Educational Gerrymandering? Race and Attendance Boundaries in a Demographically Changing Suburb Siegel-Hawley, Genevieve Harvard Educational Review; Winter 2013; 83, 4; ProQuest Social Sciences Premium Collection pg. 580

# Educational Gerrymandering? Race and Attendance Boundaries in a Demographically Changing Suburb

## **GENEVIEVE SIEGEL-HAWLEY**

Virginia Commonwealth University

In this article, Genevieve Siegel-Hawley illuminates the challenges and opportunities posed by demographic change in suburban school systems. As expanding student populations stretch the enrollment capacities of existing schools in suburban communities, new schools are built and attendance lines are redrawn. This redistricting process can be used either to foster school diversity or to exacerbate racial isolation. Drawing on data from the U.S. Census, the National Center for Education Statistics (NCES), and the school district, along with mapping software from Geographic Information Systems (GIS), Siegel-Hawley examines the relationship between overcrowding, racial isolation, and the original, proposed, and final high school attendance zones in a changing suburban district. Findings indicate that school officials responsible for the rezoning process failed to embrace the growing diversity of the school system, choosing instead to solidify extreme patterns of racial isolation within high school attendance areas. The segregative impact of the district's new attendance zones may be subject to legal scrutiny, a consequence that could—and should—discourage other school systems from adopting similarly harmful redistricting policies.

The United States has increasingly become a nation of suburbs. Roughly half of all Americans reside in suburban communities, up from about 38 percent in the 1970s (Population Reference Bureau, 2006). Along with that growth, dramatic demographic changes have occurred. Suburban rings around primarily black central cities—once described by former U.S. Housing and Urban Development secretary George Romney as "high income white nooses" (Hannah-Jones, 2012)—have given way to what are, in many cases, very diverse communities (M. Orfield & Luce, 2013). Over half of all members of racial minority groups in large metro areas, including blacks, now live in the suburbs (Frey, 2011). And at the same time that American suburbs have become more

Harvard Educational Review Vol. 83 No. 4 Winter 2013 Copyright © by the President and Fellows of Harvard College racially diverse, they have also become more economically diverse. Suburbs in major U.S. metro areas have reported that poverty rates have risen by 25 percentage points since the early 2000s, nearly five times faster than in cities (Kneebone & Garr, 2010).

As expanding student populations stretch the enrollment capacities of existing schools in suburban communities, new schools are built and attendance lines are redrawn. These redistricting processes present important opportunities for suburban school districts to carefully consider their changing demographic composition. Subsequent decisions regarding the contours of the new boundaries have serious consequences for school enrollments. When school systems choose to redraw attendance boundaries in such a way as to intensify racial segregation, often through the creation of oddly formed or discontinuous zones, *educational gerrymandering* occurs (M. Orfield & Luce, 2010). Whether or not districts explicitly acknowledge the implications for school diversity during redistricting, such moments either advance the goals of integration or allow the troubling patterns of segregation that have longed defined American central cities to take hold.

In many ways, suburban school systems are now at the forefront of the ongoing struggle to truly integrate the nation's schools. Despite numerous legal and political challenges to the landmark *Brown v. Board of Education* (1954) decision, a nuanced consideration of neighborhood demographic characteristics during school rezoning remains an important tool for promoting voluntary integration (*Parents Involved*, 2007; U.S. DOE & U.S. DOJ, 2011). Furthermore, because attendance boundary changes are frequently linked to population increases and school construction, fast-growing suburban school districts are presented with the occasion to promote diverse learning opportunities with some regularity. Without a strong underlying commitment to the goals of *Brown*, however, these opportunities for suburban integration can quickly turn into the challenges of resegregation.

The following analysis of a racially changing suburb in the South explores issues of growing diversity and school resegregation though an in-depth examination of a school rezoning process. In 2008–2009, Henrico County Public Schools (HCPS), a suburban district in the metropolitan community surrounding Richmond, Virginia, redistricted its high schools as one component of a multiyear expansion plan to accommodate population growth (Cropper, Saums, & Kidner, 2008). In the midst of its growth, HCPS experienced significant demographic shifts. Nearly four decades after being identified as a suburban district in which white students accounted for about 90 percent of the enrollment (Pratt, 1992), the district is now a majority-minority school system (Virginia Department of Education, 2012).

Using data from the U.S. Census, the National Center for Education Statistics (NCES), and the school district, along with mapping software from Geographic Information Systems (GIS), this case study of HCPS investigates several interrelated research questions about the district's rezoning process. First, in a racially changing suburb, how did the original, proposed, and final attendance zones in Henrico County relate to the distribution of the number of students living in high school zones? Second, how did the proposed and final boundaries affect high school racial balance and isolation? And third, how did the demographics of the student population within the final high school attendance zones compare to Henrico County's actual high school enrollments?

Key findings indicate that school officials responsible for the district's rezoning process failed to embrace the growing diversity of the school system and instead solidified extreme patterns of racial isolation within high school attendance areas. At the same time, a system of high school specialty centers continues to present an opportunity to reduce the isolation linked to the new attendance boundaries.

As suburban school systems nationwide grow in demographic complexity, revisiting and reaffirming the social, economic, and legal imperatives underlying the *Brown* decision is vital. In a predominately suburban and increasingly nonwhite society, rising generations of schoolchildren depend on the informed, principled actions of educational leaders and stakeholders who wield great power over their access to equal educational opportunity.

I begin with an overview of the legal parameters governing school zoning decisions and the social science literature related to segregation, resegregation, suburbs, and attendance boundaries. I then describe how these themes have played out in Henrico County, Virginia, the racially changing southern suburb under study. After describing data and methodology, I present my analyses and findings. I close with a discussion and conclusion as well as suggested implications for policy and law.

## Legal Parameters Governing School Zoning Decisions

Although extensive research has documented the academic and social benefits that flow from integrated schools (e.g., Linn & Welner, 2007; Mickelson, 2008; Minow, 2010), an increasingly conservative Supreme Court has limited many far-reaching tools used to create them. Close on the heels of two powerful rulings in the late 1960s and early 1970s, one clarifying the standards for school desegregation and the other enabling school districts to make use of transportation as a critical strategy for carrying it out (*Green v. County School Board of New Kent County*, 1968; *Swann v. Charlotte-Mecklenberg Board of Education*, 1970), a politically reconfigured Supreme Court began a slow process of judicial retrenchment on *Brown*. Beginning with the Berger court in the early 1970s, one of the first critical setbacks came with the refusal to sanction city-suburban school desegregation in Detroit, a decision that largely absolved American suburbs of responsibility for racialized patterns of metropolitan settlement (*Milliken v. Bradley*, 1974). With the *Milliken* ruling, the court made it very difficult to cross district boundary lines for the purposes of desegregation, thereby hardening the divisions and inequities between urban and suburban school systems.

Interestingly, a precursor to that setback directly involved the school district under study. In 1972, Henrico County was pinpointed in a metropolitan school desegregation case as one of two adjacent suburbs slated to join with Richmond's urban school system (Lassiter, 2007). The case eventually made its way to the Supreme Court, where the justices tied 4–4 on the question of consolidation, leaving in place an appellate ruling striking down the merged citysuburban school district (*Bradley v. Richmond School Board*, 1973). The former chair of the Richmond School Board, Justice Lewis Powell, abstained from the vote, setting in motion the need for a clearer outcome in the form of the *Milliken* decision.

Nearly two decades later, a string of "resegregation decisions" in the 1990s further cemented the Supreme Court's rollback of school desegregation efforts (G. Orfield & Eaton, 1996). In the most notable of the three decisions, the court ruled that, even if schools remained racially imbalanced, evidence of "good faith" in complying with desegregation orders could nevertheless result in a finding of unitary status (a declaration that a district has eliminated the vestiges of its previously segregated, or dual, school system) (Freeman v. Pitts, 1992). As a result of this nebulous standard-a district's good faith efforts to desegregate obviously being open to interpretation-numerous school districts were prematurely released from judicial oversight and eventually resegregated (Reardon, Grewel, Kalgorides, & Greenberg, 2012). Two other decisions sanctioned the establishment of a system of neighborhoodbased school assignments, even if such a system resulted in resegregation (Board of Education of Oklahoma City v. Dowell, 1991). These rulings emphasized the importance of restoring local control to school districts as soon as possible (Missouri v. Jenkins, 1995).

The most recent legal obstacle to fulfilling *Brown*'s mandate dampened even voluntary efforts to promote school diversity. In 2007, the *Parents Involved* in *Community Schools v. Seattle School District No. 1(Parents Involved)* ruling limited the ways in which districts could consider race when crafting student assignment policies. Now school systems are barred from considering the race of individual students in assignment processes unless they remain under court order to desegregate. Yet, despite judicial and political limitations, several key avenues remain open to districts interested in continuing to pursue racially diverse schools. The author of the controlling opinion in the *Parents Involved* (2007) case, Justice Anthony Kennedy, specified that:

School boards may pursue the goal of bringing together students of diverse backgrounds and races through other means . . . including strategic site selection of new schools; drawing attendance zones with general recognition of the demographics of neighborhoods; allocating resources for special programs; recruiting students and faculty in a targeted fashion; and tracking enrollments, performance, and other statistics by race. (p. 127) These permissible strategies, recently clarified and affirmed in joint guidance issued by the U.S. Department of Education and U.S. Department of Justice (2011), are of particular interest in light of the suburbs' rapidly shifting student demographics. As noted above, school systems in American suburbs have emerged as one of the primary battlegrounds for implementing these legally permissible approaches to promoting racial diversity. It is vitally important to understand, then, whether or not suburban districts are taking advantage of such possibilities. It is equally important to determine the extent to which school systems in U.S. suburbs are pursuing the opposite scenario: drawing school zones in a way that systematically and intentionally separates students on the basis of race.

A less frequently considered dimension of suburban school redistrictingparticularly at a time when districts are scrambling to ensure their compliance with the Parents Involved ruling-is that the intentional racial segregation of students is still illegal. On the one hand, Parents Involved allows districts to consider the underlying demographic makeup of neighborhoods, including race, when drawing attendance boundaries or siting new schools. But, on the other hand, a 1973 Supreme Court decision prohibits districts from implementing policies that exacerbate segregation (Keyes v. Denver School District No. 1, 1973). These policies include site selection for new schools, student transfer procedures, and crafting or revising attendance boundaries (M. Orfield, 2011). Indeed, the Keyes decision lends additional significance to the racially charged process of drawing attendance boundaries by making it clear that districts cannot create those lines in a way that purposefully isolates students by race. It could be possible to prove intentional discrimination of this nature if it was clear that school officials considered a number of different boundary line configurations and chose the option under which students were most segregated (G. Orfield, 1978).

As a lower court ruling recently highlighted, though, documenting intentional discrimination can be difficult. In a case dealing with school redistricting in an urban context, the U.S. Court of Appeals for the 6th Circuit ruled that school officials in Nashville, Tennessee, did not violate the equal protection rights of black students in the district. The suit hinged on whether or not officials intentionally segregated students in crafting a new assignment plan. The appellate court held that officials had not done so, but also clarified that a general consideration of race during the rezoning process was not subject to strict scrutiny. Officials were aware, for example, that underlying neighborhood demographics would likely increase school segregation in a proximity-oriented assignment plan (see *Spurlock v. Fox*, 2013). In short, the case reaffirmed Justice Kennedy's directive related to the consideration of race during redistricting even as it represented an overall setback for the plaintiffs seeking to overturn a reassignment policy that exacerbated segregation in the district. The gray area between what is allowed under *Parents Involved* (generalized consideration of neighborhood characteristics, including race) and what is illegal under *Keyes* (intentional racial segregation of students when drawing attendance zones) makes it particularly imperative that communities, education stakeholders, advocates, and researchers closely monitor the racial impacts of school redistricting processes. The social science informing these legal parameters—like how and why segregation still matters, along with the complicated interplay between patterns of school and housing segregation—is a key backdrop for a case study examining the racial impacts of suburban school rezoning.

## Literature Review

## Segregation and Unequal Neighborhoods and Schools

Racially and economically segregated neighborhoods are linked to radically different opportunity structures, including limited access to high-quality schools, jobs, health care, affordable and fresh food goods, and other essential resources (Kozol, 2005; Massey, 2008; Massey & Denton, 1993; Nightengale, 2012; Wilson, 1991). Beyond the concrete restrictions of segregation, more intangible limitations further isolate impacted groups. On average, few residents living in high-poverty, minority segregated neighborhoods have contact with people connected to advantaged social networks, which tend to be associated with the acquisition of mainstream social, economic, and cultural capital (Anderson, 2011; Lamont & Lareau, 1988). The inability to tap into these networks and resources for information about employment, affordable rental opportunities in more advantaged areas, homeownership, and school options exacerbates existing isolation and reinforces the cyclical nature of segregation (Briggs, 2005; Royster, 2003).

Residential segregation is closely related to school segregation, largely because many districts draw school attendance boundaries around the closest surrounding neighborhoods (Sohoni & Saporito, 2009). This arrangement means that segregated neighborhoods yield segregated schools—which in turn remain linked to profoundly disparate educational opportunities. Minority segregated schools are nine times out of ten also schools with high concentrations of poverty (G. Orfield & Lee, 2005). These doubly segregated settings are associated with fewer resources, troublingly low graduation rates, less competition among peers, less-qualified and -experienced teachers, and high rates of staff turnover (Darling-Hammond, 2010; Guryan, 2004; Jackson, 2009). Minority segregated, high-poverty schools are also linked to lower test scores (Biegel, 2008; Borman et al., 2004; Lipman, 2004), in part as a result of prevailing opportunity gaps (Carter & Welner, 2013; Darling-Hammond, 2010). These factors, joined with a diminished ability to connect with networks containing important information about college and job prospects (Braddock, 2009; Teranishi & Parker, 2010; Wells, 1995), lower earnings later in life (Johnson, 2011), as well as higher imprisonment rates (Billings, Deming, & Rockoff, 2012; Kahlenberg, 2001), continue to systemically render separate schools unequal for minority students.

White students are also harmed by racial segregation. Social science shows that students of all races benefit from integrated school settings. Advantages linked to well-designed, diverse schools include better learning outcomes (Mickelson & Bottia, 2010), reductions in prejudice and the willingness to stereotype (Pettigrew & Tropp, 2006), increased civic engagement (Kurlaender & Yun, 2005), and a longer-term propensity to seek out diverse settings later in life (Wells & Crain, 1994). Most fundamentally, white segregated schools ill-prepare their students to live and work in an increasingly multiracial and globalized society (Jayakumar, 2008).

## Dynamics of Neighborhood and School Segregation in U.S. Suburbs

The changing demography of suburban communities heralds new potential for residential and school integration efforts. Yet on closer examination, many areas of suburbia are displaying signs of racial and socioeconomic segregation (Frankenberg & Orfield, 2012).

The racial makeup of suburban neighborhoods can quickly shift, moving from a diverse area to a resegregating one in a matter of years. A recent study based on U.S. Census data from the fifty largest metropolitan areas found that diverse neighborhoods where racial minorities made up over 23 percent of the population in 1980 were more likely to become predominately nonwhite over the ensuing twenty-five years than to remain integrated (M. Orfield & Luce, 2013). Schools show similar signs of instability. Nearly one-fifth of suburban school districts in the twenty-five largest metro areas are experiencing rapid racial change (Frankenberg, 2012), and already almost three-quarters of black and Latino students in the suburbs around large urban cores attend schools that are majority nonwhite (Frankenberg & Orfield, 2008). Meanwhile, roughly 16 percent of students in the twenty-five largest metro areas attend white segregated suburban schools (settings in which white students account for 90–100 percent of the enrollment), though that figure has declined significantly since 1999 (Frankenberg, 2012). The process of residential and school resegregation in the suburbs underscored by these figures is complex, involving a mixture of public and private actions.

## - Role of Attendance Boundaries

Public decisions about attendance zone boundaries help determine the student population within schools. Research has shown that those boundaries send important signals to relocating families about the schools and neighborhoods they are weighing (Weiher, 1992). Realtors, also public actors, often use coded language about the reputation of a school to communicate information about the racial makeup of neighborhoods and schools (Dougherty, 2010; Future of Fair Housing, 2008; Pearce, 1980; Wells et al., 2009). The close interaction between new sources of state and federal accountability data and the demographic composition of schools has further enabled this process. Even though outright housing discrimination has been outlawed for decades, real estate agents now have a "legally sanctioned vocabulary," in the form of school rankings, that they can use to steer families into certain neighborhoods and school zones (Dougherty, 2010).

## - Shopping for Schools

Schools, of course, play a central role in home-buying decisions, and "shopping for schools" intersects with both the public and private spheres. On the public side, recent research from the metropolitan Hartford, Connecticut, area documents the ways in which suburban real estate and school officials worked together to promote specific school zones as high quality, generating intense interest from upwardly mobile white families looking to relocate (Dougherty, 2010). As middle-class black families began moving into the suburbs of Hartford, however, realtors worked to steer them into separate sectors of suburbia using school-busting tactics (Dougherty, 2010). Reminiscent of blockbusting, a scare tactic designed to facilitate profitable rapid racial turnover in formerly white neighborhoods (Haynes, 2001), the school-busting process employs the same mechanisms to flip a whole school zone or district (Dougherty, 2010). Research further shows that housing prices vary significantly across school district and attendance lines associated with varying levels of diversity (Brasington & Haurin, 2006; Clapp, Nanda, & Ross, 2008; Kane, Riegg, & Steger, 2010). This raises the financial stakes—for all parties—linked to the selection of schools and homes.

Another example of the role public actors play in the practice of shopping for schools is related to land use decisions. Instead of promoting mixed-income development, many local suburban governments sanction exclusionary zoning policies that price less-well-off buyers out of new neighborhoods comprised only of single-family homes on large lots (M. Orfield & Luce, 2010). When those residential spaces become unworkable for low-income families that cannot afford them, the higher-opportunity schools with which they are associated also become inaccessible (Rothwell, 2012).

## - Individual Preferences

At the level of the private individual, differing preferences influence the search for neighborhoods and schools. Studies suggest that white people prefer more racially homogeneous areas of residence, while people of color are more likely to be comfortable with diverse neighborhoods (Charles, 2003). While those two competing preferences do not necessarily align, it is important to understand that the same inclinations can shift—and are more likely to do so when groups gain exposure to one another (Mickelson, 2011; Wells & Crain, 1994). Yet, even though schools would be a natural place for such exposure to occur, both quantitative and qualitative studies continue to underscore the fundamental roles that race and class play in school choice processes among white and advantaged families (Holme, 2002; Liebowitz & Page, 2011). These families typically use informal networks to pass along information about desirable schools, and more often than not the demographic makeup of a school setting carries more weight than actual indicators of school quality (Holme, 2002).

## Politics of School Rezoning

The politics and policies linked to school rezoning efforts also involve public and private actors. Individual families with schoolchildren have a considerable stake in rezoning, as they consider whether or not they are satisfied with their current or new school assignment. The research noted above indicates that the new racial and economic makeup of a school plays a significant part in white and/or well-off families' perceptions of the rezoning. Moreover, because of the relationship between the diversity of school zones and housing prices, homeowners, regardless of whether or not they have children, view changes to school boundaries as impacting property values. Though research on specific attitudes toward rezoning is limited, qualitative interviews with school leaders from a Florida and a Texas district indicate that middle- and upperclass white homeowners are most likely to actively resist boundary changes, especially when they anticipate an increase in economic and racial diversity (Holme, Diem, & Welton, 2013; Wiley, Shircliffe, & Morley, 2012). Underscoring again the complex interaction of accountability policies, race, and class, these attitudes are rationalized in part by suggestions that an influx of diversity will mean lower expectations and decreased test scores-thus fueling a decline in housing prices (Wiley et al., 2012). When this politically powerful group of private stakeholders pressures school officials, public decisions about school boundaries tend to be made in ways that benefit already-advantaged families (Eaton, 2012; Holme et al., 2013; M. Orfield & Luce, 2010; 2013; Wiley et al., 2012). Still, it is important to point out that minority communities have also mobilized around zoning issues, in some cases bringing or reactivating lawsuits related to segregative school board reassignment processes (e.g., Everett v. Pitt County Board of Education, 2012; Spurlock v. Fox, 2013).

School and housing choices in the suburbs are sensitive to small fluctuations in the racial and socioeconomic makeup of school zones. Both public and private acts can help spur swift resegregation in areas of suburbia that appear relatively diverse. However, as we have seen, public actions directly related to changing school attendance boundaries—and the enrollment demographics of the schools to which they are linked—can have serious legal implications for suburban communities. Though a handful of studies have addressed the racialized politics and impacts of suburban rezoning (Holme et al., 2013; M. Orfield & Luce, 2010; 2013; Wiley et al., 2012) as just one component of a broader investigation, there is a clear need for more extensive research in this area. The following description and analysis of a high school rezoning effort in Henrico County, Virginia, seeks to expand our knowledge of the racial impact of educational gerrymandering. Before presenting the specifics related to the high school redistricting effort in HCPS, however, a brief introduction to the general characteristics of the suburb and its school system is in order.

## Demographic Change and School Rezoning in Henrico County

Henrico County borders Virginia's capital, the independent city of Richmond, to the north, east, and west. Like many suburban communities across the nation, census figures indicate that it has experienced substantial shifts in its overall racial composition (see table 1). The white population declined nearly 10 percentage points between 1990 and 2000 and another 5 percentage points by 2010. An influx of blacks, Asians, and Latinos accounted almost entirely for the decrease in the overall proportion of the white population. The percentage of black residents increased most significantly, from 20 percentage points in 1990 to 29 percentage points in 2010. These figures describe how growing shares of nonwhite residents helped shift the racial makeup of the county, but it should be noted that, in conjunction with a general population increase, the number of white residents also rose over the twenty-year period. Indeed, the overall number of residents rose by more than 100,000 between 1990 and 2010.

In another parallel with national trends, the growth in the number of nonwhite residents in Henrico County has been heavily concentrated in certain parts of the county. Figure 1 illustrates the percentage of white residents living in Henrico County census block groups (roughly equivalent to neighborhoods) in the years 1990, 2000, and 2010. Changes over time indicate that nonwhite residents became increasingly and starkly isolated in the central and near-eastern portions of the county, particularly in neighborhoods between Interstates 64 and 95. Block groups in the eastern-most section of the county,

Total residents	206,662	262,300	306,935
All other NH (%)	0.3	2.0	2.5
Asian NH (%)	1.9	3.5	6.5
Latino (%)	1.0	2.3	4.9
Black NH (%)	20.3	24.4	29.1
White NH (%)	76.4	67.7	56.9
	1990	2000	2010

TABLE 1 Population by race, Henrico County census block groups, 1990–2010

Notes: Census block groups are roughly equivalent in size to neighborhoods. NH stands for "non-Hispanic," a census designation.

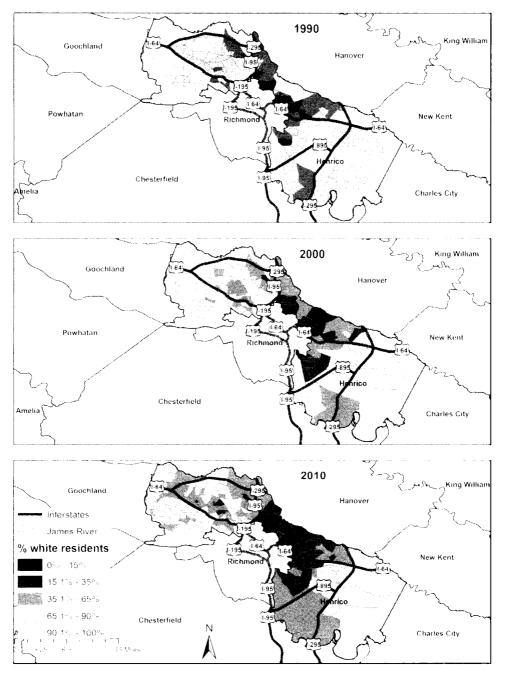


FIGURE 1 Percentage of white residents by census block group, Henrico County, 1990, 2000, and 2010

Source: U.S. Census, SF3, 1990, 2000, and 2010.

a more rural area, were more racially diverse, while neighborhoods in the far west end remained overwhelmingly white.

#### School Rezoning in Henrico County Public Schools

Prompted by rapidly rising numbers of students (growing from just over 32,000 in 1990 to 48,000 in 2007, a 50 percent increase), as well as by growth projections for the coming decade, HCPS planned to build five new schools by 2013 (Cropper et al., 2008). By 2008, sites for new middle and high schools had been selected, each located in the western portion of the county. Importantly, this analysis is concerned solely with the high school rezoning process, since these zones are typically larger than the ones for middle schools. As the size of the attendance catchment area increases, school officials are presented with more opportunities to include a range of neighborhoods of varying racial or socioeconomic compositions, which in turn leads to greater possibilities for creating diverse schools (M. Orfield & Luce, 2010).

In drawing the zone for the new high school, officials were charged with adjusting other high school attendance boundaries to balance membership and capacity across all high schools (Cropper et al., 2008). As noted earlier, the *Parents Involved* decision allowed—but did not require—county officials to consider boundary line changes that fostered racial diversity during the redistricting process. Furthermore, according to the district's own guidelines, lines were not to be drawn in a manner that resulted in a dual, segregated system of schools.

Several procedural guidelines and objectives steered the redistricting process in Henrico County. The former included efforts to ensure contiguous geographic zones, using roads and natural boundaries to define attendance areas when feasible and adherence to legal and judicial guidelines for the maintenance of a unitary system (Cropper et al., 2008). The latter involved the efficient utilization of present and projected educational facilities, implementation of grade organizational goals (e.g., 9–12th grades for high schools), placement of special programs that affect regularly formulated capacity figures for a school building, maintenance of the concept of geographic zoning, and the provision of the best physical learning environment (Cropper et al., 2008).

The objective related to the placement of special programs had particular significance for high schools in the district, since each houses at least one theme-based specialty center. High school specialty centers in Henrico County have unique academic or career foci and admissions criteria governing entrance (HCPS, 2012). Strategic location of the most popular specialty centers can help boost enrollment numbers at schools that are under capacity. These centers may have played a role in ameliorating some of the racial impacts of the rezoning process.

Based on the guiding principles and objectives, the district retained an experienced contractor to create the redistricting proposals. Five different

zoning options for the new high school attendance boundaries were developed for consideration. The Henrico County School Board, opting not to take on the politically difficult issue of redistricting single-handedly, selected a committee of seventy community members to help with the process (Redistricting Archive, 2010). The committee held numerous community forums at different points throughout the process in order to solicit public opinion on the proposed changes.

Based on community input, by January 2009 the high school redistricting committee had narrowed the five proposals to Options A and C (Redistricting Archive, 2010). The committee presented its final recommendations to the school board at the end of April. Shortly thereafter the board asked the mapping company to produce a revised version of Option C that accommodated objections from white parents whose children were zoned to high schools with higher proportions of minority students in the near- and far-western sections of the county. On May 28, 2009, circumventing the recommendations of the seventy-member committee, the board voted on and approved the revised Option C, which included several last-minute changes to the new attendance boundaries that acquiesced to the concerns of the white families (Redistricting Archive, 2010).

## Politics of Henrico Redistricting

The process was contentious, with an active group of parents protesting reassignment to schools with higher levels of racial diversity and poverty (Crutchfield, 2009). Authors weighed in on different local blogs, urging parents to dispute specific boundary changes during the community meetings. In the two blog excerpts below, both neighborhoods mentioned are located in heavily white areas in the far west end of the district (see figure 1).

None of these options shows the dire need to redistrict our small group of subdivisions, but ALL of these options uproot a longstanding Godwin community, potentially split close knit relations, and rob us of a nationally recognized school and education that many of us consciously chose when we purchased our homes. Godwin is not just a school to us, it is a tradition and we want to remain a part of it. (StayatGodwin.blogspot.com, 2009)

Nothing gets Short Pump parents more upset than the thought of our schools changing due to Henrico County redistricting. This is clearly the hottest topic at the bus stop each day. Before I had kids, I would have just thought there must not be much difference between the various schools in Western Henrico. However, now that we are "in the game" I totally understand and am actually quite anxious about these upcoming changes . . . my first reaction was that we would just move if the schools changed to ones which we do not want to send our kids to. (Short Pump Mom, 2008)

These two passages crystallize the link between choices about housing and school,<sup>1</sup> and both hint at the deeply political process of school redistricting

decisions. As other studies have indicated (Wiley et al., 2012), the racial and economic implications of the boundary changes—whether openly considered or not—were likely intertwined in the communities' perceptions of rezoning. The views highlighted in the two blogs also point toward findings from earlier research, which suggests that white and/or advantaged families tend to become more actively engaged in rezoning processes than other families (Holme et al., 2013). Furthermore, a review of social media and newspaper articles from the time period surrounding the 2008–2009 rezoning did not uncover opposing viewpoints, indicating that the voices of families of color or less advantaged families may not have been as widely heard.

Publicly, the county school board and committee members chose not to discuss race when devising the new boundary lines. A phone interview with a district official in early February 2009 also indicated that the school system was not considering race during the process (W. Jones,<sup>2</sup> personal communication, January 30, 2009). Yet despite the avowed official avoidance of race *during* the boundary line decision-making process, the *results* of rezoning inevitably affected levels of segregation at each of the high schools. The following section outlines the data and methodology used to explore how the proposed and final high school zones impacted issues related to capacity, racial balance, and isolation in the district.

## Data and Methods

### Neighborhood and School Data

I used U.S. Census data from 1990, 2000, and 2010 to compile county-level racial/ethnic statistics. To derive district high school enrollment by race for 2007–2008 (the year prior to the redistricting process), I used data from the National Center for Education Statistics' Common Core of Data (NCES' CCD), a highly reliable data source that collects enrollment information for the federal government from virtually every school district across the country (Frankenberg, Lee, & Orfield, 2003). The final section of the analysis relies on data from the Virginia Department of Education for the 2011–2012 school year regarding district high school enrollment by race. These data are very similar to what is collected by the NCES' CCD, but the state-level figures are updated more frequently. The availability of more recent data allowed for more accurate exploration of the impact of the rezoning on current enrollment trends in HCPS.

## High School Redistricting Data

I made use of census tract-level data from the American Community Survey (ACS) five-year estimates from 2006–2010 to analyze school enrollment by race for grades 9–12. The ACS represents a sample count of residents each year, instead of the universal count conducted every ten years through the U.S. Census. The five-year estimates average the yearly counts, producing the

largest and most reliable sample within the ACS. As such, these data represent the best available information on school-age racial composition related to redistricting because they are more time sensitive and better capture the rapid pace of demographic change in the study. Furthermore, sample tractlevel ACS data for the years 2006–2010 better correspond to the timing of the rezoning process than either the 2000 or the 2010 U.S. Census counts. It is important to note, however, that census tract-level data may not be ideal, as research suggests that smaller geographic units, like census block groups, typically provide a more accurate portrait of segregation (Bischoff, 2008; Reardon & Yun, 2002). Unfortunately, a preliminary analysis of the 2006–2010 ACS by block group in the school district indicates a high level of missing data, thus tracts provide a more complete dataset for this study.

While the enrollment data are important for analyzing the actual racial makeup of high schools before and after the rezoning, exploring the underlying demographics of school attendance areas using the ACS is critical for understanding the *potential* racial impact of the rezoning process. The two might differ depending on the extent to which students enroll in private schools or use public school choice options to attend a school other than the one to which they are zoned. Still, it is useful to consider whether or not the different datasets reflect a similar universe of high school-age students in order to gauge how well the ACS data estimate the racial and ethnic impact of the high school redistricting process. A comparison of the two reveals that ACS five-year estimates regarding grade-by-grade school enrollment by race closely align with NCES' CCD's high school data for the year prior to redistricting (see table 2). Though slight differences in the levels of white and black high school enrollment are apparent in the two datasets, they are minor and should not interfere with the accuracy of the analysis. The ACS reports a larger overall number of high school-age students, which could reflect private school enrollment as well as the process of averaging higher and lower numbers of ninth-twelfth graders across the five-year sample. In general, though, it appears that ACS data enable me to conduct a plausible analysis of the racial impact of a contentious high school redistricting process in a demographically changing suburb.

HCPS provided shape files (a geographic data format), which outlined the boundaries for the original and final high school zones and for the proposals under consideration. In my analysis, I focus on redistricting Options A, C, and D. I excluded Option B after an interview with a district official who suggested that, from the earliest stages of the process, it was never under serious consideration (W. Jones, personal communication, January 30, 2009).

#### Data Analysis

The bulk of this analysis focused on the high school rezoning process in Henrico County. Again, I chose to highlight high schools because their large attendance zones should make it easier to counter patterns of housing segregation

	NCES 2007–2008 High school enrollment	ACS 2006–2010 9th–12th graders
White (%)	52.6	50.0
Black (%)	39.0	37.0
atino (%)	3.4	3.6
Asian (%)	5.0	4.8
Other (%)	*	4.5
otal students	14,321	17,740

TABLE 2 National Center for Education Statistics high school enrollment by race, 2007–2008, and American Community Survey 9th–12th grade public school enrollment by race, 2006–2010, Henrico County.

Source: National Center for Education Statistics' Common Core of Data (2007–2008); American Community Survey (2006–2010).

Notes: According to the NCES' CCD, American Indian students represented less than 1 percent of Henrico County's high school enrollment and were excluded from this analysis. Only regular public schools were included.

\* Other represents the total of American Indians, those identifying with some other race, and with two or more races in the ACS data.

by drawing students across a broader residential area (M. Orfield & Luce, 2010). School officials and community members considered several redistricting options with differing consequences for the racial/ethnic composition of catchment areas linked to district high schools. To explore these options, I constructed maps that illustrate the racial impact of the proposed and final redistricting options using GIS software. This work builds on other studies' use of GIS mapping technology to illustrate the segregating effects of "neighborhood schools" (Goldring, Cohen-Vogel, & Smrekar, 2006) to measure school segregation across the metropolitan context (Zhang & Walker, 2012) and to investigate the relationship between private, magnet, and charter school usage and segregation in urban districts (Saporito & Sahoni, 2006).

I made some adjustments to the analysis because the shape files for the school attendance zones did not correspond exactly to existing U.S. Census geography levels (e.g., tracts or block groups). In order to account for areas where the district's attendance zones overlapped with a portion of more than one census tract, I used the GIS software to locate a centroid for each tract. ACS 2006–2010 data for the student population in grades 9–12 by race were already linked to the tracts. I then spatially joined these census tract centroids to the high school boundary line shape files (e.g., Easa & Chan, 2000). This allowed for more accurate grouping of the high school–age population under each boundary line change.<sup>3</sup> This enabled me to ascertain the racial/ethnic composition of students residing in the county's high attendance zones under the original, proposed, and final boundaries.

## Measures of School Racial Imbalance and Segregation

I employed measures of racial imbalance to analyze the impact of the district's high school rezoning process. I designated as *racially imbalanced* a district high school or attendance zone where the percentage of white students exceeded or fell below the total districtwide percentage of white students by 15 percentage points. The +/-15 percent standard has been widely used in desegregation orders throughout the South (e.g., *Capacchione v. Charlotte-Mecklenburg Schools*, 1999); it is also a metric found in studies examining school segregation (Borman et al., 2004; Mickelson, 2001; Valencia, 2000).

The decision to use the proportion of white students in each zone as the anchor for the +/-15 percent band was driven by the role that race plays in the school choice process for white families, documented in both the literature (Holme, 2002; Liebowitz & Page, 2011) and several blog entries from the Henrico County community. According to ACS data, white high school students constituted 50 percent of Henrico County's population (see table 2), thus an imbalanced zone was defined as less than 35 percent white or more than 65 percent white.

Finally, I also calculated the number of students who would be enrolled in racially isolated minority schools under the original and final high school rezoning options. I designated a school as *predominately minority* if the enrollment was 50–89 percent black or Latino<sup>4</sup> or *intensely segregated* if it was 90–100 percent black or Latino (G. Orfield, 2009). These measures help illuminate patterns of racial concentration for black and Latino students in the school district, an important aspect of segregation given the opportunity gaps that flow from racially isolated minority schools (e.g., Carter & Welner, 2013).

## Findings

This section is divided into three key parts, each corresponding to a research question. The first part examines the impact of the rezoning process on the distribution of the number of students living in district high school zones. The second explores the racial impact of both the proposed and final high school boundaries. In the third part I present the most up-to-date enrollment information for Henrico County high schools, along with a brief illustration of the potential influence of specialty centers on overall school enrollment demographics.

## How Did the Proposed, Original, and Final Attendance Zones in Henrico County Relate to the Distribution of the Number of Students Living in High School Zones?

Overcrowding and capacity issues were stated as the primary factors driving Henrico County's decision to build a new high school (Cropper et al., 2008), and the school district described the ensuing school rezoning process as intended to distribute students more evenly across high schools in the district. In figures 2 and 3, I display the number of high school-age students living in the census tracts corresponding to the original, proposed, and final high school zones.

Under the original high school attendance boundaries, the zones reporting the highest numbers of ninth-twelfth graders were associated with Hermitage High and Highland Springs High (see figure 2). Highland Springs is located in the eastern section of the district and county, while Hermitage is located in the near-west end. Meanwhile, high school zones in the far-western section of the county reported the lowest numbers of ninth-twelfth graders. Land use and zoning ordinances, along with demographic shifts, likely at least partly account for these patterns. Large, single-family lots predominate in the far west of Henrico, and much movement into the county has occurred in and near the middle band connecting eastern and western Henrico.

Notably, the siting of the new high school, Glen Allen, suggested a commitment to alleviating high numbers of students living in the zone linked to Hermitage High School in the west; however, it did nothing to address a a similar pattern in the central/eastern Highland Springs zone. Moreover, according to the district's own projections, the high school rezoning process would alleviate overcrowding and school capacity issues in the west end, but do nothing to address those concerns in the central and eastern part of the district (Cropper, 2009).

A comparison of the original and final high school attendance zones in Henrico County (see figure 3) shows that, under the final zones, most farwestern high school boundaries—including the ones for the new high school were drawn in a way that balanced the numbers of ninth-twelfth graders in zones across that section of the district.<sup>5</sup> Toward the central area of the county, Henrico High's zone shrank to encircle the lowest number of high school students under the final boundaries. Meanwhile, high school zones in the eastern portion of Henrico (Highland Springs and Varina) remained largely unchanged and encompassed very high numbers of ninth-twelfth graders. Each of the proposed options reflected patterns similar to the final adopted high school zones. In short, this early phase of school construction and rezoning privileged balancing the enrollment in the whiter, better-off western section of the county and ignored issues of overcrowding in the diverse central/ eastern parts.

## How did the Original, Proposed, and Final Boundaries Impact High School Racial Balance and Isolation in Henrico County?

Mapping the student population in the original, proposed, and final high school boundaries highlights the significant implications of the rezoning on school racial balance. In figures 4 and 5, I depict a percentage range estimate of white high school students residing in the original, proposed, and final attendance areas, while in figure 6, I illustrate the actual share of white high school students living in each zone.

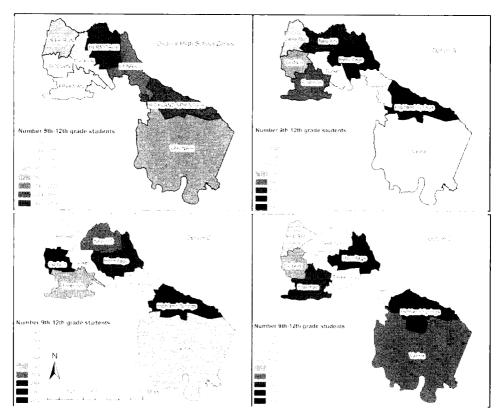


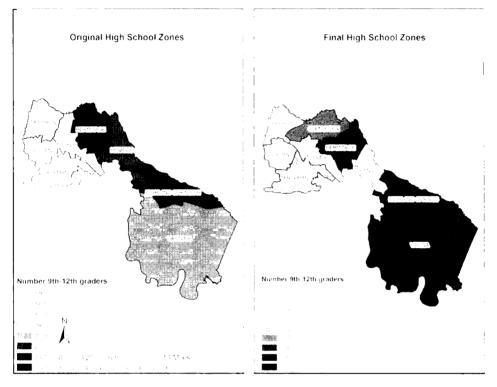
FIGURE 2 Number of Henrico County 9th–12th graders residing in original and proposed high school attendance boundaries

Source: American Community Survey, C14007H-1, 2006-2010.

In the far-western portion of the county, all three redistricting proposals left attendance boundaries linked to Godwin, Freeman, and Deep Run with heavily white populations in a school system that is now majority minority. Two of the three options also proposed an overwhelmingly white zone for the new high school, while the remaining proposal, Option C, created a more balanced (35–65 percent white) catchment area for the new school community.

Perhaps most importantly, all options created a 0–15 percent white zone for Henrico High and a 15–35 percent white zone for Highland Springs High, both of which are located in the central/eastern section of the county. That is to say that all of the options created at least two racially imbalanced zones. The size of the Henrico High attendance boundary shrank considerably under each different option, as the northeastern corner was folded into the Hermitage zone. The actual share of white students zoned for Henrico High was less than 2 percent under all three proposals (see figure 6).

A side-by-side comparison of the distribution of white high school-age stu-



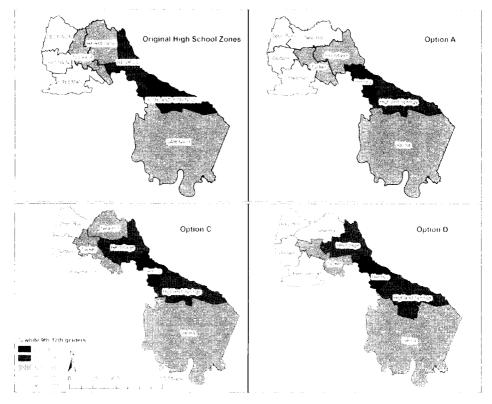
## FIGURE 3 Number of Henrico 9th–12th graders residing in original and final high school attendance boundaries

Source: American Community Survey, C14007H-1, 2006–2010.

dents under the original and final high school zones illustrates how the redistricting process increased segregation across certain schools and zones in the county (see figure 5). Each of the zones for the far-west end, including the new one, remained racially isolated, predominantly white settings. Zone proposals for the new high school, Glen Allen, ranged from including an area where white ninth-twelfth graders constituted 58 percent of the population to one where they constituted 77 percent. At roughly 65 percent, the final attendance boundaries encompassed a disproportionately white high school-age population (in comparison to the district), though not as markedly imbalanced as the three zones in the far-west end of the district (see figure 6).

In the central section of the county, zones linked to Henrico High and Highland Springs became or stayed overwhelmingly minority segregated settings. White students made up less than 1 percent of the final Henrico High zone (see figure 6). Further, the example of the Highland Springs zone highlights ways in which the redistricting process contradicted its stated goals because it remained overcrowded as well as minority segregated (see figures 3 and 5).

## FIGURE 4 Percentage of white Henrico County 9th–12th graders residing in original and proposed high school attendance boundaries



Source: American Community Survey, C14007H-1, 2006-2010.

## Concentration of Underrepresented Minority Students

Under the final attendance boundaries, more students of all races—but most critically black and Latino students—were zoned for intensely segregated underrepresented minority (URM) high schools (90–100 percent underrepresented minorities) than under the original zones (see table 3). Conversely, there were some declines in the number of students assigned to predominately black and Latino zones (50–89 percent underrepresented minorities) after the redistricting process was complete.

Fully 17 percent of all high school-age black students in Henrico County were zoned for intensely segregated underrepresented minority settings under the final attendance boundaries, compared to 0 percent under the former zones. Almost 10 percent of the county's Latino high school students were similarly zoned under the final boundaries.

By presenting data for students residing in the original, proposed, and final attendance zones, I hope to highlight what Henrico County enrollments would

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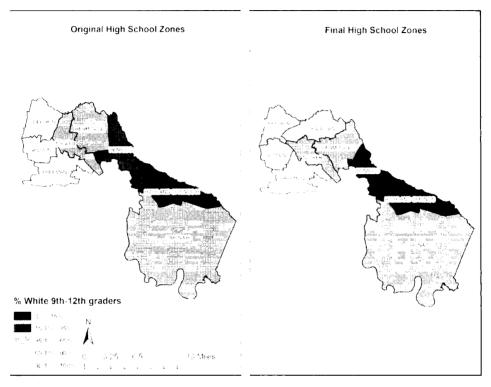


FIGURE 5 Percentage of white Henrico County 9th–12th graders residing in original and final high school attendance boundaries

look like if every student attended his or her assigned public high school. In the next section, I present the final set of analyses using the most recent racial and ethnic data from the 2011–2012 school year to examine current enrollment and segregation patterns in Henrico County high schools. These numbers differ in important ways from the data in the above rezoning analysis, due in part to the presence of theme-based specialty centers at each high school. Students apply for admission to the specialty centers (under various criteria), and acceptance permits them to enroll as full-time students in an out-of-zone high school.

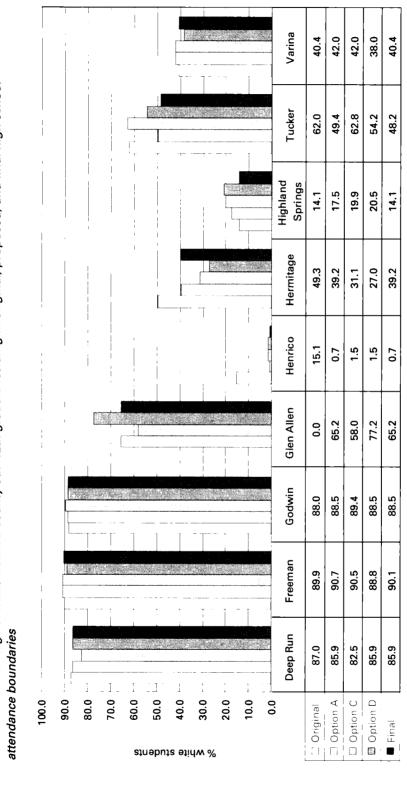
## How Did the Demographics of the Student Population in the Final High School Zones Compare to Henrico County's Actual High School Enrollments?

The most recent enrollment data indicate several discrepancies between the student population in the final high school zones and the actual makeup of Henrico County high schools. The racial demographics at Freeman and Henrico High help illustrate these differences. White students made up 70 percent of the 2011–2012 enrollment at Freeman, according to the most recent data,

Source: American Community Survey, C14007H-1, 2006–2010.

## Harvard Educational Review

FIGURE 6 Percentage of white Henrico County 9th–12th graders residing in original, proposed, and final high school attendance boundaries



Source: American Community Survey, C14007H-1, 2006–2010.

instead of the predicted 90 percent, a figure based on the high school-age population living in the Freeman zone at the time of the redistricting (see table 4). In the other direction, black students constituted a little over 70 percent of Henrico High's enrollment, compared to more than 99 percent of the students living within the attendance boundaries. While these figures represent a marked improvement from the zoning models that emphasize proximity and capacity, noteworthy imbalances are still apparent. Applying the same 15 percent standard to the white share of the enrollment in the 2011–2012 data (46 percent), we see that seven of the nine high schools in the district were racially imbalanced.

These current data indicate that the Henrico County high schools were less racially segregated than the final zones would have predicted. Since Henrico County's specialty centers provide students with an opportunity to attend high schools outside of their assigned zone, it is possible that they helped ameliorate at least some of the segregative impact of the rezoning process.<sup>6</sup> Yet it is difficult to discern the actual racial impact of Henrico's specialty centers on overall high school enrollment patterns because public data disaggregating the racial and ethnic makeup of each center are not available. Still, for Henrico High—which, given the intense segregation of its zone, was arguably the most influenced by the presence of its specialty centers—federal civil rights data from 2009 provide something of a window into the makeup of one of the school's two centers.

Henrico High houses International Baccalaureate (IB) and Center for the Arts specialty centers. In 2009, just prior to the implementation of the new high school zones, the gifted and talented enrollment (a rough proxy for the IB specialty center, though not for the Center for the Arts) at Henrico High was almost 60 percent white (table 5). By contrast, white students constituted

	50–89 percent URM schools		90–100 percent URM schools		
	Original zones	Final zones	Original zones	Final zones	
White NH (%)	17.2	23.1	0.0	0.1	
Black NH (%)	76.5	67.1	0.0	17.6	
Latino (%)	39.9	46.1	0.0	9.4	
Asian NH (%)	5.7	7.6	0.0	0.0	
Other NH (%)	35.2	37.2	0.0	7.6	
All students (%)	40.5	40.2	0.0	7.2	

TABLE 3 Percent of Henrico County 9th–12th graders zoned for 50–89 percent and90–100 percent underrepresented minority (URM) high schools

Source: American Community Survey, C14007H-I, 2006-2010.

just 20 percent of the overall enrollment. A similar pattern was documented for Asian students—22.2 percent of the gifted and talented population but 6.1 percent of the broader school population. And despite the fact that black and Latino students made up about three-quarters of Henrico High's student body, they constituted a little under a fifth of the gifted and talented enrollment. In short, these data suggest that the two specialty centers may

White (%)	Black (%)	Latino (%)	Asian (%)	Two or more races (%)	Total enrollment
78.6	4.3	4.1	11.4	1.6	1,738
67.8	14.0	9.6	6.7	2.0	1,824
78.3	7.8	4.0	8.0	1.8	1,734
64.2	20.7	4.3	9.0	2.9	1,105
14.2	73.3	2.5	5.7	1.1	1,457
36.3	47.4	9.3	0.5	1.3	1,714
11.5	83.2	3.2	13.0	1.7	1,916
44.8	25.4	11.7	0.7	5.0	1,717
27.3	67.1	2.0	7. <b>9</b>	2.9	1,759
46.3	39.3	5.5	6.7	2.2	14,964
	(%) 78.6 67.8 78.3 64.2 14.2 36.3 11.5 44.8 27.3	(%)       (%)         78.6       4.3         67.8       14.0         78.3       7.8         64.2       20.7         14.2       73.3         36.3       47.4         11.5       83.2         44.8       25.4         27.3       67.1	(%)       (%)       (%)         78.6       4.3       4.1         67.8       14.0       9.6         78.3       7.8       4.0         64.2       20.7       4.3         14.2       73.3       2.5         36.3       47.4       9.3         11.5       83.2       3.2         44.8       25.4       11.7         27.3       67.1       2.0	(%)         (%)         (%)         (%)         (%)           78.6         4.3         4.1         11.4           67.8         14.0         9.6         6.7           78.3         7.8         4.0         8.0           64.2         20.7         4.3         9.0           14.2         73.3         2.5         5.7           36.3         47.4         9.3         0.5           11.5         83.2         3.2         13.0           44.8         25.4         11.7         0.7           27.3         67.1         2.0         7.9	White (%)         Black (%)         Latino (%)         Asian (%)         more races (%)           78.6         4.3         4.1         11.4         1.6           67.8         14.0         9.6         6.7         2.0           78.3         7.8         4.0         8.0         1.8           64.2         20.7         4.3         9.0         2.9           14.2         73.3         2.5         5.7         1.1           36.3         47.4         9.3         0.5         1.3           11.5         83.2         3.2         13.0         1.7           44.8         25.4         11.7         0.7         5.0           27.3         67.1         2.0         7.9         2.9

 TABLE 4
 High school enrollment by race, Henrico County, 2011–2012

Note: \*denotes racial imbalance.

Source: Virginia Department of Education (2011-2012).

	Regular program	Gifted and talented
White (%)	17.3	58.3
Black (%)	73.7	19.4
Latino (%)	2.6	0.0
Asian (%)	6.1	22.2
Total students	1,960	180

## TABLE 5 Enrollment by race in regular and gifted and talented programs,Henrico High, 2009

Source: Civil Rights Data Collection (2009).

have drawn more white and Asian students to Henrico High than would have otherwise been the case if the school was populated solely by students living within its zone.

Understanding the extent to which specialty center students were integrated with the academic and social fabric of each county high school is beyond the scope of this analysis. Yet these 2009 data show that, even before the new zones took effect, the racial disparities between the overall enrollment and the gifted and talented program at Henrico High raised serious questions about access and equity *within* the district's high schools as well as about discrepancies *between* them.<sup>7</sup>

## Discussion

The Richmond, Virginia, suburb at the center of this case study has undergone tremendous demographic changes since the metropolitan desegregation lawsuit of the early 1970s. It is clear from the data, however, that the population shifts have not produced substantial school integration in Henrico County high schools. Instead, pockets of white racial isolation define several parts of the suburban landscape, and a growing number of intensely segregated minority neighborhoods and schools are concentrated in the central bridge between the eastern and western sections of the county.

Measures of imbalance and concentration illustrated with GIS maps indicate that the rezoning process for Henrico County high schools had clear and consistent racial impacts. All of the different attendance boundary proposals created a new segregated minority zone in the central part of the district and did nothing to alleviate the existence of racially isolated white school zones in the western parts of the county. Similarly, the final zones created two minority segregated settings in the central and eastern sections of Henrico while preserving white segregated schools in the far-west end of the county. And further, overcrowding was alleviated in the west end, but comparable issues in the central and eastern sections (where much of the population and enrollment growth had occurred and where the majority of residents were black) were ignored. It is worth underscoring again the fact that fully 17 percent of all high school-age black students in Henrico County were zoned for an intensely segregated setting under the final attendance boundaries-compared to 0 percent under the former zones. Almost 10 percent of the county's Latino high school students were similarly zoned under the final boundaries.

In the past, student assignment plans attempted to break the powerful connection between neighborhood and school isolation by sketching out broad attendance lines that encompassed racially diverse spaces. The Supreme Court upheld this policy as constitutional in the 2007 *Parents Involved* decision and it stands as one of the remaining tools available to school districts interested in pursuing voluntary integration. However, in this case, the county redistricting process shied away from addressing school segregation by redrawing attendance lines in a way that facilitated racial diversity. The final zone for the new high school did encircle a fairly diverse student population, one of the more promising developments in the process. But the much larger reality of the redistricting was increasing segregation in district high school zones. The zone for Henrico High became *less than 1 percent* white under the final, revised boundaries. Meanwhile, in the far-west end, zones for Godwin, Deep Run, and Freeman high schools remained over 80 percent white.

Finally, actual enrollment in Henrico County's high schools indicated less racial segregation than figures for the rezoning. This finding may be related to the HCPS system of high school specialty centers that help break the schoolhousing link by providing students with an opportunity to attend out-ofzone settings. Despite the potential that the specialty centers pose for greater school-level diversity, whether or not the center students are integrated with the regular public high school students remains an important and unanswered question.

## Implications for Policy, Law, and Research

How growing and diversifying suburban school districts approach redistricting has critical implications for students across the nation, as these locales must soon decide either to proactively confront the harms associated with segregation or to allow insidious patterns of racial and economic isolation to prevail. In Henrico County, if the boundaries lines were redrawn, or if other policies were brought forth—like turning each existing specialty center in the district into a whole-school, magnet program with an integrative focus (Siegel-Hawley & Frankenberg, 2013; G. Orfield & Frankenberg, 2012)—all high school students in the county would be more likely to be able to access an excellent and integrated education.

Serious legal implications flow from this study. Throughout the very political process of gerrymandering attendance boundaries, seemingly race-neutral decisions had profound effects on racial isolation. The irregular rezoning process and segregative impact of the district's new attendance zones may be subject to legal scrutiny, a consequence that could discourage other school systems from adopting similarly harmful policies. Indeed, the *Keyes* ruling should serve as a warning to any school district intentionally seeking to draw lines with segregating effects. It is also important to keep in mind that *Keyes* prohibited intentional discrimination in other areas, including school site selection and student transfer policies. Community advocates and civil rights groups should closely monitor school district processes involving siting, transfers, and rezoning for irregularities. While mounting a case complete with the extensive documentation required to show intentionality may prove difficult, particularly within the current legal context, any indication that discriminatory practices are occurring merits investigation and action. Other avenues beyond the courts are also available to advocates, such as filing a complaint with the Office for Civil Rights (OCR) in the U.S. Department of Education.<sup>8</sup>

Importantly, because these analyses focus on the school rezoning process in one racially changing suburb, the results do not necessarily generalize to all other suburban school districts. At the same time, Henrico County and its school system exemplify many of the attributes linked to suburbs experiencing demographic shifts across the nation and provide an important, in-depth example of how such communities may experience rezoning. Still, a key area for further research would be to understand whether and to what extent redistricting has had similar impacts in other communities.

## Conclusion

Segregation still matters. Historically, racial apartheid has given rise to dual systems of life opportunities that are vastly unequal, and racially and socioeconomically separate schools continue to be profoundly inequitable schools. As the suburban school district under study continues to transition into a more racially heterogeneous locale, real opportunities for harnessing the many benefits of integrated schools emerge (Linn & Welner, 2007; Mickelson & Bottia, 2010). Without strong leadership, guidance, and oversight, however, it is likely that the county's schools will simply persist in replicating patterns of segregation found within its neighboring central city.

The story of Henrico County contains broad lessons for similar suburbs across the country, as shifting communities grapple with how best to facilitate that change. Understanding what is at stake during the school redistricting process is an important first step. Acting to promote the benefits of diverse learning opportunities is the second, and it is ever more critical.

### Notes

- 1. These two posts do not reflect the views or opinions of all Henrico families.
- 2. A pseudonym is used to protect confidentiality.
- 3. While this method represents one of the best solutions to the issue of differing census and school attendance boundaries, it may result in a small number of students being included or excluded from their actual high school zones. However, these slight discrepancies should not impact the general conclusions of this analysis in any significant way.
- 4. For the purposes of this analysis, I defined black and Latino students as underrepresented minorities. I excluded American Indian students due to the small size of the population in Henrico County. While the definition of *underrepresented minority* varies depending on the context, the term typically refers to groups that have been excluded or disadvantaged in the educational process and thus tend to be underrepresented in key areas related to access to opportunity and attainment.
- 5. The one exception to this trend was the low enrollment linked to the zone for Tucker High, despite its central location in the west end of the county.

- 6. The growing racial/ethnic diversity of the Henrico County school district could also be a contributing factor. The white share of the overall high school enrollment was 46 percent in 2011-2012, compared to 50 percent in 2006-2010 ACS data (see table 2).
- 7. Though this analysis has focused on the racial impacts of the rezoning process—largely because race is a protected legal status—it is important to consider the relationship between racial and economic isolation. The overlap between minority segregated schools and schools of concentrated poverty is one of the central reasons why segregated schools remain unequal (G. Orfield & Lee, 2005). The far-west-end high schools served much lower shares of economically disadvantaged students (defined as students who are eligible for free or reduced meals, or whose families receive TANF or Medicaid) than other high schools in the district. For example, according to Virginia Department of Education data from 2011-2012, economically disadvantaged students made up 3.3 percent of the enrollment at Deep Run, 12.2 percent of the enrollment at Godwin and 14.8 percent of the enrollment at the new high school, Glen Allen. At the same time, low-income students were disproportionately concentrated in central and eastern high schools. Fully half of the students attending Henrico High were labeled economically disadvantaged, as were almost 60 percent of Highland Springs students.
- 8. In September 2010, OCR initiated a compliance review against HCPS to determine whether or not the district was meeting its responsibilities under the civil rights laws enforced by the agency (Lazo, 2011). Media reports indicate that the investigation remains open and that it centers on resources disparities between eastern and western Henrico schools (Jenks, 2012).

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Anthropology and Education from the Council on Anthropology and Education. Prior to her work as a researcher, Jaffe-Walter taught humanities at Manhattan International High School, a public high school serving recently arrived immigrant youth.

UMA M. JAYAKUMAR is an assistant professor of organization and leadership at the University of San Francisco's School of Education and a faculty associate at the University of Michigan's Institute for Social Research. Jayakumar earned her PhD in higher education and organizational change at the University of California, Los Angeles, and thereafter completed a postdoctoral fellowship with the National Center for Institutional Diversity at the University of Michigan. Her work examines race, equity, and diversity issues in higher education, with a focus on how institutional environments such as campus climates and cultures shape college access and outcomes and how students experience and resist barriers to inclusive engagement. Jayakumar's research is featured in the Journal of Higher Education, Harvard Educational Review, Diverse Magazine, and numerous amicus briefs submitted to the Supreme Court in favor of the University of Texas in Fisher v. University of Texas (2013). She was awarded the 2007 Bobby Wright Dissertation of the Year Award by the Association for the Study of Higher Education, the 2013 National Academy of Education/Spencer Foundation Postdoctoral Fellowship, and the 2013 National Research Council of the National Academies/Ford Foundation Postdoctoral Fellowship.

GENEVIEVE SIEGEL-HAWLEY is an assistant professor in the Department of Educational Leadership at Virginia Commonwealth University. Her research, which focuses on segregation, inequality, and opportunity in U.S. schools, along with policy options to promote an inclusive, integrated society, has appeared in journals such as the *Teachers College Record* and *Wake Forest Law Review*. Siegel-Hawley is also a research associate with the Civil Rights Project/Proyecto Derechos Civiles at the University of California, Los Angeles.

RICAN VUE is a research associate for the CHOICES Research Center at the University of California, Los Angeles, and an adjunct lecturer at the University of San Francisco. Her recent work, which focuses on higher education diversity and racial equity through the experiences of Hmong American students and Asian American and Pacific Islander students more generally, appears in the edited volume *The Misrepresented Minority: New Insights on Asian Americans and Pacific Islanders in Higher Education* (Stylus Publishing, 2013), and in a forthcoming article in the *Review of Higher Education*.