining school settings in particular, Tropp and Prenovost (2008) found that intergroup contact theory operates similarly in schools as it does in other environments. The positive impacts are generally enhanced when four optimal conditions exist: equal status within the contact situation, cooperation toward mutually valued goals, opportunity for people to get to know each other as individuals, and the support of relevant authorities (Allport, 1954).

Further, perpetuation theory posits that segregation repeats itself across different stages of life such that when individuals have early and sustained experiences in desegregated schools, they are more likely to live and work in desegregated environments later (Braddock \&

McPartland, 1989; Wells \& Crain, 1994). A study of adults who were born between 1945 and 1968 and followed through 2013 found that for black adults, there were significant improvements in long-term outcomes associated with desegregated schooling, including increased educational and occupational attainment, higher college quality and adult earnings, reduction in the likelihood of being incarcerated, and better health (R. C. Johnson, 2011). Racially diverse schools are beneficial not only to individuals but also to communities and society. In the long term, students who attend desegregated schools tend to have higher levels of civic engagement than those who attend less diverse, or segregated, schools (Kurlaender \& Yun, 2005). The benefits of diverse schools provide the foundation for social cohesion in multiethnic, democratic societies such as the United States (Mickelson \& Nkomo, 2012).

In addition, schools that offer a dual language education and are linguistically diverse can have numerous benefits for students, including proficiency in more than one language, enhanced academic achievement, improved cross-cultural attitudes, reduced prejudice, and positive intergroup contact (Genesee \& Gándara, 1999; Genesee, Lindholm-Leary, Saunders, \& Christian, 2006; Lindholm-Leary, 2001; Umansky \& Reardon, 2014). Further, bilingualism and biliteracy also have lasting long-term benefits for the labor market by enhancing the academic achievement, college going rates, and employment potential of bilinguals (Callahan \& Gándara, 2014). Dual immersion schools, in particular, are often also racially desegregated because in many cases, the success of such programs relies on enrolling a student population that is balanced in terms of language majority and language minority students, which often results in a racially desegregated school (de Jong \& Howard, 2009), thus reducing the racial/ethnic and linguistic isolation of language minority students. Schools that are racially desegregated as well as linguistically diverse tend to lead to lasting positive outcomes for all students.

Harms of segregation. On the other hand, segregated, predominantly non-white schools tend to be schools of concentrated poverty that are systematically linked to unequal educational opportunities and outcomes (Orfield \& Lee, 2005). Opportunities for students at minority segregated schools, that is, schools that have small shares of white students, are often limited by a variety of insufficient resources. Minority segregated schools tend to have fewer experienced and less qualified teachers (Clotfelter, Ladd, \& Vigdor, 2005; Jackson, 2009) as well as high levels of teacher turnover (Clotfelter, Ladd, \& Vigdor, 2010). In addition, the student enrollment at minority segregated schools is also less stable (Rumberger, 2003). Minority segregated schools tend to have inadequate facilities and learning materials as well as fewer curricular options, such as advanced placement courses (Yun \& Moreno, 2006). For English Learners (ELs), segregation is often associated with linguistic isolation, which limits ELs' opportunities to develop their English language skills and acquire academic English because they are exposed to few models of native English and have few opportunities to use the language in a natural context (Gándara, 2011; Gifford \& Valdés, 2006). Consequently, it is not surprising that the outcomes for students who attend minority segregated schools are often worse than for students who attended desegregated schools, including lower academic performance (Mickelson, Bottia, \& Lambert, 2013; Mickelson \& Heath, 1999), higher drop-out rates (Balfanz \& Legters, 2004; Swanson, 2004), and lower college aspirations (Yun \& Kurlaender, 2004).

The integration theory of choice intends to use school choice options to attract students of diverse backgrounds to attend schools together, resulting in better educational and social opportunities.

## Market Theory of Choice

In contrast, the market theory of choice, based on economic principles in which a competitive market is created and individuals act as consumers to select a school for their children that best meets their needs and interests, has been the dominant theory in practice in the United States for the last three decades (Betts, 2005; Witte, 2000). In the late 1980s and early 1990s, there was political backlash against big government; in education, this backlash targeted the large and bureaucratic public educational system (Wells, 2002). There was growing frustration with many of the equity-based policies of the 1960s and 1970s, including special education, desegregation, compensatory education, and bilingual education, and a preference for "excellence" in education rather than "equity" in education, with a belief that excellence and equity were mutually exclusive. Instead of focusing on the needs of the most disadvantaged students, policy attempted to improve the quality of the overall education system through an emphasis on higher educational standards alongside choice and competition (Mehta, 2013; Petrovich \& Wells, 2005). Charter school reform is consistent with the goals of both accountability and competition.

Charter schools were not originally envisioned as market-driven spaces by some supporters, including the author of the charter school bill in California. These charter proponents viewed charter schools as places for innovation, "lighthouses" that would allow some experimentation that could then be transferred to TPSs. Supporters of the lighthouse model also often believed that the number of charter schools should be limited so that charters would not compete with TPSs. This initially optimistic view of charters did not fully consider how they could become segregated settings that were, in fact, market driven.

The market theory, upon which charter schools have been developed, supports the deregulation and privatization of large bureaucratic systems and the introduction of competition, incentives, and consumer choice to improve education. This theory is based upon the premise that government's involvement, or intrusion, into the daily operation of schools is a central problem because it prevents schools from being influenced by beneficial market forces-namely competition (Chubb \& Moe, 1990). Two main goals of the market theory of choice are to provide families with options and to create competition among schools in an unregulated market so that the quality of schools will improve and be better than the TPSs as individual consumers drive the improvement of the education system. The market theory focuses on the individual and choice as its end goal. Consistent with these beliefs, charter schools grew out of the market theory of choice.

However, the market theory of choice is based upon several assumptions that might not be accurate (Henig, 1994; Orfield, 2013a). The market theory assumes that all families have access to information about their choices. However, information about choices is often passed through social networks, which tend to be segregated (Holme, 2002). This theory also assumes that families are able to understand the information and navigate the often complex processes required to make a choice; however, this is often not the case and results in parents of different races, socioeconomic statuses, and linguistic backgrounds not truly having a choice (Ball, 1993; Fuller \& Elmore, 1996; Pattillo, Delale-O'Connor, \& Butts, 2014). This theory also rests upon the assumption that students are choosing schools, when in fact, schools can employ a variety of practices, as will be discussed later, to shape their applicant pools such that schools are actually choosing students rather than students choosing schools (UCLA Charter School Study, 1998).

Thus, while charter schools have introduced competition into the public education arena, it is questionable whether equally accessible choice for all students and families has been established.

The market theory of choice also rests upon the assumption that the new choices will be better than existing options and will therefore increase the overall level of quality in schools. However, data on the academic performance of charter schools compared to TPSs is inconclusive. In a review of the literature, differences by grade level, subject area, location, race, and socioeconomic status were found to contribute to mixed findings on whether or not charters outperformed TPSs (Wohlstetter, Smith, \& Farrell, 2013). Findings from a recent national analysis of the academic success of charter schools were also mixed, with charters, in the aggregate, outperforming TPSs in some subjects (reading but not mathematics) and with some subgroups of students (black students, students in poverty, and ELs but not Hispanic, white, or Asian students); the academic performance of charter schools was uneven across states and schools (Cremata et al., 2013).

These concerns raise the question of whether or not charters are fulfilling the goals of the market theory of choice to provide better alternatives to students and whether these alternatives are truly accessible to all students and families.

## Using the Integration Theory of Choice to Explore Charter School Segregation

In U.S. society-and the education policy arena in particular-there has been a shift from policies rooted in integration theory to those rooted in market theory. Despite this political shift, social science evidence continues to demonstrate the benefits of desegregation and the harms of segregation. Furthermore, based on this extensive research, even though action has been taken to limit the ways in which diversity can be achieved in schools, the nation's legal framework, including guidance issued by the Department of Education and Department of Justice as well as
case law in higher education affirming the compelling interest in racial diversity, continues to affirm the importance of diversity in education. Although the legal framework appears to support the ideal of diversity, current education policies, particularly unregulated choice in the form of charter schools, tend to have the opposite effect. This study uses the integration theory of choice as the foundation for examining racial, socioeconomic, and linguistic segregation in charter schools.

## Background and Literature Review

At both the national and state levels, with bipartisan federal support, the charter movement has expanded over the last three decades. As early supporters of charter schools, the state of California and LAUSD adopted charter policies that allowed for substantial variation among charters and contained some guidance related to diversity. Also during the last 30 years, segregation in public schools has intensified, with charters tending to be more segregated than TPSs. Multiple mechanisms contribute to school segregation, and unique aspects of charter school policy and practices add to the general trend of increasing segregation.

## The Charter Movement

National charter movement. At the federal level, charter schools have received bipartisan support from both Republican and Democratic administrations. Under President Bill Clinton, the Charter Schools Program was created as an amendment to the Elementary and Secondary Education Act in 1994. The program established the role of the federal government with respect to charter schools and was intended to provide federal funds to state education agencies in order to plan, design, and implement high-quality charter schools as well as to share information about successful charter schools, consistent with the lighthouse model that intended to use charters as schools that would generate and share innovative educational approaches (U.S.

Department of Education, 2004). In 1998, the program was amended with the creation of the Charter Schools Expansion Act. In 2001, under President George W. Bush, the program was amended again as part of the No Child Left Behind Act (NCLB). In 2009, as part of President Barack Obama and Secretary of Education Arne Duncan's \$4 billion Race to the Top competition, specified funding priorities favored states with unrestricted charter laws. Subsequently, 16 states lifted caps on the number of charter schools allowed in their states, and enrollment in charters soared. The U.S. Department of Education also expanded the Charter Schools Program to provide separate funding for charter management organizations.

California charter movement. Charter legislation, which specifies the number of charter schools allowed in a state and provides guidelines for their operation, varies among states. Charter schools began in the United States in 1991 when Minnesota adopted the first charter legislation. One year later, California approved charter legislation. In November 1992, a statewide voucher initiative, which was supported by the business community but opposed by teachers unions, was placed on the California ballot. A more universally appealing alternative was presented through the charter school bill. With support from teachers unions, this bill was introduced into legislation, and the Charter School Act of 1992 was passed in California.

California's charters have multiple goals, including improving student performance, requiring school accountability, providing teacher opportunities, developing innovations in education programs, and creating public school competition (Wohlstetter et al., 2013). Originally, California had a cap of 100 charter schools statewide, and no more than 10 charters were permitted per school district. This limitation was negotiated with the teachers union so that charters would not be in competition with TPSs but would serve as lighthouses for experimentation and innovation. However, the statewide cap was removed in 1995 and the
district cap was removed several years later, moving charter schools into competition with TPSs. In 2013-2014, California had 1,130 charters that enrolled 519,000 students across the state (California Charter Schools Association, 2013a).

## Charter Policy

California charter legislation. California's charter schools are exempt from most California Education Codes, except for those related to non-discriminatory admissions and participation in state assessments. Thus, policies governing charter schools in California allow for great variation among pathways to establishing charter schools, their degree of autonomy, non-profit vs. for-profit status, governance structures, and classroom settings. Charter schools can be start-ups-created as new schools-or conversions-schools that are converted from existing TPSs into charters. In California, private schools cannot be converted into charter schools. In 2013-2014, 82\% of the state's charter schools were start-ups and $18 \%$ were conversions (California Charter Schools Association, 2014). Charters can be granted from three authorizers. If a charter petition is denied by a local school board, the application can be appealed to the county and then to the state. Charters are granted for five years, after which time schools must renew their charters with the granting agency.

Three levels of autonomy are present among charter schools: autonomous, semiautonomous, and non-autonomous. In 2013-2014, $72 \%$ or 811 of the state's charter schools were autonomous or semi-autonomous (California Charter Schools Association, 2014). Autonomous charters appoint their own board of directors, do not use their district's collective bargaining agreement, and are directly funded by the state. Semi-autonomous charters appoint their own board of directors but either use the district's collective bargaining agreement and are directly funded by the state or do not use the district's collective bargaining agreement and are indirectly
funded by the state. The remaining $28 \%$ or 319 charters were non-autonomous, indicating that the majority of their board of directors was appointed by their authorizer or they are under a school district's collective bargaining agreement or receive their funding indirectly from the state.

While charter schools can be non-profit or for-profit, almost all charters in California are non-profit. Approximately 3\% of California's charters are operated by for-profit corporations; this aspect of charter schools is somewhat unique to California as nationwide, $12 \%$ of charters in 2011-2012 were run by for-profit educational management organizations (California Charter Schools Association, 2014).

There is greater variation in the governance structure of the state's charters. Of the 811 autonomous charters in 2013-2014, 42\% were run by Charter Management Organizationsorganizations that operate three or more schools that share a common philosophy and centralized governance or operations (California Charter Schools Association, 2014). The other 58\% of autonomous charters were freestanding-managed as a single site or not connected to other schools-or part of networks-schools linked by a common philosophy but not a centralized governance.

California's charters also vary in terms of their setting. In 2013-2014, 22\% (249) of the state's charters were non-classroom based, indicating that less than $80 \%$ of the instructional time is offered at the school site; this number includes 27 virtual charters (California Charter Schools Association, 2014). The other $78 \%$ of charters were classroom-based, indicating that at least $80 \%$ of the instructional time occurs at the school site.

Regardless of their degree of autonomy, management structure, or setting, all charter schools in California have access to district facilities through Proposition 39. In 2000, California
voters approved Prop 39, which mandates that "public school facilities should be shared fairly among all public school pupils, including those in charter schools" and that the facilities should be "reasonably equivalent" to other classrooms, buildings, or facilities in the district. Prior to Prop 39, districts were only obligated to provide charters with access to surplus space. However, Prop 39 requires that charters have similar access to district spaces as other schools in the district. Prop 39 facilities are determined on an annual basis.

LAUSD charter policy. As this study focuses on LAUSD, in addition to the state of California, a more detailed understanding of charter policy in LAUSD specifically is also warranted. LAUSD authorizes several different types of charters, each for a period of five years, after which a charter renewal is required. LAUSD grants charters that are either start-ups or conversions, both of which can either be district-affiliated charters or independent charters. LAUSD acts an authorizer and grants charter petitions for both district-affiliated and independent charters, but there are important differences between the two types, with affiliated charters having closer ties to LAUSD in several areas and independent charters having greater autonomy and flexibility.

Affiliated charter schools are "semiautonomous public schools governed by the LAUSD Board of Education and operate in accordance with District policy, Board Rules, state and federal law, the relevant provisions of collective bargaining agreements and Personnel Commission guidelines" (Los Angeles Unified School District Office of the Superintendent, 2011). They have some flexibility in terms of educational program, school-site budgeting, some aspects of employee selection, professional development, and local school governance. Affiliated charters have full autonomy in selecting their instructional program and curricular materials. They can determine their own schedule but it must be in compliance with collective bargaining
agreements. LAUSD provides services for special education students in affiliated charters. Regarding budget and finances, affiliated charters have control over the budgeting and expenditure of categorical block grant funds but the district has control over general purpose entitlement funds and other state and federal funding. Affiliated charters can hire from the district-approved pool of eligible candidates, and their teachers are members of United Teachers Los Angeles (UTLA); thus, affiliated charters must abide by UTLA collective bargaining agreements. Affiliated charters participate in district-mandated professional development and can also conduct their own professional development in addition to what is required by LAUSD. Affiliated charters have flexibility in determining their policies that are specific to the school site. In practice, the more limited flexibility associated with affiliated charters differs in important ways from the original theory of flexibility for charter schools.

Of particular importance to this study, affiliated charters are required to comply with the LAUSD desegregation order "and shall take all reasonable steps to attract and maintain a racially integrated student body" (Los Angeles Unified School District Office of the Superintendent, 2011). Affiliated charters might be responsible for participating in desegregation efforts through magnet programs or Permits with Transportation (PWT) as will be described below (Los Angeles Unified School District, n.d.-b). While PWT could be helpful in achieving desegregation in affiliated charters, a policy prioritizing the residential enrollment could make it more difficult for affiliated charters to achieve desegregation; affiliated charters must first enroll students from the surrounding residential area before conducting a lottery for the remaining available seats if any exist after residents enroll.

Independent charters are authorized by LAUSD but have flexibility and autonomy that affiliated charters do not have in the areas described above, particularly regarding governance,
hiring, budget and finances, enrollment preferences, and educational program. Independent charters are not governed by LAUSD but are instead governed by an independent Board of Directors. Independent charters do not have to hire from LAUSD's approved applicant pool, and their teachers are not automatically part of UTLA. In regard to admissions requirements, independent charters can have preferences in admission and then must conduct a public random drawing if the demand for enrollment exceeds the school's capacity. As part of their charter petition application, independent charters are required to detail their educational program. In doing so, they must identify the neighborhood or community that they intend to serve and explain how they will meet the needs of all students, including ELs, gifted and talented students, students achieving above grade level, students achieving below grade level, low-income students, students with disabilities, and students in other subgroups, such as foster youth. They are also required to describe the means by which they will achieve racial and ethnic balance in accordance with LAUSD's Racial and Ethnic Balance goal of a ratio of 70 minority:30 white or 60 minority:40 white. This explanation must include a description of outreach and recruitment as well as the languages used for all outreach and recruitment activities and methods (Charter Schools Division, 2015b). During the 2015-2016 school year, 17\% of LAUSD's charter schools were affiliated and $83 \%$ were independent (Charter Schools Division, 2015a).

Since 1992, charter policy in California and LAUSD has allowed for substantial variation among charter schools and significant growth in the charter sector. During this same time period, segregation in the state's public schools, including charters, has increased. Prior to exploring the role of charters in contributing to intensifying segregation, it is first important to understand the extent to which segregation exists and has been documented in California's public and charter schools.

## Trends Toward Increasing Racial, Socioeconomic, and Linguistic Segregation

Given the benefits of desegregation and the harms of segregation as well as the legal guidance affirming the importance of diversity in education, it is essential to understand the extent to which such environments exist and what types of opportunities for diverse schooling are afforded to students of various races, socioeconomic statuses, and linguistic backgrounds in California. Racial segregation is often accompanied by other forms of segregation, resulting in a double segregation of students by race and poverty (Orfield \& Lee, 2005), and in the case of ELs, a triple segregation by race, class, and language (Gándara \& Orfield, 2010; Gifford \& Valdés, 2006; Vasquez Heilig \& Holme, 2013).

Segregation in California's public schools. Since the peak of desegregation in the mid1980s, segregation by both race and poverty has intensified across the nation (Orfield \& Frankenberg, 2014). In California, the share of intensely segregated minority schools-those in which 90-100\% of school enrollment is comprised of minority students-doubled between 1993 and 2012; in 2012, the typical black student and the typical Latino student attended schools with half as many white and Asian students as the typical white or Asian student (Orfield \& Ee, 2014). In addition, California's students were also segregated by poverty; the typical black or Latino student attended a school that was $70 \%$ low income while the typical white or Asian student attended a school that was only $40 \%$ low income. Experiencing a triple segregation by race, class, and language, the typical EL in California attended a school that was 75\% black and Latino, $75 \%$ low income, and $40 \%$ EL, even though ELs only accounted for $22 \%$ of the state's total enrollment in 2012. These findings demonstrate that public schools in California are segregated by race, class, and language, and these forms of segregation have increased over the last 20 years. As it was beyond the scope of the study, the above findings do not differentiate
between school type to identify differences between racial, socioeconomic, and linguistic segregation in TPSs compared to charter schools but instead consider charters and TPSs together as one group of public schools.

Racial segregation in charters. Focusing specifically on charter schools, research has consistently found that charter schools tend to be racially segregated (Garcia, 2007; Mickelson, Bottia, \& Southworth, 2008). A national study found that charters were more likely than TPSs to be located in urban areas, enroll high concentrations of black and Latino students, and enroll a majority or extremely high proportion of low-income students (Frankenberg, Siegel-Hawley, \& Wang, 2010a). Another national analysis focusing on central cities found that charter students were more likely to attend hypersegregated minority schools-those that are $99-100 \%$ non-white-than were their peers in the cities’ TPSs (Ritter, Jensen, Kisida, \& McGee, 2010). Similar to national patterns, the racial composition of charter schools in California indicate a disproportionately large share of black and low-income students, but unlike the nation overall, Latino students are underrepresented in California's charters. In 2007, white students were overrepresented in California's charters and Latino students were underrepresented (Frankenberg, Siegel-Hawley, \& Wang, 2010b). Both black and white students were more isolated with larger shares of same-race peers in charters than in TPSs. Latino students, underrepresented in charters, were more likely to attend intensely segregated TPSs. Several years later, the 2010-2011 racial composition of California's charter schools revealed an overrepresentation of black and white students as well as low-income students and an underrepresentation of Hispanic and Asian students as well as ELs when compared to the state's TPSs and feeder schools-TPSs in which students were enrolled prior to enrolling in a charter
school (Center for Research on Education Outcomes, 2014). These studies suggest that segregation is increasing.

Since these studies were conducted, the number of charter schools in California has increased, and the racial composition of the state's student population has shifted to become even more racially diverse. Therefore, an updated analysis will extend our knowledge of disparities in the racial composition and the extent of racial segregation in the state's charter and TPSs into the present. It seems likely that such an analysis will reveal intensifying racial isolation in both charter and public schools. Further, this analysis will determine whether the rate at which segregation is changing in each type of school is similar or if racial segregation is increasing more rapidly in charters or TPSs, providing valuable information about progress (or lack thereof) being made to address racial segregation in charters versus public schools.

Socioeconomic segregation in charters. Evidence regarding the enrollment and segregation of low-income students in charter schools is inconclusive. An analysis of 13 states that enroll $75 \%$ of the nation's charter students found little support for the claim that charter schools tend to serve a more economically disadvantaged population but rather that minority charter school students are more economically advantaged than their traditional public school counterparts (Carnoy, Jacobsen, Mishel, \& Rothstein, 2005). In California, within each racial group, charter school students were less likely to be socioeconomically disadvantaged (defined as being eligible for free-and-reduced-price lunch (FRL) or having no parent who completed high school) compared to students in regular public schools.

However, at the national level, using FRL eligibility as the measure of socioeconomic status, other researchers have identified conflicting patterns. The national evaluation of the Public Charter Schools Program found that between 1999 and 2002, charter schools enrolled
larger shares of poor students than did TPSs (Finnigan et al., 2004). Consistent with this finding, a later national analysis found in 2007 that charter schools across the country generally enrolled a higher percentage of low-income students than did TPSs (Frankenberg et al., 2010a). These studies showed that larger shares of charter school students than TPS students attended schools with high concentrations of low-income students. Further, charter students experienced a double segregation by race and class-over $90 \%$ of the nation's charter schools with at least $90 \%$ black and Latino enrollment also enrolled a majority of low-income students. On the other hand, white students in charter schools were exposed to smaller shares of low-income students than their public school counterparts. These findings should be interpreted with caution, as researchers identified significant gaps in charter schools' reporting of FRL data. This concern persists as a limitation for analyzing socioeconomic segregation in charters; however, the most recent data show that by 2013, the proportion of charter schools missing FRL data had declined, allowing for a more thorough and updated analysis of segregation by socioeconomic status in charter schools (National Center for Education Statistics, 2014).

Likewise, in California, a recent analysis of FRL enrollment in the state's charters and TPSs found that FRL students accounted for a slightly larger share of charter enrollment (62\%) than TPS enrollment (56\%) in 2010-2011 (Center for Research on Education Outcomes, 2014). This could be a result of changing demographics in charter school enrollment or improvements and more thorough reporting of FRL data by charter schools.

An updated analysis of FRL enrollment over the duration of charter schools' existence in California through 2013 will help to clarify discrepancies between these studies and identify trends in enrollment by poverty in charter schools as compared to TPSs. In addition to clarifying enrollment trends, additional analysis could also provide insight into the differences in the
experiences of students attending charter and TPSs as well as explore similarities and differences in trends in the potential double segregation of students by race and poverty in charter and TPSs across the state and how these trends have varied over time.

Linguistic segregation in charters. There are also gaps between charter schools and TPSs in serving ELs, with charter schools enrolling smaller shares of ELs than their TPS counterparts. A recent study of 27 states with charter legislation found that $9 \%$ of charter students were ELs compared to $13 \%$ of students in feeder TPSs (the schools out of which charter students transferred) and $10 \%$ in all TPSs (Cremata et al., 2013). With higher overall percentages but a similar pattern, California charter schools served student bodies that were $17 \% \mathrm{EL}$ in 2010, compared to $22 \%$ in feeder TPSs and $24 \%$ in TPSs (Center for Research on Education Outcomes, 2014). These studies suggest that TPSs are enrolling substantially higher levels of ELs than charter schools.

These EL enrollment disparities between charter schools and TPSs suggest that the experience of ELs in charters and TPSs might be different, but these studies do not consider the concentration of ELs in charter schools, the exposure of ELs to native-English speakers or isolation with other ELs, or the potential triple segregation of ELs by race, class, and language. A more thorough analysis of segregation by language is needed in order to understand the extent to which ELs are segregated in California's charters as compared to TPSs. Concerns with data reporting have restricted past attempts to research linguistic segregation in charters, and although similar limitations might exist for the current study, improved data reporting now allows for a somewhat more thorough analysis of linguistic segregation.

Taken together, the previous studies reveal that charter school enrollments tend to differ from TPS enrollments in important ways. Nationwide, charter schools have high concentrations
of black and Latino students. Although the findings regarding low-income students are mixed, most studies find that the nation's charters enroll a larger share of FRL students than TPSs. Charters enroll smaller shares of ELs than TPSs. In California, findings are similar for lowincome students and ELs. However, regarding racial enrollment, black and white students are overrepresented in California's charters compared to TPSs while Latino students are underrepresented.

## Relationship Between Segregation Trends and Academic Performance

Among the myriad harms of segregation previously discussed, the relationship between segregation and poor academic performance is also evident and merits further exploration in California's charters. Given the trends toward intensifying segregation, important concerns arise over the academic performance of students in increasingly segregated schools. In exploring the relationship between race and academic outcomes, a recent study of all of California's public schools during the 2012-2013 school year found strong correlations between Academic Performance Index (API) scores and the racial composition of the school's student enrollment (Orfield \& Ee, 2014). There was a strong positive correlation (.45) between level of white students in a school and the school's API score and an even stronger correlation (.63) between the combined group of white and Asian students and API scores; for both Latino students and black students, there was a negative correlation between the level of each racial group in a school and API scores (-. 39 and -.53 , respectively).

Examining charter schools in particular, a study of charter school performance in California found significant positive impacts of charter schools on student performance from 2007 to 2011 (Center for Research on Education Outcomes, 2014). As a group, California's charters had significantly positive impacts compared to their non-charter counterparts for black
and Hispanic students (not white and Asian students), students in poverty, ELs, and special education students. However, these state-level comparisons might be masking important variation among charter schools, some of which could be related to segregation. The most recent data available shows that in 2013, as a group, California's charter schools had an average API score of 790 , which was 10 points below the average API score of 800 for the state's traditional public schools (California Charter Schools Association, 2013). In Los Angeles, on average, autonomous charter schools in LAUSD had an API score of 782, which was 21 points higher than LAUSD's traditional public schools, which averaged 761. However, as Orfield and Ee's (2014) analysis of the relationship between racial segregation and API scores for all public schools suggests, these charter school averages might be covering up significant variation in API scores among schools, disparities which could be related to levels of segregation. Therefore, an analysis of the relationship between the level of segregation in charters and API scores is needed.

## Mechanisms Related to Segregation

A variety of complex processes is related to the trends toward intensifying racial, socioeconomic, and linguistic segregation. Multiple mechanisms, including changes in the law and revised student assignment policies that reflect shifting priorities, contribute to creating segregated schooling environments in both charters and TPSs. Additional aspects of charter policies and practices contribute to charter school segregation in unique ways.

Legal history of desegregation. The legal history of school desegregation in the United States and in California began long before charter schools were created in the 1990s. This history has evolved over the last century from supporting segregation, to facilitating more expansive desegregation, to constraining options for school desegregation. As charter schools entered the educational landscape in the 1990s, they did so amidst a legal backdrop that was in the process of
dismantling desegregation efforts, allowing charters to come into existence and develop without desegregation as a central concern. Thus, an understanding of the context in which charters entered the long history of desegregation helps illuminate conditions leading to a lack of civil rights and diversity-related policies among charter schools, as will be discussed later in this chapter. Despite the progress and retreat on desegregation efforts, the current legal framework affirms the importance and benefits associated with diversity in education, yet has done little to support these efforts.

In 1946, almost a decade before the U.S. Supreme Court ruled that school segregation was inherently unequal, California's courts were among the first in the nation to hear cases against school segregation and to rule that segregating Mexican American students was unconstitutional ("Westminster School Dist. of Orange County v. Mendez," 1947). Although it was an important step, the Mendez decision was limited in that it addressed segregation only for students who resided within the attendance boundaries of predominantly white schools. It did not address segregation resulting from residential segregation or gerrymandering of boundary lines, nor did it require ongoing oversight of the schools. It was, however, an important test case for Brown, which was to come after. Some of the same lawyers, including Thurgood Marshall, participated in both.

In 1954, the U.S. Supreme Court's ruling in Brown v. Board of Education struck down Plessy v. Ferguson by declaring segregation unconstitutional and stating that "separate educational facilities are inherently unequal." Although the 1954 Brown decision is often cited as the beginning of school desegregation efforts across the nation, this decision had a limited effect in California because the decision primarily targeted the 17 Southern states that had de jure segregation. One year later, Brown II required that desegregation be implemented with "all
deliberate speed" ("Brown I I," 1955). For about a decade, schools across the South delayed making authentic desegregation efforts and instead implemented token forms of desegregation. It was not until the passage of the 1964 Civil Rights Act that significant change in school segregation occurred (Orfield, 2000).

In contrast, in California through the 1960s, the state courts and legislature acted in ways that facilitated desegregation efforts. In 1962, the California School Boards Association urged districts to eliminate segregation. In 1963, the California Supreme Court issued its first decision in response to Brown, Jackson v. Pasadena, which found Pasadena's schools guilty of intentional segregation and ordered a remedy to address the segregation ("Jackson v. Pasadena City School Dist.," 1963). The court further ruled that although Pasadena was guilty of intentional segregation, the state constitution required action even when there was no proof of intent. California's state court's standard of proof was lower than that of the federal courts. Federal courts required proof of systematic official action that had the effect of segregating students of color. Therefore, aside from federal cases in San Francisco, San Jose, and Pasadena, most of California's major legal battles over segregation were fought in the state rather than federal courts ("Diaz v. San Jose Unified School District," 1984; "Johnson v. San Francisco Unified School District," 1971; "Pasadena City Bd. of Educ. v. Spangler," 1976; "San Francisco NAACP v. San Francisco Unified School District," 1983).

Across the South and other parts of the nation, many school districts adopted freedom-ofchoice plans, which gave students the option of transferring from a predominantly black school to a predominantly white school. This type of plan was not common in California; however, it merits discussion within the context of this study because it is an early example of a choice policy being used as a mechanism to perpetuate segregation under the purported positive policy
of choice. These freedom-of-choice plans were problematic in two ways. First, they placed the burden for desegregation on the actions of individual black families rather than creating a structural change that would have involved the entire school district. Second, black families often faced intimidation and complicated procedures that were intended to discourage them from requesting transfers so there was often no real "choice." In 1968, in Green v. New Kent County, the U.S. Supreme Court limited the use of freedom-of-choice plans, instead requiring that segregated schools must be dismantled "root and branch" ("Green v. County School Board of New Kent County," 1968).

For several more years, courts continued to rule in ways that facilitated more expansive and successful school desegregation. The 1971 Swann decision by the U.S. Supreme Court required that districts desegregate their schools to the greatest extent possible and approved busing as a tool for doing so ("Swann v. Charlotte-Mecklenburg Board of Education," 1971).

In 1971, the California legislature enacted the Bagley Act, which required school officials to take action to desegregate their districts. However, the law was strongly opposed and only one year later, in 1972, with two-thirds support, the state's voters approved Proposition 21, also known as The Wakefield Anti-Busing Initiative. Proposition 21 repealed the Bagley Act and explicitly forbade the race-conscious assignment of students for purposes of desegregation. However, a decade later, the state Supreme Court overruled this proposition as eliminating basic constitutional rights ("Crawford v. Los Angeles Board of Educ.," 1982).

It was not until the 1973 Keyes v. Denver decision that the U.S. Supreme Court ruled on the rights of urban students of color in states outside of the South and recognized the desegregation rights of Latino students. Keyes was the first school segregation case in the North and the West where previously there had not been explicit statutes requiring desegregation
("Keyes v. Denver School District No. 1," 1973). The Court ruled that if intentional segregation was found in part of the district, desegregation had to occur throughout the district; this decision also extended the rights of desegregation to Latino students. However, Keyes was not significantly implemented because the Nixon administration opposed urban desegregation. In California, then-Governor Ronald Reagan was also opposed (Orfield, 1996).

In the mid-1970s, a shift occurred that began to limit the extent to which desegregation could and would occur. In the 1974 Milliken decision, the U.S. Supreme Court's ruling made it very difficult for suburbs to be included in metropolitan-wide desegregation plans, thus limiting the ability of predominantly minority central-city school districts to achieve desegregation by using interdistrict remedies that would cross district lines to include the suburbs ("Milliken v. Bradley," 1974). Milliken II further undermined desegregation efforts by allowing a court to order a state to pay for educational programming to offset the harms of segregation, essentially allowing states to substitute additional funding in place of desegregation in situations in which it was determined that desegregation was not possible ("Milliken v. Bradley I I," 1977).

In California, intensifying residential segregation, alongside boundary and student assignment policies, prompted civil rights lawyers in Pasadena to request an update of the district's desegregation plan. However, in 1976, in Pasadena City Board of Education v. Spangler, the U.S. Supreme Court ruled that there was no ongoing responsibility for courts to adjust desegregation plans as populations changed. Thus, desegregation plans became outdated as demographics shifted. This pattern has occurred across the state and nation over the last several decades.

Meanwhile, in Los Angeles, in 1963, a class action suit was brought against the Los Angeles City Board of Education to desegregate two of the district's high schools. The school
board denied any problem with segregation and did not take any action. In 1966, the state required LAUSD to collect data about the racial composition of the district's schools (Caughey, 1967). Based on this data, which showed racial segregation of black students, Crawford v. Los Angeles Board of Education was expanded to include all schools in LAUSD, and in 1970, the district was required to begin desegregation ("Crawford v. Los Angeles Board of Educ.," 1970). However, the case was appealed, little desegregation occurred, and Judge Alfred Gitelson, the judge who had ordered desegregation, was defeated in reelection (Egly, 2010). In 1976, the California Supreme Court ordered Los Angeles to desegregate, but the district's limited efforts at desegregation were short-lived ("Crawford v. Los Angeles Board of Educ.," 1982).

As a direct result of the Los Angeles desegregation order and the recommendations of court-appointed experts to include the suburbs in the remedy, Proposition 1 made its way to the state ballot in 1979. The proposition, approved by two-thirds of voters, was designed to limit desegregation rights in the state by ending mandatory student assignment and busing unless there was a finding of intentional segregation. The passage of Proposition 1—after a 1982 decision by the U.S. Supreme Court upholding its constitutionality-marked the end of state desegregation efforts, and Los Angeles became the first city in the nation to largely abandon its court-ordered desegregation plan.

Not long after, at the national level, in Board of Education of Oklahoma v. Dowell, the U.S. Supreme Court determined that districts could achieve unitary status and be released from court order if they "had complied in good faith with the desegregation decree since it was entered, and whether the vestiges of past discrimination had been eliminated to the extent practicable" as determined by their compliance with the Green factors ("Board of Education of Oklahoma v. Dowell," 1991).

By the late 1990s and early 2000s, major California court decisions from the 1970s and 1980s that had ordered desegregation were terminated, ending federal desegregation orders in San Francisco and San Jose ("Ho v. San Francisco Unified School District," 1998). There is currently no state policy on school desegregation and the California state constitution now includes anti-desegregation provisions. It was at this point-the early 1990s when desegregation efforts had been largely dismantled at both the state and national levels-that charter schools entered the educational landscape.

More recently, in Parents Involved in Community Schools, the U.S. Supreme Court declared that voluntary race-based student assignment policies in Seattle and Louisville violated the Equal Protection Clause of the Fourteenth Amendment and that school districts cannot take individual students' races into account when assigning students to schools ("Parents Involved in Community Schools v. Seattle School District No. 1," 2007). Although the Court severely limited the ways in which race can be considered in making student assignments, race-conscious policies that do not dictate the assignment of individual students are still permissible, such as consideration of race in school siting and the racial composition of neighborhoods.

Despite all these limitations and constrictions on the ways in which schools and districts can attempt to achieve diverse student enrollments, the legal framework of the United States continues to affirm the importance of diversity and acknowledges myriad benefits associated with diversity. In Parents Involved in Community Schools (2007), the U.S. Supreme Court held that school districts have a compelling interest in reducing racial isolation and achieving racial diversity in their schools. Several years later, in 2011, the U.S. Department of Education and the U.S. Department of Justice issued guidance to school districts that details the benefits of diverse schools and describes a variety of approaches that school districts can employ to further their
compelling interest in achieving diversity and avoiding racial isolation (U.S. Department of Justice \& U.S. Department of Education, 2011). In 2014, the U.S. Department of Education released guidance for charter schools regarding civil rights laws, emphasizing laws that prohibit discrimination on the basis of race, color, national origin, sex, and disability; the guidance focuses on nondiscrimination in admissions, providing educational services for students with disabilities and ELs, and nondiscriminatory disciplinary measures (Lhamon, 2014) . Also in 2014, at the international level, in their review of the United States' compliance with the international treaty on racial discrimination, "The International Convention on the Elimination of All Forms of Racial Discrimination," which was ratified in 1994, the United Nations Committee on the Elimination of Racial Discrimination issued a report urging the United States to intensify efforts to ensure equal access to education by reducing school segregation (United Nations Committee on the Elimination of Racial Discrimination, 2014). This legal guidance appears to support the goal of diverse schools; however, current education policies, particularly proximitybased student assignment policies and unregulated choice in the form of charter schools, tend to have the opposite effect.

## Student assignment policies prioritizing proximity and choice over diversity. Over

 the last two decades, more than 200 school districts have been released from court-ordered school desegregation plans. The pace at which federal district courts are granting unitary status to school districts has increased considerably since 2000, when the U.S. Department of Justice's docket included 430 cases of elementary and secondary school desegregation; by 2009, there were 266 cases remaining (Smrekar \& Goldring, 2009). In the absence of court oversight, school districts have had the opportunity and responsibility to design student assignment policies that reflect the interests and desires of the local residents and policy makers. In doing so, schooldistricts' student assignment policies often reflect the competing values of diversity, proximity, and choice. In some cases, districts have attempted to create schools that are racially and socioeconomically diverse. However, the broader trend involves schools and districts developing student assignment policies that prioritize proximity and choice, including the creation of numerous charter schools. Although somewhat in tension with one another, both proximity- and choice-based plans have often contributed to intensifying segregation. Proximity-based plans rely on assigning students to schools that are closest to their residential location; when neighborhoods are segregated, this type of plan also creates schools that are segregated (Denton, 2001; Frankenberg, 2013b). Choice-based plans that are unregulated often also result in segregated schools (Cobb \& Glass, 2009).

Despite the Court's restrictions on using an individual student's race for making school assignments, there are other ways in which school districts can continue to implement raceconscious student assignment plans that strive to achieve diversity. Using various characteristics, such as income, educational attainment, and share of students of color in the neighborhood where the student resides, some school districts, such as Berkeley, California, have developed multifactor, race-conscious student assignment policies that are successful in creating diverse schools while abiding by current legal restrictions (Frankenberg, 2013a). Instead of attempting to achieve racial diversity, other districts have shifted to trying to achieve socioeconomic diversity in their schools. For example, Wake County, North Carolina, implemented a race-neutral, classbased student assignment plan that also sought to balance academic achievement levels (Grant, 2011). A class-based student assignment plan can achieve racial diversity when race and class are highly correlated; however, in many cases racial integration will not be achieved from this approach (Reardon, Yun, \& Kurlaender, 2006). Acknowledging this research, the federal
government's 2016 Investing in Innovation Fund (i3) includes a priority for school districts that employ strategies that increase racial and socioeconomic diversity, and the Stronger Together initiative, which is included in President Obama's 2017 budget proposal, includes funding for school districts that prioritize ways to promote socioeconomic diversity (The White House Office of Management and Budget, 2016; U. S. Department of Education, 2016).

Many school districts assign students to schools based on a student's residential location and the proximity of the closest school. In this case, it is important to consider that school and neighborhood segregation are intertwined (Denton, 2001; Orfield, 2013b). In fact, the relationship between residential and school segregation grew stronger between 2000 and 2010 (Frankenberg, 2013b). The United States has a history of residential segregation created through a combination of mechanisms. Beginning in the early 1900s with industrialization and the movement of blacks from rural areas to cities, people across the nation were living in segregated physical spaces. Following World War II, suburbanization of whites occurred rapidly at the same time that blacks were continuing to move into cities, resulting in clear racial distinctions between urban and suburban spaces. Various mechanisms contributed to suburbanization and the decline of central cities, including discriminatory real estate practices, racially-biased practices in financial institutions, racially restrictive covenants, redlining, neighborhood improvement associations, violence, and Federal Housing Administration and Veterans Affairs loans (Massey \& Denton, 1993). While there is some evidence of decreasing black-white residential segregation in metropolitan areas, Hispanic and Asian residents continue to be as segregated now as they were 30 years ago (Logan \& Stults, 2011). Research confirms that discriminatory real estate practices persist in both the rental and sales markets (Turner \& Ross, 2005) as well as the mortgage market (Apgar \& Calder, 2005), and these practices contribute to the maintenance of
racially segregated neighborhoods and communities. Thus, geographically based school assignments that are made in residentially segregated areas will result in racially segregated schools. One way to combat the strong relationship between residential and school segregation is to create schools and policies that allow students to cross traditional boundary lines (SiegelHawley, 2013).

Choice policies allow students to attend schools outside of their traditional geographically based school zone and can be used to support desegregation efforts. Choice has been a central theme in education policy for decades. Many forms of choice exist in today's educational landscape, including magnets, transfer programs, controlled choice, vouchers, and charters. While some of these choice options are used as mechanisms for achieving diverse schools, such as magnets (Goldring \& Smrekar, 2000; Siegel-Hawley \& Frankenberg, 2013) and interdistrict transfer programs (Eaton, 2001; Wells, Warner, \& Grzesikowski, 2013), other choice options, such as charters, have no such aims.

Magnet schools, originally designed in the 1970s as the first policy option to combine school choice with the goal of achieving desegregation, were created based on the integration theory of choice. As a result, many magnet schools historically included civil rights protections, such as open enrollment, outreach efforts, and free transportation (Goldring \& Smrekar, 2000). Today, magnet schools account for the largest set of schools of choice in the country. Although not all magnets remain focused on the pursuit of racial diversity (Frankenberg \& Le, 2008), they continue to offer unique curricula and innovative teaching methods that can attract a diverse set of students from across traditional attendance zones (Siegel-Hawley \& Frankenberg, 2013). Magnets that include diversity goals, conduct outreach to diverse communities, and provide free
transportation are associated with higher levels of racial desegregation (Siegel-Hawley \& Frankenberg, 2013).

Additionally, there are some current instances in which segregated public and charter schools are created intentionally to focus resources on students believed to be in need of a particular curriculum or pedagogy. For example, black male academies began to appear in the 1990s and have grown in popularity since that time; they are intended to improve academic achievement and address the social and emotional development of students by emphasizing black culture, building self-esteem, and providing role models for black males in a separate, segregated learning environment (Cummings, 1992-1993; Kimerling, 1994). However, the anticipated positive outcomes for such schools are often not fully realized. Research on the effectiveness of single-sex classrooms that are usually designed to serve African American and Latino males in achieving these goals is inconclusive (Fergus, Noguera, \& Martin, 2014; Noguera, 2012; Pahlke, Hyde, \& Allison, 2014). Afrocentric charter schools have also grown in number and popularity and are often designed to build on students' stores of knowledge, develop cultural practices, build community, and teach indigenous languages while developing positive relationships, cultural continuity, and critical consciousness among students, yet an in-depth study of one school's success in achieving these goals found mixed results (Murrell, 1999). Further, using more conventional measures of academic success, only $34 \%$ of Afrocentric charter schools studied in 2011-2012 met goals for Adequate Yearly Progress (Teasley, Crutchfield, Williams Jennings, Clayton, \& Okilwa, 2016). On the other hand, some segregated schools were historically able to overcome the oppression of segregation, the unequal resources, and the limited educational opportunities in order to provide students with what community members described as "good" learning environments (Walker, 1996). In general, it is important to note
that such schools have obtained only limited positive outcomes, accompanied by other drawbacks, which include being unable to access the previously described educational, shortterm, and long-term benefits associated with diverse educational environments.

LAUSD desegregation efforts. With the court order still in place, LAUSD is currently making modest efforts to promote desegregation in two ways: through magnet schools and the Permits With Transportation (PWT) Program. However, the district's current desegregation efforts are not very robust. Currently, 67,000 students attend one of the district's 198 magnet schools or magnet centers (a magnet program operating within a larger school), which are supposed to maintain a racially balanced enrollment (Los Angeles Unified School District, n.d.a). LAUSD was awarded grants through the Magnet Schools Assistance Program to revise three magnet schools and create one new magnet school in 2010 and to develop a network of four STEAM magnet schools (preparing students in Science, Technology, Engineering, Arts, and Math) in 2013, all of which have the goal of reducing minority group isolation. The PWT program is a voluntary integration program that is available to students in grades $1-12$ who live within a PWT sending school area. A school is designated as a PWT sending school if the school is over 70\% Hispanic, black, Asian and other race. PWT allows students of color from PWT sending schools to access more desegregated learning environments in other schools and also allows white students to attend predominantly Hispanic, black, Asian, and other non-white schools. LAUSD makes school assignments for the PWT program. Transportation is provided by LAUSD to students who live two miles outside of the PWT school. The maximum one-way ride time is 90 minutes. Currently, approximately 600 students participate in PWT (Los Angeles Unified School District, n.d.-c). Despite these two efforts, as the current study will show, segregation remains a concern in LAUSD.

## How Charter Schools Contribute to Segregation

Charter schools contribute to segregation in unique ways. A variety of mechanisms, including state charter policies that lack civil rights protections, individual practices of charter schools that shape student enrollment, and parent preferences in "choosing" more segregated environments, combine to create segregation in charter schools. Given the widespread acknowledgment of segregation in charters, there has been a recent effort by a small national coalition of charter schools to acknowledge the potential of charters to embrace diversity, and some strategies for doing so have been identified (Kahlenberg \& Potter, 2014; National Coalition of Diverse Charter Schools, 2015).

Although desegregation might have been part of the original intent of charter schools, that goal has long since changed. When Albert Shanker, president of the American Federation of Teachers, proposed charter schools in the United States in 1988, he emphasized the importance of charters as racially and economically integrated schools that would promote social mobility and social cohesion (Shanker, 1988). In the early stages of the charter movement, others supported the inclusion of a diversity component and suggested that charter schools could facilitate the development of racially diverse schools (Wells, 1993). However, as the charter movement expanded without civil rights protections, it became clear that they were, in fact, not going to be used as a tool for desegregation (Frankenberg \& Siegel-Hawley, 2013). Instead, as noted above, charter schools in California, which are based on the market theory of choice, were designed to improve student performance, require school accountability, provide teacher opportunities, develop innovations in education programs, and create public school competition (Wohlstetter et al., 2013).

## California's charter policy developed without civil rights provisions. In California,

 some aspects of charter policy related to admissions appear to be supportive and encouraging of racial and socioeconomic diversity; however, they have little effect in practice. California Education Code Section $47605(\mathrm{~b})(5)(\mathrm{G})$ requires a petitioner who is applying to create a charter school to consider the racial and ethnic composition of the proposed school. The petitioner must explain "the means by which the school will achieve a racial and ethnic balance among its pupils that is reflective of the general population residing within the territorial jurisdiction of the school district to which the charter petition is submitted." While this stipulation could mean that a charter school created in a segregated neighborhood would also be segregated, it also has the potential impact of requiring charter schools created in more diverse areas to make efforts to ensure the charter school is also racially diverse. However, the next condition, articulated in Section H, indicates that charter schools are permitted to have "admissions requirements, if applicable." A UCLA study of 10 California school districts during the early stage of the charter movement found that admissions criteria, which might include prior achievement, parent volunteer contracts, or specific behavior codes of conduct, can largely shape the student enrollment by excluding students who are perceived to be less desirable and more difficult to educate, as will be described below (UCLA Charter School Study, 1998). Despite the requirement in Section G, disparities in the racial enrollment of charter schools and the district in which they are located persist as previously described, and the obligation of charter schools to be reflective of the racial composition of the district is not enforced by local education agencies or the state (UCLA Charter School Study, 1998). There are no references to socioeconomic or linguistic diversity in charter legislation.California law allows some charter schools, depending on their location, to use a weighted lottery to offer admissions preferences to low-income students. A charter that is located in the geographic attendance zone of a public elementary school that enrolls at least $50 \%$ FRL students can give admissions preference to students currently enrolled in that public elementary school and to students who live in the attendance area. This approach could result in charters with extremely high concentrations of poverty.

California charter legislation also lacks any provisions regarding transportation, a problem for ensuring equitable access to charter schools. As of 2002, about half of 36 states with charter laws did not address student transportation and almost three-fourths failed to address information dissemination (Ausbrooks, 2002), all of which could exacerbate segregation in charters. California's charter laws do not contain any provisions regarding transportation; therefore, many charters do not provide transportation, thus limiting students' access to the charter unless the student has his or her own transportation (UCLA Charter School Study, 1998). California's charter laws do not address information dissemination, which could result in certain groups of students and families being targeted with information about charters while others remain unaware that the charter is an option for them because they did not receive information about it.

Charter practices that shape student enrollment. In California, although charters are theoretically nondiscriminatory and provide access to all students, in practice, charters have great latitude in shaping who enrolls as part of their student body. A combination of recruitment, admissions, and enrollment practices influences which students are able to apply to, enroll in, and remain in each charter (Welner, 2013).

In some cases, charters have been designed to meet the needs of a particular group of students. Many charters target marginalized groups of students, including low-income students, immigrants, and religious and racial minorities (Kahlenberg \& Potter, 2014). This pattern could be due, in part, to the fact that some education policy and philanthropic communities have prioritized funding for charter schools that serve high concentrations of low-income and minority students (Scott, 2009). These attempts to provide a better educational alternative to TPSs for students in underserved communities are well-intentioned, but they result in the creation of segregated learning environments. In some cases, charter schools attract the more advantaged students from school districts and facilitate "white flight." As mentioned above, recruitment efforts, such as marketing through targeted publicity and information dissemination, are sometimes used to shape the applicant pool of a charter. In other cases, the charter school's mission might not be directly tied to a specific group of students; thus, the charter ultimately enrolls a student body that has not been specifically targeted. School siting decisions and steering away less desirable students, which can be accomplished by pointing out the lack of resources or services available to meet students' needs, can also shape the school's applicant pool (Welner, 2013).

In situations where a specific student enrollment is targeted for recruitment, additional admissions requirements can also shape the student enrollment. A variety of prerequisites is sometimes used to shape the body of students who will ultimately enroll in a charter, such as attendance at an individual meeting or interview with school officials prior to application, parent involvement expectations, or satisfactory records of a student's past behavior, effort, and/or academic success (UCLA Charter School Study, 1998).

Some charter schools decline to backfill their schools. That is, they do not enroll students later in the school year or in higher grades, a practice that creates a barrier for highly mobile students, who tend to be low income (Welner, 2013).

Once students are enrolled, academic requirements, grade retention practices that encourage low-achieving students to leave, as well as suspension and expulsion policies are also used to control the student body in charters (Welner, 2013).

Parent preferences that contribute to segregation. Parent preferences for various school characteristics both attract parents to charters and drive them away from TPSs, ultimately contributing to intensifying segregation in charters (Mickelson et al., 2008). In some cases, white parents who live in diverse districts seek out charter schools with larger white enrollments, essentially using charter schools for white flight (Renzulli \& Evans, 2005). Similarly, black, Latino, and Native American parents sometimes select charters based on their racial composition and prefer schools with larger shares of same-race peers (Bifulco \& Ladd, 2006). In other cases, parents select charters based on academic achievement and test scores (Tedin \& Weiher, 2004). While parent preferences might explain these choices, it is also possible that charter policies and practices, as previously described, allow certain parents to choose to enroll their children at a charter while other parents are never presented with a true choice to exercise a preference for the school (Lubienski \& Weitzel, 2009). Thus, the extent to which these patterns truly represent parent choices as opposed to school choices is unclear.

Efforts to create diverse charters. As data has been building and awareness has spread that charters tend to be more racially and economically segregated than TPSs, more attention has been paid recently to the potential for charters to reverse this trend and instead take advantage of their unique position to become diverse schools. In July 2014, a coalition of 14 charter schools
across the United States formed the National Coalition of Diverse Charter Schools to embrace socioeconomic and racial diversity as a central component of their mission (Ulrich, 2014, July 1). Its membership has now grown to 24 charter schools, including five in California (National Coalition of Diverse Charter Schools, 2015). Because charters are not constrained by attendance zones or residential segregation, they can develop unique and creative educational programs that would attract a diverse set of students, they have the potential, as magnets did in the past, to draw diverse groups of students from across geographic areas.

In a study of eight charter schools across the country that are attempting to create diverse schools, researchers identified potential strategies for establishing diverse charters and addressing diversity in daily operations (Kahlenberg \& Potter, 2014). In consciously attempting to create diverse charters, these schools have selected geographic locations to strategically maximize their potential for diversity, developed educational programs that appeal to a diverse group of students and families, targeted recruitment to mixed applicant pools, and used weighted lotteries to ensure diversity after families applied. In their daily practices, these diverse charters have emphasized the importance of differentiating instruction, serving the needs of students with disabilities and ELs, and implementing programs that encourage social interaction among students of different backgrounds. These efforts at creating diverse charters also coincide with high levels of academic achievement.

Although the policies, practices, and resulting trends in some charters have tended to create more segregated schooling environments, this recent, small shift toward attempting to develop diverse charter schools is only a starting point. Deep concern remains regarding the widespread, historic trends toward intensifying segregation among most charter schools and the absence of attempts to harness the potential of charters to be used as a tool for developing
diverse educational environments rather than as an additional mechanism contributing to racial, socioeconomic, and linguistic segregation of students

## CHAPTER THREE

## ANALYTIC APPROACH

This investigation employs an explanatory sequential mixed methods approach to analyze racial, socioeconomic, and linguistic segregation in California's charter schools and TPSs, its relationship to academic achievement, and the elements of charter school policies and practices that are related to varied levels of charter school segregation. In doing so, this project revolves around one central query: How does racial, socioeconomic, and linguistic segregation in California's charter schools compare to that of the state's traditional public schools, and how have these trends changed over time? Within this larger query, there are four specific research questions:

1. What are the racial, socioeconomic, and linguistic trends in enrollment and segregation of California's charter schools between 1998 and 2013?
2. How do levels of racial, socioeconomic, and linguistic segregation in California's charter schools compare to levels of racial, socioeconomic, and linguistic segregation in California's traditional public schools between 1998 and 2013, and in some cases, to magnets?
3. How is segregation related to academic performance in California's charter schools as compared to traditional public schools?
4. How do the charter policies and practices, as described by school leaders, teachers, parents, and board members, in selected LAUSD charter schools relate to varying levels of racial, socioeconomic, and/or linguistic segregation in charter schools?

The mixed methods approach involves collecting and analyzing both quantitative and qualitative data in response to research questions and integrating the two through the data analysis (R. B. Johnson, Onwuegbuzie, \& Turner, 2007). This approach is appropriate because it
allows for drawing on the strengths of both quantitative and qualitative methods and minimizes the limitations of each. It is useful for providing a more complete understanding of research problems in a number of situations, including efforts to explain quantitative results with a qualitative follow-up, as is the case in the current study.

There several challenges associated with the mixed methods approach (Creswell, 2014). First, extensive data collection is necessary. Second, this approach is time intensive as it requires analysis of both quantitative and qualitative data. Third, the researcher must be familiar with both quantitative and qualitative approaches to research. Despite these challenges, this approach lends itself to the current study because the combination of quantitative and qualitative data is best suited to address the research questions, which address both quantitative patterns related to enrollment and achievement as well as policies and practices that can be analyzed more effectively through qualitative exploration.

Figure 1
Explanatory Sequential Mixed Methods Design


Figure 1. Procedure for conducting explanatory sequential mixed methods research. In the first phase, the researcher collects and analyzes quantitative data. The second, qualitative phase is a follow-up to the first phase in which the researcher collects and analyzes qualitative data that builds upon the quantitative data. Then the quantitative and qualitative data are integrated in a final interpretation. Adapted from "Three Basic Mixed Methods Designs," by J. W. Creswell (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.), p.221. Los Angeles, CA: SAGE Publications, Inc.

The explanatory sequential mixed methods design involves first analyzing quantitative data and then building upon the quantitative results to explain them in more detail through qualitative research, as shown in Figure 1. This approach is considered explanatory because the initial quantitative data is explained in further detail using the qualitative data. It is considered sequential because the initial data analysis phase involves analysis of the quantitative data and it is followed by a separate phase of qualitative data analysis; the two analyses are not conducted simultaneously. An additional challenge associated with the explanatory sequential mixed methods design is that the sample sizes for each phase of the analysis are not equal.

The specific methods used to explore each of the four research questions are described in detail at the beginning of each of the next three chapters. Chapter Four uses descriptive analyses based on two quantitative measures of segregation to explore trends in segregation in charter schools and TPSs over time. Chapter Five uses regression analysis to compare the relationship between segregation and academic achievement in charters and TPSs. Chapter Six uses a qualitative case study approach to identify policies and practices related to varying levels of segregation in charter schools. Chapter Seven brings together the quantitative and qualitative aspects of the study to provide a cohesive discussion of the entire study.

This study is limited in that neither the quantitative nor the qualitative analyses allow for making causal claims. Rather, both analyses identify and describe relationships between segregation and other variables. Thus, the findings should be interpreted as correlations, not causations. While both the quantitative and qualitative findings might be helpful in guiding other states and districts, they should not be overgeneralized to other states and districts that might have different charter policies and educational contexts. Despite these limitations, this study contributes important information about trends in California's charter schools and provides
examples of the variety of charter policies and practices that are related to segregation. In doing so, this investigation makes important contributions to both policy and research.

## CHAPTER FOUR

## SEGREGATION TRENDS BY RACE, POVERTY, AND LANGUAGE

Segregation is systematically linked to unequal educational opportunities and outcomes. As schools of choice, charter schools have the potential to create desegregated learning environments because in most cases, charters are not restricted to enrolling students from specific catchment areas and can instead enroll students from across school district lines. This feature of charter schools makes it feasible for them to enroll diverse student bodies that would provide students with the benefits associated with desegregated learning environments. However, as this chapter demonstrates, charters often fail to take advantage of their potential for desegregation. This study is important because both the number of charter schools and the share of students enrolled in charter schools continue to increase.

This chapter uses quantitative analysis of segregation measures to describe trends in segregation by race, poverty, and language over time. These trends are compared in charter schools versus TPSs in four geographic areas-California, Riverside CBSA, Sacramento CBSA, and Los Angeles Unified School District (LAUSD). In addition, a comparison between charter schools and another popular form of school choice-magnet schools-is also provided for two areas-Sacramento and LAUSD. The chapter begins with a description of the methods, including site selection, data, data analysis, and limitations. Then results are provided for each geographic area of analysis. The chapter concludes with a summary of findings.

## Methods

The quantitative portion of this study uses two measures of segregation-concentration and exposure/isolation - to describe the trends in segregation by race, poverty, and language in California's charter schools from 1998 to 2013, as well as to examine the levels of segregation in
charters compared to TPSs over the same 15-year time period. Segregation trends are analyzed for the state of California, as well as two metropolitan areas-Riverside and Sacramento-and one school district-LAUSD. Using multiple measures of segregation to explore three dimensions of segregation in various geographic areas of the state, this chapter seeks to provide a detailed description of segregation in California's charter and TPS schools. Understanding historical and current trends in segregation is important for informing future decisions and policymaking about charter schools. The analysis in this chapter explores two key research questions: 1. What are the racial, socioeconomic, and linguistic trends in enrollment and segregation of California's charter schools between 1998 and 2013? 2. How do levels of racial, socioeconomic, and linguistic segregation in California's charter schools compare to levels of racial, socioeconomic, and linguistic segregation in California's traditional public schools between 1998 and 2013, and in some cases, to magnets?

## Site Selection

This chapter explores segregation trends at multiple levels of geographic analysis, including the state, two Core Based Statistical Areas (CBSAs), and one school district. By exploring trends in different geographic areas, it is possible to identify common patterns as well as important differences based on the local context.

The state of California is the largest unit of analysis. California was selected for analysis because it was the second state to adopt charter legislation, following Minnesota, and because it has the largest number of charter schools in the nation. Thus, California has a long history with charters and sufficient data to examine trends in charter schools over a sustained period of time. California is also an early influencer of education policy in other states; thus, understanding the trends in California is useful for other states that often look to California as an example (even
though the demographic composition of California's schools might vary considerably from that of other states).

In addition to the state-level analysis, CBSAs are a useful unit of analysis, particularly in an exploration of charter schools. CBSAs tend to cover a larger geographic area than school districts and include multiple school districts that could have demographic enrollments that are distinct from one another. They demonstrate the possibility for desegregation that could occur across urban and suburban areas. Of particular importance to the current study, charter schools must enroll any student who lives in California; they are not restricted to enrolling students from one particular school district. Therefore, it is possible for charters to enroll students from a wider geographic area than a school district. To account for this possibility, the CBSA is an appropriate unit for analyzing segregation, especially for charter schools.

The two CBSAs that are analyzed were selected for comparison because they are the most and least segregated regions of the state (Orfield \& Ee, 2014). Riverside—San Bernardino-Ontario CBSA is located in the Los Angeles Inland Empire and is the most segregated region of the state. Sacramento-Arden Arcade-Roseville CBSA is part of the Central Valley and is the least segregated region of the state. From this point forward, these two CBSAs are referred to simply as "Riverside" and "Sacramento." As is the case in most CBSAs, both of these areas include numerous school districts. ${ }^{1}$ In Sacramento, a comparison between charters and magnets is also conducted. Riverside's magnets are not analyzed because of the relatively small number of magnets in the CBSA.

In addition, segregation trends are analyzed in Los Angeles Unified School District (LAUSD). There are several reasons for selecting the school district as the unit of analysis rather

[^0]than the larger Los Angeles CBSA. First, LAUSD is large, both in terms of student enrollment and geographic region. In fact, LAUSD enrolls the second largest number of students of any school district in the nation, following New York City. Additionally, it covers both urban and suburban areas. Finally, the current political context in LAUSD prompts the selection of LAUSD as the unit of analysis. In June of 2015, The Broad Foundation proposed a plan that would create 260 new charter schools in Los Angeles by 2023; this plan strives to enroll half of LAUSD's students in charters (The Broad Foundation, 2015 June). Given the urgency of understanding the potential impact of a dramatic increase in charter schools on the future of LAUSD, using the school district as the unit of analysis is appropriate.

Within LAUSD's traditional public schools, magnet schools hold an important position for several reasons. First, LAUSD's magnets are the major component of the district's courtordered desegregation plan, which is still active. Second, as the other major form of choice in LAUSD, magnet schools account for a slightly larger, although declining, share of the district's enrollment than do charter schools. Third, in response to competition from charter schools, the Broad plan's proposal to double the number of charter schools, and the impending financial crisis the district faces as a result of declining enrollment in TPSs, LAUSD has recently suggested that it will expand the number of magnets in the district (Blume, 2016, May 10; Kohli, 2016, May 12). Therefore, a comparison of magnet schools and charter schools in LAUSD follows the comparison of the district's charters and TPSs.

## Data

Variables. Enrollment and segregation are analyzed using school-level variables of racial/ethnic composition, socioeconomic composition (as measured by free-and-reduced priced
lunch [FRL] status), and linguistic composition (as measured by English Learner [EL] status).
All available data for all of California's TPSs and charter schools are analyzed.
Due to variations in the availability and completeness of data for each variable in each locale, the time spans for which segregation trends are analyzed also vary. ${ }^{2}$ In general, for race and poverty, the state-level and LAUSD analyses are conducted for every year from 1998 to 2013, and the Riverside and Sacramento analyses span 2002 to 2013. Language analyses begin in 2011 for the state, 2008 for Riverside and Sacramento, and 2007 for LAUSD. In some cases, there is a substantial proportion of missing data, which would impact the validity of the results; therefore, in those years, data is excluded from analysis and the results are not presented. ${ }^{3}$ The most recent year of data available for each variable is the 2013-2014 school year; thus, analyses of segregation are conducted through this time point.

Data Sources. Pre-existing data for segregation analyses comes from two sources.
Enrollment data by racial/ethnic group and FRL is drawn from the National Center for Education Statistics (NCES) Common Core of Data (CCD), Public Elementary/Secondary School Universe Survey and Local Education Agency data files. NCES is a reliable data source that uses an

[^1]annual survey to collect the federal government's enrollment figures for all public elementary and secondary schools and school districts.

EL data comes from the English Learners by Grade and Language data files of the California Department of Education (CDE). CDE is a reliable data source that administers annual surveys to all local education agencies (LEAs) in the state. As with all TPSs in the state, charter schools are required to report the same data within the same time frame. Charters have the option to report data either independently or through their authorizing agency.

## Data Analysis

To explore trends in enrollment and segregation, descriptive analyses are conducted using two measures of segregation - concentration and exposure/isolation. Rather than using a measure of evenness, concentration and exposure/isolation are employed to "measure the actual racial composition of schools as a way to assess progress in fulfilling the goals set out by civil rights law" (Orfield, Siegel-Hawley, \& Kucsera, 2014). ${ }^{4}$ Both measures are used to describe trends in segregation by race, poverty, and language over time.

Concentration. Concentration refers to the proportion of students in a school who share a characteristic that places them in a specified racial/socioeconomic/linguistic group. For each school enrollment, a range of racial/socioeconomic/linguistic characteristics will be measured at

[^2]three levels of concentration: majority segregated (50-100\% of school enrollment has specified characteristic), intensely segregated (90-100\%), and hypersegregated (99-100\%).

The interpretation of these three levels of segregation varies by race, poverty, and language. For example, a school that enrolls a majority of students of color is segregated, but given the racial enrollment of the nation's public schools, this level of segregation is not extreme. The same is true for low-income students. Thus, intensely segregated and hypersegregated schools are particularly important indicators of segregation by race and poverty. However, for segregation by language, the concentration of ELs in a school that is majority EL is an important indicator of segregation and would be considered quite extreme. ${ }^{5}$ The results should be interpreted with these flexible understandings of three levels of segregation depending on which dimension of segregation-race, poverty, or language-is being analyzed.

To examine segregation by race, the proportion of enrolled students (categorized according to the three levels of majority, intensely, and hypersegregated) with each of six racial characteristics is measured: Latino, black, white, Asian, Latino and black combined, and white and Asian combined. To examine segregation by poverty, the proportion of enrolled students with each of two socioeconomic characteristics-FRL and non-FRL-is measured. To examine linguistic segregation, the proportion of enrolled students with each of two linguistic characteristics-EL and non-EL—is measured. In addition to exploring each of these three dimensions of segregation separately, double segregation of students by race and poverty is analyzed. For ELs, the triple segregation by race, poverty, and language is also described.

It is conventional to calculate the concentration of white students compared to nonwhite or minority students; however, while these categories for measuring segregation were

[^3]appropriate in the historical context of a largely black-white society with a substantial white majority, this approach might not be sufficient for measuring segregation in the multiracial state of California. Perhaps a more appropriate way to explore segregation in California is to calculate the segregation of the most advantaged and educationally successful groups-white and Asian students—from underserved minority students from disadvantaged groups—black and Latino students (Orfield \& Ee, 2014). When the analysis of these combined groups-whites and Asians or blacks and Latinos-adds additional insight into the segregation trend, results are presented. However, if the act of combining white and Asian students together or black and Latino students together masks important variations between the trends for whites and the trends for Asians, or between the trends for blacks and the trends for Hispanics, the results for the combined groups are not presented. When describing the segregation of ELs by language and race, the combined groups of whites and Asians as well as blacks and Latinos is not used because it is likely that Hispanics, as well as Asians, account for most of the EL population; thus, combining them with other racial groups-whites and blacks-who are likely not a substantial portion of the EL population would not be appropriate.

Exposure and isolation. Exposure refers to the degree of potential contact between students of one racial/socioeconomic/linguistic group and another racial/socioeconomic/ linguistic group; isolation refers to the degree of potential contact between students of one group and other members of the same group (Massey \& Denton, 1988). To examine racial segregation, for each of six racial groups (Latino, black, white, Asian, Latino and black combined, and white and Asian combined), the following exposure/isolation measures are calculated: exposure to white students, exposure to the combined group of white and Asian students, and isolation with same-race peers. To examine segregation by poverty, exposure and isolation are measured for

FRL and non-FRL students. To examine linguistic segregation, exposure and isolation for EL and non-EL students are measured. In addition to exploring each of these three dimensions of segregation separately, double and triple segregation of students by race, poverty, and language are analyzed by measuring the following: each racial group's exposure to FRL and non-FRL students, EL and non-EL exposure to racial groups, and EL and non-EL exposure to FRL and non-FRL.

Both the measure of exposure and the measure of isolation range from 0 to 1 ; lower values on the index of exposure and higher values on the index of isolation indicate greater segregation. For example, if Latino exposure to white students has a value of 0.1 , it indicates that the typical Latino student is exposed to $10 \%$ white students; in other words, the typical Latino student attends a school in which he or she has $10 \%$ white schoolmates. Exposure and isolation are calculated by finding the percent of a certain group of students (e.g., Latino students) in school with a particular student (e.g., white student) in all schools of one type (e.g., charter schools) and computing the average of all of those results.

## Exposure:

$$
P^{*}=\sum_{i=1}^{n}\left(\frac{x_{i}}{X} * \frac{y_{i}}{t_{i}}\right)
$$

Isolation:

$$
P^{*}=\sum_{i=1}^{n}\left(\frac{x_{i}}{X} * \frac{x_{i}}{t_{i}}\right)
$$

- where $n$ is the number of schools or smaller area units,
- $x$ is the number of the first racial/socioeconomic/linguistic group of students in the school or smaller area $i$,
- $X$ is the total number of the first racial/socioeconomic/linguistic group of students in the larger geographical area,
- $y_{i}$ is the number of the second racial/socioeconomic/linguistic group of students in the school or smaller area $i$,
- $\quad t_{i}$ is the total number of students in the school or smaller area $i$.


## Limitations

Using FRL status as the determinant of whether or not a student is low income can be limiting (Harwell \& LeBeau, 2010). In general, the figures for high school students who are eligible for FRL tend to underrepresent the actual share of high school students who are eligible; therefore, this figure might not fully represent the proportion of students who are low income. However, this limitation would be present for all high schools and there is no reason to suspect that the level of underrepresentation would change in any systematic way over time; therefore, comparisons across groups should not be significantly affected by the use of FRL status as a measure of socioeconomic status.

Concentration is limited as a measure because it is strongly influenced by demographic changes in student enrollment. When used as a single measure, this limitation is problematic; however, when concentration is described alongside enrollment figures and other measures of segregation, including exposure/isolation, it is a helpful measure of segregation (Orfield et al., 2014).

Similar to concentration as a measure of segregation, exposure and isolation are limited in that they are also influenced by demographic changes in student populations (Orfield et al., 2014). However, when considered alongside enrollment figures and other measures of segregation, including concentration, exposure and isolation provide important information about students' lived experience with intergroup contact in schools.

Analysis of magnet schools versus charter schools is conducted for LAUSD and Sacramento. A similar analysis at the state level could have been informative; however, there are many data reporting concerns with such an analysis. Magnet indicators are missing from data for many schools across the state and in some years, magnet indicators are not provided for any schools. This data limitation prevented the use of magnet schools as a comparison group at the state level.

The current analysis includes virtual charter schools. It might have been preferable to remove virtual charters from the analysis because students who attend virtual charters are completely isolated and therefore have no interaction with any other students. Conversely, one could argue that including virtual charters in the data set is useful for the very same reasonstudents are completely isolated-an important consideration for the current study of segregation. Given the existing data, which does not include consistent indicators regarding which charters are virtual and which are brick-and-mortar/site-based, it was not possible to identify virtual charters in a consistent manner. ${ }^{6}$ In the 2013-2014 school year, $3 \%$ of the state's charter schools ( 32 schools) and $4 \%$ of the state's charter school students ( 21,161 students) were enrolled in virtual charter schools (National Alliance for Public Charter Schools, 2016). Therefore, the inclusion of virtual charter schools should not have a substantial impact on the findings.

This study does not differentiate between elementary, middle, and high schools. Such a comparison could reveal different trends in segregation for different levels of schooling; it is likely that elementary schools, which tend to be smaller, could also be more segregated.

[^4]However, this type of analysis is particularly difficult to conduct for charter schools, which are less likely to follow the same grade-level patterns as TPSs. For example, many charter schools start with just a few grades and add the subsequent grade level each year so that the school expands as students progress through the grade levels. This aspect of charter schools makes a comparison by level difficult to conduct over time. In addition, charters are more likely than TPSs to span elementary and middle school grades and some span K-12. Because of the nontraditional grade spans of charter schools, recategorizing them into the traditional elementary, middle, and high school structures would be extremely difficult and somewhat misleading.

Finally, the availability and completeness of existing data create a limitation for the current study. In some cases, FRL data has not been reported, but the greatest limitation occurs with regard to EL data. Reporting of EL data has been inconsistent until recent years. In order to address this limitation and to ensure the validity of this study, results of the analysis for the years in which a substantial proportion of data is missing are not presented. Nonetheless, results should be interpreted with caution due to missing data as described in Appendix B. Improved reporting of EL data is needed.

## Results

## California

California charter enrollment increasing; TPS enrollment decreasing. Between 1998 and 2013, there has been steady growth in California's charter sector (Table 1). Both the number of students and the number of schools in the charter sector has been increasing. The number of charter schools in California has increased from 145 in 1998 to 1,132 in 2013. The number of TPSs increased from 8,198 TPSs in 1998 to 9,350 TPSs in 2006 but since then, the number of TPSs has decreased. In 2013, there were 9,157 TPSs in California.

Table 1
Number of Schools and Students, California

| Charters |  |  |  |  |  |  | TPSs |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools | Enrollment | \% of Total <br> Enrollment | Schools | Enrollment | \% of Total <br> Enrollment | Enrollment |
| 1998 | 145 | 67853 | $1 \%$ | 8198 | 5777307 | $99 \%$ | 5845160 |
| 1999 | 238 | 104730 | $2 \%$ | 8340 | 5847868 | $98 \%$ | 5952598 |
| 2000 | 302 | 115582 | $2 \%$ | 8471 | 5935313 | $98 \%$ | 6050895 |
| 2001 | 350 | 132807 | $2 \%$ | 8566 | 6014568 | $98 \%$ | 6147375 |
| 2002 | 409 | 156696 | $3 \%$ | 8691 | 6087707 | $97 \%$ | 6244403 |
| 2003 | 444 | 166208 | $3 \%$ | 8779 | 6132720 | $97 \%$ | 6298928 |
| 2004 | 495 | 177642 | $3 \%$ | 8978 | 6144944 | $97 \%$ | 6322586 |
| 2005 | 543 | 195876 | $3 \%$ | 9107 | 6116227 | $97 \%$ | 6312103 |
| 2006 | 714 | 231004 | $4 \%$ | 9350 | 6043809 | $96 \%$ | 6274813 |
| 2007 | 701 | 241017 | $4 \%$ | 9292 | 5829411 | $96 \%$ | 6070428 |
| 2008 | 789 | 284986 | $5 \%$ | 9321 | 5955198 | $95 \%$ | 6240184 |
| 2009 | 847 | 316658 | $5 \%$ | 9280 | 5849991 | $95 \%$ | 6166649 |
| 2010 | 948 | 363916 | $6 \%$ | 9232 | 5844043 | $94 \%$ | 6207959 |
| 2011 | 1018 | 413124 | $7 \%$ | 9197 | 5789738 | $93 \%$ | 6202862 |
| 2012 | 1135 | 470880 | $8 \%$ | 9250 | 5742314 | $92 \%$ | 6213194 |
| 2013 | 1132 | 513350 | $8 \%$ | 9157 | 5702436 | $92 \%$ | 6215786 |

Source: National Center for Education Statistics, Common Core of Data.
A similar pattern exists for the number of students enrolled in California's charters and
TPSs. In 1998, 67,853 students were enrolled in charter schools. This number has increased every year through 2013 when 513,350 students attended charter schools. Charter enrollment has increased $657 \%$ during this time period. In the state's TPSs, the number of students increased from 1998 through 2004 but has been declining since then. In 2013, 5,702,436 students attended TPSs, which is less than the $5,777,307$ who were enrolled in TPSs in 1998. The state's total enrollment has increased from 5,845,160 in 1998 to $6,215,786$ in 2013.

Although charter schools are growing and TPSs are declining, the vast majority of the state's students still attend TPSs. In 2013, 92\% of California's students attended TPSs while $8 \%$ were enrolled in charter schools. This is a substantial change from earlier years. For example, in $1998,1 \%$ of the state's students enrolled in charters while the other $99 \%$ attended TPSs.

## California charters enroll disproportionately small share of Hispanic students and

large share of white students. In all the state's schools, since at least 1998, Hispanic students have accounted for the largest share of enrollment of all racial groups (Figure C-1, Appendix C). Further, the Hispanic share of the state's student enrollment has increased since 1998 while the white share of enrollment has declined. The black share of enrollment has experienced a slight decline while the Asian share of enrollment has remained fairly stable. In 2013, the state's total student enrollment was $53 \%$ Hispanic, $25 \%$ white, $11 \%$ Asian, and $6 \%$ black. While Hispanic students accounted for the largest share of enrollment every year since 1998, at that time the share of Hispanic (41\%) and white (38\%) was much closer.

Since 2006, Hispanic students have accounted for the largest racial group in California's charters and TPSs (Figure 2). In the state's charter schools, Hispanic enrollment is growing, yet Hispanic students remain underrepresented; conversely, the white enrollment is shrinking, yet white students remain overrepresented in charters. Charter schools enroll a larger share of white and black students but a smaller share of Hispanic and Asian students than TPSs. Although the proportion of each race has changed over time, the overall pattern has remained the same since 1998. In 2013, charter enrollment was $48 \%$ Hispanic, $31 \%$ white, $9 \%$ black, and $7 \%$ Asian while TPS enrollment was $54 \%$ Hispanic, $24 \%$ white, $6 \%$ black, and $12 \%$ Asian.

Figure 2
Enrollment by Race, Charters and TPSs, California


Source: National Center for Education Statistics, Common Core of Data.
In considering the share of enrollment that is white versus non-white, charter schools enroll a larger share of white students than TPSs but a smaller share of non-white students than TPSs (Figure C-2). In charters, the white share of enrollment has decreased each year since 1998 while the non-white share of enrollment has increased.

## Larger shares of charters than TPSs are intensely segregated minority,

hypersegregated minority, and intensely segregated white schools. The share of intensely segregated minority schools has been steadily increasing in both the charter and TPS sectors (Figure 3). Between 1998 and 2013, the share of $90-100 \%$ nonwhite schools was relatively similar (and increasing) in both charters and TPS, although charters generally had a slightly larger share of 90-100\% nonwhite schools. Since 2008, one-third or more of both charters and TPS have been intensely segregated. In 2013, 38\% of both and charters were intensely segregated.

Figure 3
Percent of 90-100\% Non-white Schools, California


Source: National Center for Education Statistics, Common Core of Data.
Using the most extreme measure of hypersegregation (99-100\% nonwhite), charter schools have consistently had a larger share of hypersegregated schools than TPSs (Figure 4). This portion of schools has been increasing at a generally faster rate among charters than TPSs, especially from 2001 to 2009. Since 2009, the share of hypersegregated charter schools has declined but still remains larger than the share of hypersegregated TPSs. In 2013, the share of charter schools that were hypersegregated (19\%) was almost twice as large as the share of hypersegregated TPSs (10\%).

Figure 4
Percent of 99-100\% Non-white Schools, California


Source: National Center for Education Statistics, Common Core of Data.
A larger share of charter schools is also intensely segregated for white students (Figure
5). At each time point, a larger share of charters enrolled $90-100 \%$ white students than did TPSs.

However, the portion of this type of school has been declining, and the rate of decline has been faster in charters than in TPSs such that the difference in share of 90-100\% white schools between charters and TPSs has nearly disappeared and the existence of such schools is almost obsolete.

Figure 5
Percent of 90-100\% White Schools, California


[^5]
## Hispanic students exposed to larger share of white students in charters than in

TPSs. In terms of exposure to white students of a typical student of each race, Hispanic and Asian exposure to white students is greater in charters than in TPSs (Figure 6). Between 1998 and 2013, Hispanic, black, and Asian exposure to white students has declined in both charters and TPSs. This change is likely related to the decreasing share of white students in California. The typical Hispanic and Asian students are exposed to a greater share of white students in charters than in TPSs, which is likely related in part to the larger share of white enrollment in charters than in TPSs.

In both charters and TPSs, Hispanics are exposed to the smallest share of white students: $18 \%$ in charters and $15 \%$ in TPSs in 2013. The difference in exposure to white students in charters compared to TPSs has been generally consistent (except for 1998) for Hispanic students.

Figure 6
Exposure to White Students by Race, California


Source: National Center for Education Statistics, Common Core of Data.
For black students, the level of exposure to white students in charter schools vacillated between 1998 and 2004. During the same time period, the typical black student in a TPS was experiencing steadily declining exposure to white students. Since 2004 there has been very little difference in the typical black charter school student's and typical black TPS school student's
exposure to white students. The level of exposure to white students has been generally declining for black students in both charters and TPSs since 2003. In 2013, the typical black charter school student had $18 \%$ white peers and the typical black TPS student had $17 \%$ white peers. In considering exposure to the combined group of white and Asian students, the typical black charter school student had $24 \%$ white and Asian peers while the typical black TPS student had a slightly larger (28\%) share of white and Asian schoolmates (Figure C-3). In general, black students have been consistently slightly less segregated than Hispanic students and the level of segregation for black students has been relatively similar in charters and TPSs since 2004.

Asians are exposed to the largest share of white students: $34 \%$ in charters and $23 \%$ in TPSs in 2013 (Figure 6). The disparity in exposure to white students in charters compared to TPSs has increased for Asian students, such that Asians are now exposed to about 1.5 times the share of white students in charters as in TPSs.

When considering Hispanic and black students together as a group of historically disadvantaged and underserved students compared to Asian and white students as a group of advantaged students, substantial disparities in exposure exist (Figure C-3). For example, in 2013, in both charters and TPSs, the typical Hispanic and black students attended a school that was $25 \%$ white and Asian. On the other hand, the typical white and Asian charter school students attended a charter that was $59 \%$ white and Asian. Similarly, but slightly less extreme, the typical white and Asian TPS student attended a TPS that was $56 \%$ white and Asian. The disparity in exposure to the combined group of white and Asian students is slightly larger in charter schools.

White and black students more isolated in charters than in TPSs; Hispanic students more isolated in TPSs. Isolation of Hispanic students has been increasing in both charters and TPSs (Figure 7). Hispanic isolation with other Hispanic students is greater in TPSs than in
charters, but this difference has been shrinking. In 2013, the typical Hispanic student was isolated with 65\% Hispanics in charters and 69\% Hispanics in TPSs.

Figure 7
Isolation by Race, California


Source: National Center for Education Statistics, Common Core of Data.
Black isolation with other black students has been generally declining in both charters and TPSs since 1999. In 2013, the typical black student was isolated with almost twice as large a share of same-race peers in charters (30\%) as in TPSs (17\%). Generally, this has been the case from 1999 to 2013. While black isolation with other black students is important, it is also essential to understand the degree to which black students are isolated with other students of color.

Thus, perhaps even more important is the isolation of non-white and non-Asian students with other non-white and non-Asian students, because together these groups have historically been less advantaged and have been underserved in public schools. Since 2009, non-white and non-Asian students have been isolated with almost the same share ( $75 \%$ ) of non-white and nonAsian schoolmates in both charters and TPSs. Non-white and non-Asian students accounted for $64 \%$ of the enrollment in 2013; thus, the typical non-white and non-Asian student was isolated with a disproportionately large share of other non-white and non-Asian students.

Another important trend has occurred with regard to white isolation. White isolation has been declining in both charters and TPSs; however, at all time points the typical white student was isolated with a larger share of same-race peers in charters than in TPSs. In 2013, the typical white charter school student had $54 \%$ white schoolmates and the typical white TPS student had $46 \%$ white schoolmates. The difference in isolation of white students has remained relatively consistent over time.

Asian isolation has been increasing in TPSs and fluctuating in charters. At each time point, the typical Asian student has been isolated with a larger share of same-race peers in TPSs than in charters. In 2013, the typical Asian charter school student had $17 \%$ Asian schoolmates and the typical Asian TPS student had $32 \%$ Asian schoolmates.

## California's charters enroll a disproportionately small share of low-income students.

The portion of California's students who are low income has increased since 1998. Charter schools enroll a smaller share of low-income students than do TPSs (Figure 8). However, the difference in FRL enrollment in charters and TPSs has been shrinking over time. In 2013, TPSs enrolled $58 \%$ low-income students and charters enrolled $55 \%$ low-income students.

Figure 8
FRL Enrollment, California


Source: National Center for Education Statistics, Common Core of Data.

## Charters have larger share of intensely segregated low-income schools than TPSs

since 2005. The share of $50-100 \%$ low-income schools has been increasing among both charters and TPSs from 1998 to 2013 (Figure C-4). In 1998, 47\% of TPSs but only $20 \%$ of charters enrolled 50-100\% low-income students. However, this disparity has been decreasing over time, such that by $2013,66 \%$ of TPSs and $57 \%$ of charters were $50-100 \%$ low income. It is important to remember that $58 \%$ of the state's students are low income; thus, a school that enrolls more than $50 \%$ low-income students in 2013 is not a cause for concern, at least in comparison to what would be expected if the school enrollment reflected the state average.

However, a school that enrolls $90-100 \%$ low-income students is more alarming as this indicates a high and disproportionately large concentration of poverty. The share of such schools in California has been increasing over time-steadily in TPSs and at a faster, yet more variable, rate in charters (Figure 9). From 2001 to 2004, TPSs had a larger share of 90-100\% low-income schools than charters. However, from 2005 through 2013, a larger share of charters (15\% in 2013) than TPSs ( $13 \%$ in 2013) have enrolled a student body that was $90-100 \%$ low income. This is particularly noteworthy because charters have historically (and continued into 2013 though only slightly) enrolled smaller share of low-income students (Figure 8). This suggests that those low-income students who are enrolled in charters tend to be concentrated in charters together with other low-income students.

Figure 9
Percent of 90-100\% FRL Schools, California


Source: National Center for Education Statistics, Common Core of Data.
Low-income students isolated in both charters and TPSs; historically larger gap in exposure to low-income students by poverty in charters shrinking. The gap in exposure to low-income students by poverty is shrinking in charters (Figure 10). In TPSs, low-income students are exposed to about twice the share of other low-income students as are middle-class students. In recent years, this disparity has been similar in charters and TPSs. In 2013, the typical low-income charter student attended a charter that was $70 \%$ low income while the typical middle-class charter student's school was $37 \%$ low-income. In TPSs in 2013, the typical lowincome student attended a school that was $72 \%$ low income while the typical middle-class student's school was $39 \%$ low income.

Figure 10
Exposure to FRL Students by Poverty, California


Source: National Center for Education Statistics, Common Core of Data.
In both charters and TPSs, there is a double segregation of students by race and poverty (Figure 11). For the typical student of each race (Hispanic, black, white, and Asian), the typical student is exposed to a larger share of low-income students in TPSs than in charters, although this gap has been shrinking for all races. This pattern is likely related to the growing share of low-income students in charter schools, though low-income students are still underenrolled in charters compared to TPSs. The typical Hispanic student is exposed to the largest share of lowincome students while the typical white student is exposed to the smallest share of low-income students. In 2013, the typical Hispanic and black student in both charters and TPSs were exposed to 1.5-2 times as large a share of low-income students as the typical white or Asian student.

Figure 11
Exposure to FRL Students by Race, California


Source: National Center for Education Statistics, Common Core of Data.
California's charters enroll disproportionately small share of ELs. ELs are underrepresented in the state's charter schools (Table 2). At each time point, the state's TPSs have enrolled a larger proportion of ELs than charters. Most recently, in 2013, 23\% of students attending California's TPSs were ELs while only $17 \%$ of students enrolled in charter schools were ELs. The disparity in EL enrollment between TPSs and charters has remained fairly steady from 2011 to 2013 with the changes in the portion of ELs in TPSs and charters following a similar trajectory from year to year.

Table 2
EL Enrollment, California

|  | Charters | TPS |
| :---: | :---: | :---: |
| 2011 | $17 \%$ | $23 \%$ |
| 2012 | $16 \%$ | $22 \%$ |
| 2013 | $17 \%$ | $23 \%$ |

Source: California Department of Education, English Learners by Grade and Language.

Smaller share of charters is majority EL. With regard to the concentration of students by language background in California's schools, most charter schools enroll a small share of ELs while TPSs tend to have larger shares of ELs (Figure 12). In 2013, one-fourth (25\%) of the state's TPSs and almost half (45\%) of the state's charters enrolled a student body that was less than $10 \%$ ELs; for charters, this is likely related to the disproportionately small share of ELs who are enrolled in charter schools. Almost one-fourth (22\%) of both TPSs and charters enrolled student bodies that were 10-20\% ELs. In looking at a slightly broader range, $50 \%$ of TPSs and $41 \%$ of charters had a student body that was between 10 and $40 \%$ ELs.

At the other end of the continuum, 15\% of TPSs were majority EL (enrolling more than $50 \%$ ELs) while only $9 \%$ of charters were majority EL. In terms of race and poverty, a majority concentration of students of color or low-income students might not be cause for alarm because the state's enrollment is comprised of more than half students of color and more than half lowincome students; however, for ELs, a school that is more than $50 \%$ EL has a disproportionately large concentration of ELs and does indicate a high level of segregation by language. ${ }^{7}$

[^6]Figure 12
Percent of Schools Enrolling ELs by Decile, California, 2013


Source: California Department of Education, English Learners by Grade and Language.

## EL isolation slightly smaller in charters; disparity between EL and non-EL

exposure to ELs larger in charters. ELs are isolated by language at similar levels in charters and TPSs (Figure 13). In 2013, ELs were slightly less isolated with other ELs in charters than in TPSs. The typical EL in a charter school was isolated with $37 \%$ ELs while the typical EL in a TPS was isolated with $39 \%$ ELs. Both ELs and non-ELs were exposed to smaller shares of ELs in charters than in TPSs.

Figure 13
Exposure to ELs by Language, California


Source: California Department of Education, English Learners by Grade and Language.

Compared to non-ELs, in TPSs, ELs attended school with about twice as large a share of other ELs. In 2013, the typical EL TPS student had 39\% EL peers while the typical non-EL TPS student had $18 \%$ EL peers. In charters, this disparity is even larger with the typical EL attending a school with three times as large a share of other ELs compared to the school of the typical nonEL. Most recently, in 2013, the typical EL charter student had $37 \%$ peers who were ELs while the typical non-EL charter student had only 13\% EL schoolmates.

## ELs experience double segregation by language and race at similar levels in charters

and TPSs. The typical EL is exposed to similar proportions of students of each racial group in charters and TPSs (Figure 14). The trends in EL exposure to students of each racial group remained stable from 2011 to 2013. ELs were exposed to a slightly larger share of black and white students in charters than in TPSs. In 2013, the typical EL in a charter school had 8\% black peers and $15 \%$ white peers compared to the typical EL in a TPS who had $5 \%$ black peers and $13 \%$ white peers. The typical EL was exposed to a slightly smaller share of Asian students in charters (5\% in 2013) compared to the typical EL exposure to Asian students in TPSs ( $9 \%$ in 2013). EL exposure to Hispanic students is very similar in both charters and TPSs at about 68$69 \%$ in both.

Figure 14
EL Exposure to Racial Groups, California


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

The gap in exposure between ELs and non-ELs to white students is larger in charters than in TPSs, revealing that ELs experience a more intense double segregation by language and race in charters (Figure 15). The typical non-EL in both charters and TPSs is exposed to more than twice as large a share of white students as the typical EL. In 2013, the typical non-EL had 33\% white peers in charters and the typical EL charter student had $15 \%$ white peers. In TPSs, there is a similar disparity but it is not quite as extreme as in charters; in TPSs, the typical non-EL had $27 \%$ white peers while the typical EL had $13 \%$ white peers in 2013. Regarding exposure to Hispanic students, the typical EL attends a school with a larger share of Hispanic students in both types of schools ( $68 \%$ in charters and $69 \%$ in TPSs) compared to the typical non-EL who has a smaller share of Hispanic peers ( $45 \%$ in charters and $50 \%$ in TPSs). Again, the disparity between ELs and non-ELs in exposure to Hispanic students is slightly more extreme in charter schools than in TPSs. Exposure to black students is similar for ELs and non-ELs in charters (around 8-9\%) and in TPSs (5-6\%). Non-ELs attend schools with slightly larger shares of Asian
students in both charters (7\%) and TPSs (12\%) compared to ELs who have 5\% Asian peers in charters and 9\% Asian peers in TPSs.

Figure 15
Non-EL Exposure to Racial Groups, California


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

No substantial difference in exposure to low-income students for ELs in charters
and TPSs. In addition to double segregation by language and race, ELs also experience a third dimension of segregation-poverty. Almost three-fourths of EL students' schoolmates are lowincome students compared to just over half of non-ELs' peers (Figure C-5). This difference exists in both charters and TPS. There is no substantial difference in exposure to low-income students between ELs in charters versus ELs in TPSs. In 2013, in both types of schools, the typical EL had about 71-73\% low-income schoolmates. Similarly, non-ELs in charters and TPSs attended schools with about the same share of low-income peers (52\% in charters and 54\% in TPSs).

Summary of California segregation trends. At the state level, the share of segregated minority schools is increasing in both charters and TPSs, and the increase is more extreme in the charter sector. The share of both charter schools and TPSs that are intensely segregated is
increasing such that more than one-third of both types of schools are intensely segregated. Perhaps even more noteworthy, the share of hypersegregated schools is generally increasing both among charters and TPSs. Charters have consistently had a larger share of hypersegregated schools than TPSs, and in recent years, the share of charter schools that are hypersegregated has been twice as large as the share of hypersegregated TPSs. While there was also a larger share of segregated white schools in the past, this type of school is becoming less common in both charters and TPSs.

Although Hispanic enrollment is growing statewide, Hispanic students remain underrepresented in the state's charter schools, and conversely, while the white share of enrollment is shrinking statewide, white students remain overrepresented in charter schools. Both the typical black and the typical white student are more isolated with same-race peers in charter schools than in TPSs while the typical Hispanic student and the typical Asian student are less isolated with same-race peers in charters than in TPSs. As a combined group, the typical Hispanic or black student is isolated with other Hispanic and black students at similar levels in charters and TPSs. In terms of exposure to white students, the typical Hispanic and the typical Asian student are exposed to a larger share of white students in charters than in TPSs. These differences are likely related to the slightly larger share of black and white enrollment and smaller share of Hispanic and Asian enrollment in charters. In both charter schools and TPSs, Hispanic students are the most segregated and Asian students are the least segregated of all racial groups.

Taken together, these results reveal that segregation by race is intensifying in both charter schools and TPSs in the state of California. A larger share of charters is more segregated than TPSs.

In terms of poverty, while the share of low-income students is increasing statewide, lowincome students remain underenrolled in charter schools. Yet in recent years, charter schools have had a larger share of intensely segregated low-income schools than TPSs, a pattern that is particularly noteworthy given the smaller share of low-income students who attend charters. In both charters and TPSs, students of color experience a double segregation by race and poverty. This double segregation is more extreme in TPSs, which is likely related to the larger share of low-income students who attend TPSs. Of all racial groups, Hispanic students experience the most intense double segregation.

With regard to language, charter schools enroll a disproportionately small share of ELs compared to TPSs. In part related to this disparity in enrollment of ELs, a smaller share of charters than TPSs enrolls a student body that is majority EL. Most charters enroll between 0 and $20 \%$ ELs. ELs are slightly less isolated with other ELs in charters than in TPSs, again likely related to the disproportionately small share of ELs who attend charter schools. The gap in exposure to ELs between ELs and non-ELs is larger in charter schools than in TPSs. Similarly, the disparity in exposure to white students between ELs and non-ELs is also larger in charter schools, indicating that ELs experience a double segregation by language and race, which is more intense in charter schools. ELs also experience a triple segregation by language, race, and poverty, and the extent to which ELs are segregated by poverty is similar in both charters and TPSs.

## Riverside-San Bernardino-Ontario CBSA

Riverside charter enrollment increasing. The share of charter schools in Riverside is on the rise, yet a smaller portion of students attends charters in Riverside than across the state on average. The number of schools in Riverside has increased since 2002 (Table 3). The number of

TPSs increased from 2002 to 2008 and then remained relatively stable through 2013 when there were 994 TPSs. The number of charter schools has increased consistently from 2002 through 2013 (although there was a very slight decline from 2003 to 2004 and 2011 to 2012 when there was one fewer charter in each case). In 2013, there were 64 charter schools.

Table 3
Number of Schools and Students, Riverside

| Charters |  |  |  |  |  | TPS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools | Enrollment | \% of Total <br> Enrollment | Schools | Enrollment | \% of Total <br> Enrollment | Enrollment |
| 2002 | 23 | 11674 | $2 \%$ | 841 | 745161 | $98 \%$ | 756835 |
| 2003 | 25 | 13068 | $2 \%$ | 868 | 770873 | $98 \%$ | 783941 |
| 2004 | 24 | 9419 | $1 \%$ | 897 | 795325 | $99 \%$ | 804744 |
| 2005 | 26 | 9868 | $1 \%$ | 927 | 812946 | $99 \%$ | 822814 |
| 2006 | 37 | 13595 | $2 \%$ | 971 | 826148 | $98 \%$ | 839743 |
| 2007 | 37 | 15190 | $2 \%$ | 976 | 801474 | $98 \%$ | 816664 |
| 2008 | 42 | 20543 | $2 \%$ | 986 | 818622 | $98 \%$ | 839165 |
| 2009 | 49 | 24356 | $3 \%$ | 981 | 812807 | $97 \%$ | 837163 |
| 2010 | 55 | 31354 | $4 \%$ | 975 | 810005 | $96 \%$ | 841359 |
| 2011 | 62 | 36945 | $4 \%$ | 970 | 801720 | $96 \%$ | 838665 |
| 2012 | 61 | 39016 | $5 \%$ | 996 | 797263 | $95 \%$ | 836279 |
| 2013 | 64 | 42933 | $5 \%$ | 994 | 793495 | $95 \%$ | 836428 |

Source: National Center for Education Statistics, Common Core of Data.
The number of students attending TPSs generally increased through 2006 and then decreased through 2013, when TPSs enrolled 793,495 students. In charter schools, the student enrollment fluctuated from 2002 to 2004 and has been increasing since then. The enrollment in charters has grown from 11,674 students in 2002 to 42,933 students in 2013, an increase of $268 \%$. The percent of students enrolled in charters has also increased over time. In 2013, 5\% of Riverside's students attended charters, a smaller share than the state (8\%).

## Riverside charters enroll disproportionately smaller share of Hispanics and larger

share of whites than TPSs. Since 2009, Hispanic students have accounted for the largest racial group in both charters and TPSs (Figure 16). Riverside's charter schools enroll a larger share of white students and a smaller share of Hispanic students than do TPSs. The black and Asian
shares of enrollment are similar in both charters and TPSs. From 2002 to 2013 in both charters and TPSs, the Hispanic share of enrollment has increased, the white share of enrollment has decreased, and the Asian share of enrollment has remained relatively stable. The black share of enrollment has remained stable in TPSs but decreased in charters.

Figure 16
Enrollment by Race, Riverside


Source: National Center for Education Statistics, Common Core of Data.
In the past, Riverside's charter schools enrolled a slightly larger share of white than nonwhite students (2002-2004), but from 2005 through 2013, charters enrolled a larger share of nonwhite than white students (Figure C-6). TPSs have consistently enrolled a larger share of nonwhite than white students.

## Smaller share of Riverside's charters is comprised of intensely segregated minority

 schools; at most time points since 2007, smaller share of charters is hypersegregated minority schools. The share of intensely segregated schools has been increasing in both charters and TPSs (Figure 17). At each time point, charters had a smaller share of intensely segregated schools than TPSs. In 2013, more than one-third of schools- $33 \%$ of charters and $36 \%$ of TPSs—were intensely segregated minority schools.Figure 17
Percent of 90-100\% Non-white Schools, Riverside


Source: National Center for Education Statistics, Common Core of Data.
Over time, the share of hypersegregated schools has been more variable in Riverside's charters than in the metro's TPSs (Figure 18). From 2002-2006, there were no hypersegregated charters. Hypersegregated charters appeared in 2007; subsequently the share of hypersegregated charters fluctuated for a couple of years, then increased again in 2013. Some portion of TPSs has been hypersegregated at each time point. Aside from a jump in the share of hypersegregated TPSs in 2009, the share of hypersegregated TPSs has remained fairly stable. From 2007 to 2013, with the exception of 2012, charter schools had a larger share of hypersegregated schools than TPSs. In 2013, 6\% of charters and $2 \%$ of TPSs were hypersegregated.

Figure 18
Percent of 99-100\% Non-white Schools, Riverside


Source: National Center for Education Statistics, Common Core of Data.
In $2002,4 \%$ of charters were $90-100 \%$ white, but since that time there have not been any 90-100\% white charter schools (Figure C-7). Over this time period, fewer than $1 \%$ of TPSs have enrolled a student body that was $90-100 \%$ white.

Greater exposure to white students in charters. The typical student of each race (Hispanic, black, and Asian) in Riverside is exposed to a larger share of white students in charters than in TPSs (Figure 19). However, exposure to white students is decreasing for students of each race, which is likely related to the shrinking share of white enrollment. In charter schools, black students are least exposed to white students, but in TPSs, Hispanic students are least exposed to white students.

The typical Hispanic student has consistently been exposed to a larger share of white students in charters than in TPSs. However, Hispanic students in both charters and TPSs have experienced declining exposure to white students over time. The typical Hispanic charter school student had $28 \%$ white peers and the typical Hispanic TPS student had $16 \%$ white peers in 2013.

Figure 19
Exposure to White Students by Race, Riverside


Source: National Center for Education Statistics, Common Core of Data.
Similar to Hispanic students, the typical black student in Riverside's charter schools has consistently been exposed to a larger share of white students than the typical black TPS student. However, the disparity in exposure to white students between the typical black charter and TPS student has been shrinking over time. More generally, black exposure to white students has declined in both charters and TPSs over time. The typical black charter school student had 23\% white peers and the typical black TPS student had $18 \%$ white peers in 2013.

Asian students are experiencing declining exposure to white students, as are Hispanic and black students. The typical Asian student in a charter school is exposed to a larger share of white students than the typical Asian TPS student, and this disparity has remained relatively stable over time. The typical Asian charter school student had $40 \%$ white peers and the typical Asian TPS student had $27 \%$ white peers in 2013.

When considering exposure to the combined group of Asian and white students by race in charters and TPSs, there are substantial disparities (Figure C-8). For all racial groups, the typical student is exposed to a larger share of white and Asian students in charters than in TPSs. The disparity in exposure to white and Asian students between Hispanic and black students compared
to white and Asian students is similar in charters and TPSs. For example, in 2013, Hispanic and black charter school students had $31 \%$ white and Asian schoolmates while white and Asian charter school students had $50 \%$ white and Asian schoolmates. In TPSs, Hispanic and black charter school students had $21 \%$ white and Asian peers while white and Asian TPS students had $40 \%$ white and Asian peers.

## Hispanic students less isolated in charters; black and white students more isolated

 in charters. In Riverside, both the typical white and typical black student are more isolated with same-race peers in charter schools than in TPSs (Figure 20). On the other hand, both the typical Hispanic student and the typical Asian student are less isolated with same-race peers in charters than in TPSs. When considered together, the typical non-white/non-Asian student is isolated with a smaller share of other non-white/non-Asian students in charters than in TPSs. The typical Hispanic student is the most isolated with same-race peers while the typical Asian student is least isolated with same-race peers in both types of schools.Hispanic isolation has been increasing over time, but at each time point, the typical Hispanic student was less isolated with same-race peers in charters than in TPSs. In 2013, the typical Hispanic charter student attended a charter school that was $56 \%$ Hispanic but the typical Hispanic student at a TPS had 70\% Hispanic schoolmates.

Figure 20
Isolation by Race, Riverside


Source: National Center for Education Statistics, Common Core of Data.
For the typical black student, isolation with same-race peers has decreased in TPSs; in charter schools, black isolation decreased from 2002 to 2009 and then increased through 2012, followed by a slight decrease in 2013. At each time point, the typical black student has been more isolated with same-race peers in charter schools than in TPSs. In 2013, the typical black charter student had $20 \%$ black schoolmates while the typical black TPS student had $13 \%$ black schoolmates. While black isolation with same-race peers is important, as is Hispanic isolation with same-race peers, the degree to which black students and Hispanic students are isolated with other students of color is perhaps even more informative.

Therefore, it is important to consider non-white and non-Asian students together as a combined group of historically underserved and less advantaged students. In doing so, trends reveal that the typical non-white/non-Asian student in Riverside has become increasingly isolated with other non-white and non-Asian students over time and has been more isolated in

TPS than in charters at each time point. In 2013, the typical non-white/non-Asian student who attended a charter had $69 \%$ non-white and non-Asian peers while the typical non-white/nonAsian student at a TPS had $79 \%$ non-white and non-Asian peers.

The typical white student has become less isolated with same-race peers over time. The typical white student is more isolated in charters than in TPSs. In 2013, Riverside's typical white charter school student attended a charter that was $46 \%$ white and the metro's typical white TPS student attended a school that was $34 \%$ white.

In general, the typical Asian student has become more isolated in both charters and TPS, with a jump in isolation between 2009 and 2010 followed by a decline through 2013 in charters. The typical Asian student is more isolated with same-race peers in TPSs than in charters. In 2013, the typical Asian student in a charter school had 7\% Asian schoolmates while the typical Asian student in a TPS had $11 \%$ Asian peers.

## Riverside charters enroll disproportionately small share of low-income students but

disparity is shrinking. The share of low-income students increased overall in both charters and TPSs in Riverside, although in charter schools the low-income share declined sporadically within a generally upward trajectory (Figure 21). Charter schools are increasing their share of lowincome students at a slightly faster pace than TPSs, which is resulting in a closing of the gap between the disparate enrollment of low-income students in charters and TPSs.

## Figure 21

FRL Enrollment, Riverside


Source: National Center for Education Statistics, Common Core of Data.
Smaller share of charters has high concentrations of poverty. In Riverside, charters have a smaller share of schools with high concentrations of poverty than do TPSs. The share of schools that enroll 50-100\% low-income students has increased steadily in TPSs (Figure C-9). Although there has been some variation from year to year, there has been an overall increase in the share of charter schools enrolling 50-100\% low-income students. In each year, a larger share of TPSs than charters were $50-100 \%$ low income. A school that enrolls more than $50 \%$ lowincome students is not particularly concerning due to the share of low-income students who attend Riverside schools overall.

However, a school that enrolls $90-100 \%$ low-income students is cause for concern as this type of school has a disproportionately large concentration of poverty in comparison to the metro overall. In Riverside, a smaller share of charter schools than TPSs is 90-100\% FRL (Figure 22). In fact, from 2005 to 2008, no charter schools enrolled 90-100\% low-income students. In 2013, $15 \%$ of TPSs and only $3 \%$ of charters were $90-100 \%$ low income.

Figure 22
Percent of Schools that are 90-100\% FRL, Riverside


Source: National Center for Education Statistics, Common Core of Data.
At the most extreme level of socioeconomic isolation are schools that enroll 99-100\% low-income students. Before 2012, very few schools in Riverside-about 1\% of TPSs and no charters-had such a high level of isolation by poverty (Figure C-10). The share of 99-100\% low-income schools increased in 2012 for both charters and TPSs but then decreased again in 2013. In 2013, $0 \%$ of TPSs and charters had a student body that was hypersegregated by poverty.

Low-income students isolated by poverty and race in both charters and TPSs. In
Riverside's TPSs, for both the typical low-income student and the typical middle-class student, exposure to low-income students increased between 2002 and 2013 (Figure 23). In charter schools, the pattern vacillated from year to year. At each time point, both low-income and middle-class students were exposed to a larger share of low-income students in TPSs than in charters.

Figure 23
Exposure to FRL by Poverty, Riverside


Source: National Center for Education Statistics, Common Core of Data.
With the exception of 2004, Riverside students of all races were exposed to larger shares of low-income students in TPSs than in charters (Figure 24). In charter schools, exposure to lowincome students increased at a fast pace for students of all races from 2002 to 2004; then there was a dip from 2004 to 2005, followed by a steady increase for charter school students of all races through 2013. The disparity in exposure to low-income students by race is larger in TPSs than in charters. In charters, from 2005 to 2010, students of each race were exposed to similar shares of low-income students. From 2012 to 2013, the gap between the typical Hispanic and typical black student's exposure to low-income students and the typical white and typical Asian student's exposure to low-income students grew larger in charters. In TPSs, the gap in exposure to low-income students between the typical Hispanic and typical black student compared to the typical white or typical Asian student has been more pronounced than in charters and this gap has remained fairly stable over time with Hispanic and black students exposed to disproportionately large shares of low-income students while white and Asian students are exposed to smaller shares of low-income students, revealing a double segregation of students by race and poverty.

Figure 24
Exposure to FRL by Race, Riverside


Source: National Center for Education Statistics, Common Core of Data.
Charters enroll disproportionately small share of ELs. At each time point, Riverside's
TPSs have enrolled a larger portion of ELs than the metro's charter schools (Table 4). Most recently, in 2013, $21 \%$ of Riverside's TPS students were ELs while only $9 \%$ of charter students were ELs. The disparity in the share of EL enrollment between Riverside's TPSs and charters has been narrowing over time as TPSs enroll slightly smaller shares of ELs and charters enroll slightly larger shares of ELs than they did five years earlier. The general trend toward an increasing share of ELs enrolled in charter schools is unique to Riverside among the geographic areas analyzed in this study.

Table 4
EL Enrollment, Riverside

|  | TPS | Charter |
| :---: | :---: | :---: |
| 2008 | $23 \%$ | $7 \%$ |
| 2009 | $22 \%$ | $6 \%$ |
| 2011 | $21 \%$ | $9 \%$ |
| 2012 | $20 \%$ | $9 \%$ |
| 2013 | $21 \%$ | $9 \%$ |

Source: California Department of Education, English Learners by Grade and Language.
Smaller share of charters enrolls majority EL student body. The pattern for concentration of ELs in 2013 is similar to that of 2008 (Figure C-11, Figure 25). Most of

Riverside's charters (57\%) have a student body that is fewer than $10 \%$ ELs, which is a smaller share than in 2008 when $68 \%$ of charters enrolled less than $10 \%$ ELs. Similar to 2008, one-fourth of Riverside's TPSs enroll less than 10\% ELs. In 2013, $10 \%$ of TPSs were majority EL, compared to $12 \%$ in 2008. Only $4 \%$ of charters enroll a majority EL student body, and although a small share, this is an increase from 2008 when an even smaller share of charters (3\%) were majority EL.

Figure 25
Percent of Schools Enrolling ELs by Decile, Riverside, 2013


Source: California Department of Education, English Learners by Grade and Language.
ELs isolated with smaller share of ELs in charters. ELs are isolated by language in both charters and TPSs. Overall, both ELs and non-ELs are exposed to smaller shares of ELs in charters than in TPSs and this pattern has remained fairly stable over time (Figure 26). This pattern reveals that ELs are less isolated with other ELs in charters than in TPSs. While the overall share of ELs to which both ELs and non-ELS are exposed is smaller in charters, the disparity between ELs and non-ELs is larger in charters than in TPSs. In 2013, in charter schools, the typical EL had $24 \%$ EL schoolmates, which is three times as many as the typical non-EL who had 8\% EL classmates. The gap in TPSs is slightly smaller with the typical EL having 35\% EL peers versus the typical non-EL who had 17\% EL peers.

Figure 26
Exposure to ELs by Language, Riverside


Source: California Department of Education, English Learners by Grade and Language.

## ELs experience less intense double segregation by language and race in charters.

ELs in Riverside experience a double segregation by race and language but it is less extreme in charters than in TPSs (Figure 27). The typical EL in a charter school is exposed to larger shares of white students and smaller shares of Hispanic students than the typical EL in a TPS. For example, in 2013, the typical EL in a charter school had $20 \%$ white peers and $65 \%$ Hispanic peers while the typical EL in a TPS had $12 \%$ white peers and $76 \%$ Hispanic peers. As such, the double segregation by race and language is less intense for ELs in charter schools. Exposure to black and Asian students is similar for ELs in charters and TPSs. Most recently, in 2013, the typical EL had 2-3\% Asian peers and 7-8\% black peers in both charters and TPSs. The patterns of exposure to different racial groups for ELs in Riverside has remained stable over time.

Figure 27
EL Exposure to Racial Groups, Riverside


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

The typical non-EL is exposed to a larger share of white students and a smaller share of Hispanic students in charter schools than in TPSs (Figure 28). For example, in 2013, the typical non-EL in a charter school had $37 \%$ white schoolmates and $46 \%$ Hispanic schoolmates versus the typical non-EL in a TPS who had $23 \%$ white peers and $59 \%$ Hispanic peers.

Figure 28
Non-EL Exposure to Racial Groups, Riverside


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

In comparison to non-ELs, ELs are exposed to a disproportionately large share of Hispanic students and a disproportionately small share of white students in both charters and TPSs. Compared to non-ELs, the typical EL is also exposed to a smaller share of black and Asian students in both types of schools.

ELs experience triple segregation by language, race, and poverty. For both ELs and non-ELs, exposure to low-income students in charters and TPSs increased between 2008 and 2013 (Figure 29). Compared to non-ELs, ELs are exposed to a larger share of low-income students in both charters and TPSs. For example, in 2013, in charters, the typical EL had 66\% low-income peers and the typical non-EL had $48 \%$ low-income peers. The gap in exposure to low-income students between ELs and non-ELs was similar in charters and TPSs in 2013, but this has not been the case over time. In the past, the gap in exposure to low-income students between ELs and non-ELs was smaller in charters but it has expanded over time; in TPSs, the gap has remained stable over time. At each time point, ELs in TPSs have been exposed to larger shares of low-income students than ELs in charter schools. The difference was extremely large in the past. For example, in 2008, the typical EL charter school student had $23 \%$ low-income peers while the typical EL TPS student had 72\% low-income peers. However, this difference has decreased. In 2013, the typical EL charter school student had 66\% low-income peers and the typical EL TPS student had 78\% low-income peers.

Figure 29
Exposure to FRL by Language, Riverside


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Summary of Riverside segregation trends. The share of charter schools in Riverside has been increasing, yet the portion of students attending the metro's charters is smaller than the share of the state's students attending charters. In Riverside, charter schools enroll a disproportionately large share of white students and a disproportionately small share of Hispanic students. For both charters and TPSs, the share of intensely segregated minority schools has been increasing. TPSs have a larger share of intensely segregated minority schools but charters have a larger share of majority white schools. Students of all races are exposed to a larger share of white students in charter schools than in TPSs, likely related to the disproportionately large share of white students who attend charter schools. In charter schools, black students are exposed to the smallest share of white students, and in TPSs, Hispanic students are exposed to the smallest share of white students. Of all racial groups, Hispanic students are the most isolated with samerace peers in both charters and TPSs. Black and white students are more isolated with same-race peers in charters, while Hispanic and Asian students are less isolated with same-race peers in
charters. As a combined group, the typical Hispanic or black student is isolated with a smaller share of other Hispanic and black students in charters than in TPSs.

Riverside's charter schools enroll a disproportionately small share of low-income students in comparison to TPSs; however, this gap has been narrowing over time. Likely related to the disparity in enrollment of low-income students, charters have a smaller share of schools with high concentrations of poverty. In both charters and TPSs, low-income students are isolated with a larger share of other low-income students than are middle-class students. In addition, there is a double segregation of students by race and poverty with students of color being exposed to larger shares of low-income students than are white students. This disparity in exposure to lowincome students by race is less intense in charters, indicating that the double segregation of students by race and poverty is less extreme in charters than in TPSs.

With regard to language, charter schools enroll a disproportionately small share of ELs. In both charters and TPSs, ELs are isolated with other ELs, but the overall level of isolation is smaller in charters. The disparity between EL and non-EL exposure to ELs is larger in charters. ELs in Riverside experience a double segregation by language and race, which is less intense in charters than in TPSs. ELs also experience a third dimension of segregation, by poverty, which is also less intense for ELs in charters than in TPSs.

## Sacramento—Arden-Arcade—Roseville CBSA Charters Versus TPSs

Sacramento charter enrollment increasing, TPS enrollment decreasing. The number of TPS in Sacramento has remained relatively stable from 2002 when there were 543 TPSs to 2013 when there were 539 TPSs (Table 5). Overall, the number of charters has increased during this time period, from 21 charters in 2002 to 79 charters in 2013.

Table 5
Number of Schools and Students, Sacramento

| Charters |  |  |  |  |  |  | TPS |  |  | All Schools |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools | Enrollment | \% of Total <br> Enrollment | Schools | Enrollment | \% of Total <br> Enrollment | Enrollment |  |  |  |
| 2002 | 21 | 14633 | $4 \%$ | 543 | 331966 | $96 \%$ | 346599 |  |  |  |
| 2003 | 26 | 14589 | $4 \%$ | 542 | 333737 | $96 \%$ | 348326 |  |  |  |
| 2004 | 33 | 17035 | $5 \%$ | 560 | 335969 | $95 \%$ | 353004 |  |  |  |
| 2005 | 39 | 17800 | $5 \%$ | 568 | 337115 | $95 \%$ | 354915 |  |  |  |
| 2006 | 53 | 20903 | $6 \%$ | 584 | 333463 | $94 \%$ | 354366 |  |  |  |
| 2007 | 54 | 21372 | $6 \%$ | 568 | 318529 | $94 \%$ | 339901 |  |  |  |
| 2008 | 57 | 24266 | $7 \%$ | 572 | 332291 | $93 \%$ | 356557 |  |  |  |
| 2009 | 58 | 28399 | $8 \%$ | 561 | 327575 | $92 \%$ | 355974 |  |  |  |
| 2010 | 66 | 28609 | $8 \%$ | 551 | 327272 | $92 \%$ | 355881 |  |  |  |
| 2011 | 72 | 31622 | $9 \%$ | 546 | 323638 | $91 \%$ | 355260 |  |  |  |
| 2012 | 77 | 34851 | $10 \%$ | 549 | 322372 | $90 \%$ | 357223 |  |  |  |
| 2013 | 79 | 37543 | $10 \%$ | 539 | 321826 | $90 \%$ | 359369 |  |  |  |

Source: National Center for Education Statistics, Common Core of Data.
Similarly, the number of students enrolled in TPSs has been relatively stable over the time period while the enrollment in charter schools has increased. In 2002, 331,966 of Sacramento's students attended TPSs and in 2013, 321,826 students attended TPSs. The growth in the number of students enrolled in charters has been consistent, except for a slight decline in 2003. In 2002, 14,633 students attended charters and in 2013, that figure had grown to 37,543 , an increase of $157 \%$.

The portion of the metro's students attending charters has grown to $10 \%$ in 2013, a larger portion than in the state overall (8\%).

Charters enroll disproportionately large share of white students and small share of
Hispanic students. In Sacramento's charters and TPSs, unlike the state average and Riverside, white students comprise the largest segment of enrollment (Figure 30). Charters enroll a disproportionately large share of white and black students, but Hispanic and Asian students are underenrolled in charters, Asian students more so than Hispanics. Over time, the share of white students has decreased in both TPSs and charters while the share of Hispanic students has
increased in both types of schools. The share of black and Asian students has remained relatively stable.

Figure 30
Enrollment by Race, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
The share of white students has decreased in both charters and TPSs in Sacramento while the share of non-white students has increased in both types of schools (Figure C-12). At each time point, the share of white students was larger in charters and the share of non-white students was larger in TPSs. The share of white students in charters was larger than the share of nonwhite students in charters through 2012. However, as of 2013, white students accounted for $50 \%$ of charter enrollment and non-white students made up the other $50 \%$. On the other hand, the nonwhite share of enrollment in TPSs exceeded that of the white enrollment in 2006 and continued to do so into 2013. In 2013, non-white students accounted for $58 \%$ of TPS enrollment while white students comprised $42 \%$.

## Generally larger shares of charters are intensely segregated minority schools and

intensely segregated white schools. The share of intensely segregated schools consistently increased in TPSs from 2002 to 2013 while the share of intensely segregated charters was more variable within an overall upward trajectory (Figure 31). Since 2003, for every year except for

2009 and 2010, charters had a larger share of intensely segregated schools than did TPSs. In 2013, 18\% of charters and $14 \%$ of TPSs were intensely segregated. In 2003, there was a big jump in the share of charters that were intensely segregated.

Figure 31
Percent of 90-100\% Non-white Schools, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
In all years except 2006 and 2013, there was a very small share (less than $1 \%$ ) of hypersegregated schools for both charters and TPSs (Figure C-13). In 2006, there was a jump in the share of hypersegregated charters, from $0 \%$ in 2005 to $2 \%$; this $2 \%$ represents one school that was hypersegregated in 2006. In 2013, there was also one hypersegregated charter school. Between 2010 and 2013, a small share (around 1\%) of TPSs were hypersegregated; this percentage represents two TPSs that were hypersegregated.

Since 2004, a larger share of Sacramento's charters than TPSs have been intensely segregated white (90-100\%) (Figure 32). This type of school is declining in TPSs but vacillating in charters. In 2013, $8 \%$ of charters but only $1 \%$ of TPSs enrolled a student body that was $90-$ $100 \%$ white. This indicates that when white students attend charters, they often attend charters with high concentrations of other white students. These results suggest that it is possible that charters are being used for white flight to some extent. In the next section, analysis of

Sacramento's magnets compared to charters will reveal that while the use of charters for white flight might be occurring, it was likely occurring to a greater extent in the past. The combined results will show that as of 2013, magnets were also potentially being used for white flight, perhaps to an even greater extent than charters.

Figure 32
Percent of 90-100\% White Schools, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Exposure to white students similar in charters and TPSs. In Sacramento, exposure to white students is declining for students of all races (Hispanic, black, and Asian) (Figure 33). Exposure to white students is very similar in charters and TPSs for students of all races.

In 2013, the typical Hispanic student was exposed to the largest share of white students in both charters and TPSs. This pattern is unique; in both the state and Riverside, the typical Hispanic student was least exposed to white students. In 2013, the typical Hispanic charter school student was exposed to a larger share of white students (35\%) than the typical Hispanic TPS student, who has $32 \%$ white schoolmates.

Figure 33
Exposure to White Students by Race, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Of all three races (black, Hispanic, Asian), Sacramento's typical black student is least exposed to white students in both charters and TPSs. However, the typical black student is exposed to a similar share of white students in TPSs (25\%) and charters (22\%).

The typical Asian student is exposed to a larger share of white students in charters than TPSs, yet the gap in this disparity is small. In 2013, the typical Asian charter student attended a school with $35 \%$ white schoolmates and the typical Asian TPS student attended a school that was $30 \%$ white.

The disparity in exposure to the combined group of white and Asian students was larger in charters than in TPSs in 2013 (Figure C-14). Hispanic and black charter school students attended a charter with $40 \%$ white and Asian peers, while Asian and white charter school students attended a charter that was $70 \%$ white and Asian. A similar, although smaller, disparity exists in TPSs. In 2013, Hispanic and black TPS students attended a TPS that was $46 \%$ white and Asian, while white and Asian TPS students attended a TPS that was $63 \%$ white and Asian.

Non-white and non-Asian students isolated with slightly larger share of non-white and non-Asian students in charter schools; white students more isolated in charters. In
general, Hispanic isolation has been increasing over time (Figure 34). For the most part, the typical Hispanic TPS student has been isolated with a slightly larger share of same-race peers than the typical Hispanic charter school student. While same-race isolation is important, Hispanic isolation with other non-white and non-Asian students is also important and is analyzed below.

Figure 34
Isolation by Race, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Black isolation has decreased in TPSs and remained fairly stable in charters since 2004, with slight variation over time. The typical black charter student in Sacramento is isolated with about twice as large a share of black schoolmates as the typical black TPS student in the metro. In 2013, the typical black charter student had $34 \%$ black peers while the typical black TPS student had only $17 \%$ black schoolmates.

When considered together as a group of non-white and non-Asian students, the typical non-white/non-Asian student has been more isolated with other non-white and non-Asian schoolmates in charters than in TPSs at each time point except 2002. For example, in 2013, the typical non-white/non-Asian charter student attended a charter school that was $60 \%$ non-white
and non-Asian while the typical non-white/non-Asian TPS student attended a school that was $54 \%$ non-white and non-Asian.

Sacramento's typical white charter school student is isolated with more same-race peers than the metro's typical white student who attends a TPS. White isolation has been declining in both types of schools during this time period. In 2013, the typical white charter student attended a charter that was $66 \%$ white while the typical white TPS student attended a school that was $56 \%$ white.

Asian isolation in TPSs remained relatively stable from 2002 through 2013 but Asian isolation has been increasing in charters since 2009. Until very recently, in 2012 and 2013, the typical Asian TPS student was isolated with a larger share of same-race peers than the typical Asian charter school student. In 2013, the typical Asian charter school student attended a charter that was $25 \%$ Asian and the typical Asian TPS student attended a school that was $23 \%$ Asian.

## Similar shares of low-income students enrolled in charters and TPSs since 2007.

 Sacramento's TPSs have enrolled a larger share of low-income students than charter schools until 2007 when they both enrolled similar shares of low-income students (Figure C-15). Both charters and TPSs have enrolled similar shares of low-income students since that time except for 2010 when TPSs enrolled a larger share of low-income students than charters. In both types of schools, the share of low-income students has increased over time and in 2013, both types of schools enrolled $50 \%$ low-income students.Smaller share of charters has high concentrations of low-income students. In both charters and TPSs, the share of schools enrolling 50-100\% low-income students has been generally increasing (with some vacillation in charters) (Figure C-16). At most time points, a smaller share of charters than TPSs enrolled 50-100\% low-income students. In 2013, 56\% of

TPS but only $41 \%$ of charters had a student body that was over half low income. It is difficult to make a definitive claim about this trend since the trajectory from year to year has varied over the most recent years, but TPSs have had a larger share of 50-100\% low-income schools at most time points.

Similarly, TPSs have a generally larger share of 90-100\% low-income schools than do charters (Figure 35). In 2005 and 2007, the pattern was the opposite with a larger share of charters enrolling 90-100\% low-income students than TPSs. In 2013, 10\% of TPSs and only 8\% of charters enrolled such a highly concentrated low-income student body.

Figure 35
Percent of Schools that are 90-100\% FRL, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
At the most extreme, a larger share of TPSs than charters enroll 99-100\% low-income students (Figure C-17). This comparison is consistent for all years except 2005 when charters had a slightly larger share of 99-100\% low-income schools. Aside from 2012, the share of 99$100 \%$ low-income schools was small, hovering around $0-1 \%$ in both charters and TPSs. In 2013, no TPSs or charters had a student body that was 99-100\% low-income.

Low-income students isolated at similar levels in charters and TPSs. In both charters and TPSs, the typical low-income student attends a school with a larger share of low-income
students than does the typical middle-class student (Figure 36). For both low-income and middleclass students, exposure to low-income students in both charters and TPSs has been increasing. The share of low-income students to which other low-income students are exposed is slightly larger in charters than in TPSs, although this gap has narrowed to the point that it is almost nonexistent in 2013. The typical middle-class student is exposed to a slightly smaller share of lowincome students in charters than in TPSs, but again, this disparity is essentially non-existent by 2013. Together, these two trends show that in the past there was a greater disparity between lowincome and middle-class students in their exposure to low-income students in charters than in TPSs, but this is no longer the case.

Figure 36
Exposure to FRL by Poverty, Sacramento


Source: National Center for Education Statistics, Common Core of Data.

## Low-income students experience double segregation by race and poverty. Exposure

 to low-income students has increased over time for students of all races (Hispanic, black, white, and Asian) in Sacramento (Figure 37). Black and Hispanic students experience a double segregation by race and poverty in that they are exposed to larger shares of low-income students than white students; this double segregation exists in both charters and TPSs. For most years, students of all races have been exposed to larger shares of low-income students in TPSs than incharters. However, in 2013, black and white charter school students were exposed to a larger share of low-income students than their same-race peers in TPSs.

Figure 37
Exposure to FRL by Race, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Sacramento charters enroll disproportionately small share of ELs. From 2008 to 2013, Sacramento's TPS enrolled a slightly larger share of ELs than charter schools (Table 6). For example, in 2013, $16 \%$ of students in TPSs were ELs while a slightly smaller percentage, $14 \%$, of charter school students were ELs. The gap in EL enrollment between TPSs and charters is small; in fact, it is smaller in Sacramento than in Riverside, in LAUSD, or statewide. The changes in the portion of ELs enrolled in TPSs and charters follow a similar trajectory in both TPSs and charters from year to year. As such, the gap between the percentage of EL enrollment in TPSs and charters, while small, has remained fairly stable over time.

Table 6
EL Enrollment, Sacramento

|  | TPS | Charter |
| :---: | :---: | :---: |
| 2008 | $16 \%$ | $14 \%$ |
| 2009 | $16 \%$ | $14 \%$ |
| 2011 | $15 \%$ | $13 \%$ |
| 2012 | $15 \%$ | $13 \%$ |
| 2013 | $16 \%$ | $14 \%$ |

Source: California Department of Education, English Learners by Grade and Language.

Larger share of charters is majority EL; share of majority EL schools decreasing in both charters and TPSs. In 2008, most of Sacramento's charter schools (65\%) enrolled a very small (less than 10\%) share of ELs while fewer than half of the metro's TPSs (43\%) enrolled such a small share of ELs (Figure C-18). At the same time, a larger share of charters ( $9 \%$ ) were majority EL than TPSs (4\%), a situation that is unique to Sacramento. While the share of majority EL charters-those that have over 50\% EL enrollment-was relatively small at 9\%, it is still important to note, as this pattern does not appear in other places where TPSs tend to have higher concentrations of ELs than charters. In Sacramento in 2008, a little more than half of TPSs ( $54 \%$ ) had student bodies that were between 10 and $50 \%$ ELs, which is more than the onefourth ( $25 \%$ ) of charters that enrolled 10-50\% ELs.

In 2013, the pattern for Sacramento's ELs was similar. A little more than two-thirds of charters (67\%) enrolled very small shares (less than $10 \%$ ) of ELs while less than half ( $40 \%$ ) of TPSs had this small a share of ELs in their student body (Figure 38). Similar to 2008, over half of TPSs ( $51 \%$ ) had a student body that was $10-40 \%$ EL while about one-fourth ( $24 \%$ ) of charters enrolled $10-40 \%$ ELs. Compared to 2008, smaller shares of charters and TPSs enrolled student bodies that were majority EL, suggesting that ELs were perhaps better distributed among charter schools in 2013 than they were in 2008. While the gap is small, a slightly larger share of charters than TPSs are majority EL. In 2013, 4\% of charters and 3\% of TPSs enrolled a student body that was majority EL.

Figure 38
Percent of Schools Enrolling ELs by Decile, Sacramento, 2013


Source: California Department of Education, English Learners by Grade and Language.
EL isolation greater in charters. Sacramento's ELs are isolated by language in both charters and TPSs but more so in charters (Figure 39). Compared to non-ELs, ELs are exposed to a larger share of ELs in both types of schools. There is a substantially larger disparity in exposure to ELs between ELs and non-ELs in charters compared to TPSs. This gap has been shrinking slightly over time but still remains. In 2013, the typical EL charter student was exposed to 3.5 times as large a share of other ELs as the typical non-EL charter school student. The typical EL charter student had 36\% EL peers while the typical non-EL charter student had $10 \%$ EL peers. A similar pattern, although with a slightly smaller disparity, exists in TPSs where the typical EL had about two times as large a share of EL peers as the typical non-EL. In 2013, the typical EL TPS student had $28 \%$ EL peers versus the typical non-EL TPS student, who had $13 \%$ EL peers. The typical EL was exposed to more ELs in charters than TPSs. This pattern is unique to Sacramento. The typical non-EL was exposed to more ELs in TPSs than in charters.

Figure 39
Exposure to ELs by Language, Sacramento


Source: California Department of Education, English Learners by Grade and Language.
ELs do not experience a substantial double segregation by language and race. The typical EL is exposed to larger shares of white students and smaller shares of Hispanic, black, and Asian students in charters than in TPSs (Figure 40). In fact, in charters, of all racial groups, white students account for the largest segment to whom ELs are exposed; almost half of ELs’ peers are white in charter schools. This pattern is unique to Sacramento and could be related to the fact that white students comprise the largest segment of enrollment in Sacramento. However, in the state, Riverside, and LAUSD, Hispanics account for the largest racial group to which ELs are exposed. The difference in exposure to Hispanic students between ELs in charters and TPSs in Sacramento has grown larger over time, mostly due to the increasing exposure of EL TPS students to Hispanics. The difference in exposure of ELs to Asian and black students in Sacramento's charters compared to TPSs has shrunk over time.

Figure 40
EL Exposure to Racial Groups, Sacramento


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Similar to ELs, the largest racial group with whom non-ELs attend school is white students (Figure 41). Again, this pattern is unique to Sacramento. In other geographic areas, Hispanics are the largest group to whom non-ELs are exposed.

Figure 41
Non-EL Exposure to Racial Groups, Sacramento


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Compared to non-ELs, ELs are exposed to a smaller share of white students and a larger share of Asian and Hispanic students in both charters and TPSs. The typical EL is exposed to a
smaller share of black students in charters and a larger share of black students in TPSs than nonELs. In both charters and TPSs, the typical non-EL has a larger share of white peers ( $48 \%$ in charters and $44 \%$ in TPSs in 2013) than ELs ( $47 \%$ in charters and $26 \%$ in TPSs in 2013). The disparity between the typical EL and the typical non-EL in exposure to white students is greater in TPSs than in charters, which is also unique to Sacramento as the disparity is greater in charters elsewhere.

## ELs experience double segregation by language and poverty at similar levels in

 charters and TPSs. For both the typical EL and the typical non-EL, exposure to low-income students has been increasing in charters and TPSs (Figure 42). Compared to non-ELs, ELs are exposed to a larger share of low-income students in both charters and TPSs. For example, in charters in 2013, the typical EL had 73\% low-income schoolmates and the typical non-EL had $48 \%$ low-income peers. The gap in exposure between ELs and non-ELs to low-income students is similar in charters and TPSs and has narrowed slightly over time. As of 2012, ELs in charters became exposed to a larger share of low-income students than ELs in TPSs. In 2013, ELs in charters had 73\% low-income peers and ELs in TPSs had 69\% low-income peers.Figure 42
Exposure to FRL by Language, Sacramento


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Summary of Sacramento segregation trends in charters versus TPSs. Sacramento has experienced growth in the charter sector. In fact, a larger share of students attends charters in Sacramento than the state average. In Sacramento, white students account for the largest racial group in both charters and TPSs. Charters enroll a disproportionately large share of white and black students but a disproportionately small share of Hispanic and Asian students. Charters have a larger share of intensely segregated minority schools as well as predominantly white schools. Unlike the state and Riverside, black students in Sacramento are the least exposed to white students in both charters and TPSs while Hispanic students are exposed to the largest share of white students in both types of schools. The difference in exposure to white students between charters and TPSs is not substantial for any of the racial groups. In terms of isolation with samerace peers, black and white students are more isolated in charters. For Hispanic students, the level of isolation with same-race peers is similar in charters and TPSs. When considered together, the typical Hispanic or black student is isolated with a larger share of other Hispanic and black students in charters.

In terms of poverty, in the past, charter schools have enrolled a disproportionately small share of low-income students. However, that gap closed in 2007 and no longer exists. In 2013, both charters and TPSs enrolled $50 \%$ low-income students. In general, a smaller share of charters than TPSs enrolls a student body that has a high concentration of poverty. The typical lowincome student is isolated with other low-income students at similar levels in charters and TPSs. In both charters and TPSs, students of color experience a double segregation by race and poverty. Students of all races are generally exposed to a smaller share of low-income students in charters than in TPSs, which is likely related to the overall smaller share of low-income students who are enrolled in charters as compared to TPSs. However, this pattern changed for black and white students in 2013.

Charter schools enroll a disproportionately small share of ELs. Therefore, not surprisingly, most charter schools have a student body that is less than $10 \%$ El. However, it is perhaps more unexpected to find that a larger share of charter schools than TPSs enrolled a student body that was majority EL, although the percentage was quite small for both types of schools. The typical EL in Sacramento is isolated with other ELs in both charters and TPSs, and the isolation of ELs is more intense in charter schools. The disparity in exposure to ELs between the typical EL and the typical non-EL is also larger in charters.

ELs in Sacramento do not experience the same degree of double segregation by language and race as ELs do elsewhere. In Sacramento, white students account for the largest racial group to whom ELs are exposed in charters, which is likely related to the fact that white students are the largest segment of enrollment of all racial groups. The typical EL in a charter school is exposed to a larger share of white students than the typical EL in a TPS. However, compared to the typical non-EL, the typical EL is exposed to a disproportionately small share of white
students and a disproportionately large share of Hispanic and Asian students in both charter schools and TPSs, indicating that while the double segregation by language and race is not as extreme in Sacramento, it still exists. ELs also experience a third dimension of segregationpoverty. The typical EL is segregated with a larger share of low-income students in both charters and TPSs compared to the typical non-EL. As of 2012, ELs were segregated with a larger share of low-income students in charters than TPSs. Thus, ELs experience a triple segregation by language, race, and poverty.

## Sacramento Charters Versus Magnets

Growth in the charter sector exceeded growth in the magnet sector. The number of both charter and magnet schools increased in Sacramento between 2002 and 2013 (Table 7). However, the number of charter schools grew at a much faster rate, from 21 charters in 2002 to 79 charters in 2013. The number of magnets only increased from 17 to 23 . The number of students enrolled in charters increased $157 \%$ from 14,633 charter students in 2002 to 37,543 charter students in 2013. In magnets, the number of students remained stable at 17,022 in 2002 and 17,088 in 2013. More than twice as many students attend charters in Sacramento compared to magnets.

Table 7
Number of Schools and Students, Charters and Magnets, Sacramento

|  | Charters |  | Magnets |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Schools | Enrollment | Schools | Enrollment |
| 2002 | 21 | 14633 | 17 | 17022 |
| 2013 | 79 | 37543 | 23 | 17088 |

Source: National Center for Education Statistics, Common Core of Data.
Sacramento charters and magnets enroll disproportionately large share of white students and small share of Hispanic students; disparity is less extreme in charters. In both 2002 and 2013, charter schools enrolled a disproportionately large share of white students and a
disproportionately small share of Hispanic students, in comparison to TPSs (Figure 43).
Compared to magnets, in 2002, charters also enrolled a smaller share of Hispanic students and a larger share of white students.

Figure 43
Enrollment by Race, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
In 2002, magnet school enrollment was fairly evenly split among Hispanic (24\%), black (19\%), white (30\%), and Asian (25\%) students. However, between 2002 and 2013, the racial enrollment of magnet schools changed substantially such that magnet schools are now the most dissimilar from TPSs. In 2013, magnets were majority white (53\%) and enrolled a disproportionately small share of black (5\%) and Hispanic (19\%) students but a disproportionately large share of Asian students (16\%) compared to TPSs and to charter schools. White students comprised the largest share of enrollment in both charters and magnets in 2013, as was also the case in TPSs in Sacramento. While the white share of enrollment decreased in charters, it has increased in magnets.

In fact, the share of white versus non-white students has followed opposite trajectories in magnets compared to charters, with white enrollment decreasing in charters but increasing in magnets while the non-white share of enrollment increased in charters but decreased in magnets.

In 2013, charters were essentially $50 \%$ white and $50 \%$ non-white. Magnets were $53 \%$ white and $47 \%$ non-white (Figure C-19). In 2013, magnets enrolled a larger share of white students and Asian students than charters.

Similarly, when considered together as a group, the share of white and Asian students compared to the share of non-white and non-Asian students has followed an opposite trajectory in each type of school (Figure 44). The share of white and Asian students increased in magnets but decreased in charters. The share of non-white and non-Asian students increased in charters but decreased in magnets.

Figure 44
Percent White and Asian vs. Non-white and Non-Asian Enrollment, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Charters had larger share of intensely segregated white and intensely segregated minority schools in 2013; substantial increase in share of intensely segregated minority charter schools and substantial decrease in share of intensely segregated minority magnet schools. In the past, a larger share of magnets was intensely segregated minority schools ( $24 \%$ in 2002) and a larger share of charters was intensely segregated white schools (5\%) (Figure C-20, Table 8). However, this pattern has changed considerably, likely related to the substantial
increase in the white share of enrollment in magnet schools. In 2013, a larger share of charters (18\%) was intensely segregated minority schools while the share of such magnet schools had declined to only $4 \%$. In 2013, a larger share of charters ( $8 \%$ ) continued to be intensely segregated white schools (Figure 45, Table 8).

Figure 45
Percent of Non-white Schools, Charters and Magnets, Sacramento, 2013


Source: National Center for Education Statistics, Common Core of Data.
Perhaps surprisingly, although magnet schools enroll the most disproportionately high white share of enrollment, there were no intensely segregated white magnet schools in 2013 (Table 8). In fact, by decile, the largest share of magnet schools, almost one-third of magnets (30\%) enroll 50-60\% white students (Figure 45). Nearly 70\% of magnet schools enroll between $30 \%$ and $60 \%$ non-white students, indicating that while magnets overenroll white students, the white students seem to be spread somewhat evenly among magnet schools such that magnets do not tend to have schools with either high concentrations of white students or high concentrations of minority students.

Table 8
Percent of Intensely Segregated Minority and Intensely Segregated White Charters and Magnets, Sacramento

|  | Intensely Segregated <br> Minority | Intensely Segregated <br> White |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Charters | Magnets | Charters | Magnets |
| 2002 | $0 \%$ | $24 \%$ | $5 \%$ | $0 \%$ |
| 2013 | $18 \%$ | $4 \%$ | $8 \%$ | $0 \%$ |

Source: National Center for Education Statistics, Common Core of Data.
Less exposure to white students in charters. For each racial group, exposure to white students has decreased in charter schools and increased in magnet schools (Figure 46). All racial groups are exposed to a smaller share of white students in charter schools than in magnet schools. These trends are likely related to the substantial increase in the white share of magnet school enrollment. The typical student of each racial group was exposed to a similar share of white students in magnets schools in $2013(41 \%-48 \%)$. In charter schools, the typical Hispanic student and the typical Asian student were exposed to approximately $35 \%$ white peers while the typical black student is least exposed to white students, with around $22 \%$ white peers.

Figure 46
Exposure to White Students, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Students of all races more isolated in charters than magnets. The typical Hispanic student has become increasingly isolated in both magnets and charters (Figure 47). The typical
black student has become increasingly isolated with same-race peers in charters and less isolated with other black students in magnets. When considered together, non-white and non-Asian students have become increasingly isolated with other non-white and non-Asian students in charters but less isolated in magnets. White isolation has decreased in charters and increased in magnets, and Asian isolation follows the opposite trajectory with isolation increasing in charters but decreasing in magnets. For each racial group and the combined group of non-white and nonAsian students, the level of isolation is greater in charters.

Figure 47
Isolation by Race, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.

## Sacramento's charters enroll disproportionately large share of low-income students.

Since 2002, the share of low-income students has increased in charters but decreased in magnets
(Table C-1). As of 2013, the share of low-income students attending charters was 50\% (a substantial increase from $12 \%$ in 2002), which was the same as the share of low-income students in the metro's TPSs. However, the share of low-income students attending magnets has decreased from $46 \%$ in 2002 to $32 \%$ in 2013.

## Larger share of charters was majority low-income and intensely segregated low-

income in 2013. Given the disparate levels of low-income enrollment, it is perhaps not
surprising that a larger share of charters than magnets were majority low-income and intensely segregated low-income schools in 2013 (Table 9). In fact, in 2013, no magnet schools were intensely segregated by poverty. From 2002 to 2013, the shares of majority low-income and intensely segregated low-income schools increased among charters and decreased among magnets.

Table 9
Percent of Majority Low-Income and Intensely Segregated Low-Income Charters and Magnets, Sacramento

Percent of Majority Percent of Intensely Segregated
Low-Income Schools Low-Income Schools

|  | Charters | Magnets | Charters | Magnets |
| :---: | :---: | :---: | :---: | :---: |
| 2002 | $5 \%$ | $41 \%$ | $0 \%$ | $12 \%$ |
| 2013 | $41 \%$ | $26 \%$ | $8 \%$ | $0 \%$ |

Source: National Center for Education Statistics, Common Core of Data.
Larger gap in exposure to low-income students by poverty in charters. In both charters and magnets, compared to their middle-class peers, low-income students attend schools with larger shares of other low-income students (Figure 48). In 2013, the gap in exposure to lowincome students between low-income and middle-class students was larger in charters than in magnets. Moreover, both the typical low-income student and the typical middle-class student are exposed to a larger share of low-income schoolmates in charters than in magnets. From 2002 to 2013, both the typical low-income and the typical middle-class student have become exposed to a smaller share of low-income peers in magnet schools and a larger share of low-income peers in charter schools.

Figure 48
Exposure to Low-Income Students by Poverty, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Double segregation by race and poverty intensifying in both charters and magnets.
In both charters and magnets, black and Hispanic students are exposed to larger shares of lowincome students than their white and Asian peers, revealing a double segregation of students by race and poverty (Figure 49). These disparities have grown larger over time in both types of schools.

Figure 49
Exposure to Low-Income Students by Race, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.

Charters and magnets enroll disproportionately small share of ELs. Both charters and magnets enroll a disproportionately small share of ELs compared to TPSs, but the underenrollment is more extreme in magnets, which enrolled $10 \%$ ELs, compared to charters, which enrolled 14\% ELs in 2013.

Charters have larger, albeit small, share of majority EL schools. In 2013, the majority of charters (67\%) and magnets (61\%) enrolled 0-10\% ELs (Figure C-21). While there are no majority EL magnet schools, $4 \%$ of charters enroll majority EL student bodies.

EL isolation greater in charters. In both charters and magnets, compared to the typical non-EL, the typical EL attends a school with a larger share of other EL peers (Table 10). The disparity in exposure to ELs between the typical EL and the typical non-EL is larger in charters than magnets.

Table 10
Exposure to ELs by Language, Charters and Magnets, 2013, Sacramento

|  | Charters | Magnets |
| :--- | :---: | :---: |
| ELxEL | .36 | .22 |
| Non-ELxEL | .10 | .09 |

Source: California Department of Education, English Learners by Grade and Language.
Smaller disparity in exposure to racial groups by language in charters. In both charters and magnets, the typical EL is exposed to a smaller share of white students and a larger share of Hispanic students, revealing a double segregation by language and race (Table 11). The disparities between the typical EL and the typical non-EL in exposure to students of other races is smaller in charters than magnets, indicating that the double segregation by race and language is less intense in charters. The typical EL has a larger share of white peers but a smaller share of Asian peers in charters than in magnets. Compared to the typical non-EL in magnets, the typical non-EL charter student has a smaller share of both white and Asian peers and a larger share of Hispanic and black peers.

Table 11
Exposure to Racial Groups by Language, Charters and Magnets, 2013, Sacramento

| Charters |  |  |  |  | Magnets |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | x Hisp | x Black | x White | x Asian | x Hisp | x Black | x White | x Asian |
| EL | .29 | .10 | .47 | .09 | .31 | .08 | .38 | .18 |
| Non-EL | .23 | .12 | .48 | .08 | .18 | .05 | .55 | .16 |

Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

ELs experience segregation by poverty in charters and magnets. The typical EL is exposed to a larger share of low-income students in both charters and magnets, indicating a third dimension of segregation: poverty (Table 12). Both the typical EL and the typical non-EL are exposed to larger shares of low-income students in charters than in magnets. While the overall levels of exposure to low-income students are lower in magnets, the disparity in exposure to lowincome students between the typical EL and the typical non-EL is similar in charters and magnets.

Table 12
Exposure to Low-Income Students by Language, Charters and Magnets, 2013, Sacramento

|  | Charters | Magnets |
| :--- | :---: | :---: |
| ELxFRL | .73 | .52 |
| Non-ELxFRL | .48 | .29 |

Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Summary of Sacramento segregation trends in charters versus magnets. While the number of both charter and magnet schools is increasing, the growth in the charter sector has far exceeded that of magnet schools. The number of students enrolled in charters has increased substantially while the number of magnet school students has remained stable. More than twice as many students attended charters as magnets in 2013.

Both charters and magnets enroll a disproportionately large share of white students and a disproportionately small share of Hispanic students, but the extent of this disparity is smaller in charters than magnets. There has been a substantial increase in the share of intensely segregated
minority charter schools, but the opposite has occurred for magnets. In 2013, larger shares of charters than magnets were both intensely segregated minority schools and intensely segregated white schools. Students of all racial groups are exposed to a smaller share of white students in charters and are more isolated with same-race peers in charters.

As charter schools have made progress in narrowing the gap in enrollment of low-income students compared to TPSs, Sacramento's magnets have done the opposite. The share of lowincome students enrolled in magnets decreased over time such that in 2013, magnets enrolled a disproportionately small share of low-income students. Likely related to their larger share of low-income students compared to magnet schools, charters have a larger share of majority lowincome and intensely segregated low-income schools. The gap in exposure to low-income students between the typical low-income student and the typical middle-class student is larger in charters than magnets. In both charters and magnets, students experience a double segregation by race and poverty.

Both charters and magnets enroll a disproportionately small share of ELs, but the underenrollment is less extreme in charters. Although it is a small share of schools, charters do have a larger share of majority EL schools than do magnets. ELs are also more isolated with other ELs in charters than in magnets. The double segregation by race and language is less intense in charters than in magnets. ELs experience a triple segregation by language, race, and poverty in both types of schools.

## Los Angeles Unified School District (LAUSD) Charters Versus TPSs

LAUSD charter enrollment increasing; TPS enrollment recently decreasing. The number of charter schools in LAUSD has been increasing during the last 16 years while the
number of TPSs in LAUSD increased from 1999 to 2012 (with a slight decline in 2007) but then decreased in 2013 (Table 13). In 2013, there were 735 TPSs and 254 charter schools in LAUSD.

Table 13
Number of Schools and Students, LAUSD

| Charters |  |  |  |  |  | TPS |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Schools | Enrollment | \% of Total <br> Enrollment | Schools | Enrollment | \% of Total <br> Enrollment | Enrollment |
| 1998 | 15 | 11131 | $1.6 \%$ | 635 | 684754 | $98.4 \%$ | 695885 |
| 1999 | 33 | 25641 | $3.6 \%$ | 622 | 684366 | $96.4 \%$ | 710007 |
| 2000 | 36 | 26338 | $3.7 \%$ | 623 | 695008 | $96.3 \%$ | 721346 |
| 2001 | 40 | 29261 | $4.0 \%$ | 623 | 705797 | $96.0 \%$ | 735058 |
| 2002 | 49 | 30969 | $4.1 \%$ | 628 | 715883 | $95.9 \%$ | 746852 |
| 2003 | 49 | 25258 | $3.4 \%$ | 644 | 721751 | $96.6 \%$ | 747009 |
| 2004 | 68 | 30205 | $4.1 \%$ | 653 | 711162 | $95.9 \%$ | 741367 |
| 2005 | 84 | 35010 | $4.8 \%$ | 684 | 692309 | $95.2 \%$ | 727319 |
| 2006 | 128 | 40822 | $5.8 \%$ | 701 | 662900 | $94.2 \%$ | 703722 |
| 2007 | 131 | 46797 | $6.8 \%$ | 700 | 638452 | $93.2 \%$ | 685249 |
| 2008 | 156 | 57904 | $8.5 \%$ | 711 | 626239 | $91.5 \%$ | 684143 |
| 2009 | 169 | 65589 | $9.8 \%$ | 711 | 601726 | $90.2 \%$ | 667315 |
| 2010 | 192 | 77758 | $11.7 \%$ | 731 | 589332 | $88.3 \%$ | 667090 |
| 2011 | 208 | 95038 | $14.4 \%$ | 742 | 564094 | $85.6 \%$ | 659132 |
| 2012 | 254 | 118599 | $18.2 \%$ | 749 | 534738 | $81.8 \%$ | 653337 |
| 2013 | 254 | 136831 | $21.0 \%$ | 735 | 513789 | $79.0 \%$ | 650620 |

Source: National Center for Education Statistics, Common Core of Data.
Overall, from 1998 to 2013, the total number of students in LAUSD decreased by 7\% from 695,885 students in 1998 to 650,620 students in 2013. The number of students enrolled in LAUSD's TPSs generally increased from 1998 to 2003 but has been declining since 2003. On the other hand, the number of students attending LAUSD's charter schools increased every year except 2003. Between 1998 and 2013, the number of students attending charters increased by $1129 \%$ from 11,131 students to 136,831 students. Conversely, the number of students attending TPSs decreased by $25 \%$ from 684,754 in 1998 to 513,789 in 2013.

Throughout the past 16 years, charter schools have been capturing an increasingly large share of LAUSD's student enrollment. In 1998, only $2 \%$ of LAUSD's students attended charters,
but in 2013, $21 \%$ of the district's students were enrolled in charter schools, which means that one in five of LAUSD's students attended charter schools in 2013, a share of charter enrollment that is much higher than the state average.

## LAUSD charters enroll disproportionately small share of Hispanics and large share

 of whites. In both TPSs and charters, Hispanic students comprise the largest share of enrollment and their portion of enrollment has been increasing in both types of schools (Figure 50). In the earlier years, Hispanic students were more underrepresented in charters than they are in the latter years; however, Hispanic students continue to account for a disproportionately small share of the charter enrollment (59\%) compared to their portion of enrollment in TPSs (78\%). White students, and black students to a much lesser extent, account for a disproportionately large share of the charter enrollment in LAUSD. In 2013, charters were $21 \%$ white and $10 \%$ black while TPSs were $6 \%$ white and $9 \%$ black. In 2013, white students accounted for the second largest share of enrollment in charters ( $21 \%$ ) while black students comprised the second largest share of enrollment in TPSs (9\%). Asian students' enrollment was relatively similar in both charters and TPS, particularly in recent years. In 2013, Asian students accounted for $6 \%$ of TPS enrollment and $7 \%$ of charter enrollment.Figure 50
Enrollment by Race, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
The non-white enrollment is larger in TPSs than in charters, and this has been the case during the entire 16-year time period (Figure C-22). Conversely, the white enrollment is larger in charters, and again, this has been true during the entire time period of study. The difference between white enrollment in charters and TPSs, and similarly the difference between non-white enrollment in charters and TPSs, appeared to be shrinking from 2003 to 2010, suggesting that the enrollment of white and non-white students was becoming more similar in charters and TPSs; however, between 2010 and 2013, the gap expanded again. In 2013, LAUSD's TPSs were $94 \%$ non-white while the district's charters were $79 \%$ non-white; TPSs were only $6 \%$ white while charters enrolled $21 \%$ white students.

## Smaller share of charters comprised of intensely segregated minority schools since

 2011; larger share of charters comprised of hypersegregated minority schools. The share of intensely segregated minority schools increased in both charters and TPSs through 2009 (Figure 51). Since 2009, the share of intensely segregated minority schools decreased in the charter sector but increased among LAUSD's TPSs. In both the charter and TPS sectors, there is a high share of intensely segregated schools, but from 2011 to 2013, a smaller share of charters thanTPSs was comprised of intensely segregated minority schools. In 2013, 67\% of charters and $83 \%$ of TPSs were intensely segregated minority schools.

Figure 51
Percent of 90-100\% Non-white Schools, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
However, the trend differs at the most extreme level of segregation-hypersegregation, which is indicated by an enrollment that is $99-100 \%$ non-white. A larger share of LAUSD's charters than TPSs are hypersegregated (Figure 52). In 2013, more than half of all charters (52\%) and slightly less than half of TPSs (44\%) were hypersegregated minority schools. The share of hypersegregated minority schools was increasing in charters through 2009 and has since been declining; a similar shift occurred a few years later, in 2012, in TPSs.

Figure 52
Percent of 99-100\% Non-white Schools, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
In all years since 1999, the majority of charters and TPSs in LAUSD have been intensely segregated minority schools, enrolling 90-100\% non-white students (Figure 51). In the earlier years, including 1998 and 1999, there were more substantial shares of majority white (10-20\% non-white, $20-30 \%$ non-white, and $30-40 \%$ non-white) charter schools, but the share of majority white schools has declined over time. In 1998, $40 \%$ of charters were majority white, and in 1999, $18 \%$ of charters were majority white (Figure C-23, Figure C-24). However, by 2013, only 8\% of charters were majority white (Figure C-25). Also, in the earlier years, small shares of TPSs and charters were $50-90 \%$ non-white, but again, that has changed over time such that by 2013 , the vast majority of both charters and TPSs were intensely segregated minority schools that enroll 90-100\% non-white students.

None of the charters or TPSs in LAUSD were intensely segregated white schools, enrolling 90-100\% white students, until 2010. One school, Ararat Charter, opened in 2010 in Van Nuys, enrolling 90-100\% white students and accounting for less than $1 \%$ of charter schools in LAUSD. While surprising given the small share of white students in the district, this one school is not particularly concerning because it affects such a small portion of the district's
students. However, if this type of white segregation becomes more common in charter schools, attention should be paid to this issue. From 2010 to 2013, none of the district's TPS were intensely segregated white schools.

Greater exposure to white students in charters. Hispanic, black, and Asian students are exposed to a larger share of white students in charters than in TPSs, likely related to the disproportionately large share of white enrollment in charters (Figure 53). Among the various races, the typical Hispanic student is exposed to the smallest share of white students in both charters and TPSs. In 2013, the typical Hispanic charter student had $10 \%$ white schoolmates while the typical Hispanic TPS student had $4 \%$ white peers. Exposure to white students for the typical Hispanic student has been increasing in charters since 2010 but decreasing in TPSs for each year of the 16-year time period.

Figure 53
Exposure to White Students by Race, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
The typical black student is exposed to a larger share of white students in charters (15\%
in 2013) than in TPSs ( $6 \%$ in 2013). In general, the typical black student's exposure to white students has been decreasing in TPSs and has varied in charters with an increase in exposure to white students in charters since 2009.

The typical Asian student is exposed to a larger share of white peers in charter schools than in TPSs. In 2013, the typical Asian charter school student attended a school with $37 \%$ white peers while the typical Asian TPS student attended a school that was $13 \%$ white. Among the various races, the typical Asian student is exposed to the largest share of white students in both charters and TPSs. Overall, exposure to white students for the typical Asian student has been declining in both charters and TPSs.

With regard to exposure to the combined group of white and Asian students, in 2013, students of all racial groups were exposed to higher levels of white and Asian students in charters than TPSs (Figure C-26). However, there is also a larger gap in exposure to white and Asian students in charters than in TPSs. In 2013, the typical Hispanic or black charter school student had $15 \%$ white and Asian peers while the typical white or Asian charter school student had $61 \%$ white and Asian peers. Similarly, although at lower levels and with a smaller gap in percentage points, the typical Hispanic or black TPS student had $9 \%$ white and Asian schoolmates while the typical white or Asian TPS student had $36 \%$ white and Asian schoolmates.

White and black students more isolated in charters; Hispanic students less isolated
in charters. The typical Hispanic student has become increasingly isolated with same-race peers in both charters and TPSs during the last 16 years (Figure 54). The typical Hispanic LAUSD student is less isolated in charters than in TPSs. In 2013, the typical Hispanic TPS student attended a school with $84 \%$ Hispanics while the typical Hispanic charter school student attended a school that was 77\% Hispanic. Among Hispanic, black, and Asian students, the typical Hispanic student is most isolated with same-race peers.

Figure 54

Source: National Center for Education Statistics, Common Core of Data.
The typical black student is more isolated with same-race peers in charters than in TPSs. Isolation of black students in LAUSD's charters has been declining. In the district's TPSs, black isolation has been more variable, with an increase from 2003 to 2007 followed by a decrease from 2007 to 2013.

When considered as a group of non-white and non-Asian students, the typical non-white/non-Asian LAUSD student is extremely isolated with other non-white and non-Asian peers in both charters and TPSs. This form of isolation has generally increased over time. In 2013, the typical non-white/non-Asian student in a charter school had $85 \%$ non-white and nonAsian peers; in a TPS, the typical non-white/non-Asian student had $91 \%$ non-white and nonAsian schoolmates.

The typical white student in LAUSD is more isolated with same-race peers in charter schools than in TPSs and this has been the case since 1998. In 2013, the typical white charter school student attended a school with $50 \%$ white schoolmates while the typical white TPS
student attended a school that was $28 \%$ white. In both charters and TPSs, white isolation has generally been declining.

Patterns of isolation for Asian students have varied during the 16-year time period. In charters, the typical Asian student has become increasingly isolated with same-race peers, and this has also been true in TPSs since 2009. Between 2008 and 2013, the typical Asian student in a TPS was more isolated with same-race peers than the typical Asian student in a charter school. In LAUSD in 2013, the typical Asian charter school student had $17 \%$ Asian peers while the typical Asian TPS student had 20\% Asian schoolmates.

## LAUSD's charters enroll a disproportionately small share of low-income students.

 At each time point except 2010 and 2012, LAUSD's TPSs have enrolled a larger share of lowincome students than have the district's charters (Figure 55). In 2013, 79\% of students who attended TPSs were low income while only $62 \%$ of charter school students were low income.Figure 55
FRL Enrollment, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
Charters have larger share of intensely segregated low-income schools since 2005. In general, a larger share of TPSs than charter schools has enrolled 50-100\% low-income students; the trend is opposite in 2007 and 2010 (Figure C-27). In 2013, 95\% of TPSs and 70\% of charter
schools were $50-100 \%$ low income. While the share of both types of schools enrolling a majority low-income student body appears to be extremely high, a school that enrolls over $50 \%$ lowincome students in LAUSD is not particularly shocking because more than half of the student enrollment in the district is low income.

Schools that enroll a much higher concentration of low-income students, 90-100\%, are cause for concern because these schools represent high concentrations of poverty that are not reflective of the larger district level of poverty. The share of schools with high concentrations of poverty ( $90-100 \%$ low income) has generally been increasing in the charter sector and, although quite variable, has been decreasing in LAUSD's TPSs (Figure 56). From 1998 to 2005, a larger share of TPSs than charters were $90-100 \%$ low income but since 2005, a larger share of charters than TPSs has been low income. In 2013, 36\% of charters and $21 \%$ of TPSs enrolled a student body that was $90-100 \%$ low income. This is particularly noteworthy because charters enroll a disproportionately small share of low-income students in comparison to TPSs.

Figure 56
Percent of Schools that are 90-100\% FRL, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
Gaps in exposure to low-income students by poverty and by race larger in charter schools. Compared to middle-class students, low-income students in LAUSD are isolated with a
disproportionately large share of other low-income peers in both charters and TPSs (Figure 57). From 2006 to 2012, the typical low-income charter school student was isolated with a larger share of other low-income students than the typical low-income TPS student. In 2013, the trend reversed and the typical low-income charter school student attended a school with $77 \%$ lowincome peers and the typical low-income TPS student attended a school with $82 \%$ low-income schoolmates. At most time points except 2013, the gap in exposure to low-income students between low-income and middle-class students was larger in charter schools than in TPSs.

Figure 57
Exposure to FRL by Poverty, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
The typical white and Asian students are exposed to a substantially smaller share of lowincome students than the typical Hispanic and black students, especially in LAUSD's charter schools (Figure 58). In both charters and TPSs, the typical white student is least exposed to lowincome students and the typical Hispanic student is exposed to the largest share of low-income students. However, the disparity in exposure to low-income students by race (the typical black or Hispanic student vs. the typical white or Asian student) is larger in charter schools than in TPSs. The typical white charter school student is exposed to the smallest share of low-income students
( $32 \%$ in 2013) while the typical Hispanic TPS student is exposed to the largest share of lowincome students ( $82 \%$ in 2013).

Figure 58
Exposure to FRL by Race, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
LAUSD charters enroll disproportionately small share of ELs. At each time point between 2007 and 2013, charters have enrolled a disproportionately small share of ELs (Figure 59). For example, in 2013, $30 \%$ of students in LAUSD's TPSs were ELs while only $18 \%$ of charter school students were ELs. Both TPSs and charters have been following a similar trajectory in terms of the share of EL enrollment, with the percentage of ELs in both TPSs and charters generally declining over this time period. However, there was a slight uptick in the share of EL enrollment for both TPSs and charters in 2013. The disparity in the share of EL enrollment between TPSs and charters has grown slightly larger over time.

Figure 59
EL Enrollment, LAUSD


Source: California Department of Education, English Learners by Grade and Language.

## Smaller share of charters is majority EL; share of majority EL schools decreasing

in both charters and TPSs. In 2007 in LAUSD, a larger share of charters (29\%) than TPSs (10\%) had a student body that was less than $10 \%$ ELs (Figure 60). On the other end of the continuum, a smaller share of charters ( $21 \%$ ) than TPSs (34\%) had student bodies that were majority EL (more than $50 \% \mathrm{EL}$ ). Upon more detailed analysis of majority EL schools, approximately the same portion (5-6\%) of charters and TPSs enrolled student bodies that were $70-90 \%$ EL. In comparison to the state, Riverside, and Sacramento, both charters and TPSs in LAUSD are distributed more evenly by decile in terms of the percentage of ELs enrolled, which means that there is greater variation among the percentage of EL enrollment in LAUSD charters and TPSs.

Figure 60
Percent of Schools Enrolling ELs by Decile, LAUSD, 2007


Source: California Department of Education, English Learners by Grade and Language.
Between 2008 and 2013, the share of both charters and TPSs that was majority EL (enrolled over 50\% ELs) decreased (Figure 61). A smaller portion of TPSs enrolled majority ELs in $2013(21 \%)$ than in $2008(34 \%)$. A similar decrease occurred in charter schools where the share of charters enrolling majority ELs declined from $21 \%$ of charters in 2008 to $11 \%$ of charters in 2013. With decreases occurring in both sectors, the share of majority EL TPSs remains larger than the share of majority EL charters.

In 2013, more than half of charters (56\%) enrolled 0-20\% ELs, which is a substantial change from 2007 when $40 \%$ of charters enrolled 0-20\% ELs. This decline is likely related, in part, to the decreasing enrollment share of ELs, particularly in charters. More than half (53\%) of TPSs enrolled 20-50\% ELs in 2013 compared to about one-third (32\%) of charters that enrolled $20-50 \%$ ELs. On the other end of the continuum, a larger share of TPSs ( $21 \%$ ) than charters (11\%) enrolled a majority EL student body in 2013.

Figure 61
Percent of Schools Enrolling ELs by Decile, LAUSD, 2013


Source: California Department of Education, English Learners by Grade and Language.

## EL isolation less in charters; disparity between EL and non-EL exposure to ELs

greater in charters. In both charters and TPSs, compared to non-ELs, ELs are more isolated with larger shares of other ELs (Figure 62). Both ELs and non-ELs are exposed to smaller shares of ELs in charters than in TPSs. ELs are less isolated in charters, but the difference in exposure between ELs and non-ELs is greater in charters than in TPSs. In 2013, the typical EL in a charter had more than twice as large a share of EL schoolmates (34\%) as the typical non-EL in a charter (15\%). In TPSs, the typical EL had a larger share of EL peers (41\%) than the typical non-EL ( $25 \%$ ) but the gap between the two was not as large as it was in charters.

Figure 62
Exposure to ELs by Language, LAUSD


Source: California Department of Education, English Learners by Grade and Language.
ELs experience double segregation by language and race. The typical EL is exposed to relatively similar proportions of students of each racial group in both charters and TPSs (Figure 63). In 2013, the typical EL in a charter school was exposed to a smaller share of Hispanic students (77\%) and a larger share of white students (9\%) than the typical EL in a TPS who was exposed to $85 \%$ Hispanic students and $3 \%$ white students. EL exposure to black and Asian students was similar in both charters and TPSs at about $7 \%$ for black peers and $4 \%$ for Asian peers. Trends in exposure to different racial groups for ELs have remained stable over time with two small changes. First, there has been a slight decline in EL exposure to Hispanic students in charters and an increase in EL exposure to Hispanic students in TPSs. Second, there has been a slight increase in EL exposure to white students in charters but a slight decrease in EL exposure to white students in TPSs.

Figure 63
EL Exposure to Racial Groups, LAUSD


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

The typical non-EL student is exposed to a smaller share of Hispanic students and a larger share of white, black, and Asian students in charter schools compared to TPSs (Figure 64).

Figure 64
Non-EL Exposure to Racial Groups, LAUSD


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Compared to non-ELs, ELs are exposed to a smaller share of white, black, and Asian students but a larger share of Hispanic students in both types of schools. The disparity in exposure to white students for ELs versus non-ELs is larger in charters than in TPSs. Most
recently, in 2013, in charters, the typical EL had 9\% white peers and the typical non-EL had 23\% white peers. ELs have larger shares of Hispanic schoolmates than do non-ELS, both in charters ( $77 \%$ vs. $55 \%$ in 2013 ) and in TPSs ( $85 \%$ vs. $75 \%$ in 2013).

## Larger disparity between typical EL and non-EL exposure to low-income students

in charters. In both charters and TPSs, exposure to low-income students increased for both ELs and non-ELs until 2009, then decreased in 2012 (Figure 65). In 2013, exposure to low-income students increased in TPSs but decreased in charter schools for both ELs and non-ELs. Compared to the typical non-EL, the typical EL is exposed to a larger share of low-income students in both charters and TPSs. For example, in 2013, in charters, the typical EL had 76\% low-income peers and the typical non-EL had $59 \%$ low-income peers. The disparity in exposure to low-income students between ELs and non-ELs is larger in charter schools than TPSs and this pattern has been in existence since 2007. From 2007 to 2012, ELs in charter schools were exposed to larger shares of low-income students than ELs in TPSs; however, this trend changed in 2013. In 2013, ELs in TPSs had 83\% low-income peers and ELs in charter schools had 76\% low-income peers.

Figure 65
Exposure to FRL by Language, LAUSD


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Summary of LAUSD segregation trends in charters versus TPSs. LAUSD's overall enrollment has been shrinking; however, the charter share of enrollment has been increasing. A substantially larger share of students attends charter schools in LAUSD than across the state.

In both charters and TPSs, Hispanic students comprise the largest segment of enrollment. However, charter schools enroll a disproportionately small share of Hispanic students and a disproportionately large share of white students. Compared to TPSs, charters have a smaller share of intensely segregated minority schools (90-100\% non-white), but a larger share of hypersegregated schools (99-100\% non-white). Taken together, these results reveal that although charter schools enroll a disproportionately small share of Hispanic students, they tend to concentrate students of color together in the same charter schools at very high levels, as is demonstrated by the larger share of hypersegregated charter schools.

Hispanic, black, and Asian students are exposed to a larger share of white students in charters than in TPSs, which is likely related to the disproportionately large share of white enrollment in charter schools. Of all racial groups, Hispanic students are exposed to the smallest
share of white students in both charters and TPSs while Asian students are exposed to the largest share of white students. The typical Hispanic student is more isolated with same-race peers in TPSs while the typical white student and the typical black student are more isolated with samerace peers in charters. When considered together, the typical Hispanic and the typical black student are extremely isolated with other Hispanic and black students in both charters and TPSs; in 2013, this isolation is slightly more extreme in TPSs.

Charter schools in LAUSD enroll a disproportionately small share of low-income students. However, since 2005, a larger share of charters than TPSs have enrolled 90-100\% lowincome students, a pattern that is somewhat unexpected given the disproportionately small share of low-income students who attend charters. Taken together, these results indicate that when charter schools do enroll low-income students, they tend to be concentrated together in the same charter schools.

LAUSD's students experience a double segregation by race and poverty in that the typical Hispanic and the typical black students are exposed to larger shares of low-income students than the typical white and the typical Asian students. In charter schools, there is a greater disparity in exposure to low-income students by poverty at most time points as well as a greater disparity in exposure to low-income students by race.

The share of ELs enrolled in LAUSD has declined in both charters and TPSs. Charter schools enroll a disproportionately small share of ELs, and the disparity in EL enrollment between charters and TPSs is expanding. The majority of charter schools enroll a student body that is between $0 \%$ and $20 \%$ ELs, and a smaller share of charters than TPSs enrolls a majority EL student body. In both charters and TPSs, ELs are isolated by language. ELs are less isolated
in charters, but the disparity between EL and non-EL exposure to ELs is larger in charters than in TPSs.

Not only are ELs segregated by language, they are also segregated by race. The typical EL is exposed to a smaller share of white students than the typical non-EL. The disparity in exposure to white students between ELs and non-ELs is greater in charter schools than in TPSs. ELs also experience a triple segregation by language, race, and poverty, as the typical EL attends a school with a larger share of low-income students than the typical non-EL. Through 2012, ELs were segregated with a larger share of low-income students in charters than in TPSs, but this pattern changed in 2013 such that now ELs are segregated with a smaller share of low-income students in charters compared to TPSs. The disparity in exposure to low-income students between ELs and non-ELs is larger in charters.

## LAUSD Charters Versus Magnets

Charter enrollment increasing; magnet enrollment decreasing. Since 1998, the number of both magnet and charter schools in LAUSD has increased (Table 14). The number of charter schools has increased at a faster rate (1593\%) than magnet schools (28\%). Magnet schools continue to enroll a larger number of students (175,821 students in 2013) than charter schools (136,831 students in 2013). However, the number of students enrolled in magnet schools has decreased overall ( $-14 \%$ ) while the number of students enrolled in charters has consistently increased (1129\%).

Table 14
Number of Schools and Students, Charters and Magnets, LAUSD

|  | Charters |  | Magnets |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Schools | Enrollment | Schools | Enrollment |
| 1998 | 15 | 11,131 | 113 | 204,808 |
| 2007 | 131 | 46,797 | 136 | 235,701 |
| 2013 | 254 | 136,831 | 145 | 175,821 |

Source: National Center for Education Statistics, Common Core of Data.

## Charters enroll smaller share of Hispanic and black students but larger share of

 white students than magnets. Charter schools enroll a smaller share of Hispanic and black students than magnet schools (Figure 66). Charters also enroll a larger share of white students. Both charters and magnets enroll a similar share of Asian students. In magnet schools, the Hispanic share of enrollment has increased over time while all other racial groups have decreased. In charter schools, the Hispanic share of enrollment has also increased and there has been an overall decrease in black and white shares of enrollment. The Asian share of enrollment has remained relatively stable and small.When white and Asian students are considered together as a group, charter schools have consistently enrolled a larger share of these students than magnet schools. In 2013, 28\% of charter enrollment was white and Asian while $16 \%$ of magnet enrollment was white and Asian. Conversely, $72 \%$ of charter enrollment was non-white and non-Asian while a larger share, $84 \%$, of magnet enrollment was non-white and non-Asian in 2013.

Figure 66
Enrollment by Race, Charters and Magnets, LAUSD


Source: National Center for Education Statistics, Common Core of Data.

## Larger share of hypersegregated segregated charter schools than magnet schools.

The share of minority segregated schools has generally increased in both charters and magnets (Table 15). There has been an overall increase in the share of both charters and magnets that are intensely segregated minority schools. The increase has been more rapid in charter schools than magnet schools, but a slightly larger share of magnet schools is intensely segregated than charter schools, which is likely related to the disproportionately large share of white students who are enrolled in charter schools. As of 2013, 67\% of charters and 70\% of magnets were intensely segregated minority schools. Within the overall increase, the share of intensely segregated schools of both types decreased between 2007 and 2013.

At an even more extreme level, the share of hypersegregated schools has been generally increasing in both charters and magnets, although there was a decline from 2007 to 2013.

Despite enrolling a smaller share of Hispanic and black students, charter schools have a larger share of hypersegregated schools. In 2013, more than half (52\%) of charters were hypersegregated while slightly less than one-third (31\%) of magnets were hypersegregated.

Table 15
Percent of Intensely Segregated and Hypersegregated Charters and Magnets, Race, LAUSD Intensely Segregated Hypersegregated

|  | Charters | Magnets | Charters | Magnets |
| :---: | :---: | :---: | :---: | :---: |
| 1998 | $33 \%$ | $51 \%$ | $20 \%$ | $29 \%$ |
| 2007 | $75 \%$ | $65 \%$ | $63 \%$ | $35 \%$ |
| 2013 | $67 \%$ | $70 \%$ | $52 \%$ | $31 \%$ |

Source: National Center for Education Statistics, Common Core of Data.
In $1998,40 \%$ of charter schools were majority white but by 2013 , only $14 \%$ of charters were majority white (Figure C-28, Figure C-29). In magnet schools, $2 \%$ of schools were majority white in 1998 and $1 \%$ were majority white in 2013. There were no intensely segregated white charter or magnet schools at any of the three time points.

## Isolation for Hispanic and black students similar in charters and magnets; white

students more isolated in charters. Exposure to white students has been generally declining in both charters and magnets for all racial groups (Figure 67). All racial groups are exposed to a larger share of white students in charters than in magnets, likely related to the disproportionately large share of white students who are enrolled in charters.

Figure 67
Exposure to White Students, Charters and Magnets, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
The typical Hispanic student has experienced an overall increase in isolation with samerace peers (Figure 68). While Hispanic students were less isolated with same-race peers in charter schools in the past, in more recent years, the typical Hispanic student has been isolated at similar levels in both charters (77\%) and magnets (78\%). In charter schools, the typical black student experienced a substantial increase in isolation with same-race peers between 1998 and 2007 followed by a decrease. In magnet schools, the typical black student's isolation with samerace peers has been declining. In 2013, the typical black student was isolated at similar levels with same-race peers ( $37 \%$ ) in both charters and magnets. When non-white and non-Asian students are considered together, the typical non-white/non-Asian student has experienced an overall increase in isolation with other non-white and non-Asian students. In 2013, the typical
non-white/non-Asian student was isolated at similar levels in both charters (85\%) and magnets ( $87 \%$ ). The typical white student has experienced a slight decrease in isolation with same-race peers in both charters and magnets but was substantially more isolated with same-race peers in charters ( $50 \%$ in 2013) than in magnets ( $23 \%$ in 2013), which is likely related to the disproportionately large share of white students who are enrolled in charters.

Figure 68
Isolation by Race, Charters and Magnets, LAUSD


Source: National Center for Education Statistics, Common Core of Data.

## Charters enroll smaller share of low-income students, but larger share of charters is

intensely segregated by poverty. Charter schools enroll a smaller share of low-income students than LAUSD's magnet schools (Figure 69). The share of low-income students attending both charters and magnets has generally increased over time, although there was a slight decrease in charters between 2007 and 2013. In 2013, 62\% of charter students and 77\% of magnet students were low-income.

Figure 69
Enrollment by Poverty, Charters and Magnets, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
Although it was not the case in the past, in recent years, most charters and magnets have enrolled a student body that was majority low income (Table 16). In 2013, 70\% of charters and $97 \%$ of magnets were majority low-income. These high levels of majority low-income schools are not shocking given the high level of low-income students in LAUSD in general. What is perhaps more surprising is that a substantially larger share of charter schools is intensely segregated by poverty than magnet schools. This finding is unexpected, particularly given that charter schools enroll a smaller share of low-income students. In 2013, more than one-third ( $36 \%$ ) of charters were intensely segregated by poverty; $10 \%$ of magnets were intensely segregated by poverty in 2013.

Table 16
Percent of Majority Low-Income and Intensely Segregated Low-Income Charters and Magnets, LAUSD

|  | Majority <br> Low-Income |  | Intensely Segregated <br> Low-Income |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Charters | Magnets | Charters | Magnets |
| 1998 | $27 \%$ | $72 \%$ | $7 \%$ | $14 \%$ |
| 2007 | $86 \%$ | $83 \%$ | $40 \%$ | $7 \%$ |
| 2013 | $70 \%$ | $97 \%$ | $36 \%$ | $10 \%$ |

Source: National Center for Education Statistics, Common Core of Data.

Double segregation by race and poverty more intense in charters than magnets. In comparison to middle-class students, low-income students are isolated in both charters and magnets with larger shares of other low-income students (Figure 70). The level of isolation has been increasing in both charters and magnets. In 2013, the typical low-income student was isolated with other low-income peers at a similar level in both charters (77\%) and magnets (79\%). The typical middle-class student had a larger share of low-income peers in magnets (70\%) than in charters (63\%). The disparity in exposure to low-income students between lowincome students and middle-class students is larger in charters than in magnets.

Figure 70
Exposure to Low-Income Students by Poverty, Charters and Magnets, LAUSD


Source: National Center for Education Statistics, Common Core of Data.

Exposure to low-income students has been increasing for students of all races in both charters and magnets; however, in both types of schools, the typical Hispanic student and the typical black student are exposed to larger shares of low-income students than the typical white or Asian student (Figure 71). Hispanic students have the largest share of low-income peers in both charters and magnets. For all racial groups, the typical magnet school student is exposed to a larger share of low-income peers than the typical charter school student, likely related to the smaller share of low-income students who are enrolled in charter schools. The disparity in
exposure to low-income students by race is larger in charter schools than in magnet schools, indicating that the double segregation of students by race and poverty is more intense in charter schools than magnet schools.

Figure 71
Exposure to FRL by Race, Charters and Magnets, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
Charters and magnets enroll similar share of ELs, but larger share of charters than
magnets are majority EL. Patterns with language in magnets and charters are quite similar. In both charters and magnets, the share of ELs has been decreasing and both types of schools enroll a similar share of ELs ( $25-27 \%$ in $2007 ; 17-18 \%$ in 2013) (Table C-2). In both cases, they enroll a smaller share of ELs than the district as a whole.

In 2013, most charters (56\%) and magnets (64\%) enrolled 0-20\% ELs (Figure 72).
However, in terms of highly concentrated shares of ELs, a larger share of charters ( $11 \%$ in 2013) than magnets ( $3 \%$ in 2013) enrolls a student body that is majority EL. This pattern was even more intense in 2007 when $21 \%$ of charters and $5 \%$ of magnets were majority EL (Figure C-30); however, the share of majority EL schools of both types has been decreasing, likely related to the decreasing share of EL enrollment in both charters and magnets.

Figure 72
Percent of Charters and Magnets Enrolling ELs by Decile, LAUSD, 2013


Source: California Department of Education, English Learners by Grade and Language.
ELs more isolated with other ELs in charters. In both charters and magnets, the typical EL is isolated with a larger share of EL schoolmates as compared to the typical non-EL (Figure 73). The typical EL is more isolated with other ELs in charter schools than in magnet schools. Moreover, the disparity in exposure to ELs between the typical EL and the typical non-EL is larger in charters than magnets.

Figure 73
Exposure to ELs by Language, Charters and Magnets, LAUSD


Source: California Department of Education, English Learners by Grade and Language.

Double segregation of ELs by language and race more intense in charters. The typical EL is exposed to a similar share of students of other racial groups in charters compared to magnets (Table 17). The typical EL's schoolmates in both types of schools in 2013 are 77-79\% Hispanic, $7-9 \%$ black, $6-9 \%$ white, and $3 \%$ Asian. However, the experience of the typical nonEL in exposure to students of other races varies in charters and magnets. The typical non-EL charter student has a larger share of white schoolmates and a smaller share of Hispanic schoolmates than the typical non-EL magnet student.

Table 17
Exposure to Racial Groups by Language, Charters and Magnets, LAUSD

| Charter |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Exposure <br> to <br> Hispanic | Exposure <br> to <br> Black | Exposure <br> to <br> White | Exposure <br> to <br> Asian | Exposure <br> to <br> Hispanic | Exposure <br> to <br> Black | Exposure <br> to <br> White | Exposure <br> to <br> Asian |  |  |
| EL |  |  |  |  |  |  |  |  |  |  |
| 2007 | .83 | .09 | .04 | .03 | .80 | .09 | .06 | .03 |  |  |
| 2013 | .77 | .07 | .09 | .03 | .79 | .09 | .06 | .03 |  |  |
| Non-EL |  |  |  |  |  |  |  |  |  |  |
| 2007 | .51 | .15 | .24 | .09 | .68 | .14 | .10 | .08 |  |  |
| 2013 | .54 | .11 | .23 | .08 | .70 | .12 | .09 | .08 |  |  |

Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

When comparing the experience of EL students with non-EL students in charter schools, the typical EL has a larger share of Hispanic schoolmates and a smaller share of white schoolmates than the typical non-EL. In magnet schools, there is a similar pattern but the disparities in exposure to students of different races between the typical EL and the typical nonEL are smaller. This finding indicates that there is a double segregation of ELs by both language and race in charters and magnets and that it is more intense in charter schools.

## Larger disparity between typical EL and non-EL exposure to low-income students

in charters. In both charters and magnets, the typical EL is exposed to a larger share of lowincome students than the typical non-EL, indicating that poverty is a third dimension of
segregation for ELs in addition to language and race (Figure 74). Unlike earlier years, in 2013, the typical EL was exposed to a slightly larger share of low-income students in magnets than in charters. This could be related to the larger share of low-income enrollment in magnets than charters. However, the disparity in exposure to low-income students is larger in charters than magnets. This disparity is narrowing in charter schools but still remains larger than in magnets.

Figure 74
Exposure to FRL by Language, Charters and Magnets, LAUSD


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Summary of LAUSD segregation trends in charters versus magnets. While the number of both charter and magnet schools is increasing in LAUSD, the number of students enrolled in LAUSD's charters is increasing while the number of students enrolled in LAUSD's magnet schools is decreasing.

Compared to magnets, LAUSD's charter schools enroll a smaller share of Hispanic and black students but a larger share of white students. Even though they enroll a smaller share of Hispanic and black students, a substantially larger portion of charters than magnets are hypersegregated minority schools. While both Hispanic and black students are isolated at similar
levels in charters and magnets, white students are more isolated in charters, likely related to the larger share of white students who are enrolled in charters.

Charters enroll a smaller share of low-income students than magnet schools, but a larger share of charter schools are intensely segregated by poverty. In both types of schools, lowincome students are isolated with a larger share of other low-income schoolmates than their middle-class peers. Further, the disparity in exposure to low-income students between lowincome and middle-class students is larger in charter schools. While exposure to low-income students has been increasing for students of all races and income backgrounds in both charters and magnets, the double segregation of students by race and poverty is more intense in charters than in magnets.

Both types of schools enroll a similar share of ELs, a noticeably smaller share than the district on average. While most charters and magnets enroll 0-20\% ELs, a larger share of charters than magnets has a student body that is majority EL. The typical EL is isolated with a larger portion of EL schoolmates in a charter school than in a magnet. In addition, the double segregation of ELs by language and race is more intense in charters. With regard to poverty, the typical EL is exposed to a larger share of low-income students than are non-ELs in both charters and magnets. While the typical EL magnet school student is exposed to a slightly larger share of low-income students than the typical EL charter school student, the disparity in exposure to lowincome students between the typical EL and the typical non-EL is larger in charters than in magnets.

In almost every category for each measure of segregation, charter schools in LAUSD are more segregated than the district's magnet schools.

## Summary of Findings

The purpose of this chapter is to explore trends in racial, socioeconomic, and linguistic segregation in charter schools over time and to compare those trends to TPSs, and in some cases also to magnet schools. Differences in segregation patterns by school type should be interpreted within the larger context of these results, which reveal intensifying segregation in both charters and TPSs and generally modest differences between segregation in charter schools and TPSs. Geographic areas studied were the state of California as well as Riverside, Sacramento, and LAUSD. The following 15 findings summarize the main trends in segregation by race, poverty, and language in charters compared to TPSs and in some cases, to magnets. Although it is not the primary purpose of this chapter to compare segregation trends in the various geographic areas to one another, an understanding of the overall patterns in Riverside, Sacramento, and LAUSD provides a useful context. Therefore, a brief description of selected similarities and differences in the three geographic areas precedes the summary of 15 key findings that describe segregation trends over time.

All the areas-the state, Riverside, Sacramento, and LAUSD-are experiencing growth in the charter sector. Riverside, which is the most segregated region of the state, has the smallest share of students attending charters, and in fact, the proportion of students enrolled in Riverside's charters is smaller than the state average. Charter schools in Riverside, as in all areas studied, enroll a disproportionately large share of white students and a disproportionately small share of Hispanic students. Sacramento, which is the least segregated region of the state, has the largest white share of enrollment in charter schools of any area studied and in fact, white students comprise the largest share of enrollment in both charters and TPSs in Sacramento, unlike the other areas. In Sacramento, enrollment by race, poverty, and language is more similar in charters
and TPSs than in other areas. In both charters and TPSs, Sacramento also generally has the lowest levels of intensely segregated schools by race, poverty, and language. ${ }^{8}$ Of the three areas, LAUSD has the largest share of students attending charters. LAUSD also has the largest disparities in enrollment by race, poverty, and language between charters and TPSs. Compared to Riverside or Sacramento, LAUSD has substantially larger shares of intensely segregated charters and TPSs by race, poverty, and language. Moreover, charter schools in LAUSD are more segregated than magnet schools.

## Finding \#1: Increasing Share of Charter Schools

The share of charter schools is increasing at the state level, in both Riverside and Sacramento metro areas, and in LAUSD. Compared to the state on average, Riverside has a smaller proportion of charter school students while Sacramento and LAUSD have larger proportions of students who attend charter schools.

## Finding \#2: Charters Enroll Disproportionately Large Share of White Students and

## Disproportionately Small Share of Hispanic Students

In most areas, including the state, Riverside, and LAUSD, Hispanic students comprise the largest share of enrollment in both charters and TPSs. Sacramento is unique in that white students account for the largest share of enrollment in both types of schools. Despite these differences, in all geographic areas studied, charter schools enroll a disproportionately large share of white students and a disproportionately small share of Hispanic students compared to TPSs, a finding that is consistent with prior research on California's charter enrollment (Center for Research on Education Outcomes, 2014; Frankenberg et al., 2010b).

[^7]In LAUSD, charters also enroll a larger share of white students and a smaller share of Hispanic students compared to magnet schools. However, in Sacramento charter schools enroll a smaller share of white students and a larger share of Hispanic students than magnets.

Finding \#3: Share of Intensely Segregated Minority Schools Increasing in Both Charters and TPSs

In general, the share of intensely segregated minority schools is increasing in both charters and TPSs. This pattern is true for both types of schools at the state level as well as in Riverside and LAUSD. In Sacramento, the share of intensely segregated TPSs is increasing and the share of intensely segregated charter schools varies but is generally increasing.

Comparing the share of intensely segregated minority schools in charters to TPSs reveals different patterns in different areas. In 2013, larger shares of charters were intensely segregated minority schools at the state level and in Sacramento, but in Riverside and LAUSD, smaller shares of charters were intensely segregated.

## Finding \#4: Share of Hypersegregated Minority Charter Schools Increasing in State and

 LAUSDAt the most extreme level of racial segregation, there is an overall increase in the share of hypersegregated charter schools at both the state level and in LAUSD, and the share of hypersegregated minority charters has generally increased over the recent years in Riverside. In these three areas, larger shares of charters are hypersegregated by race than in TPSs. There is a larger share of hypersegregated charters compared to magnets in Sacramento and LAUSD as well. In Sacramento, the trends for hypersegregated schools in charters compared to TPSs vary over time.

## Finding \#5: Share of Intensely Segregated White Schools Generally Larger in Charters

At the state level as well as in Sacramento and LAUSD, larger shares of charters than TPSs have student bodies that are 90-100\% white. Since 2008 in Sacramento and since 2009 in LAUSD, there has been an overall increase in the share of intensely segregated white charter schools. In Sacramento, this finding is most prominent as $8 \%$ of charters compared to $1 \%$ of TPSs were intensely segregated white schools in 2013. A similar pattern exists in Sacramento's magnet schools compared to charters, as none of Sacramento's magnets were $90-100 \%$ white in 2013.

While this pattern still exists, this finding is less important at the state level and in LAUSD, as the share of intensely segregated white schools is extremely small in those two locales. In 2013, around $1 \%$ of both charters and TPSs were intensely segregated white schools at the state level and only one charter, but no TPS, was an intensely segregated white school in LAUSD.

## Finding \#6: Exposure to White Students Greater in Charters Than TPSs

Exposure to white students is similar across geographies. At the state level and in Riverside, Sacramento, and LAUSD, the typical Hispanic student and the typical Asian student are exposed to a larger share of white students in charter schools than in TPSs. The typical black student is also exposed to a larger share of white students in charters in LAUSD and Riverside, but the pattern for black exposure to white students is variable at the state level and in Sacramento. The general pattern of greater exposure to white students in charter schools compared to TPSs is likely related to the disproportionately large share of white students who attend charter schools compared to TPSs.

In most areas, including the state as well as Riverside and LAUSD, Hispanic students are the most segregated racial group from white students in both charters and TPSs. In Sacramento, black students are the most segregated from white students in both types of schools.

The comparison to magnets varies. In Sacramento, the typical student of each racial group is exposed to a smaller share of white schoolmates in charters than in magnets. However, the opposite is true in LAUSD where students of all racial groups are exposed to larger shares of white students in charters compared to magnets.

Finding \#7: Hispanic Students Less Isolated in Charters; Black and White Students More Isolated in Charters

Across all geographic areas, isolation patterns are similar. The typical Hispanic student is less isolated with same-race peers in charters than in TPSs at the state level, as well as in Riverside, Sacramento, and LAUSD. This lower level of isolation for Hispanic students in charters is likely related to the disproportionately small share of Hispanic students who attend charter schools. Conversely, both the typical black student and the typical white student are more isolated with same-race peers in charter schools across all areas in comparison to TPSs, a pattern that is consistent with the findings of previous research (Frankenberg et al., 2010b).

For magnet schools, in Sacramento, students of all races are more isolated in charters than magnets. In LAUSD, black and white students are also more isolated with same-race peers in charters compared to magnets; LAUSD's Hispanic students are isolated at similar levels in both charters and magnets.

Finding \#8: Hispanic and Black Students Increasingly Isolated with Other Hispanic and

## Black Students

In all locales, as a combined group, Hispanic and black students have become increasingly isolated with other Hispanic and black students. This finding is important because although isolation with same-race peers is harmful, segregation with other historically less advantaged and underserved students is similarly a cause for concern. When considered together as a group, the typical non-white and non-Asian students have varied isolation experiences. The typical non-white/non-Asian student in Sacramento is more isolated in charter schools, but in Riverside and LAUSD, the typical non-white/non-Asian student is less isolated in charters. At the state level, the isolation level for the typical non-white/non-Asian student is very similar in both charters and TPSs.

## Finding \#9: Charters Enroll Disproportionately Small Share of Low-Income Students

In all geographic areas, except Sacramento since 2007, charter schools enroll a disproportionately small share of low-income students. In general, the disparity in enrollment of low-income students between charters and TPSs has been narrowing at the state level, as well as in Riverside, Sacramento, and LAUSD.

## Finding \#10: Share of Intensely Segregated Low-Income Schools Larger in Charters for

## State and LAUSD

At both the state level and in LAUSD, since 2005, charter schools have had a larger share of intensely segregated low-income schools than TPSs, a pattern that is particularly noteworthy given the disproportionately small share of low-income students who attend charter schools. In Riverside and Sacramento, the reverse occurs; smaller shares of charters are intensely segregated low-income schools. Compared to magnets in Sacramento and LAUSD, larger shares of charters are intensely segregated low-income schools as well.

## Finding \#11: Low-Income Students Isolated in Both Charters and TPSs

In both charters and TPSs in all areas, low-income students are exposed to a larger share of other low-income students than are middle-class students. At the state level as well as in Riverside and Sacramento, the disparities in exposure to low-income students between the typical low-income student and the typical middle-class student is similar in charters and TPSs. At the state level and in Sacramento, the disparity in exposure to low-income students between the typical black student and the typical Hispanic student versus the typical white student is also similar in charters and TPSs; however, in Riverside this gap grew larger in charters in recent years. In LAUSD, the gaps in exposure to low-income students between students of different socioeconomic backgrounds and between students of color and white students are larger in charters than in TPSs.

The disparity in exposure to low-income students by poverty is also larger in charters compared to magnets in Sacramento and LAUSD. Further, in LAUSD the disparity in exposure to low-income students by race is larger in charters compared to magnets.

## Finding \#12: Charters Enroll Disproportionately Small Share of ELs

Charter schools enroll a disproportionately small share of ELs; this finding has been consistently observed in prior research (California Charter Schools Association, 2014; Center for Research on Education Outcomes, 2014). The disparity in EL enrollment between charters and TPSs has remained fairly stable at the state level and in Sacramento but is narrowing in Riverside and expanding in LAUSD. In LAUSD, charters and magnets enroll similar levels of ELs. In Sacramento, charters enroll a slightly larger share of ELs than do magnets.

Likely related to the disproportionately small share of EL enrollment in charters as compared to TPSs, as of 2013, at the state level, as well as in Riverside and LAUSD, a smaller share of charters than TPSs enrolled a student body that was majority EL. In Sacramento, the reverse is true-a larger share of charters is majority EL. By decile, the largest segment of charter schools enrolls $0-10 \%$ ELs at the state level as well as in Riverside, Sacramento, and LAUSD.

However, compared to magnet schools, in both Sacramento and LAUSD, a larger share of charters than magnets are majority EL.

## Finding \#14: ELs Generally Less Isolated in Charters, Yet Disparity in Exposure to ELs

## Larger in Charters

ELs are less isolated with other ELs in charters than in TPSs at the state level and in Riverside and LAUSD. However, in Sacramento, ELs are more isolated in charter schools, despite a smaller share of EL enrollment in charters than TPSs. The gap in exposure to ELs between ELs and non-ELs is larger in charter schools than in TPSs in all locales.

Compared to magnet schools in Sacramento and LAUSD, ELs are more isolated with other ELs in charters.

## Finding \#15: Double and Triple Segregation in Both Charters and TPSs

In both charters and TPSs, students of color experience a double segregation by race and poverty. For ELs, there is a triple segregation by race, poverty, and language in both charters and TPSs.

## CHAPTER FIVE

## SEGREGATION AND ACADEMIC ACHIEVEMENT IN CHARTER SCHOOLS VERSUS TRADITIONAL PUBLIC SCHOOLS

Segregation is associated with a variety of unequal educational outcomes, including lower academic achievement. This chapter explores the strength of the relationship between segregation and achievement in charter schools and traditional public schools (TPSs) to determine whether racial segregation is more, less, or equally harmful in segregated charter schools versus segregated TPSs. The analysis underscores the need to address racial segregation in both charter schools and TPS in order to improve academic achievement.

This chapter uses ordinary least squares (OLS) regression analysis to examine the relationship between segregation and academic performance moderated by school type. In doing so, it explores the research question: How is segregation related to academic performance in California's charter schools as compared to traditional public schools? The chapter begins with a description of the data sources, variables, and data analysis. The results are provided for the state of California, followed by results for Los Angeles Unified School District (LAUSD), Riverside, and Sacramento. The chapter concludes with a discussion of the results.

## Methods

## Data Source

Pre-existing data comes from two sources. The California Department of Education (CDE) provides data about academic performance and English Learner (EL) enrollment. Academic Performance Index (API) data is available through California Longitudinal Pupil Achievement Data System (CALPADS), California’s longitudinal statewide K-12 education data system, for the 2012-2013 school year. EL data comes from the English Learners by Grade and

Language data files of the CDE. CDE is a reliable data source that administers annual surveys to all local education agencies in the state. As with all TPSs in the state, charter schools are required to report similar data within the same time frame. Charters have the option to report data either independently or through their authorizing agency. All available data for all of California's TPSs and charter schools were analyzed. While there was some missing data, it is unlikely that this missing data impacted the results of this study. ${ }^{9}$

The National Center for Education Statistics (NCES) Common Core of Data, Public Elementary/Secondary School Universe Survey and Local Education Agency data files is the data source for enrollment by racial/ethnic group, free-and-reduced priced lunch (FRL), school type, grade configuration, and urbanicity. NCES is a reliable data source that uses an annual survey to collect the federal government's enrollment figures for all public elementary and secondary schools and school districts.

## Variables

The main variables of interest are API score, level of segregation, and school type. The dependent variable is a school's API score. API is measured using 2012-2013 API scores. API is a school-level measure of weighted average student performance on state assessments. API scores range from 200 to a total possible score of 1,000 . The state's goal for each school is an API score of 800 , which would theoretically indicate that all students in the school were proficient.

Level of segregation is determined by using the concentration measure of segregation. Concentration measures the proportion of students in a school who share a characteristic that

[^8]places them in a specified racial/ethnic group. In this analysis, segregation is measured in two ways: 1. percent of white students enrolled in a school and 2. percent of white and Asian students enrolled in a school.

School type indicates whether a school is a TPS or a charter school. Within the TPS category, in some cases, the variable is further defined as a non-magnet TPS or a magnet TPS.

Covariates included in the sensitivity analysis, but not in the primary models, include percent of low-income students (as measured by FRL), percent of ELs, grade configuration (elementary school, middle school, high school), and urbanicity (city, suburb, town, rural).

## Data Analysis

OLS regression analysis is used to analyze the relationship between segregation and academic performance moderated by school type. Regression analysis is appropriate for exploring this research question because it allows for describing the form of the relationship between explanatory variables and a response variable while controlling for other variables (Agresti \& Finlay, 2009). The general equation is the following:

$$
E(y)=\alpha+\beta_{1} x_{1}+\beta_{2} x_{2} \ldots+\beta_{k} x_{k}
$$

- $E(y)$ is the estimated API score for a school?
- $\quad \alpha$ is the mean of $y$ when all of the explanatory variables in the model are 0
- $\beta_{1}, \beta_{2}, \ldots \beta_{k}$ are partial regression coefficients that measure the partial effect of $x_{1}, x_{2}$, and $x_{k}$ on $y . \beta_{k}$ is the change in the mean of $y$ for a one-unit increase in the predictor $x_{k}$ when controlling for all other variables in the model
- $x_{1}, x_{2}, \ldots x_{k}$ are the explanatory variables
- $\quad k$ is the number of predictors

Regression analysis was conducted by using the statistical software package SPSS. More specifically, in the primary analysis for California, API was regressed onto white percent, charter, and the interaction between white percent and charter. Because of the dummy coding of charter, the conditional main effect of percent white on API score represents the association between segregation and API in a TPS. The interaction between white percent and charter represents the difference in the association between segregation and API in a charter school and a TPS. For example, if the conditional main effect of white percent was 1 and the interaction between white percent and charter was -2 , the simple slope for white percent in charter schools would be $1+-2=-1$.

In the primary analysis comparing LAUSD, Riverside, and Sacramento, API was regressed onto white percent, charter, and the interaction between white percent and charter; two- and three-way interactions between Sacramento and white percent, charter, and the interaction between white percent and charter; and two- and three-way interactions between Riverside and white percent, charter, and the interaction between white percent and charter. Because of the dummy coding of charter, Sacramento, and Riverside, the overall intercept $\propto$ represents the expected API score for a TPS in LAUSD. The Sacramento variable represents the difference in the expected API score between Sacramento and LAUSD in a TPS. The Riverside variable represents the difference in the expected API score between Riverside and LAUSD in a TPS. Likewise, the conditional main effect for charter represents the difference in API score between a charter and a TPS in LAUSD. The interaction between charter and Sacramento represents the difference between LAUSD and Sacramento in the difference in API score between a charter and a TPS. The interaction between charter and Riverside represents the
difference between LAUSD and Riverside in the difference in API score between a charter and a TPS.

Similarly, the conditional main effect of white percent represents the association between segregation and API in a TPS in LAUSD. The interaction between white percent and Sacramento represents the difference between the association of segregation and API in a TPS in Sacramento and the association of segregation and API in a TPS in LAUSD. The interaction between white percent and Riverside represents the difference between the association of segregation and API in a TPS in Riverside and the association of segregation and API in a TPS in LAUSD.

The two-way interaction between charter and white represents the difference between the association of segregation and API in a charter school and a TPS in LAUSD. The three-way interaction between Sacramento, white, and charter represents the extent to which the APIsegregation slope differs in TPS and charter schools in LAUSD compared to the difference of those two slopes in Sacramento. The three-way interaction between Riverside, white, and charter represents the extent to which the API-segregation slope differs in TPS and charter schools in LAUSD compared to the difference of those two slopes in Riverside.

Using procedures recommended in Preacher, Curran, and Bauer (2006) for probing interactions in linear regression analysis, the accompanying web utilities (Preacher, Curran, \& Bauer, 2010-2016) were used to calculate simple intercepts, simple slopes, and regions of significance for the interactions.

Separate models were run for each of four geographic areas: California, Riverside CBSA, Sacramento CBSA, and LAUSD. In addition, a combined model including LAUSD, Riverside, and Sacramento together was also run. The results were stable across models; therefore, the results for the combined model are presented.

In the separate models for LAUSD and Sacramento, two sets of models were run for each geographic area: one that compared charters to TPSs and another that compared charters to magnet schools. There was no significant difference between charters and magnets in either LAUSD or Sacramento. Thus, results for the charter versus magnet models are not presented in this chapter but can be found in the appendix (Table C-3 and Table C-4).

For each of the four geographic areas of analysis, models were run that used percent of white students enrolled in a school as the measure of segregation and another set of models were run that used percent of white and Asian students as the measure of segregation. Results for white and Asian students were similar to the results for white students. Because the overall results were stable, this chapter does not present both sets of results. The results for percent of white and Asian students enrolled in a school as the measure of segregation are included in the appendix (Table C-5, Figure C-31, and Figure C-32).

In each of these analyses, the model was first run without any covariates. The initial model included API as the outcome variable, and predictors included level of segregation, school type, and an interaction term for level of segregation and school type. A second model was run that included the following covariates: percent FRL, percent EL, grade configuration, and urbanicity. The results of the model with covariates were similar to the more parsimonious model. Sensitivity analyses were conducted, including testing for multicollinearity, searching for outliers or influential points, and rerunning the regression using a complete cases approach. All of these tests for sensitivity revealed that the results of the model including covariates were stable. When percent FRL was included, the overall results were similar but there was a negative association for charter, which made the findings seem spurious because FRL and percent white are strongly associated and largely measure the same construct. Therefore, this chapter interprets
the more parsimonious model without covariates, but it is important to note that the findings are highly similar in the more complex model.

The following section presents results using white students as the measure of segregation and compares TPSs to charter schools. A model for California is presented and then a combined model for LAUSD, Riverside, and Sacramento is presented.

## Results

## California

A multiple linear regression was calculated to predict API score based on level of segregation moderated by school type at the state level (Table 18).

Table 18
Predictors of API Score, California

| Variable | $B$ | SE B |
| :--- | :---: | :---: |
|  | $741.291^{* * *}$ |  |
| White | $1.591^{* * *}$ | .043 |
| Charter | 8.724 | 4.781 |
| CharterxWhite | $-.632 * * *$ | .113 |
| Note. $R^{2}=.136,{ }^{* * *} p<.001$. |  |  |

Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

A significant regression equation was found $(\mathrm{F}(3,9253)=483.535, p<.001)$, with an $R^{2}$ of .136. A school's predicted API is equal to $741.291+1.591$ (white) +8.724 (charter) -.632 (charterXwhite), where white is measured as the percent of white students in a school, charter is coded as $0=$ TPS, $1=$ charter school. In California, the API score of a TPS with no white students was 741.291, $t=471.481, p<.001$. The conditional main effect of charter was not significant, $t=1.825, p=.068$, indicating that the API score of a charter with no white students was 8.724 points higher than that of a TPS with no white students, but the difference was not statistically significant. The conditional main effect of white students was significant, $t=36.945$, $p<.001$, such that API score increased 1.591 points for each percent increase in white students
in a TPS. The interaction effect was significant, $t=-5.600, p<.001$, such that there was a difference of -.631 points in the effect of white students in TPSs compared to charter schools. This significant difference indicates that the slope for TPSs was significantly larger than the slope for charters, meaning that the effect of white students was greater in TPSs than in charter schools. Decomposition of the interaction revealed that the simple slope for charter schools was significant, $t=9.2, p<.001$, such that in charter schools, the API score increased by .959 points for each percent increase in white students (Figure 75). Essentially, for every $1 \%$ increase in the share of white students enrolled in a school, the API score in a TPS increased more than the API score in a charter school.

Figure 75
Interaction Plot for charterXwhite, California


Note. $\mathrm{CVz1}(1)=$ TPS. $\mathrm{CVz1}(2)=$ charter schools. $\mathrm{X}=$ percent of white students. $\mathrm{Y}=$ API score. Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

The interaction effect was significant at certain levels of segregation (Figure 76). The lower bound of the region of significance for the interaction effect was negative and the upper bound of the region of significance for the interaction effect was .24 , indicating that there was no significant difference in API score between charter schools and TPSs when there were less than $24 \%$ white students attending a school, but when a school's enrollment was greater than $24 \%$ white, there was a statistically significant difference in the API scores of TPSs and charter schools with TPSs outperforming charter schools.

Figure 76
Regions of Significance for Charter, California


Note. Moderator = percent of white students.
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

## LAUSD, Sacramento, Riverside

A multiple linear regression was calculated to predict API score based on level of segregation and school type in three areas: Riverside, Sacramento, and LAUSD (Table 19).

Table 19
Predictors of API Score, LAUSD, Riverside, Sacramento

| Variable | $B$ | $S E B$ |
| :--- | :---: | :---: |
|  | $721.783^{* * *}$ |  |
| LAvSAC | -16.527 | 8.460 |
| LAvRIV | $14.874^{*}$ | 5.746 |
| Charter | $48.287 * * *$ | 7.729 |
| LAvSACxCharter | 10.662 | 23.249 |
| LAvRIVxCharter | $-138.404^{* * *}$ | 21.518 |
| White | $3.639^{* * *}$ | .250 |
| LAvSACxWhite | $-1.730^{* * *}$ | .292 |
| LAvRIVxWhite | $-1.856^{* * *}$ | .295 |
| CharterxWhite | $-1.479^{* * *}$ | .339 |
| LAvSACxCharterxWhite | .212 | .511 |
| LAvRIVxCharterxWhite | $2.894^{* * *}$ | .645 |
| Notes. $R^{2}=.233, * p<.05,{ }^{* *} p<.01, * * * p<.001$ |  |  |

Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

A significant regression equation was found $(\mathrm{F}(11,2494)=69.022, p<.001)$, with an $R^{2}$ of .233. A school's predicted API is equal to $721.783+3.639$ (white) +48.287 (charter) -1.479 (charterXwhite) - 16.527 (LAvSAC) -1.730 (LAvSACxwhite) + 10.662 (LAvSACxcharter) + .212 (LAvSACxcharterxwhite) + 14.874 (LAvRIV) - 1.856 (LAvRIVxwhite) - 138.404 (LAvRIVxcharter) +2.894 (LAvRIVxcharterxwhite), where white is measured as the percent of white students in a school; charter is coded as $0=$ TPS, $1=$ charter school; LAvSAC is coded as $0=$ LAUSD and Riverside, $1=$ Sacramento; and LAvRIV is coded as $0=$ LAUSD and Sacramento, $1=$ Riverside.

First, examining the average API scores in the three regions, results revealed that the average API score for a TPS with no white students in LAUSD was 721.783, $t=199.833, p<$ .001. In comparing Sacramento to LAUSD, the difference in API scores of -16.527 in a public school with no white students was not significant, $t=-1.954, p=.051$. In comparing Riverside to LAUSD, the difference in API scores of 14.874 for a public school with no white students was
significant, $t=2.589, p=.010$, such that Riverside's API score of 736.657 for a public school with no white students was significantly higher than LAUSD's score of 721.783. The average API scores for TPS are significantly different between LAUSD and Riverside but not between LAUSD and Sacramento.

In examining the conditional main effect of charter in the three regions, results revealed that the conditional main effect of charter in LAUSD was significant, $t=6.248, p<.001$, such that the API score of a charter school with no white students was 48.287 points higher than that of a TPS with no white students. The API score for a charter school with no white students in LAUSD was 770.07, $t=112.700, p<.001$. The charter effect in Sacramento was 10.662 points greater than the charter effect in LAUSD, but this difference in charter effect between LAUSD and Sacramento was not significant, $t=.459, p=.647$. The charter effect in Riverside was significantly different from the charter effect in LAUSD, $t=-6.432, p<.001$, such that the charter effect in Riverside was -138.404. The decomposition of the interaction term revealed that the API score for a charter school with no white students in Riverside was $646.537, t=33.0232$, $p<.001$. The charter effect is significantly different in LAUSD compared to Riverside but not in LAUSD compared to Sacramento.

In LAUSD, the conditional main effect of white students was significant, $t=14.573, p<$ .001, such that API score increased 3.639 points for each percent increase in white students in a TPS. The conditional main effect of white students was significantly different in Sacramento compared to LAUSD, $t=-5.929, p<.001$, such that the effect of white students was 1.730 points smaller in Sacramento than in LAUSD. The decomposition of the interaction term revealed that the simple slope for the conditional main effect of white students was significant, $t=12.653, p<$ .001, such that API score increased 1.909 points for each percent increase in white students in

TPSs in Sacramento. The conditional main effect of white students was significantly different in Riverside compared to LAUSD, $t=-6.282, p<.001$, such that the effect of white students in Riverside was 1.856 points smaller than the effect of white students in LAUSD. The decomposition of the interaction term revealed that the simple slope, or the conditional main effect of white students in Riverside, was significant, $t=11.283, p<.001$, such that API score increased 1.783 points for each percent increase in white students in TPSs in Riverside. The conditional main effect of white students was different in LAUSD compared to both Sacramento and Riverside.

In LAUSD, the interaction effect was significant, $t=-4.364, p<.001$, indicating that the effect of white students was significantly different by 1.479 points in TPSs and charters. The effect of white students was greater in TPSs than in charter schools. The decomposition of the interaction revealed that in charter schools, the simple slope was $2.16, t=9.435, p<.001$, indicating that the API score increased by 2.16 points for each percent increase in white students in charter schools in LAUSD (Figure 77).

Figure 77
Interaction Plot for charterXwhite, LAUSD


Note. $\mathrm{CVz1}(1)=$ TPS. $\mathrm{CVz1}(2)=$ charter schools. $\mathrm{X}=$ percent of white students. Y = API score. Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

In LAUSD, the interaction effect was significant at certain levels of segregation (Figure
78). The lower bound of the region of significance for the interaction effect was .2235 and the upper bound of the region of significance for the interaction effect was .5391 , indicating that there was no significant difference in API score between charter schools and TPSs when there were between $22.35 \%$ and $53.91 \%$ white students attending a school. When the school enrollment was less than $22.35 \%$ white in LAUSD, charter schools had a significantly higher API score than TPSs. When the school enrollment was greater than $53.91 \%$ white, TPSs had a significantly higher API score than charter schools in LAUSD.

Figure 78
Regions of Significance for Charter, LAUSD


Note. Moderator = percent of white students.
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

The difference in the interaction effect between Sacramento and LAUSD was .212, but this difference was not statistically significant, $t=.414, p=.679$.

The interaction effect in Riverside is significantly different from the interaction effect in LAUSD, $t=4.490, p<.001$, such that there was a 2.894 point difference between the effect of white students in charters and TPSs in Riverside and LAUSD. The decomposition of the interaction revealed that the simple slope for charter schools in Riverside was significant, $t=$ $6.091, p<.001$, such that the API score increased by 3.198 points for each percent increase in white students in Riverside's charter schools.

In Riverside, the interaction effect was significant at certain levels of segregation. The lower bound for the region of significance was .4733 and the upper bound for the region of significance was 3.8852 , indicating that there was a significant difference in API score between charter schools and TPSs when there was less than $47.33 \%$ white students attending a school. When the school enrollment was less than $47.33 \%$ white, the API score for a public school was significantly higher than that of a charter school, holding percent of white students constant. When the school enrollment was greater than $47.33 \%$ white, the API scores for a TPS and a charter school were not significantly different when controlling for percent of white students.

## Summary of Results

In sum, in California, the conditional main effect of charter was not significant, indicating that the API score for a charter school with no white students is not different from the API score of a TPS with no white students. The conditional main effect of white students was significant; the API score increased as the percent of white students increased. The interaction effect revealed that the effect of white students on API was greater in TPSs than in charters, meaning as the percent of white students increased, there was a larger increase in API score in TPSs than in charters. Both charter schools and TPSs performed similarly and poorly compared to other schools in California when the student body was highly segregated (i.e., more than $76 \%$ nonwhite). However, when schools were more desegregated (i.e., less than $76 \%$ non-white), TPSs outperformed charter schools. In LAUSD and Sacramento, unlike the state, the conditional main effect of charter was significant. In both regions, the API score for a charter school with no white students was higher than the API score for a TPS with no white students. Similar to the state, the conditional main effect of white students was significant; the API score increased as the percent of white students increased. Similar to the state, the effect of white students on API score was
greater in TPSs than in charters in both LAUSD and Sacramento. In segregated schools where the student enrollment was greater than $78 \%$ non-white, charters outperformed TPSs. However, similar to the state, in desegregated schools, TPSs outperformed charters.

In Riverside, the pattern differs. In Riverside, the conditional main effect of charter was significant, but unlike LAUSD and Sacramento, the API score for a TPS with no white students was higher than the API score for a charter school with no white students. Similar to the state, LAUSD, and Sacramento, the conditional main effect of white students was significant; the API score increased as the percent of white students increased. Unlike the state, LAUSD, and Sacramento, in Riverside the percent of white students had a greater effect on API score in charters than in TPS. In majority minority schools that were greater than $53 \%$ non-white, TPS outperformed charters. However, in schools that were more desegregated, with less than 53\% non-white students, the school type did not matter for API score-both charters and TPS performed similarly.

## Discussion

This chapter explores the relationship between segregation and academic performance in charter schools compared to TPSs. As prior literature demonstrates, segregation is systematically linked to unequal educational outcomes. The results of this chapter confirm that there is a positive correlation between the percent of white students in a school and the school's academic performance as measured by API scores; segregated schools have lower academic performance than desegregated schools. The difference in academic performance between charter schools and TPSs depends on the racial composition of the school. Further, the extent to which the level of segregation impacts academic performance in charter schools versus TPSs varies by locale.

There are several potential explanations for these results, including the school's focus, funding, and selection effects. First, it is possible that charters with larger white enrollments are religiously affiliated or have other non-academic themes while TPSs with similar levels of white enrollment do not have such a focus, thus explaining why in schools with larger white enrollments, TPSs might outperform charters. Second, it is possible that the private funding that is frequently provided to non-white charters aids non-white charters in achieving higher API scores than non-white TPSs, which might not receive the same level of private funding as charters with similar levels of non-white enrollment. Finally, it is possible that white families bring political capital to TPSs that helps to improve academic achievement outcomes whereas there is already some form of selective effect occurring and capital being leveraged for families of all races that choose charters. Further research would be needed to examine these, and other, possible explanations.

The results of this study are consistent with recent research analyzing poverty concentration, racial composition, and standardized test scores in charter and non-charter schools. In the current study as well as research by Logan and Burdick-Will (2015), the academic performance of charter schools compared to TPSs depends on the composition of the student body. Logan and Burdick-Will found that across the United States during the 2010-2011 school year, in high-poverty areas, charters performed better than TPSs, but in low-poverty areas, TPSs performed better than charters. Given the high correlation between poverty and race, the current study's findings-at the state level as well as in LAUSD and Sacramento, that in more segregated schools, charters outperformed TPSs but in more diverse and desegregated schools, TPSs outperformed charters-are consistent with Logan and Burdick-Will's findings related to poverty concentration. However, different results in Riverside are surprising-TPSs
outperformed charters in segregated (majority minority and hypersegregated) schools yet there was no significant difference between charters and TPSs in desegregated schools. Additional research and perhaps the use of additional variables are needed to interpret the findings in Riverside.

Finally, while academic performance is an extremely important educational outcome, as the literature review described, other academic outcomes that are not measured in standardized tests as well as non-academic outcomes of desegregation, including short-term social impacts and long-term perpetuating effects, are also important. Thus, the results of this chapter should not be overstated as to the impact of segregation level on broader educational, social, and life outcomes for students.

## CHAPTER SIX

## MECHANISMS RELATED TO SEGREGATION IN THREE LAUSD CHARTER SCHOOLS

In addition to understanding the trends in charter school segregation and the impact of segregation on academic achievement, it is important to identify the mechanisms that are related to varying levels of racial, socioeconomic, and linguistic segregation in charter schools so that future policies and practices can be shaped to address these mechanisms. This chapter uses a qualitative case study approach to explore the mechanisms related to segregation in three LAUSD charter schools. It begins with a description of the methods, including site selection, participants, data collection, data analysis, and limitations. Then, a description of findings at each case study school is provided. The chapter concludes with a comparison of themes across case studies which reveals three categories of mechanisms that are related to varying levels of segregation in charter schools: charter founding decisions, ongoing policies and practices, and family influence.

## Methods

The qualitative portion of this study uses a multi-case study approach to conduct an indepth analysis of how school leaders, teachers, parents, and board members at three charter schools in Los Angeles describe the policies and practices that are likely related to varying levels of segregation in their schools. This portion of the study was conducted in Los Angeles Unified School District (LAUSD), an important site for studying charter policies and practices and how they are related to segregation for multiple reasons. LAUSD has the most charters and most charter growth of any district in California. Moreover, there is great debate in LAUSD over the future role of charter schools in educating the district's students. In June 2015, the Broad Foundation developed a plan, "The Great Public Schools Now Initiative," to create 260 new
charter schools in Los Angeles in order to enroll half of the district's students in charter schools by 2023 (The Broad Foundation, 2015 June). This plan also strives to serve as a model for other districts across the nation. Thus, analysis of the existing charter schools in LAUSD is important not only for contributing to the scholarly understanding of how charter school segregation functions in general but also addresses the urgent need to inform the debate over expansion of charter schools in LAUSD. The qualitative portion of this study strives to accomplish these aims by exploring how different mechanisms, such as school policies, practices, and characteristics, are related to varying levels of segregation. In doing so, a multi-case study approach is utilized to explore the research question: How do the charter policies and practices, as described by school leaders, teachers, parents, and board members, in selected LAUSD charter schools relate to varying levels of racial, socioeconomic, and/or linguistic segregation in charter schools?

## Site Selection

Three case study schools were purposefully selected to provide variation among levels of racial, socioeconomic, and linguistic segregation (Table 20). Valley Charter is predominantly Hispanic (86\%) and low income (59\% FRL); it has some diversity of linguistic background, enrolling 32\% ELs. At the opposite end of the continuum, Ocean Charter is predominantly white ( $80 \%$ ), non-poor ${ }^{10}$ ( $6 \%$ FRL), and has almost no linguistic diversity ( $4 \%$ EL). The third school, Downtown Charter, is comparatively more multiracial, enrolling 69\% Hispanic, 11\% black, 7\% white, and $8 \%$ two or more races. With the recognition that Downtown Charter's racial composition is still predominantly non-white, given the racial demographics of LAUSD,

[^9]Downtown Charter provides an example of a charter school that has been relatively more successful in enrolling a multiracial student body than others. However, it is important to recognize that Downtown Charter is relatively more multiracial because it enrolls larger shares of black (11\%) and multiracial (8\%) students, not white (7\%) or Asian students (1\%). This enrollment pattern could impact the extent to which the benefits associated with diversity are available to students at Downtown Charter, as students who have been traditionally more advantaged (white and Asian students) do not account for a substantial portion of the school's enrollment; nonetheless, it is more diverse and multiracial than the other two sites. In addition, Downtown Charter has a large share of low-income students (61\% FRL) and ELs (39\%). While these three charter schools do not fit neatly into the categories "segregated minority school," "segregated white school," and "desegregated school," given the limitations of the levels of desegregation that exist in LAUSD's charter schools and the Los Angeles metropolitan area more broadly from which LAUSD charters could theoretically attract students, as well as the willingness of schools to participate in this study, they are the best examples available to represent varied levels of segregation. ${ }^{11}$

Table 20
Case Study School Enrollments, 2014-2015

|  | Enrollment | Hispanic | Black | White | Asian | Two or <br> More | FRL | EL |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Valley Charter | 400 | $86 \%$ | $3 \%$ | $7 \%$ | $0 \%$ | $3 \%$ | $59 \%$ | $32 \%$ |
| Downtown | 145 | $69 \%$ | $11 \%$ | $7 \%$ | $1 \%$ | $8 \%$ | $61 \%$ | $39 \%$ |
| Charter |  |  |  |  |  |  |  |  |
| Ocean Charter | 515 | $8 \%$ | $4 \%$ | $80 \%$ | $6 \%$ | $1 \%$ | $6 \%$ | $4 \%$ |

Source: National Center for Education Statistics, Common Core of Data.

[^10]There is variation among the location, longevity, and charter type of the three schools (Table 21). Valley Charter is located in the San Fernando Valley, Downtown Charter is in Downtown Los Angeles, and Ocean Charter is on the Westside. Valley Charter and Ocean Charter have both been in existence for a long time-15 years for Valley Charter and 23 years for Ocean Charter-while Downtown Charter is relatively new, having just opened three years ago. Both Valley Charter and Downtown Charter are independent start-ups that were founded by parents, and as independent charters, both of these schools have autonomy from LAUSD and LAUSD policies in terms of their governance, personnel, budget and finances, admissions procedures, and educational program. Ocean Charter is an affiliated conversion charter that was a TPS in LAUSD from 1955 to 1993 prior to its conversion to charter status. As an affiliated charter, Ocean Charter is semi-autonomous in that it is governed by the LAUSD Board of Education, must operate in accordance with LAUSD policy, and must adhere to United Teachers Los Angeles (UTLA) collective bargaining agreements. However, it has some autonomy in the areas of school-site budgeting, hiring of personnel, professional development, and its educational program. None of these three schools is operated by Charter Management Organizations.

Table 21
Case Study School Characteristics

|  | Location | Year Opened | Charter Type |
| :--- | :--- | :--- | :--- |
| Valley Charter | San Fernando Valley | 2001 | Independent Start-Up |
| Downtown Charter | Downtown | 2013 | Independent Start-Up |
| Ocean Charter | Westside | 1993 | Affiliated Conversion |

## Participants

To recruit participants, I contacted the school leader (principal or executive director) at each school by sending an e-mail message which provided information about the study and requested participation. At all three schools, I followed up with phone calls. The first interview I conducted at each school was with the school leader. Out of necessity, I used snowball sampling
to recruit additional participants. At the end of each interview, I asked the leader for assistance in recruiting other participants, including teachers, parents, and board members. At Downtown Charter, I directly contacted teachers and board members via email to request their participation. At Valley Charter and Ocean Charter, the executive director and principal facilitated the recruitment of additional participants. Thus, it is important to acknowledge that Valley Charter and Ocean Charter leaders might have selected certain teachers and parents who they believed would provide favorable insights about the schools. However, by interviewing multiple teachers and parents at both of these locations, guaranteeing them that I would protect their anonymity, and scheduling interviews on my own without the leader's involvement (so they never knew who actually participated in the study), I attempted to establish a trusting rapport with participants so that they felt comfortable to speak openly and honestly. Regardless of these efforts, it is likely that I did not speak with teachers or parents who have been openly hostile or critical of the principals at these two schools. Thus, the findings of these case studies must be interpreted with this limitation in mind.

In terms of participants, the original goal was to interview a minimum of three participants at each school, including one administrator, one staff member, and one teacher. While the minimum number of participants was attained for each school, the type of participants varied due to availability and willingness to participate (Table 22). At all three schools, I interviewed the school leader; at Valley Charter, this person's official title was "executive director" and at Downtown Charter and Ocean Charter, this person's title was "principal." Interviews at Valley Charter also included four parents, one of whom serves on the Board of Directors. In addition to the principal, interviews at Downtown Charter included two members of the Board of Directors. At Ocean Charter, along with the principal, interviews included three
teachers, two of whom are also parents of current and former Ocean Charter students. Although this variation might not be ideal because participants in different roles have different perspectives and likely focus on different aspects of each school, the use of a semi-structured interview protocol that included a similar set of questions for each participant ensured that the same set of topics were discussed in all interviews regardless of the participants' varied affiliations with the school.

Table 22
Interview Participant Roles

|  | School Leader | Teacher | Board Member | Parent | Total |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Valley Charter | 1 | 0 | 1 | 4 | $5^{*}$ |
| Downtown Charter | 1 | 0 | 2 | 0 | 3 |
| Ocean Charter | 1 | 3 | 0 | 2 | $4^{*}$ |

Note. *There were a total of five participants from Valley Charter. One of the parents is also a board member; therefore, she is represented in both the parent and board member categories. There were a total of four participants from Ocean Charter. Two of the teachers are also parents of current and former Ocean Charter students; therefore, those two participants are represented in both the teacher and parent categories.

The demographic characteristics of participants varied by race and gender (Table 23). In terms of race, seven of the 12 participants are white, two are Hispanic, two are Asian, and one is black. In terms of gender, 10 of the 12 participants are female and two are male.

Table 23
Interview Participant Demographic Characteristics

|  | Female | Male | White | Hispanic | Black | Asian |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Valley Charter | 5 | 0 | 3 | 1 | 1 | 0 |
| Downtown Charter | 2 | 1 | 3 | 0 | 0 | 0 |
| Ocean Charter | 3 | 1 | 1 | 1 | 0 | 2 |

The names of schools and individual participants have been replaced with pseudonyms to guarantee anonymity to all participants (Table 24). The description of specific neighborhoods where the schools are located does not include the name of the neighborhood because while providing this information might assist the reader in understanding the local context for the school, it could also make the schools identifiable. Neighborhood data is based on the census
tract in which the school is located and was gathered from the 2015 American Community Survey 5-year estimate.

Table 24
Individual Participant Characteristics

|  | Position | Length of Affiliation with School | Race | Gender |
| :--- | :--- | :--- | :--- | :--- |
| Valley Charter |  |  |  |  |
| Allison | Executive director, <br> founder <br> Parent, board | 15 years | White | Female |
| Deirdra | mears | Hispanic | Female |  |
| Joy | Parent | 6 years | Black | Female |
| Kristen | Parent | 4 years | White | Female |
| Sandra | Parent | 6 years | White | Female |
| Downtown |  |  |  |  |
| Charter |  | Principal | White | Female |
| Sharon | Board member | 1 year | White | Male |
| Josh | Board member | 1 year | White | Female |
| Kate |  | 9 weeks (taught at Ocean Charter | Asian | Male |
| Ocean Charter | Principal | before for 13 years) | Asian | Female |
| Tom |  | 17 years | White | Female |
| Stephanie | Teacher, parent | Hispanic | Female |  |
| Adrienne | Teacher, parent | 24 years | 19 years |  |
| Laura | Teacher |  |  |  |

In addition to interviews, I attended an open house/school tour event at two of the three schools (Valley Charter and Downtown Charter), which allowed for additional data collection. These events allowed me to observe the physical space more carefully and to observe how information was conveyed to parents and how school representatives responded to parent questions about the school. At Downtown Charter, the open house was led by the director of operations, a black male, and the principal also participated. The school tour at Valley Charter was led by the office manager, a Hispanic female.

## Data Collection

In scheduling the interviews, I provided participants with the option of in-person or phone interviews (Table 25). All principal interviews were conducted in person. For Valley

Charter, two parent interviews were conducted in person and two were on the phone. For Downtown Charter, both board member interviews were conducted on the phone. For Ocean Charter, two teacher interviews were conducted in person and one was conducted on the phone. All interviews were audio-recorded and transcribed by a hired transcription company. Interviews ranged in length from 40 to 90 minutes.

Table 25
Interview Settings

|  | In Person | Phone |
| :--- | :--- | :--- |
| Valley Charter | 3 | 2 |
| Downtown Charter | 1 | 2 |
| Ocean Charter | 3 | 1 |

Semi-structured interview protocols were used for all interviews with slight modifications to questions depending on the role of the participant (Appendix B). The interview protocol was piloted with one charter school principal in Sacramento and the protocol was revised to enhance clarity and validity. The semi-structured interview allowed for asking all participants a similar set of core questions while giving me some flexibility to probe more deeply and ask follow-up questions in order to understand topics as they emerged during the interview (Brenner, 2006). For all participants, questions generally focused on the following topics: school mission and theme, school location, family residential locations, transportation, recruitment and outreach, languages utilized, admissions requirements, lottery, student academic and behavioral expectations, parent involvement expectations, support for students, barriers to enrollment, students leaving the school, diversity of student body, and student interactions across race, class, and language groups.

During data collection, I maintained a research journal in which I wrote memos about emerging themes, questions, and topics to explore more fully. These memos were useful for processing what I was learning and for thinking about next steps. In addition, these memos
address concerns of reliability by serving as an audit trail. To address concerns of validity, I triangulated the data using multiple sources of data, including interviews with participants in at least two different roles at each school as well as observations during open houses/school tours at two of the schools.

## Data Analysis

After collecting all the interview data, I created a case study database for each of the three schools. This database included interview transcripts, field notes from open houses/school tours, and informational materials collected from the school or downloaded from the school website. I conducted open coding, which allowed themes to emerge rather than being predetermined (Merriam, 2009). I coded data using 16 categories that I developed as a reflection of what I saw in the data: facilities, space, location, transportation, information/outreach/recruitment, enrollment process, student support, discomfort discussing race/coded language, beliefs about diversity, beliefs about other parents valuing aspects of education and diversity, diversity versus excellence, social interaction across diverse groups of students, social interaction across diverse groups of parents, fundraising, independent versus affiliated charters, and beliefs about charters.

I conducted a within-case analysis of interview data for each of the three charter schools, followed by a cross-case analysis to compare themes and identify similarities and differences among the three charters (Eisenhardt, 1989). During within-case analysis, I used analytical coding to revise my original coding scheme. I identified all instances of data for each category and sorted the data by category for each school. I then used selective coding to develop propositions. To address validity concerns at this stage, I sought to identify both confirming and disconfirming evidence. Through cross-case analysis, I developed an integrated framework that
provides a rich description of the ways in which various components of charter school policies and practices are related to varying levels and types of segregation. This qualitative analysis builds upon the quantitative analysis by developing an explanation for how charter policies and practices are likely related to segregation.

## Limitations

In general, the case study approach has both advantages and disadvantages. This approach focuses on understanding and describing findings in a rich, thick, contextualized way; in doing so, the findings can help describe a more fully developed theory of how charter decisions, policies, and practices relate to segregation and diversity. A case study is one important step in the research process, but it is also limited in that these case studies cannot be generalized to other charter schools and districts.

In addition, there are several aspects of these particular case studies that could generate limitations. First, participants at each of the three schools are affiliated with the schools in different ways, which could result in different types of topics being more important to different participants, a situation that is likely to occur with any type of interview method but might have been exacerbated by the variation across participant roles. Second, due to my own language limitations of speaking only English, I interviewed all participants in English, which excluded non-English-speaking participants, a limitation that might be especially important for Valley Charter. Third, the race of participants varies and is often not representative of the school's enrollment. At Downtown Charter, all participants are white, which is likely related to the roles of the participants as the school leader and two board members rather than as parents; however, as Downtown Charter is an example of a comparatively more diverse school, having all white participants is a limitation that could affect the findings regarding Downtown Charter.

Additionally, at Ocean Charter, a predominantly white school, three out of four participants are non-white; again, the race of participants at Ocean Charter could affect the findings related to Ocean Charter. Fourth, the number of participants from each school is somewhat small. While it was possible to develop a well-rounded understanding of each school and I began to hear consistent messages about each school from the small number of participants, my findings are likely not saturated and additional interviews with participants from each school could expand or deepen the findings. Fifth, the use of snowball sampling and the school leaders' involvement in recruiting participants at Valley Charter and Ocean Charter might have created some selection bias among participants for these two schools. While participants were granted anonymity and the school leaders were never informed of who participated, this method for obtaining participants might have influenced the findings. However, participants did make critiques of the schools and expressed frustration with some aspects of the school leadership, suggesting they were being forthcoming and honest with their responses despite the initial contact from their school leader. Finally, these case study schools are not perfect exemplars of clear variation in levels of segregation-one segregated minority school, one segregated white school, and one desegregated school. However, they are useful case studies in that they provide important insights into how different decisions, policies, and practices are related to somewhat varying levels of segregation while at the same time also raising issues about the intersection between charter schools and other important topics, such as bilingual education and gentrification.

## Valley Charter School

Valley Charter opened as an independent start-up charter school in 2001 in the San Fernando Valley area of Los Angeles. The school enrolls approximately 400 students in grades K-8. Valley Charter School's charter was recently renewed for 2016-2021.

Valley Charter is racially and socioeconomically segregated but has some diversity in terms of the students' language backgrounds (Figure 79). Valley Charter's mission and dual immersion program attract both native Spanish- and English-speaking families. The mission creates some diversity but a need for greater racial diversity among students and teachers is apparent to some parents. The mechanisms that seem to prevent desegregation include location and transportation needs, passing of information by word of mouth, enrollment process, and support for struggling students but not those who are excelling academically. While the school's use of a dual immersion program is the foundation for creating some diversity, it is also creating an unintended effect of insufficient focus on other more rigorous academic instruction, which is leading some families of high-achieving, non-Latino students to consider leaving the school, particularly in the upper grades.

Figure 79
Valley Charter Enrollment by Race, 2014-2015


- Latino
- White
- Black
- Asian
- Two or More Races

Source: National Center for Education Statistics, Common Core of Data.

## School Mission Embraces Diversity, Yet Racial and Socioeconomic Diversity Is a Concern

Valley Charter was founded by a mother-daughter team whose family had participated in LAUSD's desegregation plan in the 1970s. At that time, Allison, who was nine years old, travelled on a bus 20 miles away from the family's neighborhood to an inner-city Los Angeles school. Through this experience, Allison, who is now serving as executive director of Valley

Charter, "learned the true beauty of the diversity of Los Angeles as well as the many barriers that separated her from her Spanish-speaking, Latino classmates. The realization of social injustice as a child evolved into the promise of a mother: 'My children will go to a school where they are free to make friends with their classmates and not give a second thought to the differences that separate them." This experience motivated the mother-daughter co-founders to open Valley Charter, a place where they believe "language and culture do not separate children-they unite them." As such, Valley Charter has a dual immersion program in English and Spanish.

The school's mission is "to bring together a diverse community of learners where cultural and individual differences are the building blocks of social, academic, and interpersonal success," which Allison, one of the founders and the current executive director who is a white female, explains:

We really believe that we want this school to be very diverse in terms of servicing different cultural, linguistic, and socio-economic backgrounds in one school setting where the kids were integrated together, and given the tools and strategies to live together and work together every day.

This mission goes hand-in-hand with the school's approach to teaching and learning through a dual immersion program in which all students learn Spanish and English. As Kristen, a white mother, explains:

I think that there is something to the fact that the parents all choose to send their kids to this diverse place and that the teachers choose to be teaching in this diverse place. That the mission of the school is to support diversity and understanding of different cultures. It's not just to be surrounded by lots of different people, but to understand, to learn.

As she makes clear, there is widespread support among parents and school staff for bilingualism and the idea of diversity, which is why they selected this particular school.

However, the school is, in fact, segregated by race and socioeconomic status. Unlike the school's executive director, most parents are aware of this situation and express a desire for
increased racial diversity at the school, particularly in terms of Asian and black students. Kristen provides an overview of the student body:

Obviously it's a bilingual school, so we are going to have a diversity of languages. We are going to get people of different racial ethnic backgrounds because of that. Like I said, people who go to that school, quite often they choose to be there, because they want to be in a place where their children are going to be surrounded by children of other backgrounds. That said, I don't know that there's a single Asian student in that school. Maybe one. There are some African Americans, but not so many. I mean there are some, but not as many as white. It is primarily Latino and white.

Expressing a desire for more racial diversity, particularly in attracting Asian families, Kristen conjectures about why Asian parents might not be choosing Valley Charter:

We could use a few more Asian students. I would add more Asian students. You know, really we are competing though. If you are a Chinese parent or a Korean parent, there may be bilingual schools that are teaching either your native language or the language of generations ago and you might be interested in having your child learn the language that goes with your culture as opposed to another language. Also, especially nowadays, it's as important to know Chinese as it is to know Spanish.

Kristen's reasoning about Asian parents' choice not to send their children to Valley Charter might be correct. However, there might also be other explanations, such as the location or lack of information dissemination, that contribute to this situation.

Similarly, Joy, a black mother, reflects on the racial composition of the student body:
It is very diverse with, as far as the Latino and Caucasian student mix. For me, it has been a challenge for me that there aren't more African American students. With the exception of this year, when my youngest just so happens to have, like, there are four black kids in the class, which is unheard of. With all of the other kids, they have typically been the only African American child in their class.

She is concerned about this lack of racial diversity and would like for it to change:
As an African American parent, I'd say you'd have to be really, really kind of comfortable with being one of the few as far as like all of the friends that my kids are meeting, their friends, they are not black. My friends that I've met through Valley Charter, I have met some other black parents but it's not for everybody. That is a concern. I would definitely change it.

Similar to Kristen, Joy suggests that the lack of black students at the school is likely due to black parents' choices and values. However, she also recognizes the need for a change in school practices in order to make enrollment a viable option for black families:

> We [Allison and I] talked and we just haven't really pursued it. We talk over the years, every now and again. Allison and I have mentioned like, "Oh, we need to come up with some sort of strategy to target outreach," because I think it's just more of, one, getting the word out that this exists. Then, two, I think maybe culturally, I don't know that African Americans as a whole place the same value on bilingualism as other parents. I think when my friends - now that they are, my kids are older-when they see my daughter speaking Spanish and reading in Spanish, it's like, "Wow that's cool," but it wasn't necessarily a priority or something that they saw as an advantage to pursue while younger. My husband and I have talked about, maybe we should do some, make some videos or something promoting it, but it's just time, we haven't done it. I think it would have to [involve] building relationships with organizations or institutions that have lots of African American families, whether it'd be churches or like kind of parenting groups. Then having an African American parent from the school kind of talking about what their experience has been like. Even, I think just having video and images. Even some videos of like African American kids speaking fluently in Spanish. I think that alone kind of gives people pause, "Wow," because it's so unexpected. That's what I think would be helpful.

Thus, while participants generally express an appreciation for diversity and their initial response is to say the school is diverse, they also clearly articulate the need for more racial diversity that would increase the number of Asian and black students at the school. In 2014-2015, Valley Charter was only $7 \%$ white, but none of the participants raised concern that there were not enough white students at the school.

There is a disconnect here though, as the school's executive director, Allison, does not seem to be aware of or at least acknowledge the need for a more diverse student body. Instead, her description of the school as being "very inclusive and non-segregated" is based on the rationale that:

I often hear where people say, "We have a very diverse school but they're 99\% African American." In that respect I think the school is servicing a diverse population, but they're not a diverse school. The fact that we have ... I can't think of the numbers off the top of my head, but we have diversity in terms of multiracial families, and we're not $99 \%$ the
same. We draw a very unique population, teaching in two languages opens up, breaks down barriers between our cultures.

Because the school is not $99 \%$ a single race, she views the school as being diverse, but in fact, the school is $86 \%$ Latino, not too different from being $99 \%$ a single race. She seems to have difficulty disentangling the school's dual immersion approach to teaching and learning from the reality of the racial composition of the student body.

In terms of socioeconomic status, parents perceive that there is some diversity. Sandra, a white mother, explains:

I think there's a lot of economic diversity. There are kids that are going to Valley Charter because it happened to be their neighborhood school, and Valley Charter is not in a really wealthy or even . . It's probably a middle-class, lower-middle-class neighborhood. There's kids that are going who live in apartments. Kids that are going who live in houses. Kids that are going that live with their grandparents.

Likely due, at least in part, to the school's location, there is a substantial share of low-income students (59\%) and because of the dual immersion program, middle- and upper-middle-class families from outside of the neighborhood choose to enroll their children at the school. However, there seems to be a distinction among families of different races in terms of socioeconomic status, as Joy notes:
[There's] a little bit of a divide. I would say the majority of our Latino families are probably on the lower socioeconomic bracket. Lots of them are local. I think with our African American and our Caucasian parents, I would say most of us are kind of middle class.

Thus, despite a mission and dual immersion program that highlight the value of diversity, especially language diversity, there is a need for greater diversity, particularly by race, at Valley Charter.

## Teacher Diversity Needed

In addition to a need for more racial diversity among the students at Valley Charter, diversity among the teaching staff is also somewhat limited. Most of the teachers (89\%) are

Latino and in terms of language background, Allison explains that "for the staff, the majority of them, their first language is Spanish so they're native Spanish speakers or they were bilingual, biliterate as young people." Their ability to serve as models in terms of language is an asset that Sandra describes:

The teachers to me are really role models, really dedicated. The teachers will talk a lot about where they're from. Clearly, they themselves wanting to be teachers at Valley Charter, really value bilingual education. I think they bring that to the school.

However, the lack of racial diversity among the teachers also causes a concern for some participants. Joy explains her concern with the lack of racial diversity and why she believes it is the case:

This is like one of the downfalls of it being a bilingual school. The teachers, almost every year it's like, "We need more black teachers." They have to be fully bilingual. It's kind of like a catch $22 \ldots$ They did hire a new aide who is Dominican. That diversifies and he looks like really dark. My daughter's aide this year-she has a one-on-one behavior aide-and they hired someone who is African American even though she doesn't speak Spanish. I think there are some things like that they are trying. I mean we've talked about like are there ways we can, I don't know ... It's just the pool is so small because they have to be fully bilingual.

Having a diverse teaching staff is a concern nationwide, and by layering on the requirement that teachers be bilingual, creating a racially diverse teaching staff likely becomes even more challenging. However, as both Joy and Sandra note, teachers serve as models and thus the lack of a racially diverse teaching staff could be contributing to the school's lack of a racially diverse student body as parents might not want to enroll their children in a school in which their children's background is not reflected among the teachers and leaders.

## Location Selected to Create Diversity but Lack of Transportation Is Limiting

In 2014, the neighborhood (census tract) that immediately surrounds Valley Charter had a population of 3,938 and was predominantly Latino (Figure 80) (U. S. Census Bureau, 2015). In 2000, the larger region of Los Angeles (defined as a neighborhood by the Los Angeles Times) in
which Valley Charter is located had a median income of $\$ 51,601$. Within this larger region, there were six public schools, four of which were TPSs and two of which, including Valley Charter, were charters. There were also six private schools (Los Angeles Times, 2016).

Figure 80
Racial Composition of Census Tract Surrounding Valley Charter, 2014


$$
\begin{aligned}
& \text { - Latino } \\
& \text { = White } \\
& \text { = Black } \\
& =\text { Asian } \\
& \text { = Two or More Races }
\end{aligned}
$$

## Source: U.S. Census Bureau, American Community Survey 5-Year Estimates.

Valley Charter's location in the San Fernando Valley was intentionally selected 15 years ago in order to make the mission of creating a diverse community possible. Allison explains:

We were interested in [this community] and this part of the San Fernando Valley because we felt it would be ideal for the recruitment of this program. . . . For our dual immersion program to be very successful, you want to have a balance of English proficient and students who are proficient in the target language, which in our case was Spanish. . . . We thought [this community] was a great location because we could draw from the entire . . . San Fernando Valley, [which] is just a very diverse area. We thought that we could recruit the right population by being here, get that balance that we needed, which has proven to be the case.

In fact, the school's location in a community that is about half Latino and one-third white has been helpful for creating language diversity, but in terms of achieving racial diversity, this location has been much less successful. The neighborhood immediately surrounding the school is predominantly Latino and low income. Thus, Latino families who live in close proximity to the school often enroll their children at Valley Charter.

The diversity that does exist at the school often comes from families who live outside of the immediate neighborhood and use their own transportation to get to Valley Charter. In fact,
some families drive great distances in order to enroll their children at Valley Charter, as Deirdra, a Latina mother and board member, notes:

Apparently, they come from all over. We have people like me, who come all the way from Grenada Hills. I know several people that come from Grenada Hills. Some folks are coming all the way from North Hollywood. Really, it runs the gamut. There's students from Canoga Park. . . . It's a lot of different areas. People do travel to come to this school.

As Sandra explains, the school's dual immersion program is unique in Los Angeles, especially in the Valley, and this aspect of the school seems to provide sufficient motivation for some parents to be willing to make the sometimes very long drive:

Once I had gone on a tour, then I met other parents who were really passionate about bilingual education and really excited about the school. Some people were coming from quite some distance, from other areas, Calabasas or LA or Hollywood, really willing to drive their kids pretty far in order to get them to Valley Charter. Then, it was more like, "Oh yeah, there's other parents who are interested in this, too. We're not crazy."

For other families, however, if the school had been located somewhere further away from their
home, they would not have selected it. For example, Kristen explains:
It was nice that it's nearby. I mean we certainly wouldn't have gone out of the Valley . . . Let's say this was in North Hollywood, I probably wouldn't have done it. . . . There are people that come from really far away, because it's just that important to them. For me personally, I just don't see how that would have fit into our lives. If there had been a school bus, sure. If we had to drive that half an hour in each direction to get him to school, I don't think that would have happened.

There is no transportation provided, which could create a barrier for some families,
especially those living outside of the immediate neighborhood. ${ }^{12}$ Absent any official
transportation, Deirdra explains past efforts to organize transportation among the parents:
We've talked a number of times of trying to see if we could get vans that might pick up a group of students, but because everyone is so spread out, it hasn't happened. So, we all drive our kids to school. Some kids, you see them, some parents live locally and they walk, take the bus, but the majority drive.

[^11]For low-income families in particular, the lack of transportation could pose a problem as Joy describes: "You definitely have to have your own transportation. If parents don't have cars, then I would imagine they would have to live really close to the school."

Without the provision of transportation, diversity is often hard to achieve. In this case, the school draws heavily from the surrounding predominantly Latino and low-income neighborhood, which is reflected in the student demographics, as well as other families in the Valley who are able and committed to driving their children to and from Valley Charter on a daily basis. If transportation were provided or if the school were located in a more diverse neighborhood, it is possible that the student body would be more diverse as well.

## Information Disseminated by Word of Mouth

Information about Valley Charter is primarily shared through word of mouth. For example, Kristen learned about the school "from my sister-in-law, who had considered it, but ended up not choosing it for her daughter." Joy gathered information about Valley Charter through her own research and queries:

I think too, just figuring out the whole system of schools and how to apply and deadlines and locations, it takes a lot of work. The first year before my daughter got into this school I spent so much time, like researching different schools. Then, you kind of have to be in, especially with the charters, in kind of a circle of people who know because there is no place where it's like . . With the magnet schools you can go to the choices brochure and it has everything there. It's one application. It's very easy to access that. The charters are so independent and they are small schools talked about here and there. All of the charters, I found out by word of mouth. . . . It can be a very exclusive experience because if you don't know anybody that knows of charters, unless you live by one, you drive by it, you see it. Without that, you basically just have to know someone that knows if it exists.

As Joy suggests, relying on word of mouth and social connections rather than targeted outreach and recruitment from the school tends to exclude people and exacerbate segregation.

The school does not conduct recruitment or outreach because the waiting list is already so long. Allison justifies this decision, saying: "Right now we don't do a whole lot. I mean we're
just getting people without doing a whole lot of recruiting, and we always have more applicants than we have spaces." Deirdra's comments confirm:

To be honest, there's such a long waiting list that we really don't have to do too much outreach. There's always more people that want to come to the school than the school can take, because we can only take 400 students.

What is important to Valley Charter in terms of communication is providing information in both English and Spanish. It is important to have an applicant pool that is balanced in terms of native Spanish speakers and native English speakers so that the group of students that is randomly selected in the lottery will likely also be balanced in terms of native language, a key feature of the dual immersion approach. Allison explains that one way Valley Charter tries to achieve this balance is by ensuring that "all of our . . print materials . . . are in both languages. The tours and the informational meetings that we do are provided in both languages. Pretty much everything we do is in both languages."

It is likely that the lack of formal outreach and recruitment contributes to a less diverse student body. If more white, Asian, and black parents and families outside of the immediate neighborhood were aware of the school's existence through targeted outreach and recruitment and if information was not confined to the social networks of current attendees, it is possible that the school could obtain a more diverse student body. However, the lack of such efforts is likely related to the current lack of diversity. Prioritizing linguistic diversity over racial or socioeconomic diversity, the school's effort to provide information in both Spanish and English likely contributes to their ability to obtain a linguistically diverse student body.

## Enrollment Process Reproduces Existing Demographics

Valley Charter conducts an open lottery through which students are admitted to the school. A lottery can create diversity if the applicant pool is diverse, but absent intentional efforts at recruitment and outreach in order to create a diverse applicant pool, it is unlikely that
the enrollment process would result in a diverse student body. Priority is given to students in LAUSD, an extremely large district, so this priority does not effectively change the likelihood of admittance. Priority is also provided to siblings of current students and children of staff members. Kristen explains: "There's lots of siblings. People have kids and then they send their younger siblings to attend the school as well. Because it's not that big of a school, it gets pretty filled up with siblings." The sibling preference is important for families so that they do not have to send their children to different schools, but in terms of the overall student enrollment, this preference likely perpetuates the current demographic composition of the student body. Because the vast majority of current students are Latino, as are their siblings, it is likely that the sibling preference contributes to the maintenance and reproduction of a racially segregated school. Similarly, as the majority of teachers and staff members are Latino, this preference likely contributes to racial segregation as well. While participants perceive that the sibling preference, and to some extent the staff member preference as well, are related to the racial composition of the school, quantitative enrollment data describing the extent to which these preferences influence the student body was not available for analysis.

## Support for Struggling Students and Students with Disabilities but Not High-Achieving

## Students

Valley Charter provides numerous supports for students with disabilities and students who are struggling academically and behaviorally; however, there is a lack of support for students who are high achieving. Deirdra expresses pride in the school's support for students with special needs:

There's a lot of accommodation. We actually have a lot of kids with different special needs, and there's someone that heads the special needs teachers, and there's a number of teachers that specialize in behavioral issues, that come into the classroom to work independently with some of those kids that need help.

Similarly, Allison conveys her beliefs:
I think all students are successful here. . . . I would say the only time where a student is not successful is when they have a disability in which language acquisition or language processing presents a challenge that is so extreme that the parent or the staff feels that the student might be struggling. . . .Sometimes trying to learn two languages at the same time is complicated. If the student is presenting difficulties that it's really stressing them out to the point where it's interfering with their education in either language, then that's a conversation to have. That's very rare, and I would say for the most part any student can be successful in dual immersion with the right support.

Joy's experience with each of her three children supports Allison's assertion that all students can be successful at Valley Charter:

My oldest daughter . . . has autism and so she has a lot of like behavioral challenges, developmental, academic. She just needs a lot of support and she's done really well at Valley Charter. My son is as smart as a whip, traditional boy. And like I found the school to be great for him as well. Then, I've got my youngest, which is a social butterfly... I've seen all different types of kids thrive.

Generally, participants describe Valley Charter as a school that is supportive of the many challenges students might experience. The support for students with disabilities and students who are struggling academically and behaviorally is essential and likely contributes to the school's ability to retain students for many years at a high rate.

However, when it comes to providing services for students who are excelling and need enrichment, the services, or even differentiation within the classroom, are limited. Kristen describes her son's situation:

Nathaniel's really good at math. If they would start teaching him long division and complicated multiplication, . . . he could totally do it. I do it a little bit at home, and he gets it already, but he doesn't have the patience to let me teach him so much at home. . . . If they would do more of that, he would move beyond where he is even faster. I don't see them taking a group of kids who might be ready for the next level and pushing them ahead. In the math anyway.

Joy describes a similar perspective based on her son's experience:
I think there could be a little bit more work done with differentiated learning within the classrooms. My son is really great in math. Sometimes I've had to like nudge the teachers like to give him more advanced work or like they have this computer math program that
they follow throughout the year. Usually he taps out of his really quickly. This year the teacher has like slowed, I guess the way she slows him down is like she cuts it up because she can control how far he can go. . . . He is like, "I want to do more." Then he gets way ahead of the other kids. I could see why she, on her end, doesn't want it. Then I think, I don't know, I think there is a lot of support for the kids that are underperforming. I think there could be more done for how do we address and keep challenging the kids who are a little more advanced in a particular area?

Support services tend to focus on struggling students and students with disabilities but leave high-achieving students with unmet needs, thus creating a dilemma for parents of those students, who tend to be middle-class and non-Latino parents, between the value of bilingualism and a desire for a more rigorous education in other academic areas, particularly mathematics.

The absence of a more rigorous education in other academic areas has led some families to consider leaving Valley Charter or actually take the steps to leave, and instead enroll their children in a different school. Kristen shares one such example:

I know of a child that left . . . because . . . [the parents] were unhappy with the teaching methods here. They didn't feel their child was thriving as that child could be. . . . It's a hard decision, because we all go there really, really wanting our kids to be bilingual and we think this is important . . It's really hard to leave that, because everybody feels so strongly about getting that piece of education, but it is not the entire picture of your child's education. If you feel like your kid's not advancing in science or math or whatever as they could be or they are not enthusiastic about school and you want them to be . . . when they get to high school, to be really excited about school so they can go on in their education. Then, you might choose to leave.

Sandra describes her own situation and expresses a similar sentiment:
Now that my kids are older, I'm not considering keeping them there for middle school. That's probably one of the things that's changed since we first started there. I think I've come to realize as we've moved up through grades that what I think Valley Charter has going for it the most is . . . a bilingual education in Spanish. I haven't felt that otherwise the school is necessarily strong academically. I've felt that I wish they didn't rest on, "We offer a bilingual education," but, "We offer an amazing education no matter what you're looking at the school for," and it happens to be bilingual.

Reflective of the market premise of competition, she continues to describe her dilemma and disappointment at the decision that she and her husband have made to no longer send their children to Valley Charter:

I really wish that there were more bilingual schools in LAUSD. I think if there were, in some ways it would give Valley Charter a run for their money because they wouldn't be able to rely on the fact that they're bilingual, therefore if you want a bilingual education, you need to send your kid to Valley Charter. I think they would benefit from that kind of . . . I don't want to say competition, but healthy competition. You need to beef up everything else about your school, because it's not just a bilingual school that people are looking for but for an all-around educational experience that includes bilingual education. . . . . . Maybe it's just because I'm a firm believer in bilingual education, I'm kind of bummed that I can't send my kids there to middle school because I'm valuing these other things as well. I think that focusing maybe more on . . . what else are parents looking for and what else do kids need to be successful into high school and beyond could be of benefit to them. I'm sure they're looking at it, but figuring out a way to actually do it, I think, would be of benefit.

Three of the four parent participants-Kristen, Sandra, and Joy, the three non-Latina mothers-all expressed concern over the lack of rigorous educational opportunities for their children and framed this concern as a trade-off between bilingualism and "more rigorous academic preparation." Thus, this lack of services raises questions about whether the limited racial and socioeconomic diversity that currently exists will be sustained given the uncertainty with which these non-Latino middle-class parents continue to enroll their children at Valley Charter. The lack of enrichment services is likely related to the lack of racial and socioeconomic diversity in the school.

## Linguistic Diversity, Racial Segregation

Valley Charter's mission to serve a diverse community of learners is only partially fulfilled. Through the school's dual immersion program, a linguistically diverse student body is present. However, other features of the school, including its location, lack of transportation, informal information-sharing practices, enrollment priorities, and support for struggling students but not those who are high achieving, are contributing to the racially segregated nature of the school. As one of the few dual immersion schools in Los Angeles, Valley Charter is fulfilling an important purpose; however, it is also missing a unique opportunity to create a more racially
diverse school for its linguistically diverse students and could be in danger of losing its linguistic diversity.

## Downtown Charter School

Downtown Charter opened in 2013 in a commercial district of the Downtown area of Los Angeles as an independent start-up school. Downtown Charter was founded by a small group of parents who got to know each other at a neighborhood playground when their children were toddlers. Believing that there was a need for an elementary school in the area, they decided to open Downtown Charter School. When it opened in 2013, it was a TK-2 school that enrolled approximately 80 students. Each subsequent year, it has added the next grade level. In the 20152016 school year, Downtown Charter enrolled approximately 200 students in grades TK-4.

Downtown Charter is somewhat more racially diverse than other charter schools in LAUSD, although it still has a long way to go toward achieving desegregation. Its somewhat multiracial enrollment is about two-thirds Latino, with the remaining one-third of students split among black, white, and two or more races (Figure 81). Downtown Charter is not as diverse socioeconomically, enrolling $61 \%$ low-income students, and slightly more than one-third of the school's students are English Learners (ELs). Multiple mechanisms contribute to creating a relatively more diverse school, including the school's mission, location, information and outreach, enrollment policies, support services, curriculum and instruction, and teaching staff. However, concerns regarding the school's facility jeopardize the future of the school and its student body.

Figure 81
Downtown Charter Enrollment by Race, 2014-2015


$$
\begin{aligned}
& \text { - Latino } \\
& \text { = White } \\
& \text { = Black } \\
& \text { = Asian } \\
& \text { = Two or More Races }
\end{aligned}
$$

Source: National Center for Education Statistics, Common Core of Data.

## Founding Mission to Embrace Diversity

With a desire to create a school in their Downtown neighborhood that did not yet have one, a group of parents founded Downtown Charter. Their goal was to create a school that would serve the Downtown Los Angeles community. Downtown Charter's mission is to create "an inclusive educational community" that provides a rigorous curriculum, hands-on learning, and collaboration with the Downtown community. The founders' mission is one that many other parents of Downtown Charter students seem to value as well. In fact, Josh highlights diversity as one of the selling points of the school for prospective parents:

I think the thing that sells everybody is the idea of the inclusion and the diversity of the school. They're obviously buzz words that get thrown around a lot with everything we do in LA, but . . The numbers of the school really bear that out much more than some other places that will pay lip-service to inclusion and diversity. . . In a city like LA, you have these enclaves where there are people who grow up in a certain part of LA who will know nothing of the people who live south of The 10. There are a lot of folks who grow up in certain neighborhoods who will never venture to South LA. Those are not the types of parents and families I see going to Downtown Charter. They're folks who value that interaction with folks of other races, folks who have different socioeconomic backgrounds, who live in different neighborhoods.

The school's location in Downtown Los Angeles makes creating a diverse school feasible, as will be discussed below, but without a specific mission to create such diversity, it is likely that would not have occurred. As Sharon, the principal who is a white female, explains:

The parents who started it, they are from a higher SES, and they very clearly said this is not a school for loft parents. This is a school for all downtown students. They made it very clear from the beginning that this was a school for all students who lived here [in Downtown], and it wasn't for just loft parents.

Josh, a white board member, further clarifies: "It's always been a goal of the founders to have it be a Downtown-serving school, but not just be serving the Downtown residents. To have it be serving folks who are working there and folks who are living there." According to Sharon, "About $60 \%$ live really in this area. A lot of parents commute in, and they work around here, so this is a school that they've chosen to put their kids in because they're close."

While the description of the founders' intentions seems to prioritize socioeconomic diversity, the school is arguably more diverse in terms of race and language. Kate summarizes the school's sentiments about diversity: "We definitely pride ourselves on having a very diverse-when I say diverse, it's for all senses of the word, ethnically diverse, socioeconomically diverse-school."

## Gentrifying Location Facilitates Diversity Effort

Downtown Charter is located in a gentrifying neighborhood in Downtown Los Angeles.
In 2008, the population of the larger region of Downtown was 34,811 . By 2010, Downtown's population had grown to 43,604 and as of 2015 , the population in Downtown was 59,145 . In 2000, Downtown's population was $37 \%$ Latino, $22 \%$ black, $21 \%$ Asian, $16 \%$ white, and $4 \%$ other. The median income for Downtown was $\$ 15,003$. There were nine schools, including four TPSs, three charter schools (not including Downtown Charter which did not open until 2013), and two private schools (Los Angeles Times, 2016).

However, since 2000, Downtown, and this neighborhood in particular, have experienced substantial growth and redevelopment. Within this neighborhood, The Staples Center opened in 1999 and the LA Live entertainment complex opened nearby in 2007. This neighborhood is being advertised by the neighborhood's Business Improvement District as a "vibrant and evolving urban community," "a flourishing urban neighborhood nestled in the entertainment hub of Downtown Los Angeles" that is "positioned to be the residential epicenter of Downtown LA" and is "home to some of the city's hottest restaurants, bars, cafes and more." ${ }^{13}$ Beginning in the early 2000s through 2008, luxury apartments and condominiums with ground floor retail have been developed throughout the area. In this particular neighborhood, as of 2016, 3,400 residential units are under construction, 3,300 additional residential units are in entitlement stages, new retail space totaling 456,000 square feet is being added to the neighborhood, and there is a nearly $\$ 4$ billion investment in the neighborhood, including new parks, trees, public art, pedestrian access, and green alleys. The median household income for the neighborhood is currently $\$ 113,000$. In 2014, the neighborhood (census tract) that immediately surrounds Downtown Charter had a population of 2,159 and was predominantly Latino (Figure 82) (U. S. Census Bureau, 2015). Downtown Charter is the only elementary school in the neighborhood.

[^12]Figure 82
Racial Composition of Census Tract Surrounding Downtown Charter, 2014


- Latino
- White
- Black
- Asian
- Two or More Races

Source: U.S. Census Bureau, American Community Survey 5-Year Estimates.
This location is important for two reasons. First, the residents of the area are diverse.
There are some low-income residents, mostly Hispanic but also black families who were living in the area prior to the surge in growth and development and who still live there. There are also middle-class families, who tend to be white or Asian families moving into the area to occupy the newly constructed condominiums and loft apartments. By attracting both of these types of residents, the school is able to create a somewhat more diverse student body. Second, as Josh described above, the school also serves the children of people who work in Downtown Los Angeles. With many professional positions located in the community as well as jobs in the construction and development industries, the goal of creating a diverse student body becomes more attainable.

Recognizing the importance of location, and in fact attributing the majority of the school's success in creating diversity to location, Sharon asserts:

Our school definitely is not segregated. I would say that charter schools are serving the community that they're founded in. If we want to say that they're segregated, I would say then our communities are [segregated]. . . . Charter schools are founded in particular communities to service that community, so . . . I don't think they are targeting certain students. We just are fortunate that we live in, or that we, our school lives in a very diverse part of LA.

The importance of place is evident in the attempt to create diversity in Downtown Charter's student body.

## Formal and Informal Information Dissemination and Outreach Strive to Support Diversity

In its third year of operation, Downtown Charter relies on multiple forms of information dissemination to inform families about its existence. First, the school works with primary centers in and around Downtown to ensure that families with young children are aware of the school. Second, Downtown Charter uses the local media to advertise and highlight news about the school. Sharon explains:

We run an ad in the Downtown newspaper. Then we've been fortunate enough in the last two years to really garnish quite a bit of media coverage in the sense of newspaper articles or different things so parents hear our name around quite a bit.

For the ads, Sharon reports that Downtown Charter runs them "in both English and Spanish. Those are our two primary languages, . . . the languages of Downtown." In addition to direct advertising, Kate reflects on the media coverage that has ensued as a result of a collaborative project to create artwork on construction fences in the community, (the project itself will be described below): "It's been a big success. . . . We just put out a big press announcement about it last week. . . . I think the school has gotten a lot of press attention from the Downtown News, the LA Times." This type of media coverage undoubtedly increases awareness and curiosity about the new school. By sharing information both in targeted places, such as primary centers, and more broadly through the news media, Downtown Charter is likely reaching a somewhat diverse set of families.

However, even with these varied attempts at disseminating information, word of mouth is still vitally important for recruiting students. Sharon believes that "a lot of it is word of mouth. Other parents tell, 'Oh, I go to this school, you should check it out.' . . . Most of our success has been word of mouth." Because of this reliance on word of mouth communication, it is likely that
new families coming to the school would be of a similar racial, socioeconomic, and linguistic background as the current families, since people tend to be part of social networks with others who are similar to themselves (McPherson, Smith-Lovin, \& Cook, 2001). This type of information dissemination is often problematic because information never reaches new communities and in many places, that means segregation is perpetuated. However, in the case of Downtown Charter, the families who currently attend the school are somewhat diverse members of different races, socioeconomic statuses, and language backgrounds, and they likely have different social networks outside of the school through which the information is being spread. Therefore, the information reaches different groups of people, and the diversity that already exists at Downtown Charter is sustained.

## Enrollment Policies

Downtown Charter uses a random lottery to determine its student enrollment. Sharon explains:

It's an open lottery. Any student can enter the lottery. It doesn't matter . . . if they live Downtown or not, and then whatever spaces we have available go to those students. Siblings are automatically admitted. . . . Siblings and board members are our only preference.

While a weighted lottery would likely create even more diversity among race, socioeconomic status, and language, a random lottery can be effective in creating diversity as long as the applicant pool is diverse. It is difficult to determine the effect of the sibling preference because the school is in its early years of existence and does not yet enroll students in all grade levels, but it is likely that the sibling preference will contribute to a replication of the existing student body. Because Downtown Charter relies somewhat on word of mouth but also conducts outreach in preschools and through the media, it is able to target specific communities, thereby increasing the chances that the applicant pool would be diverse.

## Supports for ELs, Students with Disabilities, and Struggling Students Are a Work in

## Progress

Providing support services for students is an essential part of a charter school's effort to retain a diverse student body. Recognizing its limitations in some areas, Downtown Charter works to provide the necessary support for ELs, students with disabilities, and students who are struggling academically or behaviorally.

Downtown Charter attempts to meet the needs of ELs by training all classroom teachers in working with ELs and also providing instruction to students in English Language Development (ELD). Sharon explains:

So [for] our English language learners, . . . all of our teachers are trained on working with them in the sense of just throughout the day it's embedded. There's things to support them or ways to support them. We do have a separate ELD time for them so that they can develop. Overall, they're performing pretty comparatively to the English only.

Kate's comments confirm that for ELs, "their performance is very much within the same percentage base."

For students with disabilities, Downtown Charter's services are limited, which could pose a problem for enrolling and meeting the needs of students with disabilities. Sharon explains:

For our students with disabilities, we work with LAUSD, so they bring in support. We are honest in the sense that we don't have a special ed department yet, so they're only on campus once or twice a week. They're not going to get the daily intervention, so we tell parents that ahead of time so that they can make that decision if this is the right place.

Although not clearly stating that the school discourages students with disabilities from enrolling, providing this type of information to parents of students with disabilities could steer them away from the school. Despite the lack of formal services for students with disabilities, Sharon thinks that the school's small size reassures parents that their children will still get the attention they need:

A lot of parents with students with, you know, either an IEP or just needing extra support do choose our school because it's small. It's only 200 students. I know everybody.
Teachers know everybody. It's one of those I know every parent, I know a grandparent, so it's just kind of that sort of community. Even though it doesn't have everything, parents really like that aspect of it. That their child is almost, almost has this taken care of quality for their child.

Aside from services for students with disabilities, Downtown Charter uses its four aides to provide intervention services for students who are struggling with academic and behavioral
needs. Sharon explains the school's approach to working with struggling students:
Then we have intervention programs for our students. We have four aides that are pulling kids out all of the time. We chose to use the aides that way. Instead of being in the class, we just chose to use our aides to pull out and support and really help students who need that extra one-on-one attention. They pull for academics, but then we have a mentoring program where they're pulling them for 10 minutes a day just to talk with thembehaviorally, get some goals going. We started that this year, so we don't have all the data yet to see if it worked or not.

Uncertain about whether or not these services are resulting in the desired outcomes, the school nonetheless is attempting to serve, rather than turn away, students who are ELs, who have special needs, and who are struggling academically and behaviorally. ${ }^{14}$

## Diversity-Related Curriculum and Student-Centered Instruction Likely Contribute to

## School Diversity

Incorporating both the school's project-based approach to teaching and learning as well as its desire to embrace diversity, the school's curriculum addresses diversity-related topics and utilizes student-centered projects that are relevant and meaningful to students lived experiences.

[^13]For example, the first- and fourth-grade curricula include units based on culture and immigration, which Sharon describes:

Our first-grade class, their big project of second trimester is culture. So they do their own culture, they share their own culture, and then they research other cultures. . . . Then [in] fourth grade, their first unit was all about immigration, so they studied, they interviewed their own parents about how they got to LA, how their family got to LA, and did an immigration video on all the ways that the class has, or everybody in this class, has gotten where they are now.

By utilizing these types of diversity-focused concepts as the basis for learning in multiple grades, Downtown Charter demonstrates its commitment not only to enrolling a diverse and desegregated student body but also to teaching its students explicitly about the importance of and respect for diversity. This approach sends a message to students and families that the school is a place to learn about and learn from people with different backgrounds, a message that could support a more diverse student body.

Downtown Charter also capitalizes on its location by creating a school that Sharon describes as follows:
[The curriculum is] rigorous with an emphasis on project-based learning and hands-on [activities] that also is very much in the sense of looking at LA and the world around us, having students get out into the community. . . . We use the DASH, and the Metro station is in front of the science center, . . . We've walked to LA Live. We DASH to the library frequently because it's pretty easy. They've done Chinatown, they've done Koreatown, Olvera Street.

To incorporate learning about the school's location and community further into the curriculum, Sharon describes a kindergarten unit in which the students explored "what makes a great city. They went out and they really explored our city and then came back and said, 'This is what we need, this is what we don't need.' Then they built their own city." This type of student-centered approach to teaching and learning demonstrates a respect for the students' daily lives and experiences, again likely reinforcing a more diverse student enrollment.

Alongside the school's geographic location and all the resources and diverse groups that are accessible because of it, the school has also worked to have students become engaged with the community through involvement with the development that is occurring in the area. For example, Kate, a white board member, describes a project incorporating art, development, and civic education:

Because of all the developments, there's been a ton of graffiti on the construction fences, and each time you take a fence down and put another blank canvas up, it created a more desirable place for taggers. So what we did was-the BID [Business Improvement District] facilitated it with a nonprofit called the Do Art Foundation-a project . . . on one of the most tagged construction fence sites in [the community] which was on the same block where the school is. And we had a local artist come out, and with the Downtown Charter elementary school students, had them paint the huge construction fences that were put up instead of the traditional blank canvas. And we installed them in January. And one fence probably [that had been] tagged several times a day, it has only been tagged twice in almost three months. . . . I was walking by the other week and one of the parents was walking with her daughter to school. She was like, "Mommy, this was my project."... The students have . . . paid attention to the graffiti. To me it's a great example of getting the school involved with the development and solving a big community problem that's right there on the block while also teaching them to know about art and hopefully not to tag in the future.

Kate highlights the multiple ways in which she sees the school's location and involvement with the community being beneficial to both the students and the community.

Downtown Charter's diversity-related curriculum and project-based, student-centered approach to curriculum, instruction, and engagement with the community is related to the school's overall priority on diversity and likely supports the recruitment and retention of a somewhat more multiracial and diverse student body.

## Diversity of Teaching Staff Supports Diversity Efforts

In addition to promoting diversity through curriculum and instruction, Sharon is also conscious of the diversity of the teaching staff. She explains her perspective:

It's always been my . . . opinion that students need to see examples of themselves in teaching. So I don't purposely hire for it, but I do believe like it would be great to have an African American teacher on campus or Latinas on campus.

With a teaching staff of nine credentialed teachers and four teaching aides, she explains:
Our teaching staff is diverse in an interesting way. . . . We have one Latina and one Korean teacher. But we have a teacher . . . who was born in Finland. We have a few who were born on the East Coast. One Indian teacher. Most of our teachers were born other places and have moved to LA. So it's just kind of an interesting mix of teachers that we've been able to recruit. . . . Somebody asked me, "How many bilingual teachers do you have on campus?" and I said, "One." And then I was like, "Wait, I need to correct myself, because I only have one who speaks Spanish, but I have someone who speaks Korean, one who speaks Finnish, one who speaks Hindi, so it's like I actually have quite a few bilingual teachers on campus, but one when you think of traditional bilingual." My support staff are . . . three Latinas and then one from Australia. . . . We do have two males, which is pretty high considering we only have nine teachers.

Sharon herself is a white female and the other school administrator, the director of operations, is a black male.

Again, by embracing diversity, not only in the student enrollment but also among the teachers and staff members, Downtown Charter demonstrates a commitment to diversity of race, national origin, and language. While the principal would like to recruit an even more diverse teaching staff that more closely mirrors Los Angeles, the faculty, which in 2014-2015 was 50\% white, $33 \%$ Asian, and $17 \%$ Hispanic, is more diverse than most across the nation, but similar to Valley Charter, Downtown Charter lacks black teachers. ${ }^{15}$ The diversity of the teaching staff also conveys an important message to students and families that working with and learning from people of different backgrounds is valuable, a message that likely contributes to the school's ability to maintain a slightly more desegregated student body. ${ }^{16}$

[^14]
## Small Space and Temporary Facility Create Uncertainty Among Families

Downtown Charter is facing uncertainty about its future and its ability to continue serving the existing student body and community due to two primary concerns about the facility. First, the school's current space is very small. Second, and perhaps more importantly, the school's current location is temporary and a permanent location has not yet been secured.

The small size of the school's current facility means that the number of classrooms is limited and the physical space for each classroom is small. Downtown Charter is located on the property of a medical center. There is a small playground in front of the building adjacent to a sidewalk. People enter the school through a set of double doors that are also used to access parts of the medical center. The school facility is spread across several parts of the first floor of the building, intermixed with medical center meeting rooms.

This facility poses several problems. First, there is only one third-grade classroom and one fourth-grade classroom because there is no space for additional classrooms at those grade levels. Not only does this limit the school's ability to expand, but it also creates a potential barrier for current students and families as Sharon explains:

One of the things about our school, because it is small, a barrier or something that may be part of the decision to leave if a parent decides to, is the fact that . . [a student's] behavior can impact a whole classroom. For example, with one third-grade class, I can't separate students that shouldn't be in the same classroom together.

In addition to the limited number of classrooms, the rooms themselves are small. Sharon explains, "In general, each class is 25 students except for TK and fourth, and that's due to class size, like their physical space is tiny. All of our physical spaces are pretty small, but those are smaller than the rest." This creates a problem because according to Sharon, "There's no space in the classrooms for students to just be somewhere else for a minute. Like they're really small." The limited number of rooms and small spaces also create the obvious concern expressed by

Sharon that "we can't grow as rapidly just because of our space. . . . There's a need to grow

## bigger."

Given the inadequacy of the current space and its temporary nature, the school, with the main responsibility falling on the Board of Directors, is searching for a permanent location. However, thus far, this search has been unsuccessful. The school's location in a gentrifying community, which has been helpful for creating a relatively more diverse student body, is creating a seemingly unsurmountable barrier for securing a permanent facility for the school because as Kate explains:

With the way land prices are right now, people are paying . . . way more for land. It is sort of a bubble, some would argue, and because of that people aren't willing necessarily to give a 30 -year lease to a school ... The financing company that we're working with to develop the school isn't willing to pay competitively with what some others are willing to pay.

Josh highlights the benefits and challenges of the school's location in Downtown Los Angeles:
I think it is important to stay Downtown and it's also really hard . . . with how the real estate market is in LA because the real estate market in Downtown LA is really, really hot at the moment, which makes prices for anything very high.

A different, more financially realistic pathway that charter schools can pursue to secure a facility exists through Proposition 39, which allows charter schools to apply to the school district for use of a district-owned space. ${ }^{17}$ Given this option, Josh, who is a board member, explains:

We as a school apply for Prop 39, like any good charter school, what any board would ask the staff to do. We need to keep our options open because there are instances of charter schools in LA being given empty facilities for no cost. . . . You need to at least apply for Prop 39 to see if that potentially exists [in your neighborhood]. . . . We, being a prudent board, had our staff do that.

[^15]As a result of Downtown Charter's Prop 39 application, LAUSD offered the school the option of dividing into three separate facilities, which already house district schools. In effect, Downtown Charter would be split into three campuses, and each would be co-located with a TPS, an arrangement that Downtown Charter ultimately found to be inadequate for meeting its needs. During this process, representatives from one of the other schools with which Downtown Charter would be co-located protested at one of Downtown Charter's board meetings and developed an extensive social media campaign to protest against Downtown Charter.

Both the difficulty of finding an affordable permanent facility as well as the public protest against Downtown Charter's Prop 39 application have undoubtedly created concerns among current and prospective families. Josh shares:

There's definitely concern about what the next facility will be. A lot of parents are happy with the school and everyone knows that the current home in the hospital-the hospital's been a great partner-but everyone knows that that home is a temporary home. I think it's a source of some consternation for some of the families. Understandably so.

The fragility of the facility situation could deter some families from enrolling students at Downtown Charter. How this would disparately affect families from different races, socioeconomic statuses, and linguistic backgrounds is uncertain. However, it is possible that families with more financial, social, and institutional capital, who are likely middle-class white and Asian families, would be able to gather information about other options and have the transportation resources needed to send their children to a different school. On the other hand, low-income families of color and non-English-speaking families might not seek out or have the knowledge about how to seek out other options and also might not have the logistical or financial means to do so. These differences could result in a situation in which families with greater resources are fleeing or choosing not to enroll their children at Downtown Charter.

## Maintaining Diversity?

With Downtown Charter in its third year of operation, it is too soon to tell whether or not the school will be able to maintain its current level of diversity or create an even more diverse student body as its mission stipulates. While its location in a gentrifying area has been somewhat beneficial for diversity thus far, it is also possible that low-income Hispanic families could be pushed out of the area, contributing to a transition to a more segregated white and Asian school. The school's lack of a permanent facility and difficulty in securing a facility in the high-rent gentrifying area might also cause the school to move to a different community or to close down altogether, scenarios that could jeopardize the current and future enrollment. However, the school's mission to serve the Downtown community, including families from different socioeconomic statuses, which is written into the school's charter, its attempts to disseminate information in multiple ways in both English and Spanish, and the embedding of diversity in both the curriculum and teaching staff could facilitate diversity into the future.

## Ocean Charter School

Ocean Charter School opened in 1993 as one of the first charter schools in Los Angeles soon after California approved charter legislation in 1992. From 1955 to 1992, Ocean Charter was a TPS in LAUSD. Ocean Charter is a TK-5 school that enrolls approximately 600 students. The school's charter was recently renewed for 2015-2020.

Ocean Charter is a racially, socioeconomically, and linguistically segregated school (Figure 83). Participants perceive a general lack of diversity and have varying perspectives about whether this homogeneity is desirable or not. Several mechanisms likely contribute to these high levels of segregation, including the school's lack of vision and will to diversify, residential
enrollment priorities, isolated location, lack of transportation, informal information sharing practices, and absence of student supports.

Figure 83
Ocean Charter Enrollment by Race, 2014-2015


- Latino
- White
- Black
- Asian
- Two or More Races

Source: National Center for Education Statistics, Common Core of Data.

## Lack of Diversity

Ocean Charter is an overwhelmingly white ( $80 \%$ ), non-poor ( $6 \%$ FRL), English-speaking ( $4 \%$ EL) school. Participants' overall perception of their school confirms the lack of diversity. As Adrienne, a white teacher and mother, bluntly stated: "We are not diverse. That's not us." Tom, the principal who is an Asian male, further explained: "It's primarily white, and then you've got the next group, usually, is Asian, and then the small percentage of Hispanics, and then other ... even though they're considered white, we've got some Persians." There is also some diversity of national origin with families from Australia, England, and India. As these are primarily English-speaking countries, there is a very small population of ELs although Adrienne explains that there are differences in vocabulary and accents.

In terms of diversity by socioeconomic status, Adrienne describes the student body as "strong middle class if not upper middle class. I do think that there's some that are lower middle class, but it really feels like everyone is pretty comfortable." For example, Friends of Ocean Charter is a fundraising body formed by parents at the school. In addition to conducting
fundraising events that capitalize on parents' donations, each family is requested to pay $\$ 800$ per student as a flat fee each year for the "Circle of Giving." These funds are used to hire additional teachers in order to reduce class size, support enrichment in the form of a credentialed science teacher, and purchase technology, which currently consists of one iPad or laptop per student. After acknowledging that "we don't have that much diversity," Laura, a Latina teacher, provides a more nuanced description of the student body:

We do have, there is diversity. There are a lot of Persian kids. There's some Asian kids. The Hispanic kids are the ones who usually come from someplace else. And there's not a lot of black kids. . . . There's a big variance [in economic level] for the people who live outside of [the community]. Even some of the kids who live in [the community], they'll live either in an apartment and they're coming to school. I've had kids who live in . . . the mobile home park on [the highway] . . or they'll live with a grandparent. There's still the economic diversity. . . . Just like the other day we celebrated Persian New Year, and the mom came in with a stack of fresh dollar bills and gave each kid two dollars. Never had that happen before. . . . But you know, there are probably other kids in the class who wouldn't ever see that happen. It's especially those kids who come from other places who don't have this, you just kind of notice they don't have the iPhone in their backpack waiting to go off. ...Since we have so few [ELs], we only have one class at each grade level.

In general, the school is segregated by race, poverty, and language with students being white, affluent, and English-speaking. Within these categories, there is some diversity of ethnicity and national origin.

## Some Desire but Lack of Vision and Will to Diversify

Given this homogenous group of students, opinions about whether a more diverse student body would be preferable are mixed, with some participants explaining the benefits of diversity and others citing the comfort and ease that comes along with working with this population of students and families. Tom expresses:

We would always like to have a more diverse student population. Again, depending on how many residents we get, and primarily the residents in this community are white or Asian, or Asian-Pacific Islander. But if we could increase the diversity, I would love it.

Laura shares a similar sentiment:

I like when my class is diverse. I like when they bring in their different cultures. I like celebrating things that I don't know anything about. I like Persian New Year and the Celebration of the Lights rather than just the traditional Valentine's Day, Christmas, and stuff. . . . I like kids to be exposed to that. I think in the world that is so important.

She goes on to explain the reasoning behind her favorable feelings toward diversity:
Just the idea that if you can get kids from all different places and all different types of cultures, ethnicities, my belief is you start them off that way, you're not going to have a lot of problems later on. . . . [When] you're isolated, you never see a person of color your whole life, then when you go and you see someone, you don't know how to be their friend, you don't know how to get along, you don't know how to work together. It's just not natural. So if you just naturally start that way and there is no discussion about any reason why we need to talk about that, in a sense... I just think it opens a lot of doors.

Laura's desire for diversity in the classroom reflects her belief in the long-term benefits of diversity, for both social and work interactions.

On the other hand, Laura explains that in regards to diversity, "I also get the idea that some parents prefer not to have the more diversity." She reflects on past experiences in which parents discuss their preferences using coded language about students who ride the bus rather than explicitly discussing race and ethnicity:

I have had families that seem to me they are concerned about a particular student because of their ethnicity rather than their actions. But sometimes both come into play. Then it becomes more of a deal because of ethnicity. . . . I think that parents complained more when, they would say things like, 'Oh, one of the kids who takes the buses,' stuff like that. There was a lot of that. Not so much anymore but we don't have the big amount of kids being bused in anymore.

Ocean Charter is a receiving school for the "Permits with Transportation" (PWT) program, which is one of the two main components of LAUSD's desegregation plan. ${ }^{18}$ PWT provides

[^16]transportation for students of color to transfer to predominantly white schools in order to have a more desegregated educational experience. PWT is still in effect; however, Laura's comment reveals that the number of students of color choosing to attend Ocean Charter through PWT has diminished over time. Further, she also suggests that this change is probably in accordance with white parents' preferences for a less diverse school.

Laura believes the same might be true of other teachers: "I've definitely seen that everybody does not share the same welcoming of students." Adrienne, for example, expresses comfort with the current make-up of students and families:

I'm so used to this kind of clientele. Teaching is never easy, but I know that what makes it easier here than in other schools is that I know that I get to do more teaching than not, and I love teaching. I don't have to spend a great amount of time disciplining anybody. I don't know if that's a function of diversity or ethnicity or language. I'd like to think that's a function of a socioeconomic class of this population and they are pretty well-nurtured. They are taken care of.

In fact, most of the parents in her classroom donated the requested $\$ 800$ per student, which she uses as a rationale for why she is having a good school year: "I would say most donated. I might be wrong. And this is why I think I'm having such a nice year because I think I had nearly everybody. Everyone says, 'Adrienne, you got the good, the sweet class this year.'" Adrienne uses a socioeconomic lens to explain her perspective of why she prefers teaching this homogeneous group of students and reveals her preference for a segregated, predominantly white, middle-to-high-income, English-speaking school, which she relates to an easier teaching experience and fewer disciplinary challenges.

With some teachers, parents, and principals favoring a more diverse student body but others content with the current segregated school, there is no action or effort underway to change the school in order to make it more diverse or desegregated. Laura suggests that could be accomplished by changing the lottery to a weighted system similar to the approach used in
magnet schools, but even taking this step would have a limited effect as only $10-20 \%$ of the school's students enter through the lottery. Tom suggests, "You don't really want to travel too far to go to a kindergarten school, you want to be able to be in the community" and therefore in order for the school to change, "Well, you know, the make-up of the community has to change, because they're all residents and the residents have first priority, and then we open it up to the charter." As an affiliated, rather than independent, charter, Ocean Charter is bound by an attendance zone of the surrounding neighborhood, an important factor that will be discussed below. This lack of desire, vision, and will to become more diverse among the teachers and the principal is likely sustaining the segregated nature of the school.

## Residential Enrollment Priorities Reproduce Segregation

As an affiliated charter school, Ocean Charter has little autonomy or flexibility in its enrollment process. First, residents of the surrounding neighborhood are given priority admission to the school, accounting for what Adrienne and Tom estimate to be about $80-90 \%$ of the school population. Then, the remaining seats are made available to students and families who have applied from outside of the attendance area by submitting a charter application. These seats are filled through a random lottery. With the school being located in a white, wealthy neighborhood, this process results in a segregated school that is reflective of the segregated community that surrounds it.

## Isolated Location Perpetuates Segregation

Ocean Charter is located in a residential area on the Westside of Los Angeles. In 2008, the larger region of Los Angeles (defined as a neighborhood by the Los Angeles Times) in which Ocean Charter is located had a population of 25,507 , which was $89 \%$ white, $6 \%$ Asian, $3 \%$ Latino, $0 \%$ black, and $2 \%$ other. In 2000, it ranked third for the largest percentage of white
residents among cities or neighborhoods in Los Angeles County. The median household income for this region was $\$ 168,008$. There were 10 schools in the region, including four public schools, all of which were charters, and six private schools (Los Angeles Times, 2016). In 2014, the neighborhood (census tract) that immediately surrounds Ocean Charter had a population of 6,319 and was predominantly white (Figure 84) (U. S. Census Bureau, 2015). This area has numerous parks, including four state parks, and is frequently used as a location for filming television programs and movies.

Figure 84
Racial Composition of Census Tract Surrounding Ocean Charter, 2014


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- Latino
| White
- Black
- Asian
- Two or More Races
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Source: U.S. Census Bureau, American Community Survey 5-Year Estimates.
Ocean Charter's location in a residential neighborhood on the Westside makes it geographically isolated from the rest of Los Angeles, creating an additional barrier for students and families who do not live nearby in the predominantly white, wealthy neighborhood.

Adrienne explains that "most [students] are neighborhood attending area kids. I would say I don't know exactly, but I would have to say like $80 \%$. Very few kids don't live here. I think all my kids live in [the community] this year." Explaining how this creates a barrier, she continues:

Our distance is also a problem because even if you live in Santa Monica or Venice, it's still a schlep. Even our number of bused-in kids, travelers, decreases because it's so far and the traffic has gotten pretty aggravated. That's why they might not come.

For students of color who might access the school as part of PWT, LAUSD determined that the one-way travel time on a bus is not supposed to exceed 90 minutes. With Los Angeles's welldocumented reputation for traffic congestion, this time frame could also prevent students of color who live in other parts of the district from accessing Ocean Charter through PWT. Laura explains that although "mostly it is just the kids . . . [from] this neighborhood," she has also has had some others:

I've had kids who come from Inglewood. I've had kids who come from Baldwin Hills. I have kids now who come from where I live, which is Mar Vista. Venice. Culver City. Sometimes they come because their parents work up here. That just makes it easier for them to be here.

She clarifies that she is referring to parents who work as housekeepers. Otherwise, she believes:
The different ways you could get here, whether you have transportation or not would make it difficult. . . . We can't even get people that actually want to work here because it's kind of out of the way. It's not off a freeway. It's a trek from the rest of the city. I'm not sure why, unless you're conveniently located here, that you'd want to be here.

Reinforcing this sentiment, Tom asserts, "First of all, it's proximity. You want to go to your neighborhood school. I think we do have a good neighborhood school." As a neighborhood school, Ocean Charter successfully attracts many families for whom the isolated location is not a concern.

Despite the isolated location, there are benefits to the school's location insofar as attracting families who live nearby, again, those who tend to be white, wealthy, and English speakers. Ocean Charter sits atop the hills and has a view of the ocean, features that draw teachers to the school and are believed to be considerations for parents as well. Stephanie, an Asian teacher and mother, describes her first visit to Ocean Charter:

I came to an open house at Ocean Charter. Ocean Charter is up on a hill. You can see the ocean and the mountains. The sun was setting and the ocean breeze was so calming. I was swept away! I said to myself, "I want to be here."

Reflecting on her first impression of the school, Laura remembers: "Of course the ocean view was great." The school's isolated geographic location in a segregated residential neighborhood is likely one of the mechanisms that sustains a segregated student body.

## Lack of Transportation Impedes Diversity

Location and transportation are inextricably intertwined; thus, it is difficult to discuss them separately, particularly when a school's remote location makes transportation so critical. However, there are several unique aspects of transportation that necessitate discussion with regard to Ocean Charter's lack of diversity. As previously described, LAUSD provides transportation to students who are part of the district's desegregation plan through PWT. As a result, some students from South and East Los Angeles, who tend to be lower-income students of color, have been able to attend Ocean Charter. However, even with this free transportation, Stephanie explains:

The only thing that may be a challenge for the student is a long commute if they do not live near our school. We have seen children unable to work to their fullest potential because they are so very tired and hungry at all hours. They come to school very early and stay late at the STAR after-school program. Some kids are here 7 a.m. to 6 p.m.

Thus, Ocean Charter's teachers and leader perceive that the school's isolated location and long distance away from the parts of the city where students of color and low-income students live make it a less desirable and more difficult place for students of color and low-income students to attend.

In addition to PWT, there are two other LAUSD programs, in addition to the general charter application and lottery, that could provide students with access to Ocean Charter. Students who attend low-achieving schools or overcrowded schools can transfer to Ocean Charter if space is available, which is often not the case. Moreover, transportation is not provided to students in these two situations, making attendance at Ocean Charter an unrealistic option for
many students of color and low-income students who otherwise could have chosen to attend the school through these two programs.

## Informal Information Sharing Practices Exacerbate Segregation

In addition to the barriers created by the school's enrollment process, geographic location, and lack of transportation, information about the school is shared primarily through social interactions, a process that often exacerbates segregation. As Tom comments, most families learn about the school through "word of mouth." Without formal outreach or recruitment efforts, it is less likely that families outside of the current families' social networks would become aware of the school's existence, and social networks tend to be segregated.

For families that live outside of the neighborhood, Laura explains:
The ones who are working up here hear about it from the parents that they're working for. I've had people who work as housekeepers up here, and the people they're working for tell them, "Oh, take your kids to Ocean Charter."

This is one example, and the only example provided, of how non-attendance zone families, who are likely low-income families of color, would find out about the school. Again, the information is passed by word of mouth, but in this case, it breaks out of the homogenous social network of the wealthy, white families in the neighborhood.

Although there is not currently any formal outreach or recruitment, Tom explains that there might have been in the past: "I think in the past, . . . the principal or maybe representatives from the school would go to the preschools in the surrounding area, just letting them know that this is an option." While such a formal effort at recruitment could be used to diversify the student body, by targeting preschools in the surrounding area, these efforts were likely reaching other white, wealthy, English-speaking families, further perpetuating the segregation at Ocean Charter.

## Absence of Student Supports Inhibits Diversity

Even if students and families from outside of the neighborhood become aware of the school, are willing to make the long drive to the school, and can gain access after residents have been enrolled, the lack of support for struggling students and students with some special needs could deter students from attending Ocean Charter. Although participants' comments about support services for students were rarely framed in terms of race, it is nonetheless a racialized conversation because students of color tend to be lower-achieving academically and overidentified as having special needs. On the other hand, high-achieving students, who tend to be white and Asian students, are often quite successful at the school.

Ocean Charter tends to enroll students who are high academic achievers. Adrienne describes the school as one that is "high functioning, highly academic" and asserts that "I think high-achieving kids will do great here." On the other hand, Laura explains:

Whether it's ethnicity, whether it's . . . that has been traditionally a struggle point for us in making sure that those needs of those kids are met because . . . we don't have programs necessarily in place that are for bringing kids up to, if they come to us at a certain point. We've had training on . . . targeting kids to make sure they're moving through. Setting smart goals for them. Making sure they move through.

Laura's comment demonstrates the school's struggle in talking about and working with students who are not academically high-achieving, a gap that could steer low-achieving students, who tend to be low-income students of color, away from the school.

The lack of services for students with emotional needs is a common concern. Adrienne identifies this as an area for improvement, saying, "We don't have any kind of resource for emotional or psychological issues. That's a huge problem for me." Tom highlights this concern as well: "The only thing that could be a potential barrier is someone who might have special needs. If we don't have the program, we can't create a program for one particular student . . . We don't have an ED (emotionally disturbed) program." Expressing frustration with their challenges
in meeting these needs, Stephanie asserts: "LAUSD needs to provide us with more qualified special needs assistants, health care assistants, and school nurse and school psychologist time to support all the children."

## Perpetuating Segregation

Ocean Charter's residential enrollment priorities, isolated geographic location, lack of transportation, informal information sharing practices, and absence of student supports all contribute to the maintenance of a highly segregated, predominantly white, non-poor, Englishspeaking charter school.

## Comparison of Themes

At each of the three case study schools, a variety of mechanisms contributes to varying levels of racial, socioeconomic, and/or linguistic segregation. While it is difficult to generalize based on these case studies because the local context and ways that decisions, policies, and practices are enacted are extremely important, it is nonetheless possible to identify overarching categories of mechanisms that are likely to either exacerbate or ameliorate segregation. The findings from Valley Charter, Downtown Charter, and Ocean Charter indicate that there are three types of school-level mechanisms that affect charter school segregation: charter founding decisions, school policies and practices, and family influence (Figure 85). District- and statelevel policies also impact these three categories of findings. While charter schools have little control over the ways in which parents and families influence the diversity of the school, they have substantial power and autonomy-a foundational aspect of the concept of charter schools in general-in the decision-making process at various stages, including the writing of the charter petition application, and the development and implementation of various policies and practices throughout the school's existence.

Figure 85
Mechanisms Related to Charter School Segregation


## Charter Founding Decisions

When a charter school petition application is developed, the petitioners must detail the school's mission, identify its status as an independent or affiliated charter, and describe the school's location. After making these founding decisions, the petitioners must secure a facility for the school. All of these decisions can lead to the creation of a diverse charter school or one that is racially, socioeconomically, and linguistically segregated.

If the charter's mission includes a focus on creating a diverse community within the school, a more desegregated school is likely to be created. For example, Valley Charter's mission "to bring together a diverse community of learners where cultural and individual
differences are the building blocks of academic, social, and intrapersonal success" and Downtown Charter's mission to develop "an inclusive educational community" both include some reference to diversity and inclusion as important values for the makeup of the school itself. As such, these two schools enroll student bodies that are relatively diverse in at least some ways: linguistically for Valley Charter and racially for Downtown Charter. On the other hand, Ocean Charter's mission "to promote lifelong learning, maximize student achievement, and instill concern for others" does not mention the importance of diversity within the school but only that they aspire to "produce successful, responsible, caring, respectful, and inquisitive human beings capable of participating in a diverse changing world." Without an explicit goal to create a diverse school community, it is therefore not surprising that Ocean Charter enrolls a wealthy, white, English-speaking student body that is highly segregated by race, socioeconomic status, and language background.

In addition to the charter's mission, in LAUSD, a decision about whether to become an affiliated or independent charter also influences the school's ability to create a diverse and desegregated student body. This finding highlights the way in which LAUSD's policies about affiliated and independent charters impact school-level diversity efforts. The differences that emerged in these three case study schools are consistent with previous quantitative research that found distinct differences between independent and affiliated charters as well as between conversion and start-up charters in LAUSD, with affiliated conversion charters tending to serve more advantaged student bodies that have a larger share of white students, a smaller portion of FRL students, and a generally higher achieving student body (Lauen, Fuller, \& Dauter, 2015; Shin, Fuller, \& Dauter, 2015). In the current study, Ocean Charter, which is an affiliated charter school, is much more tightly connected to LAUSD and therefore has less autonomy in decision-
making than the other two case study schools. For example, since Ocean Charter is an affiliated charter, Ocean Charter's enrollment priorities must include students who live in the surrounding neighborhood, which in this case means residential segregation greatly affects the high level of school segregation. This requirement appears to have a strong impact on the predominantly white racial composition of the student body, but without such a requirement, it is possible that Ocean Charter could work to create a more diverse student body if desired. The residential preference for affiliated charters is an example of how district-level policy constrains the school's potential ability to create diversity. In terms of personnel and hiring, Ocean Charter is required to hire from the pool of applicants in LAUSD and must abide by collective bargaining agreements, restrictions that could perhaps result in a teaching staff that is less diverse than it might be if the school had more flexibility regarding hiring decisions, if school leaders actively sought a more diverse teaching staff. Conversely, as independent start-up charter schools, both Valley Charter and Downtown Charter have greater autonomy and flexibility in various aspects of decisionmaking. This flexibility and autonomy could lead to the creation of a more desegregated school if decisions about enrollment process, curriculum and instruction, and teacher hiring, are made with diversity in mind, as will be discussed below. Among these three case study schools, it appears that independent charter status can lead to greater desegregation than affiliated charter status; whether or not the school has the will to do so is another question.

Determining the neighborhood where the charter school is located can greatly impact the school's ability to enroll a desegregated student body. Similar to findings from prior research on how a school's location can shape its student body (Henig \& MacDonald, 2002; Lubienski, Gulosino, \& Weitzel, 2009), in each of the three case study schools, participants described location as being important for determining who enrolls in the school, either to facilitate the
recruitment of a more diverse student body or to create barriers and limit students' abilities to attend the school. Downtown Charter, for example, was created in a location that lacked elementary schools with the intention of providing an elementary school to serve the growing, gentrifying Downtown community. While this decision could have easily meant creating a school for the middle-class and wealthy gentrifiers moving into the community, its location in a part of town that still retains a substantial population of low-income, Hispanic families means that it is, in fact, a school for both gentrifiers and those with lower incomes who were previously residing in the area. Valley Charter, seeking a linguistically diverse student body, chose to locate on a property that was in a low-income, Latino neighborhood and also was within very close proximity with relatively easy highway access to more affluent white neighborhoods. Although Downtown Charter students are generally drawn from Downtown and Valley Charter students generally come from the San Fernando Valley, these two larger areas include racially, socioeconomically, and linguistically diverse populations, which could theoretically be used for greater desegregation efforts. Conversely, Ocean Charter's location in an isolated residential neighborhood on the Westside, an area that is already quite segregated with white middle- and upper-class families, is further isolated in that it is not easily accessible from areas beyond its immediate neighborhood, essentially ensuring that the student body is a reflection of the segregated neighborhood in which it is located. Placing a charter school in a diverse area and/or an area that is easily accessible from other diverse neighborhoods is likely to result in the ability to develop a more desegregated school. However, locating a charter school in a residentially segregated and geographically isolated area creates a segregated school that mirrors the surrounding segregated community. In addition to the petitioners' decision about where to locate
the charter school, by authorizing charters in segregated neighborhoods, LAUSD also contributes to this mechanism.

Alongside location, the actual facility that a charter secures can also influence the diversity of the student body. For example, having sufficient space to accommodate enough students and classrooms is important. With such a small space, Downtown Charter is facing challenges of being unable to provide students with quiet space or to spread students among multiple classes, issues that deter some parents from enrolling their children at the school. Valley Charter, although not overly concerned about space, is also hoping to expand and move its middle school onto a separate campus. With a larger space, both of these schools could potentially enroll more students, which could satisfy some of the concerns from parents. Having the physical spaces to house the materials and amenities necessary to meet the needs of students is also important. At Valley Charter, there is no science laboratory or other enrichment spaces that middle-class, non-Latino parents view as being valuable assets for their children's education, a concern that leads some families, particularly middle-class, non-Latino families, to leave the school. Although not articulated, a similar issue might be occurring at Downtown Charter. Its cramped facility and limited number of classrooms might be related to the relatively small number of middle-class families at the school, especially considering the gentrification occurring in the neighborhood. Finally, the permanence of the facility is also important. At Downtown Charter, the lack of a permanent facility has created anxiety among current and prospective families, in some cases likely deterring those with other options, who tend to be middle-class white families, from enrolling at the school. On the other hand, Ocean Charter, a well-established conversion charter school, occupies a permanent facility with sufficient space, multiple gardens, and a beautiful view of the ocean is appealing to middle- and upper-class white families. This
appeal is further enhanced by the fact that through Friends of Ocean Charter and the parent donations it collects, the school has more than adequate funds to make any improvements to facilities that are needed. Thus, having a small, temporary facility can raise concerns among parents and is likely exerting an influence on the school's ability to recruit middle-class white and Asian families and maintain diversity in its student enrollment. Conversely, a large, wellresourced, beautiful, permanent facility helps to draw in non-poor white families. These findings build upon previous research which found that start-up charters struggle more with facilities concerns than do conversion charters (Krop \& Zimmer, 2005) and that parents at longer established charter schools are generally more satisfied with charter facilities than are parents at new charter schools (Wohlstetter, Nayfack, \& Mora-Flores, 2008).

Decisions about these four founding elements-mission, charter type, location, and facility-can have long-term effects on a school's ability to create and sustain a desegregated student body. Charter schools have control over these decisions; therefore, they can make intentional choices that are likely to either facilitate desegregation or to exacerbate segregation when they develop the initial design of the school and petition to create it. Charter authorizers, such as LAUSD, can also influence these decisions. Thus, LAUSD could take a more proactive stance, particularly because the district is still under court-ordered desegregation, to encourage or require charters to make decisions that would facilitate desegregation efforts rather than create segregated schools.

## School Policies and Practices

Once charter schools are granted their charter, they develop a variety of policies and engage in a range of practices. Many of those policies and practices, including outreach and recruitment, enrollment, transportation, curriculum and instruction, support services, and teacher
diversity, are likely to impact the degree to which charter schools are able to create and sustain a desegregated school.

Charter schools are schools of choice; however, in order for families to truly be able to make a choice about charters, families must first be aware of charter schools. Knowledge of and information about schools can either be provided to parents, or parents can seek out this information. Charter schools can choose to provide information, recruit students, target certain communities for outreach, or do nothing and simply accept the students whose families have worked on their own to gather information. Without providing this information, charter schools, not families, are making the choice about who applies to and enrolls in the school. Ocean Charter and Valley Charter do very little in the way of providing information, recruiting students, or reaching out to targeted communities. Both of these schools explain their lack of recruitment and outreach as being due to their lengthy waiting lists and lack of desire to add even more names to the list. However, they fail to acknowledge that if they did engage in recruitment and outreach efforts targeting diverse communities (Asian, black, and white communities for Valley Charter; black, Latino, and Asian communities for Ocean Charter), they could potentially enroll a more diverse student body if they wanted to do so. Prior research finds that in some cases, charter leaders choose not to market their schools so that they can retain control over who applies to the school, thereby excluding less desirable students from applying to and enrolling in the school (Jabbar, 2016). It is possible that, being comfortable with the current make-up of the student body, leaders at Valley Charter and Ocean Charter are similarly electing not to market their schools to a broader and more diverse set of families so that they can control who attends the school. On the other hand, Downtown Charter conducts outreach at preschools around the area, advertises through neighborhood and citywide media outlets, and works with local businesses to
promote the school. All of the school's materials are provided in both English and Spanish, the two main languages of the Downtown community. The difference in outreach and communication efforts between Ocean Charter and Valley Charter as compared to Downtown Charter could also be attributed to a number of factors, including different goals for student diversity as well as the length of time the school has been in existence. Regardless of the reason for different practices, these charter schools demonstrate that the absence of recruitment, outreach, and multilingual information is likely to contribute to a more segregated student body. Enrollment processes and priorities can either facilitate or constrain diversity efforts. If an enrollment preference is provided to students who live in the surrounding neighborhood, as is the case at Ocean Charter, charters are likely to be segregated because there is a strong relationship between residential and school segregation (Denton, 2001; Frankenberg, 2013b). However, if a random lottery without a neighborhood preference is used to determine enrollment, as is the case at Downtown Charter and Valley Charter, a more diverse enrollment is possible. The outcome of a random lottery would likely be influenced by the applicant pool, which is determined as a result of outreach and recruitment efforts as described above. Providing a sibling preference could have varied results, depending on whether the existing student body is diverse or not. At Valley Charter, the sibling preference results in linguistic diversity but not racial diversity, as the current student body is linguistically but not racially diverse and participants described that siblings often occupy many of the available seats for entering students. At a young school, like Downtown Charter, it is too soon to tell what effect the sibling preference will have. None of these three charters uses a weighted lottery that would give preference to students from certain neighborhoods, socioeconomic statuses, or other factors that could potentially facilitate a more diverse enrollment.

Once students have been enrolled, the logistical challenge of transportation becomes important. In LAUSD, independent charters are responsible for supplying their own transportation, and outside of PWT, affiliated charters are also responsible for their own transportation should they choose to provide it. However, none of these three charter schools provides transportation. This situation is similar to other non-charter schools in LAUSD as LAUSD does not provide transportation for resident students and only provides transportation for four purposes: special education, integration, distance/hazard, and public school choice/No Child Left Behind (Los Angeles Unified School District, n.d.-c). The lack of transportation means that families are responsible for providing their own transportation, a demand that might be particularly difficult for families interested in attending charter schools that are in remote or isolated locations, such as Ocean Charter. This requirement also places more limitations on lowincome families who are less likely to have the resources and time available to transport their students to distant locations, again preventing families from enrolling in places such as Ocean Charter. An exception to this situation is seen at Valley Charter, where middle-class families from outside of the neighborhood place such high value on a bilingual education that they are willing and able to drive their children longer distances to reach the school, especially because there are no other options for dual immersion in the Valley. At Downtown Charter, the lack of transportation has less influence because the school is located in an urban area that is walkable and also has multiple forms of public transportation. The lack of transportation is inextricably intertwined with the school's decision-making about location, as these two factors largely determine who can attend the school if they are not provided with transportation. Thus, in general, charter schools that do not provide transportation, especially those that are located in racially and geographically isolated neighborhoods, are likely to enroll segregated student
bodies. This finding is consistent with prior research on another form of school choice-magnet schools-which found that magnet schools that provided free transportation had higher levels of desegregation (Siegel-Hawley \& Frankenberg, 2013).

Having shared information (or not) and established the student enrollment procedures, charters often have some flexibility in determining the curriculum and pedagogy they will utilize. In LAUSD, both independent and affiliated charters have some autonomy in this area. Curriculum and instruction that are culturally relevant and responsive, meaningful for students' lived experiences, and include a focus on the fair and accurate representation of different racial and ethnic groups, accounts of historical discrimination, and affirmation of tolerance are likely to be supportive of sustaining a more diverse student enrollment (Banks \& McGee-Banks, 2004; Gay, 2010; Ladson-Billings, 1995; Moll, Amanti, Neff, \& Gonzalez, 1992). For example, Downtown Charter's units that are based on the concepts of culture and immigration demonstrate a curricular approach that would likely support student diversity by consciously engaging students in learning about diversity-related topics. Further, their project-based student-centered pedagogical approach ensures that students are engaged in meaningful learning tasks that are connected to students' realities. These curricular and pedagogical decisions at Downtown Charter likely reinforce a more desegregated student body. At Valley Charter, the dual immersion program brings the value of bilingualism to the forefront, reinforcing the importance of developing and maintaining multiple languages rather than replacing or subtracting language. Consistent with prior research findings that dual immersion often leads to greater diversity than other approaches to bilingual education, which tend to segregate ELs (de Jong \& Howard, 2009), this approach to teaching and learning honors the value of linguistic diversity and is related to the linguistic diversity that exists among students at the school. At Ocean Charter, discussion about
curriculum and instruction as related to diversity was absent. Therefore, it is not possible to draw conclusions about their approach to curriculum and instruction, but it is feasible to conjecture that since it was not raised as part of the conversation, there is not a major focus on diversity in the school's curriculum or pedagogical approach. Charters that exercise their autonomy surrounding curricular and instructional decisions in order to adopt diversity-focused approaches are likely to sustain a student body that is more diverse in at least some ways.

Alongside curriculum and instruction, charters must determine how to provide support services for students. According to state and district policy, charters have to accept and provide services for ELs, students achieving below and above grade level, students with disabilities, lowincome students, and students in other subgroups such as foster youth. However, in practice, charters' capacity for providing services to these students varies considerably and likely affects whether or not they enroll diverse groups of students. Valley Charter has well-established services for students with disabilities and struggling students, and given their dual immersion program, educating ELs is also a strength. Thus, Valley Charter does not appear to exclude students or push them out because of lack of services. However, their lack of focus on enrichment services for high-achieving students could contribute to a declining middle-class, non-Latino enrollment. At the other end of the spectrum, Ocean Charter prides itself on enrolling a high-achieving student body and providing the instruction needed to educate such students. Ocean Charter has less success in providing services for struggling students and students with particular disabilities, which likely reinforces the segregated, predominantly white, affluent enrollment of the school. In some cases, charter schools dissuade students with disabilities and instead favor traditionally abled students over students with special needs (Welner \& Howe, 2005). While there is not clear evidence that such practices exist at Ocean Charter, it is possible
that such a phenomenon could be occurring, either intentionally or not, because of the lack of skills and services available to accommodate struggling students and students with certain disabilities. As a young school, Downtown Charter falls in between these two extremes, selfadmittedly working toward improving student support services but currently using aides to provide intervention services and paying LAUSD to provide services to students with disabilities. Professional development for teachers and a dedicated ELD period for students allow Downtown Charter to support ELs. The project-based nature of Downtown Charter's approach to curriculum and instruction likely allows for differentiation and enrichment opportunities for high-achieving students. Thus, working to provide a continuum of services for student support likely contributes to Downtown Charter's ability to retain a relatively more diverse student body. For charter schools in general, the extent to which they provide support services that address the full range of students' needs is probably related to the diversity of their student body. Charters that do not provide enrichment services, such as Valley Charter, typically enroll predominantly low-income students of color and are often unable to recruit and retain middle-class and white families who have the social, political, and institutional capital to demand that their children receive those services. At charters, such as Ocean Charter, that do not provide support services for struggling students, students with disabilities, and ELs, the enrollment tends to consist predominantly of students from white, middle-class families.

The diversity of the teaching staff can also convey an important message about the school's values regarding diversity, which could potentially support or detract from desegregation efforts. Downtown Charter attempts to hire a teaching staff that represents a diversity of races and genders. At Valley Charter, teachers must be bilingual, which results in many native-Spanish-speaking Latino teachers as well as some native-English-speaking teachers
who are non-Latinos. Although the Ocean Charter teachers who are participants in this study are racially diverse, they are not representative of the larger teaching staff, which is predominantly (73\%) white. ${ }^{19}$ As most of the nation's teaching force is white (U.S. Department of Education, 2016), it is not likely that having a predominantly white staff contributes to segregation;
however, having a diverse teaching staff, which is rare, might facilitate the recruitment of a more diverse student body as teachers of color serve as role models (Graham, 1987) and can build cultural links between home and school because of their own life experiences (Irvine, 1988).

## Family Influence

Families can influence charter school segregation through two different avenues. First, families are understandably inclined to discuss their children's schools with other friends and family members. By generating awareness about the schools through their own social contacts, parents are likely to contribute to a replication of the existing student body, as social networks tend to be comprised of people who are similar in background to oneself (McPherson et al., 2001). In more segregated schools, such as Ocean Charter and to some extent Valley Charter, the dissemination of information through social networks perpetuates continued segregation.

Second, the extent to which families desire a diverse environment for their children also impacts the diversity of the school itself. For example, all of the Valley Charter parents conveyed that the primary reason they selected Valley Charter was because of its dual immersion program, which effectively creates linguistic diversity and some level of, though to a substantially lesser extent, racial diversity. Thus, they support efforts, and in some instances even propose strategies, for continuing to support and expand diversity at the school, particularly racial diversity which is

[^17]lacking. On the other hand, parents who do not desire diverse learning environments, such as those at Ocean Charter, can contribute to preserving the existing "clientele" by complaining to administrators about "travelers"-students of color-who are bused in or excluding students of color from social activities outside of the regular school day, actions that would isolate students of color and perhaps discourage them from remaining at the school. Therefore, parents' preferences for or against diversity can translate into meaningful actions that either facilitate or constrain school efforts related to diversity.

While it might seem that charter schools have little ability to change these family-related influences, charters do, in fact, have the tools to address some of these influences; whether they take advantage of these tools or not is up to the school. First, regarding the informal information sharing that occurs through families' social networks, it is likely that will persist. However, as discussed above, charters that also utilize formal methods of disseminating information and intentionally target certain communities for outreach and recruitment, such as Downtown Charter, can counterbalance, to some extent, the informal information sharing that occurs through homogenous social networks. In terms of families' desires to enroll their children at diverse schools, there might be less that charters can do to change families' beliefs and values. However, if the charter educates parents and demonstrates the educational and social value of having a diverse enrollment, perhaps families would be open to more desegregated settings. Although they might not at first appear to be mechanisms that can be influenced by charter schools themselves, these family influences have been brought to light by the participants in the three case study schools and these mechanisms are important to understand, particularly because charter schools have some capability, albeit limited, of offsetting some of these influences.

## Summary

Valley Charter and Downtown Charter took important first steps in identifying the importance of diversity with their mission, location, and curriculum and instruction, but they have missed opportunities with outreach and recruitment, facilities, transportation, student support services, and teacher diversity. This combination of positive steps alongside missed opportunities is evident in the levels of segregation at both schools, which demonstrate diversity along some dimensions of race, class, or language but are far from desegregated or diverse in others. Conversely, Ocean Charter has made no attempt to create diversity through its founding decisions or ongoing policies and practices and therefore seems content with the advantaged population it currently serves.

## CHAPTER SEVEN

## ADDRESSING SEGREGATION IN CHARTER SCHOOLS

Civil rights policies are important for making choice systems desegregated and equitable (Orfield \& Frankenberg, 2013). However, growing out of the market theory of choice rather than the integration theory of choice, charter schools do not have civil rights policies attached to them. In the current post-civil rights era, this mixed methods study finds that segregation is intensifying in both charters and TPSs in California. While the disparities in enrollment and segregation between charters and TPSs are generally modest, there are important differences between the two school types. Charters tend to enroll disproportionately large shares of advantaged students and disproportionately small shares of underserved and historically disadvantaged students. Various measures of segregation reveal mixed findings, with some locations and some groups of students experiencing more intense segregation in charters while in some cases segregation is more intense in TPSs. However, in general, charters tend to be more segregated than TPSs.

## Charters have large share of advantaged students, small shares of disadvantaged

students. Charters enroll a disproportionately large share of white students and disproportionately small shares of Hispanic students, low-income students, and ELs.

Increasing shares of intensely segregated and hypersegregated schools in charters and TPSs. In most cases, in both charters and TPSs, the shares of intensely segregated minority schools and hypersegregated minority schools are increasing. Hispanic and black students are increasingly isolated with other Hispanic and black students and low-income students are isolated with other low-income schoolmates. In both types of schools, students of color
experience a double segregation by race and poverty, and for ELs, there is a triple segregation by race, poverty, and language.

Charters often more segregated than TPSs. Compared to TPSs, multiple measures of segregation reveal that charter schools are often more segregated than TPSs. In general, larger shares of charter schools than TPSs are hypersegregated minority schools, intensely segregated white schools, and intensely segregated low-income schools. The typical black student and the typical white student are isolated with larger shares of same-race peers in charters than in TPSs.

On the other hand, some measures indicate lower levels of segregation in charters than TPSs. Exposure to white students is greater in charters than TPSs, and the typical Hispanic student is less isolated with same-race peers in charters than TPSs. Both of these findings are likely related to the disproportionately large share of white enrollment and small share of Hispanic enrollment in charters. In general, a smaller share of charters is majority EL, and the typical EL is less isolated in charters than in TPSs. This finding is likely related to the disproportionately small share of ELs who are enrolled in charters.

Charters more segregated than magnets. A comparison of charters to magnets in Sacramento and LAUSD finds that charters tend to be more segregated than magnets. Students are generally more isolated by race in charters than magnets. A larger share of charters than magnets is intensely segregated by poverty, and the disparity in exposure to low-income students by race is larger in charters than magnets. Compared to magnets, a larger share of charters is majority EL, and ELs are more isolated with other ELs in charters than in magnets.

However, in some cases, this analysis also finds that segregation is intensifying in magnet schools. This comparison is largely a post-civil rights comparison of two choice systems that, for
the most part, are not guided by civil rights policies as some magnet schools have abandoned desegregation efforts of the past and charter schools never engaged in desegregation efforts.

Academic performance lower in segregated schools. Intensifying segregation in both charters and TPSs is alarming because segregation has negative consequences for student outcomes, including academic achievement among others. Regression analysis of API scores in charter schools and TPSs confirmed that in both charters and TPSs, segregated schools have lower academic performance than desegregated schools. On average across the state, in intensely segregated schools and hypersegregated schools, the school type-charter or TPS-does not matter for API scores. Both charters and TPSs that are highly segregated perform similarly to one another and poorly in comparison to more desegregated schools. At the state level, when schools are more desegregated, TPSs outperform charter schools.

In different locales, different patterns emerge. In LAUSD and Sacramento, in segregated schools, charters outperform TPSs. In LAUSD and Sacramento's more desegregated schools, the reverse occurs-TPSs outperform charters. However, in Riverside, in segregated schools, TPSs outperform charters, and in desegregated schools, the school type does not matter for API—both charters and TPSs perform similarly.

However, as the level of segregation appears to have a stronger effect on TPSs in LAUSD and Sacramento but a stronger effect on charters in Riverside, it is not possible to conclude that the level of segregation is related to academic achievement in the same way for charters and TPS across different locales.

Various mechanisms impact segregation levels in charters. Qualitative case studies of three LAUSD charter schools further demonstrate the variation among charter schools by revealing three categories of school-level mechanisms that are related to varying levels of racial,
socioeconomic, and linguistic segregation. First, one-time decisions about the charter's mission, type, location, and facility that petitioners make during the founding of a charter school can have a lasting impact on diversity and desegregation. Second, segregation is related to a charter's ongoing policies and practices around outreach and recruitment, enrollment, transportation, curriculum and instruction, student support services, and teacher diversity. Third, the ways in which a charter responds to or works with families' influences on information sharing and preferences for a diverse school are also related to desegregation. District and state policies also influence these mechanisms.

The three case studies further demonstrate that without the intentional adoption and implementation of policies and practices that could facilitate desegregation, desegregation is unlikely to occur. The tendency toward segregation among charter schools is a reality that the quantitative measures of segregation have demonstrated and the qualitative analyses have confirmed and illuminated.

Summary. Charter schools across the state are becoming increasingly segregated by race, poverty, and language over time and are also generally more segregated than TPSs. High levels of segregation are correlated with lower academic achievement in both charters and TPSs. The way in which the level of segregation is related to academic achievement in charters compared to TPSs varies among geographic areas, but generally in segregated schools, charters outperform TPSs and in desegregated schools, TPSs outperform charters. A variety of founding decisions as well as ongoing school-level practices and policies influence the degree to which a charter is segregated.

These findings contribute to our understanding of charter school segregation in different contexts, including in metropolitan areas that are both segregated and desegregated as well as
within a large, urban, predominantly non-white school district. The trends are cause for concern as the number of charter schools and the share of students enrolled in charter schools continue to increase.

## Implications for Policy and Practice

This study's findings generate implications for policy and practice in multiple areas, including diversity goals, siting decisions, transportation, facilities, information dissemination, enrollment, curriculum and instruction, teacher hiring, and housing, all of which contribute to varying levels of desegregation or segregation in charter schools. If policies and practices in these areas are developed in a comprehensive manner to address segregation, it is possible for charter schools to create and sustain more desegregated schools that would in turn provide students with more equitable educational opportunities and outcomes. However, in the absence of such policies and practices, critical examination of the rapid expansion of charter schools is needed and reinvestment in the magnet sector deserves renewed attention.

## Diversity Goals

In their initial petition for charter school status, petitioners are required to describe how the charter school will reflect the demographic composition of the community or district in which it is located. However, if charter schools are located in segregated communities, this requirement essentially ensures that the school will also be segregated. On the other hand, as two of the case study schools demonstrate, some levels of desegregation can be achieved if there is an intentional effort to create and sustain a diverse school. If application requirements were to have petitioners explain how the charter school would enroll a diverse student body, rather than one that is reflective of the community (which could be quite segregated), it is possible that
charter schools would strive for greater desegregation. Thus, a policy requiring charter schools to set diversity goals and work to meet those goals could be effective in facilitating desegregation.

Charter authorizers could require that charter schools establish diversity goals as part of their initial charter petition. In this case, LAUSD is still under a court ordered desegregation plan; thus, LAUSD has the obligation to facilitate desegregation in the district's schools, including charters. More rigorous standards and stronger oversight could encourage charters to work toward achieving those diversity goals. Finally, charter authorizers have to reauthorize charter schools every five years; therefore, the reauthorization process provides an opportunity for charter authorizers, such as LAUSD, to hold charter schools accountable for diversity efforts and outcomes.

The state of California could encourage such efforts by including a measure of diversity or desegregation as part of the state accountability system under the Every Student Succeeds Act (ESSA) (Holme \& Finnigan, 2016, April 19). ESSA requires that in addition to several measures of academic success, each state must include one non-academic indicator of school quality or success. By including a measure of diversity or desegregation as the indicator, or one of the multiple indicators, of school success, it is likely that charter schools would create diversity goals and work toward meeting those goals in a more intentional and comprehensive fashion.

## School Siting Decisions

Because the location in which a charter school is establish is related to the racial composition of students who are likely to attend, policy that encourages the siting of new charter schools (and new TPSs for that matter) in diverse neighborhoods, rather than in neighborhoods of concentrated poverty or racial or linguistic isolation, would likely facilitate greater desegregation in charter schools. This responsibility falls to charter school petitioners who select
the school's initial site as well as to charter authorizers who could encourage greater desegregation through the authorization process.

## Transportation

The provision of transportation could enhance desegregation in charter schools as it has in other schools of choice (Siegel-Hawley \& Frankenberg, 2013). As parents in the case study schools described, when families are responsible for transporting their own children, numerous barriers-including work obligations and the lack of a means of transportation-prevent students from attending schools outside of their immediate neighborhoods, and these barriers disproportionately affect lower-income, less advantaged students and families. Providing free, reliable transportation would increase the likelihood that students from other neighborhoods could attend the school, an option that might not have been feasible without transportation. Thus, transportation would likely enhance the school's ability to recruit and retain a more diverse student body. Providing transportation is a broader concern for both charter schools and TPSs in LAUSD as limited transportation is available to students across the district.

## Facilities

Facilities are also related to a charter school's ability to recruit and retain students. As two of the case study schools demonstrate, when facilities are inadequate, families can be deterred from attending schools. This pattern likely occurs in a systematic way such that advantaged families, who have the information and resources available to make a different choice, are deterred from enrolling in charters that have less than desirable facilities. Whether charters independently secure their own facilities or are provided with access to district facilities through Proposition 39, policy ensuring that facilities are adequate in size and quality could aid schools in recruiting and sustaining a more diverse student body.

## Information Dissemination

In order for charter schools to enroll a diverse student body, a diverse group of students and families must possess knowledge about the school and its existence. However, across case study schools and participants, it is clear that information about charter schools is currently accessed primarily through social networks. Charter schools conduct little to no information dissemination or targeted outreach; thus, it is incumbent on parents to do the research or learn about charter schools from other parents and community members. Creating a central hub of information about charter school options, such as a website and printed materials including listings and important information about charter schools, could address this gap in information. Given the goal to make the information accessible to diverse groups of students and families, it would be important to provide this information in multiple languages and to disseminate it widely across districts, including at public libraries, post offices, and other locations that are frequented by families of diverse backgrounds. As the authorizer, LAUSD could encourage charter schools to cooperate with one another on this effort and could also play a key role in gathering information from all of the district's charters and creating a hub of information that is available and accessible to families.

## Enrollment Policy

Charter school enrollment policies are also related to varying levels of segregation. In most cases, enrollment priorities are given to siblings, but lotteries are otherwise random. A weighted lottery that prioritizes diversity in racial, socioeconomic, and linguistic enrollment could facilitate the creation of a more diverse student enrollment. In LAUSD in particular, the distinction between affiliated and independent charter schools is important for enrollment because affiliated charters must first enroll students within the school's attendance zone before
conducting a lottery. As one case study school demonstrated, after granting enrollment to neighborhood students, very few seats, if any, were available to students outside of the attendance zone. Any policy that dictates an attendance zone of the neighborhood surrounding a school is likely to result in segregation due to residential segregation. One of the primary features of charter schools that makes them uniquely positioned to create desegregated schools is the lack of a catchment area and the ability to enroll students from across school and district boundary lines; however, if enrollment policy requires them to give first priority to neighborhood students, this feature of charter schools becomes void. Therefore, if enrollment policies are to support desegregation efforts, these policies must, at the least, not dictate an attendance zone and could be more effective by creating a weighted lottery.

## Curriculum and Instruction

The curricular and pedagogical decisions that charter schools make are also related to their ability to recruit and retain a diverse student body. While specifying how support services will be provided is required as part of the charter petition, it appears that the full range of support services for students achieving below grade level as well as those achieving above grade level is frequently not offered. At least, that is the case in all three of the case study schools in this study. Training for classroom teachers to provide such services as well as support services through specialists is needed in charter schools. Addressing this issue would perhaps aid in resolving the perceived dilemma between diversity and excellence, as voiced by parents at Valley Charter. By using an engaging, culturally relevant and responsive curricular approach and providing high quality, differentiated instruction, charter schools could recruit and sustain a desegregated student body.

## Teacher Hiring Practices

Teacher diversity is also likely related to a charter school's ability to create and sustain a diverse student enrollment. Teacher recruitment efforts and hiring practices that intentionally target a more diverse teaching staff could facilitate the creation of a more diverse student body. In general, charters have autonomy to establish their own recruitment and hiring practices; therefore, attending recruitment fairs in diverse areas and specifically aiming to hire teachers of color could be impactful.

With regard to the particular schools in this study, unique implications for teacher hiring practices emerge. In LAUSD in particular, the distinction between affiliated and independent charter schools is important in this regard because affiliated charters must hire from within LAUSD's pool of applicants while independent charters are not required to do so. Providing affiliated charters with the flexibility to hire outside of the LAUSD applicant pool could provide additional options for diversifying their teaching staffs.

In a dual immersion school, requiring all teachers to be bilingual, regardless of whether they provide instruction in English or Spanish, severely limits the potential teacher pool, and in the case of Valley Charter, results in an overwhelmingly Latina teaching faculty. If teachers who provide instruction in English do not have to be fluent in Spanish, the options for recruiting a more diverse teaching faculty could also include more white, black, and Asian teachers.

## Charter Schools Versus Magnet Schools

While all the above policies and practices could facilitate greater desegregation in charter schools and this study's focus has been on charter schools, it is important to recognize that charter schools might not be the best approach to creating desegregated schools. It is likely that in some cases, charter schools are being used for white flight from TPSs, and in other cases,
charters are being used to intentionally serve communities of color with high concentrations of poverty. Thus, policies as well as federal and philanthropic investments that have contributed to the rapid expansion of the charter school sector are sometimes in fact harmful to the goal of creating more diverse and desegregated schools.

As the findings in Sacramento and LAUSD demonstrate, magnet schools, although their original goal of combining school choice with desegregation efforts has been waning, are still more desegregated than charter schools. Magnet schools have maintained higher levels of desegregation despite drastically reduced federal funding and the fading focus on desegregation in some magnet schools. Therefore, reinvesting in magnet schools with civil rights protections could offer promise for creating more desegregated schools of choice. This reinvestment could come at multiple levels-increased support through federal grants, such as the Magnet Schools Assistance Program, or a more local focus on expanding the magnet sector, as LAUSD is in the process of doing (Kohli, 2016, May 12).

## Housing Policy

Finally, housing policy that supports desegregated neighborhoods and communities is also important for school desegregation. Schools and neighborhoods are interrelated, particularly when transportation is not provided, making it even more difficult to create a desegregated school in a segregated neighborhood. The three case study schools in Los Angeles reveal that although not restricted by catchment areas, charters often do not draw students from larger geographic areas due to concerns with traffic and transportation. This study further demonstrates that in the more residentially desegregated area of Sacramento, schools are also more desegregated. Therefore, housing policy that supports the development of mixed-income
neighborhoods likely also would contribute to a school's ability to enroll a more desegregated student body.

## Future Research

This study raises many additional questions related to charter schools, charter policy, and segregation. In some cases, these questions involve additional types of data, such as virtual status and management organization, and the use of different methods, such as survey and network analysis. In other cases, the findings have suggested other topics, including magnet schools, charter school governance structure, desegregation/diversity in a multiracial, predominantly nonwhite context, and gentrification. The role of two California policies-California Multilingual Education Act and Proposition 39-and their relationship with charter school segregation also necessitate further exploration.

## Analyzing Different Data

To build upon the quantitative analysis of charter school segregation trends, additional data would be helpful. There might be differences in segregation levels between different types of charter schools, analyses that the current study could not explore due to data limitations. Thus, more thorough collection of data on charter school characteristics, including whether a charter is virtual or site-based and whether a charter is part of a Charter Management Organization (CMO) or independently operated, would be informative for future research. In addition to these charterspecific characteristics, better reporting and data collection about FRL and particularly EL status would be helpful.

In addition, the current analysis of the relationship between segregation and educational outcomes uses API score as the measure of academic performance. At the time when the data for this study was collected, API score was the best, albeit imperfect, measure of school
performance. However, since 2012-2013, API is no longer used in California. In CORE districts, which include LAUSD, Sacramento, and seven other school districts, a School Quality Improvement Index has been introduced and used since the 2014-2015 school year. This index uses 10 metrics to assess schools in three domains: academics, social-emotional, and culture and climate. Further, with the adoption of ESSA, states have the increased responsibility of designing their own accountability structures to measure academic success and other indicators of interest. In fact, ESSA requires that states include English language arts (ELA) and mathematics assessments, graduation rates, English language proficiency, and at least one other non-academic indicator of school quality or success. Beginning in 2017-2018, California will evaluate schools using the required metrics as well as measures of student engagement, such as suspension rates and chronic absences. This more holistic approach to evaluating schools promises to be a better indicator of some of the other important outcomes, including non-academic outcomes, related to a student's education and will perhaps account for some of the other benefits that tend to be associated with desegregated learning environments. Therefore, a similar analysis using California's new measure of school performance will be important for future research.

## Using Different Methods

To build upon the case study methodology, it would be helpful to administer a survey about charter school decisions, policies, and practices to a large, randomly selected sample of charter schools across the state or nation. While this option was not feasible for the current study because of difficulty in gaining access to this type of sample, it could be very useful in furthering the aims of this research.

Another methodological approach that is prompted by the qualitative findings is network analysis. In all three case study schools, information about the school was passed through word
of mouth and there was very little formal information dissemination, outreach, or recruitment. Thus, understanding how information is passed through social networks, whether information reaches beyond standard networks, and the resulting outcomes for enrollment could be helpful for understanding, and then perhaps disrupting, the reproduction of student enrollment that likely occurs through information sharing based on social networks.

## Exploring Related Topics

The quantitative analyses of segregation trends in magnet schools as compared to charter schools reveal that magnet schools, another form of school choice, are less segregated than charters along all three dimensions of segregation. Therefore, future research could explore the mechanisms through which magnet schools achieve greater desegregation than charter schools in the same locale, for example, in LAUSD.

The qualitative findings suggest that there are distinct differences between charter policies on governance structure and segregation, that is, whether charters are independently governed or affiliated with LAUSD. A more thorough exploration of the differences between these two types of charter schools would be informative for LAUSD. In addition, it would also be useful to identify whether this distinction in governance exists in other school districts, and if so, how it is related to segregation in other districts.

The qualitative findings further suggest that the ways in which school leaders, teachers, parents, and board members conceptualize and perceive diversity in general, as well as that of their own school in particular, are varied and are likely influenced by the multiracial, predominantly non-white context that is Los Angeles. Future research exploring how educators, leaders, and parents think about diversity and desegregation in a context that is so demographically different from the context of Brown v. Board of Education is important.

Similarly, exploring how different actors think about diversity versus desegregation would also be informative. Finally, understanding the ways in which these conceptualizations and perceptions impact decision-making about charter schools' policies and practices and the related impact on students and communities would be useful.

Finally, the intersection between gentrification, diversity, and charter schools is an area in which research is needed. For Downtown Charter, gentrification seemed to serve as a mechanism both to enhance diversity and to limit it. Further study is needed to explore desegregation trends and levers for enhancing diversity in charter schools in gentrifying areas. There is debate over whether gentrification is positive for revitalizing communities or negative for destroying community history and pushing out low-income families of color. However, as gentrification inevitably occurs, it would be important to understand what it means for schools and what role charter schools are taking in either facilitating or detracting from diversity in the schools themselves as well as in the community.

## Tracing the Evolution and Implementation of California Policies

With the passage of Proposition 227 in 1998, California voters drastically limited schools' abilities to provide bilingual education; thus, Valley Charter's role as one of the few dual immersion programs in LAUSD was important for shaping the student enrollment at the school. In November 2016, voters will again consider the issue of bilingual education as they vote on the California Multilingual Education Act (Senate Bill 1174). Should the bill pass, it would repeal most of Prop 227 and would essentially allow instruction in languages other than English by repealing the sheltered English immersion requirement and the waiver provisions of Prop 227. Instead, it would require that school district provide ELs with structured English immersion programs. Given this potential for change, it would be important to monitor and
explore whether more charter schools (and TPS) adopt dual immersion programs and what that means for desegregation in those schools. Even if the bill does not pass, this proposal suggests a growing momentum of support for bilingual education, thus, additional exploration of bilingual, and particularly dual immersion, programs in charter schools is warranted.

Another California proposition that the current findings suggest is important for understanding desegregation in charter schools is Proposition 39, which guarantees charters access to districts' facilities. However, in practice, findings suggest that there is uncertainty surrounding the adequacy of facilities that can be obtained through Prop 39. This issue likely impacts which families will enroll students at various schools, given the anxiety over future location, untraditional facilities arrangements, etc. Further exploration is needed of how Prop 39, and perhaps facilities more generally, are related to diversity efforts in charter schools.

## Moving Forward

Ongoing debate surrounding the role of charter schools in the public school landscape will undoubtedly continue, with some arguing that charter schools provide healthy competition and others arguing against charter schools, citing the harms that the privatization of a public school system can cause for students, educators, and communities across the nation. While this debate is important and should certainly continue to evolve, it is nonetheless important to understand how charters are related to segregation because given the current legal and political climate, it is unlikely that charters will disappear any time soon. In fact, in places like Los Angeles, New Orleans, Detroit, and the District of Columbia, charter reform has already begun to-or is likely to soon-restructure the entire system of public education. This study makes important contributions by documenting the extent of segregation in charter schools and the relationship of segregation to academic achievement in charters compared to TPSs. Further, it
deepens our understanding of the mechanisms that influence charter segregation. In doing so, this study could be helpful for guiding existing and future charter schools in creating desegregated learning environments that provide students with access to the academic, shortterm social, and long-term perpetuating benefits that are associated with diverse educational experiences.

The development and expansion of charter schools has occurred during a post-civil rights era in which education policy has largely neglected to consider the grave consequences of segregation. Charter schools are a massive state- and federally-funded system of schools that were created without civil rights standards, which could make charter schools vulnerable to challenge in the future. It is possible that a turning point is in the near future. The current postcivil rights period could soon be coming to an end and educational policy could once again prioritize civil rights requirements for schools of choice.

## Appendix A: School Districts Included in Riverside and Sacramento CBSAs

Riverside CBSA includes the following school districts:
Adelanto Elementary, Alta Loma Elementary, Alvord Unified, Apple Valley Unified, Baker Valley Unified, Banning Unified, Barstow Unified, Bear Valley Unified, Beaumont Unified, California School for the Deaf, Central Elementary, Chaffey Joint Union High, Chino Valley Unified, Coachella Valley Unified, Colton Joint Unified, Corona-Norco Unified, Cucamonga Elementary, Desert Center Unified, Desert Sands Unified, Etiwanda Elementary, Fontana Unified, Helendale Elementary, Hemet Unified, Hesperia Unified, Jurupa Unified, Lake Elsinore Unified, Lucerne Valley Unified, Menifee Union Elementary, Moreno Valley Unified, Morongo Unified, Mountain View Elementary, Murrieta Valley Unified, Needles Unified, Nuview Union, Ontario-Montclair, Oro Grande Elementary, Palm Springs Unified, Palo Verdes Unified, Perris Elementary, Perris Union High, Redlands Unified, Rialto Unified, Rim of the World Unified, Riverside County Office of Education, Riverside Unified, Romoland Elementary, San Bernardino City Unified, San Bernardino County Office of Education, San Jacinto Unified, Silver Valley Unified, Snowline Joint Unified, Temecula Valley Unified, Trona Joint Unified, Upland Unified, Val Verde Unified, Victor Elementary, Victor Valley Union High, YucaipaCalimesa Joint Unified

Sacramento CBSA includes the following school districts:
Auburn Union Elementary, Black Oak Mine Unified, Buckeye Union Elementary, Center Joint Unified, Colfax Elementary, Davis Joint Unified, El Dorado County Office of Education, El Dorado Union High, Elk Grove Unified, Elverta Joint Unified, Esparto Unified, Eureka Union, Folsom-Cordova Unified, Foresthill Union Elementary, Galt Joint Union Elementary, Gold Oak Union Elementary, Indian Diggins Elementary, Lake Tahoe Unified, Latrobe, Loomis Union Elementary, Mother Lode Union Elementary, Natomas Unified, Newcastle Elementary, Pioneer Union Elementary, Placer County Office of Education, Placer Hills Union Elementary, Placer Union High, Placerville Union Elementary, Pollock Pines Elementary, Rescue Union Elementary, Robla Elementary, Rocklin Unified, Roseville City Elementary, Roseville Joint Union High, Sacramento City Unified, Sacramento County Office of Education, San Juan Unified, Silver Fork Elementary, SBE-Western Sierra Collegiate Academy, Twin Rivers Unified, Washington Unified, Western Placer Unified, Winters Joint Unified, Woodland Joint Unified, Yolo County Office of Education

## Appendix B: Data Background

Table B-1
Number of Schools Included in Analysis of Race Data

| California |  |  |  | Riverside |  |  | Sacramento |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| LAUSD |  |  |  |  |  |  |  |  |
|  | TPS | Charters | TPS | Charters | TPS | Charters | TPS | Charters |
| $1998-99$ | 8183 | 144 | ND | ND | ND | ND | 635 | 15 |
| $1999-00$ | 8324 | 235 | ND | ND | ND | ND | 622 | 33 |
| $2000-01$ | 8454 | 299 | ND | ND | ND | ND | 623 | 36 |
| $2001-02$ | 8560 | 350 | ND | ND | ND | ND | 623 | 40 |
| $2002-03$ | 8674 | 408 | 841 | 23 | 539 | 21 | 628 | 49 |
| $2003-04$ | 8775 | 444 | 868 | 25 | 544 | 27 | 644 | 49 |
| $2004-05$ | 8878 | 494 | 897 | 24 | 558 | 33 | 653 | 68 |
| $2005-06$ | 9011 | 542 | 921 | 26 | 561 | 39 | 684 | 84 |
| $2006-07$ | 9040 | 616 | 936 | 29 | 552 | 46 | 699 | 102 |
| $2007-08$ | 9154 | 683 | 959 | 36 | 555 | 52 | 699 | 124 |
| $2008-09$ | 9151 | 744 | 966 | 41 | 561 | 51 | 709 | 148 |
| $2009-10$ | 8990 | 794 | 949 | 43 | 540 | 57 | 707 | 157 |
| $2010-11$ | 8942 | 887 | 959 | 53 | 535 | 62 | 725 | 176 |
| $201-12$ | 8916 | 975 | 954 | 59 | 533 | 70 | 740 | 195 |
| $2012-13$ | 8884 | 1055 | 959 | 58 | 535 | 72 | 744 | 229 |
| $2013-14$ | 8840 | 1121 | 964 | 64 | 525 | 78 | 733 | 249 |

Note. ND indicates no data was analyzed.

Table B-2
Number of Schools Included in Analysis of FRL Data

|  | California |  | Riverside |  | Sacramento |  | LAUSD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TPS | Charters | TPS | Charters | TPS | Charters | TPS | Charters |
| $1998-99$ | 8150 | 144 | ND | ND | ND | ND | 635 | 15 |
| $1999-00$ | 8268 | 235 | ND | ND | ND | ND | 622 | 33 |
| $2000-01$ | 8395 | 298 | ND | ND | ND | ND | 622 | 36 |
| $2001-02$ | 8497 | 349 | ND | ND | ND | ND | 623 | 40 |
| $2002-03$ | 8593 | 405 | 841 | 23 | 539 | 21 | 628 | 49 |
| $2003-04$ | 8689 | 443 | 868 | 25 | 544 | 27 | 644 | 49 |
| $2004-05$ | 8807 | 494 | 897 | 24 | 558 | 33 | 653 | 68 |
| $2005-06$ | 8918 | 542 | 921 | 26 | 561 | 39 | 684 | 84 |
| $2006-07$ | 8918 | 582 | 936 | 28 | 552 | 42 | 699 | 102 |
| $2007-08$ | 8983 | 517 | 959 | 16 | 555 | 39 | 696 | 106 |
| $2008-09$ | 9137 | 621 | 966 | 26 | 561 | 38 | 706 | 140 |
| $2009-10$ | 8828 | 644 | 949 | 24 | 540 | 45 | 703 | 154 |
| $2010-11$ | 8935 | 884 | 959 | 52 | 535 | 62 | 724 | 176 |
| $2011-12$ | ND | ND | ND | ND | ND | ND | ND | ND |
| $2012-13$ | 8845 | 1048 | 953 | 57 | 535 | 71 | 735 | 228 |
| $2013-14$ | 8832 | 1119 | 963 | 64 | 525 | 78 | 733 | 247 |

Note. ND indicates no data was analyzed.
Table B-3
Number of Schools Included in Analysis of EL Data

|  | California |  | Riverside |  | Sacramento |  | LAUSD |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | TPS | Charters | TPS | Charters | TPS | Charters | TPS | Charters |
| $2007-08$ | ND | ND | ND | ND | ND | ND | 698 | 113 |
| $2008-09$ | ND | ND | 951 | 37 | 539 | 46 | 708 | 135 |
| $2009-10$ | ND | ND | 934 | 40 | 516 | 51 | 707 | 146 |
| $2010-11$ | ND | ND | ND | ND | ND | ND | ND | ND |
| $2011-12$ | 8505 | 865 | 935 | 53 | 517 | 59 | 737 | 192 |
| $2012-13$ | 8453 | 957 | 944 | 57 | 513 | 62 | 742 | 225 |
| $2013-14$ | 8426 | 1028 | 949 | 61 | 506 | 67 | 731 | 247 |

Note. ND indicates no data was analyzed.

Table B-4
Number of Magnet Schools Included in Analysis of Race, FRL, and EL Data Sacramento LAUSD

| $1998-99$ | ND | 113 |
| :---: | :---: | :---: |
| $2002-03$ | 17 | ND |
| $2007-08$ | ND | 136 |
| $2013-14$ | 23 | 145 |

Note. ND indicates no data was analyzed. The same number of magnet schools are used for analysis of race, poverty, and language data for each year.

## Appendix C: Supplemental Data

Figure C-1
Enrollment by Race, All Schools, California


Source: National Center for Education Statistics, Common Core of Data.

Figure C-2
White vs. Non-white Enrollment, California


Source: National Center for Education Statistics, Common Core of Data.

Figure C-3
Exposure to White and Asian Students, California, 2013


Source: National Center for Education Statistics, Common Core of Data.
Figure C-4
Percent of 50-100\% FRL Schools, California


Source: National Center for Education Statistics, Common Core of Data.

Figure C-5
Exposure to FRL by Language, California


Sources: National Center for Education Statistics, Common Core of Data; California Department of Education, English Learners by Grade and Language.

Figure C-6
Percent of White vs. Non-white Enrollment, Riverside


Source: National Center for Education Statistics, Common Core of Data.

Figure C-7
Percent of 90-100\% White Schools, Riverside


Source: National Center for Education Statistics, Common Core of Data.
Figure C-8
Exposure to White and Asian Students, Riverside, 2013


Source: National Center for Education Statistics, Common Core of Data.

Figure C-9
Percent of Schools That Are 50-100\% FRL, Riverside


Source: National Center for Education Statistics, Common Core of Data.
Figure C-10
Percent of Schools That Are 99-100\% FRL, Riverside


Source: National Center for Education Statistics, Common Core of Data.

Figure C-11
Percent of Schools Enrolling ELs by Decile, Riverside, 2008


Source: California Department of Education, English Learners by Grade and Language.
Figure C-12
Percent of White vs. Non-white Enrollment, Sacramento


Source: National Center for Education Statistics, Common Core of Data.

Figure C-13
Percent of 99-100\% Non-white Schools, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Figure C-14
Exposure to White and Asian Students, Sacramento, 2013


Source: National Center for Education Statistics, Common Core of Data.

Figure C-15


Source: National Center for Education Statistics, Common Core of Data.
Figure C-16
Percent of Schools That Are 50-100\% FRL, Sacramento


Source: National Center for Education Statistics, Common Core of Data.

Figure C-17
Percent of Schools That Are 99-100\% FRL, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Figure C-18
Percent of Schools Enrolling ELs by Decile, Sacramento, 2008


Source: California Department of Education, English Learners by Grade and Language.

Figure C-19
Percent White vs. Non-white Enrollment, Charters and Magnets, Sacramento


Source: National Center for Education Statistics, Common Core of Data.
Figure C-20
Percent of Non-white Schools, Charters and Magnets, Sacramento, 2002


Source: National Center for Education Statistics, Common Core of Data.
Table C-1
FRL Enrollment, Charters, Magnets, and TPS, Sacramento

|  | Charter | TPS | Magnet |
| :---: | :---: | :---: | :---: |
| 2002 | $12 \%$ | $36 \%$ | $46 \%$ |
| 2013 | $50 \%$ | $50 \%$ | $32 \%$ |

Source: National Center for Education Statistics, Common Core of Data.

Figure C-21
Percent of Schools Enrolling ELs by Decile, Charters and Magnets, Sacramento, 2013


Source: California Department of Education, English Learners by Grade and Language.
Figure C-22
Percent White vs. Non-white Enrollment, LAUSD


Source: National Center for Education Statistics, Common Core of Data.

Figure C-23
Percent of Non-white Schools, LAUSD, 1998


Source: National Center for Education Statistics, Common Core of Data.
Figure C-24
Percent of Non-white Schools, LAUSD, 1999


Source: National Center for Education Statistics, Common Core of Data.

Figure C-25
Percent of Non-white Schools, LAUSD, 2013


Source: National Center for Education Statistics, Common Core of Data.
Figure C-26
Exposure to White and Asian Students, LAUSD, 2013


Source: National Center for Education Statistics, Common Core of Data.

Figure C-27
Percent of Schools That Are 50-100\% FRL, LAUSD


Source: National Center for Education Statistics, Common Core of Data.
Figure C-28
Percent of Non-white Schools, Charters and Magnets, LAUSD, 1998


Source: National Center for Education Statistics, Common Core of Data.

Figure C-29
Percent of Non-white Schools, Charters and Magnets, LAUSD, 2013


Source: National Center for Education Statistics, Common Core of Data.
Table C-2
EL Enrollment, Charters, Magnets, and TPS, LAUSD

|  | Charter | TPS | Magnet |
| :---: | :---: | :---: | :---: |
| 2007 | $27 \%$ | $36 \%$ | $25 \%$ |
| 2013 | $18 \%$ | $30 \%$ | $17 \%$ |

Source: California Department of Education, English Learners by Grade and Language.
Figure C-30
Percent of Schools Enrolling ELs by Decile, Charters and Magnets, LAUSD, 2007


Source: California Department of Education, English Learners by Grade and Language.

Table C-3
Predictors of API Score, LAUSD, White Students, Charter vs. TPS, Charter vs. Magnet

| Variable | $B$ | $S E B$ |
| :--- | :---: | :---: |
|  | $742.411^{*}$ |  |
| White Percent | $3.116^{*}$ | .262 |
| TPSvCharter | $-69.427^{*}$ | 14.307 |
| TPSvCharterxWhitePercent | 1.535 | .909 |
| MagnetvCharter | 37.252 | 21.500 |
| MagnetvCharterxWhitePercent | -.136 | 1.507 |
| Notes $R^{2}=295, * p<05$ |  |  |

Notes. $R^{2}=.295,{ }^{*} p<.05$
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

Table C-4
Predictors of API Score, Sacramento, White Students, Charter vs. TPS, Charter vs. Magnet

| Variable | $B$ | $S E B$ |
| :--- | :---: | :---: |
|  | $742.252^{*}$ |  |
| White Percent | $1.448^{*}$ | .369 |
| TPSvCharter | -113.481 | 63.993 |
| TPSvCharterxWhitePercent | 1.302 | 1.140 |
| MagnetvCharter | 107.403 | 117.940 |
| MagnetvCharterxWhitePercent | -.126 | 2.099 |

Notes. $R^{2}=.229,{ }^{*} p<.05$
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

Table C-5
Predictors of API Score, California, White and Asian Students, Charter vs. TPS

| Variable | $B$ | SE B |
| :--- | :---: | :---: |
|  | $707.958^{*}$ |  |
| WhiteAsian Percent | $2.071^{*}$ | .035 |
| Charter | $27.393^{*}$ | 4.686 |
| CharterxWhiteAsianPercent | $-.857^{*}$ | .098 |

Notes. $R^{2}=.279,{ }^{*} p<.05$
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

Figure C-31
Interaction Plot for charterXwhiteAsian, California


Note. $\mathrm{CVz} 1(1)=\mathrm{TPS} . \mathrm{CVz} 1(2)=$ charter schools.
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

Figure C-32
Regions of Significance for Charter, California


Note . Moderator = percent of white and Asian students
Sources: National Center for Education Statistics, Common Core of Data; California Longitudinal Pupil Achievement Data System.

## Appendix D: Email to Recruit Participants

Dear -----

I am a researcher at UCLA and a former teacher. I'm writing to request your participation in a UCLA research study. The purpose of the study is to learn more about charter schools in California. In particular, we would like to understand the mission of your school, how your school recruits students, and what type of students choose to attend your school. Your school's ---- is particularly intriguing and we would be very excited to learn more about your school and your students. As the ---- of ------, we believe you have valuable insights to contribute to this research study.

Your participation in this research is voluntary. If you agree to participate we will ask you to participate in an interview that will last about 45 minutes. The interview would occur on the phone, at your school, or in a different location that is convenient for you. Your responses will be kept anonymous. We don't anticipate that you will experience any risks or discomforts. While there are no direct benefits to you for participating in this research, your participation could help strengthen the design of charter schools going forward.

We hope that you will be interested in participating so that we can schedule an interview in the next couple of weeks. Please reply to this email to arrange an interview or if you have any questions.

Thank you for considering this request. I look forward to hearing from you soon.
Sincerely, Jenn Ayscue

## Appendix E: Interview Protocols

## Principal

## GENERAL INFORMATION

Tell me a little bit about yourself, your role in this school, and how long you've been here.

Describe the theme or mission of your school.

How/why did the school get started in this location?

## RECRUITMENT

Tell me a little bit about how the school gets information out to students and families about enrolling here as an option.

What forms of recruitment does the school do?
Where does the recruitment occur?

What types of students/communities are targeted in recruitment efforts?

What languages are used in the recruitment process?

## ADMISSIONS

Describe the requirements for being admitted to your school.
If more students apply to the school than you have space for, how do you determine who is admitted?

- Using criteria? Lottery? Any special weights in the lottery?


## ENROLLMENT

Tell me a little bit about the academic and behavioral expectations for students who enroll here.

- Are there contracts or specific expectations regarding behavior?
- Academic success?

What sort of expectations are there for parent involvement?
What happens if a student or parent does not uphold the contract or meet the expectations?

- How common is this?


## TRANSPORTATION

How do most students get to school on a daily basis?
What type of transportation is provided by the school, if any?

Where do most students live relative to the school?

Where did most students go to school before enrolling here?

## DIVERSITY OF STUDENT BODY

Tell me a little bit about the student body of your school.
What about the school attracts these particular students?

If a parent were considering enrolling their child here and asked you what type of students are successful here, how would you respond?

What type of students would you tell the parent might be better served at a different school and why would a different school be better for them?

What barriers might prevent other students who might have wanted to attend here from actually attending?

What types of students tend to leave the school?
What forms of diversity exist among the students at this school?

How do students at this school interact with students of other races, classes, and linguistic backgrounds?

Suppose you could change the diversity of the school's student body, what would be ideal?

- What sort of resources or efforts would be needed in order to achieve that ideal?

Some people critique charter schools for being more segregated than other public schools. How would you respond to those people?

- Why do you think they say that?
- Do you think there's any truth to that critique of charter schools?


## FINAL THOUGHTS

What do you see as the greatest success for this school?

What do you see as the biggest challenges for this school?
Is there anything else you would like to add that you think would be important for my understanding of the school?

## Teacher

## BACKGROUND

Tell me a little bit about yourself, your role at the school, and how long you've been working at the school.

What attracted you to the school when you were looking for a teaching position?
How did the school's status as a charter school impact your decision to teach here?

What do you think is most beneficial about it being a charter?

What do you think is most challenging about it being a charter?

## INFORMATION

How did you find out about the school?

What type of information was important for you to gather before accepting a job here?

When other teachers or parents ask you about the school, what aspects of the school do you usually emphasize?

If a friend were considering enrolling his or her child here and asked you what type of students are successful here, how would you respond?

What type of students would you tell your friend might be better served at a different school and why would a different school be better for them?

Do you know students who have left the school? What has been the reason for their departure?

What barriers might prevent other students who might have wanted to attend here from actually attending?

## LOCATION

What was attractive or not attractive about the school's location?

Where do most families live relative to the school?

Is transportation to the school a concern for families? How do most students get to school?

Where did most students go to school before enrolling here?

## STUDENT/PARENT EXPECTATIONS

Tell me a little bit about the academic and behavioral expectations for students who enroll here.
What sort of expectations are there for parent involvement?
What happens if a student or parent does not meet the expectations?

## STUDENT BODY

Tell me a little bit about the student body of the school.
What about the student body is most beneficial?
What is challenging/not ideal about the student body?
What forms of diversity exist among the students at this school?

Suppose you could change the diversity of the school's student body, what would be ideal?
What do you think the school needs to do to achieve that diversity?
How do students at this school interact with students of other races, classes, and linguistic backgrounds?

Some people critique charter schools for being more segregated than other public schools. How would you respond to those people?

- Why do you think they say that?
- Do you think there's any truth to that critique of charter schools?


## FINAL THOUGHTS

What do you see as the greatest successes for this school?
What do you see as the biggest challenges for this school?
Is there anything else you would like to add that you think would be important for my understanding of the school?

## Board Member

## GENERAL INFORMATION

Tell me a little bit about yourself, your involvement with the school, and how long you've been affiliated with the school.

Were you involved in the school's founding?

- What was the motivation behind creating this school? How has this changed, if at all, over time?

What about this particular school makes you invested in its success?
What do you think attracts families to the school?
How/why did the school get started in this location?

## INFORMATION

Tell me a little bit about how the school gets information out to students and families about enrolling here as an option.

What forms of recruitment does the school do?
What types of students/communities are targeted in recruitment efforts?

## DIVERSITY OF STUDENT BODY

Tell me a little bit about the student body of the school.

What about the school attracts these particular students?
If a friend or colleague were considering enrolling his or her child here and asked you what type of students are successful here, how would you respond?

What type of students would you tell your friend or colleague might be better served at a different school and why would a different school be better for them?

What barriers might prevent other students who might have wanted to attend here from actually attending?

Do you know students who have left the school? What has been the reason for their departure?

What forms of diversity exist among the students at this school?
Suppose you could change the diversity of the school's student body, what would be ideal?

- What sort of resources or efforts would be needed in order to achieve that ideal?

Some people critique charter schools for being more segregated than other public schools. How would you respond to those people?

- Why do you think they say that?
- Do you think there's any truth to that critique of charter schools?


## FINAL THOUGHTS

What do you see as the greatest successes for this school?
What do you see as the biggest challenges for this school?
Is there anything else you would like to add that you think would be important for my understanding of the school?

## Parent

## GENERAL INFORMATION

Tell me a little bit about yourself, your involvement with the school, and how long you've been affiliated with the school.

What attracted you to the school when you were selecting a school for your child?
What was attractive or not attractive about the school's theme or mission?

## INFORMATION

How/where did your family find out about the school? What type of information was important for you to gather before applying?

Are you involved in any forms of recruitment for the school/do you share your experience with other parents? What things do you usually emphasize?

What types of families/communities are targeted in recruitment efforts?
What languages are used in the recruitment process? How do you think that effects the student enrollment?

If a friend were considering enrolling his or her child here and asked you what type of students are successful here, how would you respond?

What type of students would you tell your friend might be better served at a different school and why would a different school be better for them?

What barriers might prevent other students who might have wanted to attend here from actually attending?

Do you know students who have left the school? What has been the reason for their departure?

## LOCATION/TRANSPORTATION

What was attractive or not attractive about the school's location?

Is transportation a concern for your family or other families?
Where does your family live relative to the school? What about other students? Certain communities?

Where did your child go to school before enrolling here?

## STUDENT/PARENT EXPECTATIONS

Tell me a little bit about the academic and behavioral expectations for students who enroll here.
What sort of expectations are there for parent involvement?
What happens if a student or parent does not uphold the contract or meet the expectations?

## DIVERSITY OF STUDENT BODY

Tell me a little bit about the student body of the school or your child's classmates.
What about the student body/your child's peers, is most beneficial?
What is challenging/not ideal about the student body?

What forms of diversity exist among the students at this school?

How important are different forms of diversity in selecting a school for your child?

Suppose you could change the diversity of the school's student body, what would be ideal?

- What do you think the school needs to do to achieve that diversity?

How do students at this school interact with students of other races, classes, and linguistic backgrounds?

Some people critique charter schools for being more segregated than other public schools. How would you respond to those people?

- Why do you think they say that?
- Do you think there's any truth to that critique of charter schools?


## FINAL THOUGHTS

What do you see as the greatest successes for this school?

What do you see as the biggest challenges for this school?

Is there anything else you would like to add that you think would be important for my understanding of the school?

## References

Agresti, A., \& Finlay, B. (2009). Statistical methods for the social sciences. Upper Saddle River, NJ: Pearson Prentice Hall.

Allport, G. W. (1954). The nature of prejudice. Reading, MA: Addison Wesley.
Apgar, W., \& Calder, A. (2005). The dual mortgage market: The persistence of discrimination in mortgage lending. In X. de Souza Briggs (Ed.), The geography of opportunity: Race and housing choice in metropolitan America (pp. 101-123). Washington, D.C.: The Brookings Institution.

Ausbrooks, C. (2002). Ensuring that underrepresented student groups have access to charter schools: What states are doing. Planning and Changing, 33(3-4), 185-196.

Balfanz, R., \& Legters, N. E. (2004). Locating the dropout crisis: Which high schools produce the nation's dropouts? In G. Orfield (Ed.), Dropouts in America: Confronting the graduation crisis (pp. 57-84). Cambridge, MA: Harvard Education Press.

Ball, S. J. (1993). Education markets, choice and social class: The market as a class strategy in the UK and the USA. British Journal of Sociology of Education, 14(1), 3-19.

Banks, J. A., \& McGee-Banks, C. A. (Eds.). (2004). Handbook of research on multicultural education (2nd ed.). San Francisco, CA: Jossey-Bass.

Betts, J. R. (2005). The economic theory of school choice. In J. R. Betts \& T. Loveless (Eds.), Getting choice right: Ensuring equity and efficiency in education policy (pp. 14-39). Washington, D.C.: The Brookings Institution.

Bifulco, R., \& Ladd, H. F. (2006). School choice, racial segregation, and test-score gaps: Evidence from North Carolina's charter school program. Journal of Policy Analysis and Management, 26(1), 31-56.

Blume, H. (2016, May 10). Union-commissioned report says charter schools are bleeding money from traditional ones. Los Angeles Times. Retrieved from http://www.latimes.com/local/education/me-union-charter-study-20160509-snapstory.html.

Board of Education of Oklahoma v. Dowell, 498 U.S. 237 (1991).
Braddock, J. H., \& McPartland, J. M. (1989). Social-psychological processes that perpetuate racial segregation: The relationship between school and employment desegregation. Journal of Black Studies, 19(3), 267-289.

Brenner, M. E. (2006). Interviewing in educational research. In J. L. Green, G. Camilli, \& P. B. Elmore (Eds.), Handbook of complementary methods in education research (pp. 357370). Washington, DC: American Educational Research Association.

Brown I I, 349 U.S. 294 (1955).
Brown v. Board of Education of Topeka, 347 U.S. 483 (1954).
California Charter Schools Association. (2013a). 2013-1014 California charter schools fact sheet. Retrieved from Sacramento, CA:

California Charter Schools Association. (2013b). 2013-2014 Los Angeles charter schools fact sheet. Retrieved from Sacramento, CA:

California Charter Schools Association. (2013, September 19). Key findings on 2013 charter school API scores. Retrieved from http://www.calcharters.org/blog/2013/09/key-findings-on-2013-charter-school-api-scores.html.

California Charter Schools Association. (2014). Portrait of the movement. Retrieved from Sacramento, CA:

Callahan, R. M., \& Gándara, P. C. (Eds.). (2014). The bilingual advantage: Language, literacy, and the US labor market. Bristol: Multilingual Matters.

Carnoy, M., Jacobsen, R., Mishel, L., \& Rothstein, R. (2005). The charter school dust-up: Examining the evidence on enrollment and achievement. Washington, D.C.: Economic Policy Institute.

Caughey, J. W. (1967). Segregation blights our schools. Los Angeles, CA: Quail Books.
Center for Research on Education Outcomes. (2014). Charter school performance in California. Retrieved from Stanford, CA:

Charter Schools Division. (2015a). Charter schools directory 2015-16. Los Angeles, CA: Los Angeles Unified School District. Retrieved from http://achieve.lausd.net/Page/1827.

Charter Schools Division. (2015b). New independent charter school petition application guide for 2015-2016. Los Angeles, CA: Los Angeles Unified School District. Retrieved from http://achieve.lausd.net/Page/1824.

Chubb, J. E., \& Moe, T. M. (1990). Politics, markets and America's schools. Washington, DC: Brookings Institution Press.

Clotfelter, C. T., Ladd, H. F., \& Vigdor, J. L. (2005). Who teaches whom? Race and the distribution of novice teachers. Economics of Education Review, 24(4), 377-392.

Clotfelter, C. T., Ladd, H. F., \& Vigdor, J. L. (2010). Teacher mobility, school segregation, and pay-based policies to level the playing field. Education, Finance, and Policy, 6(3), 399438.

Cobb, C. D., \& Glass, G. V. (2009). School choice in a post-desegregation world. Peabody Journal of Education, 84(2), 262-278.

Crain, R. L., \& Mahard, R. (1983). The effect of research methodology on desegregation achievement studies: A meta-analysis. American Journal of Sociology, 88(839-854).

Crawford v. Los Angeles Board of Educ., Calif. Super. Ct. Los Angeles County, No. 822-854 (1970).

Crawford v. Los Angeles Board of Educ., 458 U.S. 527 (1982).
Cremata, E., Davis, D., Dickey, K., Lawyer, K., Negassi, Y., Raymond, M. E., \& Woodworth, J. L. (2013). National charter school study 2013. Retrieved from Stanford, CA:

Creswell, J. W. (2014). Research design: Qualitative, quantitative, and mixed methods approaches (4th ed.). Los Angeles, CA: SAGE Publications, Inc.

Cummings, R. (1992-1993). All-male black schools: Equal protection, the new separatism, and Brown v. Board of Education. Hastings Constitutional Law Quarterly, 20, 725-782.
de Jong, E., \& Howard, E. (2009). Integration in two-way immersion education: Equalising linguistic benefits for all students. International Journal of Bilingual Education and Bilingualism, 12(1), 81-99.

Denton, N. A. (2001). The persistence of segregation: Links between residential segregation and school segregation. In j. a. powell, G. Kearney, \& V. Kay (Eds.), In pursuit of a dream deferred: Linking housing and education policy (pp. 89-119). New York: Peter Lang.

Diaz v. San Jose Unified School District, 733 F. 2d 660 (9th Cir. 1984).
Eaton, S. (2001). The other Boston busing story: What's won and lost across the boundary line New Haven, CT: Yale University Press.

Egly, P. (2010). Crawford v. Los Angeles Unified School District; An unfulfilled plea for racial equality. University of La Verne Law Review, 31, 257-322.

Eisenhardt, K. (1989). Building theories from case study research. The Academy of Management Review, 14(4), 532-550.

Feistritzer, C. E. (2011). Profile of teachers in the U.S. 2011. Retrieved from Washington, D.C.:
Fergus, E., Noguera, P., \& Martin, M. (2014). Schooling for resilience: Improving the life trajectories of African American and Latino males. Cambridge, MA: Harvard Education Press.

Finnigan, K., Adelman, N., Anderson, L., Cotton, L., Donnelly, M. B., \& Price, T. (2004). Evaluation of the Public Charter Schools Program: Final report. Retrieved from Washington, D.C.:

Frankenberg, E. (2013a). The promise of choice: Berkeley's innovative integration plan. In G. Orfield \& E. Frankenberg (Eds.), Educational delusions? Why choice can deepen inequality and how to make schools fair (pp. 69-88). Berkeley, CA: University of California Press.

Frankenberg, E. (2013b). The role of residential segregation in contemporary school segregation. Education and Urban Society, 45(5), 548-570.

Frankenberg, E., \& Le, C. Q. (2008). The post-Parents Involved challenge: Confronting extralegal obstacles to integration. Ohio State Law Journal, 69, 1015-1072.

Frankenberg, E., \& Siegel-Hawley, G. (2013). A segregating choice? An overview of charter school policy, enrollment trends, and segregation. In G. Orfield \& E. Frankenberg (Eds.), Educational delusions? Why choice can deepen inequality and how to make schools fair (pp. 129-144). Berkeley, CA: University of California Press.

Frankenberg, E., Siegel-Hawley, G., \& Wang, J. (2010a). Choice without equity: Charter school segregation and the need for civil rights standards. Retrieved from Los Angeles, CA:

Frankenberg, E., Siegel-Hawley, G., \& Wang, J. (2010b). Choice without equity: Charter school segregation and the need for civil rights standards, California fact sheet. Retrieved from Los Angeles, CA:

Fuller, B., \& Elmore, R. F. (Eds.). (1996). Who chooses? Who loses? Culture, institutions, and the unequal effects of school choice. New York, NY: Teachers College Press.

Gándara, P. (2011). Latinos, language, and segregation: Options for a more integrated future. In E. Frankenberg \& E. DeBray (Eds.), Integrating schools in a changing society: New policies and legal options for a multiracial generation (pp. 265-277). Chapel Hill, NC: University of North Carolina Press.

Gándara, P., \& Orfield, G. (2010). A return to the "Mexican room": The segregation of Arizona's English learners. Retrieved from Los Angeles, CA:

Garcia, D. R. (2007). The impact of school choice on racial segregation in charter schools. Educational Policy, 22(6), 805-829.

Gay, G. (2010). Culturally responsive teaching: Theory, research, and practice (Second ed.). New York, NY: Teachers College Press.

Genesee, F., \& Gándara, P. (1999). Bilingual education programs: A cross-national perspective. Journal of Social Issues, 55(4), 665-685.

Genesee, F., Lindholm-Leary, K., Saunders, W. M., \& Christian, D. (2006). Educating English Language Learners: A synthesis of research evidence. New York: Cambridge University Press.

Gifford, B. R., \& Valdés, G. (2006). The linguistic isolation of Hispanic students in California's public schools: The challenge of reintegration. Yearbook of the National Society for the Study of Education, 105(2), 125-154.

Goldring, E., \& Smrekar, C. (2000). Magnet schools and the pursuit of racial balance. Education and Urban Society, 33(1), 17-35.

Graham, P. A. (1987). Black teachers: A drastically scarce resource. Phi Delta Kappa International, 68(8), 598-605.

Grant, G. (2011). Hope and despair in the American city: Why there are no bad schools in Raleigh. Cambridge, MA: Harvard University Press.

Green v. County School Board of New Kent County, 391 U.S. 430 (1968).
Hallinan, M. (1998). Diversity effects on student outcomes: social science evidence. Ohio State Law Journal, 59, 733-754.

Harwell, M., \& LeBeau, B. (2010). Student eligibility for a free lunch as an SES measure in education research. Educational Researcher, 39(2), 120-131.

Henig, J. R. (1994). Rethinking school choice: Limits of the market metaphor. Princeton, NJ: Princeton University Press.

Henig, J. R., \& MacDonald, J. A. (2002). Locational decisions of charter schools: Probing the market metaphor. Social Science Quarterly, 83(4), 962-980.

Ho v. San Francisco Unified School District, 147 F. 3d 854 (9th Cir. 1998).
Holme, J. J. (2002). Buying homes, buying schools: School choice and the social construction of school quality. Harvard Educational Review, 72(2), 177-206.

Holme, J. J., \& Finnigan, K. S. (2016, April 19). Changing the narrative: Leveraging education policy to address segregation [Web log comment]. Retrieved from http://www.shankerinstitute.org/blog/holmefinnigan.

Irvine, J. J. (1988). An analysis of the problem of disappearing black educators. The Elementary School Journal, 88(5), 503-513.

Jabbar, H. (2016). Selling schools: Marketing and recruitment strategies in New Orleans. Peabody Journal of Education, 91(1), 4-23.

Jackson, K. (2009). Student demographics, teacher sorting, and teacher quality: Evidence from the end of school desegregation. Journal of Labor Economics, 27(2), 213-256.

Jackson v. Pasadena City School Dist., 59 Cal. 2d 876 (1963).
Johnson, R. B., Onwuegbuzie, A. J., \& Turner, L. A. (2007). Toward a definition of mixed methods research. Journal of Mixed Methods Research, 1(2), 112-133.

Johnson, R. C. (2011). Long-run impacts of school desegregation and school quality on adult attainments. Retrieved from Cambridge, MA:

Johnson v. San Francisco Unified School District, 339 F. Supp. 1315 (N.D. Cal. 1971).
Kahlenberg, R. D., \& Potter, H. (2014). A smarter charter: Finding what works for charter schools and public education. New York, NY: Teachers College Press.

Keyes v. Denver School District No. 1, 413 U.S. 189 (1973).
Kimerling, J. E. (1994). Black male academies: Re-examining the strategy of integration. Buffalo Law Review, 42, 829-858.

Kohli, S. (2016, May 12). There will be thousands more L.A. Unified magnet seats in 2017. Los Angeles Times. Retrieved from http://www.latimes.com/local/education/la-me-edu-new-magnet-20160511-snap-htmlstory.html.

Krop, C., \& Zimmer, R. (2005). Charter school type matters when examining funding and facilities: Evidence from California. Education Policy Analysis Archives, 13(50), 1-24.

Kurlaender, M., \& Yun, J. (2005). Fifty years after Brown: New evidence of the impact of school racial composition on student outcomes. International Journal of Educational Policy, Research and Practice, 6(1), 51-78.

Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. American Educational Research Journal, 32(3), 465-491.

Lauen, D. L., Fuller, B., \& Dauter, L. (2015). Positioning charter schools in Los Angeles: Diversity of form and homogeneity of effects. American Journal of Education, 121, 213239.

Lhamon, C. E. (2014, May 14). Dear colleague letter: Charter schools. Washington, D.C.: U.S. Department of Education, Office for Civil Rights. Retrieved from http://www2.ed.gov/about/offices/list/ocr/letters/colleague-201405-charter.pdf.

Lindholm-Leary, K. J. (2001). Dual language education. Tonawanda, NY: Multilingual Matters.
Linn, R., \& Welner, K. (2007). Race-conscious policies for assigning students to schools: Social science research and the Supreme Court cases. Washington, D.C.: National Academy of Education.

Logan, J. R., \& Burdick-Will, J. (2015). School segregation, charter schools, and access to quality education. Journal of Urban Affairs, OO(0), 1-21. doi:10.1111/juaf. 12246

Logan, J. R., \& Stults, B. J. (2011). The persistence of segregation in the metropolis: New findings from the 2010 census. Retrieved from Census Brief prepared for US2010 Project:

Los Angeles Times. (2016). Mapping L.A. neighborhoods. Los Angeles, CA. Retrieved from http://maps.latimes.com/neighborhoods/.

Los Angeles Unified School District. (n.d.-a). Los Angeles Unified School District Student Integration Services. Retrieved from http://achieve.lausd.net/integration.

Los Angeles Unified School District. (n.d.-b). Permits With Transportation (PWT) Program. Retrieved from http://achieve.lausd.net/Page/1951.

Los Angeles Unified School District. (n.d.-c). Transportation programs. Retrieved from http://achieve.lausd.net/Page/2727.

Los Angeles Unified School District Office of the Superintendent. (2011). Affiliated charter schools (Policy Bulletin No. BUL-5439.0). Los Angeles, CA: Author.

Lubienski, C., Gulosino, C., \& Weitzel, P. (2009). School choice and competitive incentives: Mapping the distribution of educational opportunities across local education markets. American Journal of Education, 115, 601-647.

Lubienski, C., \& Weitzel, P. (2009). Choice, integration, and educational opportunity: Evidence on competitive incentives for student sorting in charter schools. The Journal of Gender, Race \& Justice, 12, 351-375.

Massey, D. S., \& Denton, N. A. (1988). The dimensions of residential segregation. Social Forces, 67(2), 281-315.

Massey, D. S., \& Denton, N. A. (1993). American apartheid: Segregation and the making of the underclass. Cambridge, MA: Harvard University Press.

McPherson, M., Smith-Lovin, L., \& Cook, J. M. (2001). Birds of a feather: Homophily in social networks. Annual Review of Sociology, 27, 415-444.

Mehta, J. (2013). How paradigms create politics: The transformation of American educational policy, 1980-2001. American Educational Research Journal, 50(2), 285-324.

Merriam, S. B. (2009). Qualitative research: A guide to design and implementation. San Francisco, CA: Jossey-Bass.

Mickelson, R. A. (2005). The incomplete desegregation of the Charlotte-Mecklenburg Schools and its consequences, 1971-2004. In J. C. Boger \& G. Orfield (Eds.), School
resegregation: Must the South turn back? (pp. 87-110). Chapel Hill, NC: University of North Carolina Press.

Mickelson, R. A. (2008). Twenty-first century social science on school racial diversity and educational outcomes. Ohio State Law Journal, 69, 1173-1228.

Mickelson, R. A., Bottia, M. C., \& Lambert, R. (2013). Effects of school racial composition on K-12 mathematics outcomes: A metaregression analysis. Review of Educational Research, 83(1), 121-158.

Mickelson, R. A., Bottia, M. C., \& Southworth, S. (2008). School choice and segregation by race, class, and achievement. In G. Miron, K. G. Welner, P. H. Hinchey, \& A. Molnar (Eds.), School choice: Evidence and recommendations. East Lansing, MI: The Great Lakes Center for Education Research and Policy.

Mickelson, R. A., \& Heath, D. (1999). The effects of segregation on African American high school seniors' academic achievement. The Journal of Negro Education, 68(4), 566-586.

Mickelson, R. A., \& Nkomo, M. (2012). Integrated schooling, life course outcomes, and social cohesion in multiethnic democratic societies. Review of Research in Education, 36, 197238.

Milliken v. Bradley, 418 U.S. 717 (1974).
Milliken v. Bradley I I, 433 U.S. 267 (1977).
Miron, G., \& Gulosino, C. (2016). Virtual schools report 2016: Directory and performance review. Retrieved from Boulder, CO:

Moll, L., Amanti, C., Neff, D., \& Gonzalez, N. (1992). Funds of knowledge for teaching: Using a qualitative approach to connect homes and classrooms. Theory Into Practice, 31(2), 132-141.

Murrell, P. C. (1999). Chartering the village: The making of an African-centered charter school. Urban Education, 33(5), 565-583.

National Alliance for Public Charter Schools. (2016). Measuring up: Health of the movement. Washington, D.C.: Author. Retrieved from http://www.publiccharters.org/get-the-facts/health-of-movement/states/ca/.

National Center for Education Statistics. (2014). The condition of education 2014. Retrieved from Washington, D.C.:

National Coalition of Diverse Charter Schools. (2015). Our member schools. Retrieved from http://www.diversecharters.org/schools.

Noguera, P. A. (2012). Saving black and Latino boys. Phi Delta Kappan, 30(20).
Orfield, G. (1996). Turning back to segregation. In G. Orfield \& S. E. Eaton (Eds.), Dismantling desegregation: The quiet reversal of Brown v. Board of Education (pp. 1-22). New York: The New Press.

Orfield, G. (2000). The 1964 Civil Rights Act and American education. In B. Grofman (Ed.), Legacies of the 1964 Civil Rights Act (pp. 89-128). Charlottesville, VA: University of Virginia Press.

Orfield, G. (2013a). Choice theories and the schools. In G. Orfield \& E. Frankenberg (Eds.), Educational delusions? Why choice can deepen inequality and how to make schools fair (pp. 37-68). Berkeley, CA: University of California Press.

Orfield, G. (2013b). Housing segregation produces unequal schools: Causes and solutions. In P. L. Carter \& K. G. Welner (Eds.), Closing the opportunity gap: What America must do to give every child an even chance (pp. 40-60). New York, NY: Oxford University Press.

Orfield, G., \& Ee, J. (2014). Segregating California's future: Inequality and its alternative 60 years after Brown v. Board of Education. Retrieved from Los Angeles, CA:

Orfield, G., \& Frankenberg, E. (2014). Brown at 60: Great progress, a long retreat, and an uncertain future. Retrieved from Los Angeles, CA:

Orfield, G., \& Frankenberg, E. (Eds.). (2013). Educational delusions? How choice can deepen inequality and how to make schools fair. Berkeley, CA: University of California Press.

Orfield, G., \& Lee, C. (2005). Why segregation matters: Poverty and educational inequality. Retrieved from Cambridge, MA:

Orfield, G., Siegel-Hawley, G., \& Kucsera, J. (2014). Sorting out deepening confusion on segregation trends. Retrieved from Los Angeles, CA:

Pahlke, E., Hyde, J. S., \& Allison, C. M. (2014). The effects of single-sex compared with coeducational schooling on students' performance and attitudes: A meta-analysis. Psychological Bulletin, 140(4), 1042-1072.

Parents Involved in Community Schools v. Seattle School District No. 1, 551 U.S. 701 (2007).
Pasadena City Bd. of Educ. v. Spangler, 427 U.S. 424 (1976).
Pattillo, M., Delale-O'Connor, L., \& Butts, F. (2014). High-stakes choosing. In A. Lareau \& K. Goyette (Eds.), Choosing homes, choosing schools (pp. 237-267). New York, NY: Russell Sage Foundation.

Petrovich, J., \& Wells, A. S. (Eds.). (2005). Bringing equity back: Research for a new era in American educational policy. New York, NY: Teachers College Press.

Pettigrew, T., \& Tropp, L. (2006). A meta-analytic test of intergroup contact theory. Journal of Personality and Social Psychology, 90(5), 751-783.

Plessy v. Ferguson, 163 U.S. 537 (1896).

Preacher, K. J., Curran, P. J., \& Bauer, D. J. (2006). Computational tools for probing interaction effects in multiple linear regression, mulitlevel modeling, and latent curve analysis. Journal of Educational and Behavioral Statistics, 31, 437-448.

Preacher, K. J., Curran, P. J., \& Bauer, D. J. (2010-2016). Interactive calculation tools for establishing simple intercepts, simple slopes, and regions of significance. Retrieved from http://www.quantpsy.org/interact/index.htm.

Reardon, S. F., Yun, J. T., \& Kurlaender, M. (2006). Implications of income-based school assignment policies for racial school segregation. Educational Evaluation and Policy Analysis, 28(1), 49-75.

Renzulli, L. A., \& Evans, L. (2005). School choice, charter schools, and white flight. Social Problems, 52(3), 398-418.

Ritter, G., Jensen, N., Kisida, B., \& McGee, J. B. (2010). A closer look at charter schools and segregation: Flawed comparisons lead to overstated conclusions. Education Next, 10(3), 69-73.

Rumberger, R. (2003). The causes and consequences of student mobility. The Journal of Negro Education, 72(1), 6-21.

San Francisco NAACP v. San Francisco Unified School District, 576 F. Supp. 34 (N.D. Cal. 1983).

Scott, J. (2009). The politics of venture philanthropy in charter school policy and advocacy. Educational Policy, 23(1), 106-136.

Shanker, A. (1988, March 31). National press club speech. Retrieved from http://www.reuther.wayne.edu/files/64.43.pdf.

Shin, H. J., Fuller, B., \& Dauter, L. (2015). Differing effects from diverse charter schools: Uneven student selection and achievement growth in Los Angeles. Retrieved from Berkeley, CA:

Siegel-Hawley, G. (2013). City lines, county lines, color lines: An analysis of school and housing segregation in four Southern metropolitan areas, 1990-2010. Teachers College Record, 115(6), 1-45.

Siegel-Hawley, G., \& Frankenberg, E. (2013). Designing choice: Magnet school structures and racial diversity. In G. Orfield \& E. Frankenberg (Eds.), Educational delusions? Why choice can deepen inequality and how to make schools fair (pp. 107-128). Berkeley, CA: University of California Press.

Smrekar, C. E., \& Goldring, E. B. (2009). Unitary status, neighborhood schools, and resegregation. In C. E. Smrekar \& E. B. Goldring (Eds.), From the courtroom to the classroom: The shifting landscape of school desegregation (pp. xiii-xxvii). Cambridge, MA: Harvard Education Press.

Swann v. Charlotte-Mecklenburg Board of Education, 402 U.S. 1 (1971).
Swanson, C. B. (2004). Sketching a portrait of public high school graduation: Who graduates? Who doesn't? In G. Orfield (Ed.), Dropouts in America: Confronting the graduation rate crisis (pp. 13-40). Cambridge, MA: Harvard Education Press.

Teasley, M., Crutchfield, J., Williams Jennings, S. A., Clayton, M. A., \& Okilwa, N. S. A. (2016). School choice and Afrocentric charter schools: A review and critique of evaluation outcomes. Journal of African American Studies, 20(1), 99-119.

Tedin, K. L., \& Weiher, G. R. (2004). Racial/ethnic diversity and academic quality as components of school choice. The Journal of Politics, 66(4), 1109-1133.

The Broad Foundation. (2015 June). The great public schools now initiative. Los Angeles, CA. Retrieved from http://documents.latimes.com/great-public-schools-now-initiative/.

The White House Office of Management and Budget. (2016). Meeting our greatest challenges: Opportunity for all (President Obama's Budget Request for Fiscal Year 2017, pp. 31-69). Retrieved from
www.whitehouse.gov/sites/default/files/omb/budget/fy2017/assets/opportunity.pdf.
Tropp, L. R., \& Prenovost, M. A. (2008). The role of intergroup contact in predicting children's interethnic attitudes: Evidence from meta-analytic and field studies. In S. R. Levy \& M. Killen (Eds.), Intergroup attitudes and relations in childhood through adulthood (pp. 236-248). New York, NY: Oxford University Press.

Turner, M. A., \& Ross, S. L. (2005). How racial discrimination affects the search for housing. In X. de Souza Briggs (Ed.), The geography of opportunity: Race and housing choice in metropolitan America (pp. 81-100). Washington, D.C.: The Brookings Institution.
U. S. Census Bureau. (2015). 2014 American Community Survey 5-year estimates [Table generated using American FactFinder].
U. S. Department of Education. (2016). Investing in Innovation Fund (i3). Retrieved from http://www2.ed.gov/programs/innovation/index.html? $\exp =0$.
U.S. Department of Education. (2004). Charter Schools Program: Title V, Part B, Nonregulatory guidance. Washington, D.C.: U.S. Department of Education.
U.S. Department of Education. (2016). The state of racial diversity in the educator workforce. Retrieved from Washington, D.C.:
U.S. Department of Justice \& U.S. Department of Education. (2011). Guidance on the voluntary use of race to achieve diversity and avoid racial isolation in elementary and secondary
schools. Washington, D.C.: Author. Retrieved from
http://www2.ed.gov/about/offices/list/ocr/docs/guidance-ese-201111.pdf.
UCLA Charter School Study. (1998). Beyond the rhetoric of charter school reform: A study of ten California school districts. Retrieved from Los Angeles, CA:

Ulrich, A. (2014, July 1). New coalition promotes diverse student populations in charter schools. Education Week.

Umansky, I. M., \& Reardon, S. F. (2014). Reclassification patterns among Latino English leraner students in bilingual, dual immersion, and English immersion classrooms. American Educational Research Journal, 51(5), 879-912.

United Nations Committee on the Elimination of Racial Discrimination. (2014, September 25). Concluding observations on the combined seventh to ninth periodic reports of the United States of America. Geneva, Switzerland: United Nations. Retrieved from http://tbinternet.ohchr.org/_layouts/treatybodyexternal/Download.aspx?symbolno=CERD \%2fC $\% 2 \mathrm{fUSA} \% 2 \mathrm{fCO} \% 2 \mathrm{f} 7-9 \& \mathrm{Lang}=\mathrm{en}$.

Vasquez Heilig, J., \& Holme, J. J. (2013). Nearly 50 years post-Jim Crow: Persisting and expansive school segregation for African American, Latina/o, and ELL students in Texas. Education and Urban Society, 45(5), 609-632.

Walker, V. S. (1996). Their highest potential: An African American school community in the segregated South. Chapel Hill, NC: The University of North Carolina Press.

Wells, A. S. (1993). Time to choose: America at the crossroads of school choice policy. New York, NY: Hill and Wang.

Wells, A. S. (2002). Why public policy fails to live up to the potential of charter school reform: An introduction. In A. S. Wells (Ed.), Where charter school policy fails (pp. 1-28). New York, NY: Teachers College Press.

Wells, A. S., \& Crain, R. L. (1994). Perpetuation theory and the long-term effects of school desegregation. Review of Educational Research, 64(4), 531-555.

Wells, A. S., Warner, M., \& Grzesikowski, C. (2013). The story of meaningful school choice: Lessons from interdistrict transfer plans. In G. Orfield \& E. Frankenberg (Eds.), Educational delusions? Why choice can deepen inequality and how to make schools fair (pp. 187-218). Berkeley, CA: University of California Press.

Welner, K. G. (2013). The dirty dozen: How charter schools influence student enrollment. Teachers College Record, [online], http://www.tcrecord.org ID Number: 17104.

Welner, K. G., \& Howe, K. R. (2005). Steering toward separation: The policy and legal implications of "counseling" special education students away from charter schools. In J. T. Scott (Ed.), School choice and diversity: What the evidence says (pp. 93-111). New York, NY: Teachers College Press.

Westminster School Dist. of Orange County v. Mendez, 161 F. 2 d 774 (9th Cir. 1947).
Witte, J. F. (2000). The market approach to education: An analysis of America's first voucher program. Princeton, NJ: Princeton University Press.

Wohlstetter, P., Nayfack, M. B., \& Mora-Flores, E. (2008). Charter schools and "customer" satisfaction: Lessons from field testing a parent survey. Journal of School Choice, 2(1), 66-84.

Wohlstetter, P., Smith, J., \& Farrell, C. C. (2013). Choices and challenges: Charter school performance in perspective. Cambridge, MA: Harvard Education Press.

Yun, J. T., \& Kurlaender, M. (2004). School racial composition and student educational aspirations: A question of equity in a multiracial society. Journal of Education for Students Placed at Risk, 9(2), 143-149.

Yun, J. T., \& Moreno, J. F. (2006). College access, K-12 concentrated disadvantage, and the next 25 years of education research. Educational Researcher, 35(1), 12-19.


[^0]:    ${ }^{1}$ See Appendix A for a list of districts included in each CBSA.

[^1]:    ${ }^{2}$ At the state level, race and poverty variables are available for 1998-2013. However, in 2011, there is a substantial proportion of missing data; therefore, results of poverty data in 2011 are not presented. EL data is available and a substantial proportion of schools $(90 \%)$ reported EL data at the state level beginning in 2011. For Riverside and Sacramento, race and poverty data are available beginning in 2002. Again, there is a significant proportion of poverty data missing for 2011 in both Riverside and Sacramento; thus, results for 2011 poverty are excluded. EL data is available and a substantial proportion of schools reported EL data in Riverside and Sacramento beginning in 2008. However, in 2010, a significant proportion of TPSs and charter schools did not report EL data; thus, results for language in 2010 are omitted in both metros. For LAUSD, race and poverty data are available beginning in 1998; however, in 2011, a substantial portion of FRL data is missing; therefore, poverty data is not presented for 2011 in LAUSD. EL data is available and a substantial proportion of schools in LAUSD reported EL data beginning in 2007. However, in 2010, none of the TPSs in LAUSD reported EL data; thus, results for language in 2010 in LAUSD are omitted.
    ${ }^{3}$ See Appendix B for detailed description of the number and percent of schools included in the analysis for each dimension of segregation for each year and each geographic area.

[^2]:    ${ }^{4}$ Evenness refers to the extent to which members of a group are evenly distributed across schools in a larger geographic area; this measure identifies the proportion of students of a particular race/class/language that would need to move to a different school in order to achieve an even distribution of students by race/class/language (Massey \& Denton, 1988). Evenness can be helpful for thinking about the demographic element of segregation and can be useful for considering what type of policy options are possible. However, it is limited as a measure of segregation because rather than describing the contact that students have with other students of different racial, socioeconomic, or linguistic groups, which was the central concern of civil rights legislation and the integration theory of choice, evenness describes the randomness of distribution of groups within a geographic area. Given this study's operationalization of segregation as "the separation and isolation of students based on demographic characteristics, such as race, socioeconomic status, or linguistic background," the use of concentration and exposure/isolation are more appropriate than the use of an evenness measure.

[^3]:    ${ }^{5}$ A similar measure of concentration-majority EL—was used for studying EL segregation in Texas (Vasquez Heilig \& Holme, 2013).

[^4]:    ${ }^{6}$ A directory of virtual charter schools in each state became available after data analysis was complete (Miron \& Gulosino, 2016). Future research could conduct a similar analysis using this information to differentiate between virtual and brick-and-mortar/site-based charter schools.

[^5]:    Source: National Center for Education Statistics, Common Core of Data.

[^6]:    ${ }^{7}$ If charter schools enrolling $50 \%$ ELs is the result of recruiting ELs in order to offer bilingual or dual language programs that are not available in TPSs, then a school enrolling $50 \%$ ELs could be a sign of offering a strong educational program. In 2013, 8\% of the state's charter schools and $16 \%$ of the state's TPSs enrolled 40-60\% ELs. It is possible, although unlikely, that these schools intentionally recruited ELs for programmatic purposes.

[^7]:    ${ }^{8}$ The only exceptions are that Sacramento has a slightly larger share of intensely segregated low-income charter schools than Riverside and the share of majority EL charter schools are similar in both Sacramento and Riverside.

[^8]:    ${ }^{9}$ Across the state, 682 schools ( 39 charters, 643 TPSs) did not have API scores. In LAUSD, 19 schools ( 3 charters, 16 TPSs) did not have API scores. In Sacramento, 42 schools ( 3 charters, 39 TPSs) did not have API scores. In Riverside, 28 schools ( 1 charter, 27 TPSs) did not have API scores.

[^9]:    ${ }^{10}$ While it might seem appropriate to identify this school as a middle-class school because there are very few students who are eligible for FRL, I hesitate to use this term and make that judgment because the school is located in a very affluent community and it is likely that many of the families would be considered middle class, upper-middle class, and wealthy. Thus, I use the term non-poor to indicate the absence of poverty while not placing a label on the degree to which affluence exists at this school.

[^10]:    ${ }^{11}$ The fact that there are an extremely small number of racially desegregated charter schools in LAUSD and none of them was willing to participate in this study is perhaps an important finding in and of itself.

[^11]:    ${ }^{12}$ California state law does not require that transportation be provided to students.

[^12]:    ${ }^{13}$ Citation available upon request but not provided in an effort to ensure anonymity of the school.

[^13]:    ${ }^{14}$ Noticeably absent from these conversations is any discussion of providing services for students who are excelling academically and might require services for academic enrichment. Perhaps the school's project-based approach to curriculum and instruction naturally provides opportunities for challenging students who would have otherwise required services for academic enrichment. A lack of explicit services for high-achieving students could be contributing to the smaller enrollment of white and Asian students, who tend to be higher achieving. However, because this topic was not discussed in the interviews, there is insufficient data to make claims about findings in this area.

[^14]:    ${ }^{15}$ In 2011, the nation's public school teaching force was $84 \%$ white, $7 \%$ black, $6 \%$ Hispanic, and $4 \%$ other (Feistritzer, 2011).
    ${ }^{16}$ Sharon's awareness and acknowledgment of the importance of racial diversity among the teaching staff might also be a sign of her consciousness about race. Although not explicitly discussed in the findings because this topic was not explored in detail during interviews, Sharon's race-conscious approach to leadership likely supports the school's continued commitment to pursuing diversity among the student body and the rest of the school's activities and approach.

[^15]:    ${ }^{17}$ Approved by California voters in 2000, Proposition 39 mandates that "public school facilities should be shared fairly among all public school pupils, including those in charter schools" and that the facilities should be "reasonably equivalent" to other classrooms, buildings, or facilities in the district. Prior to Prop 39, districts were obligated to provide charters with access to surplus space. However, Prop 39 requires that charters have similar access to district spaces as other schools in the district. Prop 39 facilities are determined on an annual basis.

[^16]:    ${ }^{18}$ PWT is one of the two main components, in addition to magnet schools, that LAUSD uses to comply with the district's court-ordered desegregation plan. PWT is a voluntary integration program that provides students with access to integrated experiences by placing non-white students into integrated school settings while providing opportunities for white students to attend predominantly Hispanic, black, Asian, and other non-Anglo (PHBAO) schools. (I use the term "integrated" rather than "desegregated" because that is the terminology that LAUSD uses to describe PWT.) PWT is available to LAUSD students in first through twelfth grade who live within a PWT sending school area, which is defined as a school in which the enrollment of Hispanic, black, Asian, and other non-Anglo students exceeds $70 \%$ of the total enrollment. LAUSD determines a student's school assignment through PWT. Affiliated charters, such as Ocean Charter, must comply with PWT.

[^17]:    ${ }^{19}$ In 2014-2015, Ocean Charter's teaching staff was $73 \%$ white, $12 \%$ Asian, and $15 \%$ Hispanic. Downtown Charter's teaching staff was $50 \%$ white, $33 \%$ Asian, and $17 \%$ Hispanic. Valley Charter teaching staff was $11 \%$ white and $89 \%$ Hispanic.

