

ATTENDANCE ZONES IN THE SUBURBS



School attendance zone boundaries can play a critical role in the integration or segregation of suburban neighborhood schools.

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Suburban school districts may have been affluent and majority white in the 1960s and 1970s. However, in recent decades, suburban neighborhoods have become racially and economically diverse (Frey, 2014). Today, suburban schools in the U.S.'s largest metropolitan areas are predominantly home to residents of color,

and many have areas of concentrated poverty (Frankenberg et al., 2019). But suburban school districts historically have had relatively little experience fostering equitable schools for diverse student populations. For example, few had the formal desegregation plans that many urban districts were under following the civil rights movement.

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AT A GLANCE

- While the suburbs have become more diverse, many suburban schools remain segregated.
- School attendance zone boundaries (AZBs) are the lines within a school district that assign students to elementary, middle, and high schools.
- School integration efforts have been weakened by courts over the last 50 years, but the race-conscious drawing of school AZBs remains a legally permissible mechanism for integrating schools.
- Using longitudinal AZB data dating back to 1990, the authors studied the relationship between AZBs and segregation over time in three large suburban districts.
- They found that AZB changes have not yet been realized as a force for desegregation.

Despite their increasingly diverse populations — and the wealth of social science demonstrating the harms of segregated schools for Black and Latinx students and the benefits of integrated schools for all students (e.g., Mickelson & Nkomo, 2012; Reardon et al., 2019) — many suburban districts today are highly segregated. While segregation exists both across suburban school district lines and within suburban school districts, we focus here mainly on the segregation within school districts. Within districts, school attendance zone boundaries (AZBs) play a critical role in either maintaining segregated schools or reshaping those patterns, especially in suburban areas with growing and diversifying student populations.

What are AZBs?

AZBs are the lines within a school district that assign students to elementary, middle, and high schools. Where there is more than one school for specific grade levels (e.g., two elementary schools), many school districts use AZBs to assign students to schools. Despite growing numbers of school choice options, most public school students still attend their zoned school. In some districts, opportunities and resources are not allocated equally across schools, and AZBs determine students' access to opportunities and resources based on where they live.

AZBs remain one of the dwindling tools for addressing segregation and educational inequity. Other mechanisms to address school segregation have been weakened since the 1954 *Brown v. Board of Education* Supreme Court ruling declaring segregated schools unconstitutional. For example,

despite the stark demographic disparities across school district boundaries, the U.S. Supreme Court ruled in *Milliken v. Bradley* in 1974 that federal courts could not, in most cases, require desegregation plans to bus students across district lines, specifically in *Milliken* to suburban Detroit districts. Today, district-to-district integration efforts are rare. In the 1990s, courts relaxed the desegregation requirements of individual districts, prompting an era of resegregation (Reardon et al., 2012) and making it so that most new within-district integration efforts must also be voluntary.

More recently, the Supreme Court struck down choice-based student assignment plans that considered the race of individual students to create diverse schools (*Parents Involved in Community Schools v. Seattle School District 1*, 2007). The race-conscious drawing of school AZBs, on the other hand, remains a legally permissible mechanism for integrating schools. In fact, in his concurring opinion in the *Parents Involved* decision, Justice Anthony Kennedy noted that AZBs could be drawn with specific consideration of the racial and economic characteristics of neighborhoods to create diverse schools.

The current legal context demonstrates why the drawing and redrawing of AZBs really matters. These actions especially are important in suburban areas where AZB changes are frequent — due to growing populations and new schools — and affect diversifying student populations. AZBs can integrate schools by zoning neighborhoods with different populations to the same school. However, AZBs also can be drawn to separate students or to protect certain enclaves from racial transition. Research confirms AZBs may cause segregation in suburban areas experiencing demographic change (Diem et al., 2016; Holme, Diem, & Welton, 2014; Richards, 2017).

AZBs also can shape residential populations by influencing families' decisions about where to purchase a home, especially white or affluent families who can afford to do so. Research demonstrates how homebuyers consider schools' reputations and student compositions in their decisions, both of which are influenced by local AZBs (Lareau & Goyette, 2014). Home prices may be based in part on the characteristics of their zoned schools (Kane, Reigg, & Staiger, 2006), thus making schools with the best reputations out of reach for some homebuyers. In this way, AZBs have important implications for patterns of residential sorting and neighborhood segregation.

Despite their importance, AZB changes are not well understood, mainly because of a lack of data sources with historical AZB data. As one of the best remaining tools for school integration and one that is foundational to most student assignment policies, AZBs and their changes require close study, especially those in the suburbs.

School boundary data

To study these issues, our team has been compiling the Longitudinal School Attendance Boundary System (LSABS) data set (<https://lsabs.geog.psu.edu>). Previous national-level AZB data-collection efforts were conducted in 2009-10,

Table 1.
School district enrollments by year

	Enrollment	% White	% Black	% Hispanic	% Asian	% Two or more races	% English learners	% Low income
Fairfax								
1990	126,790	69.2	10.3	7.7	12.5	-	-	12.0
2000	152,952	62.4	11.0	11.6	14.6	-	3.1	12.2
2010	171,956	48.7	11.1	19.7	20.2	4.5	19.8	18.8
2020	188,887	37.8	9.8	26.8	19.5	5.7	19.0	25.3
Montgomery								
1990	100,261	63.4	16.6	8.2	11.5	-	-	9.1
2000	130,720	50.7	21.0	14.9	13.1	-	16.5	16.5
2010	141,722	38.1	23.2	22.7	15.6	4.4	22.1	22.1
2020	165,267	26.9	21.4	32.4	14.1	4.9	26.2	26.2
Howard								
1990	28,874	80.0	13.8	0.9	5.1	-	-	7.7
2000	43,473	71.1	17.7	2.2	8.9	-	2.1	9.8
2010	50,641	55.5	22.1	5.7	16.3	-	3.9	14.6
2020	58,868	34.5	24.1	12.0	22.7	6.3	5.3	20.0

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

2013-14, and 2015-16 by the School Attendance Boundary Information System and the U.S. Department of Education's School Attendance Boundary Survey. With LSABS, we seek to build on those earlier collections and add additional years of data, collecting and digitizing AZB maps from thousands of school districts from 1989-90, 1999-00, 2009-10, and 2019-20.

To date, LSABS has gathered full boundary data from all four timepoints for about 175 school districts and partial data for more than 1,400 school districts. Collection has been stymied by a lack of top-down tracking of AZBs by states or the federal government, low capacity of individual school districts to create and store AZB maps, and the contentious politics that can surround AZBs and the data about them (Asson, Frankenberg, Maselli, et al., 2022). Nevertheless, existing LSABS data have made possible revealing case studies that demonstrate the usefulness of longitudinal AZB data.

Case studies of suburban AZB changes

Contexts of the studies

Suburban school districts are of particular interest in the LSABS sample for the many reasons we've just discussed. Initial analyses of LSABS data from three large suburban

school districts — Montgomery County and Howard County in Maryland and Fairfax County in Virginia — have begun to shed light on the relationships between AZB changes, population changes, and patterns of segregation. These large, countywide suburban districts are in the Washington, D.C., area, one of the most diverse metropolitan regions in the country.

The population growth and diversification in these districts is similar to that of many suburban areas around the country. Students of color currently make up a majority of these three districts' enrollments, as they now do in the nation's public schools overall (see Table 1).

Each of these districts also has varying policies around school equity and diversity, reflecting the range of possibilities seen among suburban school districts. While many districts have expressed some commitment to these ideals, evidence of actual voluntary integration efforts is less common (Anderson & Frankenberg, 2019).

Fairfax County's government adopted a policy in 2017 that affirmed a commitment to addressing racial inequality and fostering diversity within all public services, including the school district. However, we have not yet seen evidence of this policy influencing school AZB decisions. For example, Fairfax County Public Schools recently reviewed its boundary policy and commissioned a survey of parents' opinions on

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priorities for rezoning. The results indicated “some parents feel strongly that [diversity and equity] are valid reasons to change school boundaries, and others feel equally passionate that they are not” (MGT Consulting, 2021, p. 21). During the most recent rezoning in summer 2021, the district held no formal discussion of how the changes would affect the socioeconomic or racial composition of schools (Fairfax County Public Schools, 2021).

In Montgomery County, the district reacted to calls from some parents and students for increased school diversity by commissioning a countywide study of potential boundary changes in 2019 (Rotberg, 2020). The study concluded that it would be possible to adjust AZBs to reduce racial and socioeconomic isolation in schools. However, opponents have been vocal in their resistance, and the district has not announced plans for districtwide rezoning (Schotz, 2021). The county does have other inclusive housing and education efforts in place. For example, one policy requires affordable housing units to be built across every part of the county, which gives some low-income families access to housing units within most school attendance zones (Schwartz, 2010).

Howard County's school board and county government also have policies aimed at equity. During a rezoning effort in 2019, the superintendent cited those policies when recommending AZB changes designed to increase the economic diversity of schools (Howard County Public School System, 2019). However, many parents submitted racist and classist public comments opposing the proposed changes. The AZBs that were eventually approved were somewhat integrative, though less far-reaching than those originally proposed (St. George, 2019).

Though similar in many ways to other suburban school contexts around the country, these three districts also are unique in some regards. They are countywide districts and quite large in terms of both geography and population. While this increases the potential for their AZBs to segregate or integrate students, it also means AZBs here are more consequential than in smaller, more homogenous districts in other suburban areas (Bischoff, 2008). In addition, these districts have a relative lack of school choice options compared to some other suburban areas, which strengthens the relationship between AZBs and school segregation because most

students attend their zoned school. Even so, our findings can still shed light on overall suburban trends. Many small suburban districts are diversifying and frequently redrawing their AZBs too. Even those with choice options still predominantly use AZBs in their student assignment policies.

What we found: Segregation increased, but unevenly

In Montgomery and Fairfax counties, we studied elementary school AZBs in 1990, 2000, and 2010 (Frankenberg et al., 2023). We focused on elementary zones because they are smaller geographic units than middle or high school zones and so have the most potential to segregate students. Their small size likely also aligns most closely with people's concept of neighborhoods. In Howard County, we expanded our analysis to include both elementary and high school AZBs in 1990, 2000, 2010, and 2020 (Asson, Frankenberg, Fowler, et al., 2022).

Across the three districts, we found that levels of multiracial segregation increased in the neighborhoods and schools over time. Alongside increases in the numbers of Black, Hispanic, and Asian children in both neighborhoods and schools, there were steep declines in the number of white school-age children living in each district, indicating white families may be moving out. AZBs were changed frequently and affected large swaths of each district.

Within each school district, we examined how AZB changes contributed to overall changes in segregation over time. In Fairfax County, elementary school AZB changes contributed to increases in segregation in both the 1990s and 2000s, though the increases were less in the 2000s. In Montgomery County, AZB changes led to slight increases in segregation in the 1990s and did not contribute to net changes in segregation in the 2000s. In Howard County, both elementary and high school AZB changes led to increases in segregation in the 1990s and 2000s but did not contribute to changes in segregation in the 2010s. Overall, we found AZB changes across these districts have contributed less to increases in racial segregation in more recent years, though they also have not yet been realized as a force for *desegregation*.

Additional analyses reveal important nuances about the relationships among changes in populations, AZBs, and segregation. For example, we studied how each school and each neighborhood (as defined by an AZB) individually contributed to districtwide levels of segregation over time. In identifying which schools and neighborhoods contributed to increases or decreases in overall segregation, we found several places where trends diverged. For example, in Fairfax County, several neighborhoods contributed to increases in neighborhood segregation between 1990 and 2010, but their corresponding schools contributed to decreases in school segregation. This means that patterns of neighborhood segregation do not mean destiny for levels of school segregation. AZBs can play an important role in mediating that link (Taylor & Frankenberg, 2021).

Table 2.**Enrollments of Howard County high schools affected by rezoning in the 2000s**

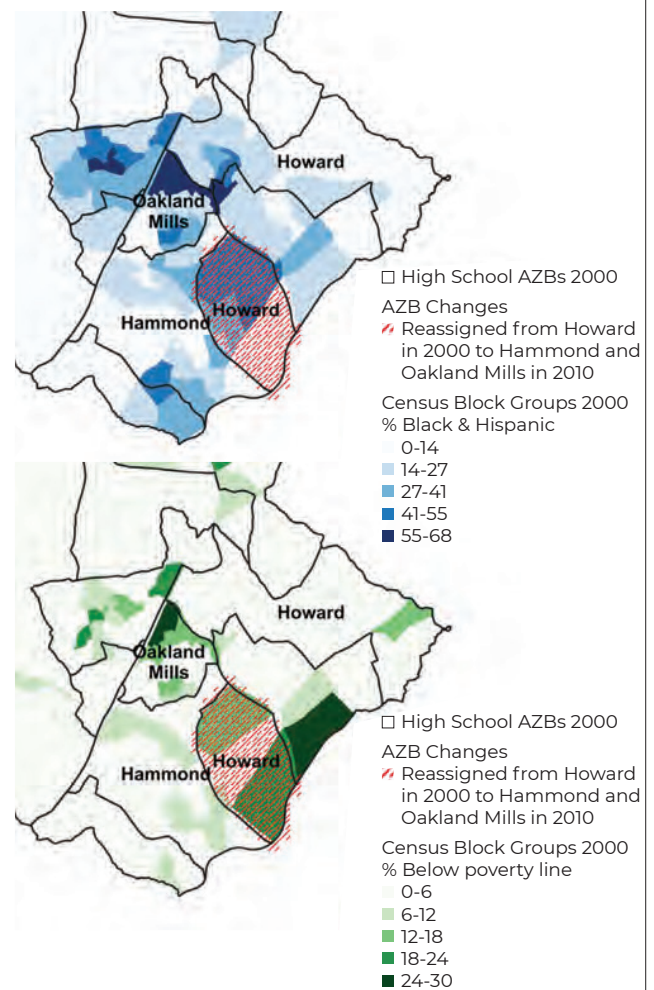
High School	Percent Black or Hispanic				Percent receiving free or reduced-price lunch		
	1989-90	1999-00	2009-10	2019-20	1999-00	2009-10	2019-20
Hammond	20	21	45	57	7	23	27
Howard	21	23	26	29	7	8	11
Oakland Mills	27	38	56	65	16	28	38
District total	15	20	27	35	8	12	17

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

Note: Free and reduced-price lunch data were not available in 1990.

We looked specifically at AZB changes made when opening new schools. Here, our findings suggest the particular importance of school placement and the drawing of AZBs around new schools. For example, in Montgomery County, many new schools opened with student enrollments that differed substantially from the district's overall demographics, suggesting the schools opened in segregated neighborhoods or their newly drawn AZBs reinforced existing patterns of neighborhood segregation. While our overall calculations indicate that school openings did not contribute to substantial changes in net segregation levels in the 1990s or 2000s, the placement of these new schools and their AZBs represent a missed opportunity to reduce segregation.

Finally, we saw that several enclave schools (e.g., those that are relatively more advantaged than the district) remain scattered around each district. AZB changes have, in some ways, helped maintain their enclave status. For example, in the Howard County Public School System, one high school boundary change in the 2000s reassigned part of Howard High School's attendance zone to Hammond and Oakland Mills high schools (Taseen et al., 2021). In 2000, the Howard High AZB included two separate areas with distinct residential populations. The southern portion of its AZB had higher percentages of Black, Hispanic, and low-income residents than the northern portion (see Figure 1). In terms of enrollment, the school had a slightly higher proportion of Black and Hispanic students in 2000 than did the district overall (see Table 2). When the southern portion of the Howard AZB was rezoned in the 2000s, the change concentrated more minority and low-income students in Hammond and Oakland Mills, while Howard High School's student population became less Black, Hispanic, and low-income than the district's overall population. As of 2019-20, Hammond and Oakland Mills had predominantly Black and Hispanic enrollments and higher-than-district-averages of students receiving free or reduced-price meals. Howard High School, on the other hand, became a relative enclave school with Black and Hispanic students accounting for just 29% of students.

Figure 1.
High school AZBs in Howard County in 2000

Source: Longitudinal School Attendance Boundary System shapefiles; 2000 U.S. Census data.

School leaders should prioritize racial and socioeconomic diversity in rezoning criteria to use AZBs as a desegregation tool.

Prioritizing racial and economic diversity through use of AZBs

Our research so far has highlighted complex relationships between AZB changes and segregation within growing and diversifying suburban school districts. Broadly, we've seen that AZBs in large, suburban districts have potential to integrate student populations — both because of the diverse populations and because districts are redrawing boundaries frequently to accommodate growing enrollments. However, the potential for integration has not been fully realized. To do so will require more explicit action prioritizing racial and economic diversity.

First, school leaders should prioritize racial and socioeconomic diversity in rezoning criteria to use AZBs as a desegregation tool. While each of the districts we studied include some mention of racial or socioeconomic diversity in their policies or other documentation around rezoning, our analyses reveal that AZB changes have not contributed to net decreases in segregation in recent decades. More progress toward integration is possible though, as indicated by Montgomery County's own recent boundary study (Schotz, 2021). District leaders should outline measurable goals for school diversity and evaluate how each AZB change will affect progress toward those goals.

Placing racial and socioeconomic diversity at the forefront of an AZB change process requires us to rethink the purpose of public education. Previous case studies of AZB change reveal families' competing values around public education and differing ideas about the meaning and importance of school diversity (Castro, Parry, & Siegel-Hawley, 2022). These conversations are particularly likely to be happening in suburban areas where historically homogenous white neighborhoods now include residents of color. Rather than viewing high-quality neighborhood schools as a competitive good to be hoarded for one's own child, we should conceptualize schools as public goods meant to serve all students and society.

Finally, the LSABS database and our preliminary analyses demonstrate the usefulness of longitudinal AZB data for researchers and school leaders alike. To make equitable future

AZB changes, we must understand the patterns and effects of past changes. One possibility is that suburban district leaders could better inform community discussion of proposed AZB changes if the public understood how prior district decisions may have contributed to existing segregation. Likewise, analysis by researchers can help bring attention to areas where AZB decisions have high potential to integrate students. We advocate for more transparency in AZB data, especially longitudinal data, to boost future efforts to increase the equity of our public education system, especially in today's diverse suburban districts. ■

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References

- Anderson, J. & Frankenberg, E. (2019). Voluntary integration in uncertain times. *Phi Delta Kappan*, 100 (5), 14–18.
- Asson, S., Frankenberg, E., Fowler, C., & Buck, R.K. (2022). *School attendance zone boundary changes in a diversifying suburb: The case of Howard County Public School System* [Conference presentation]. Annual Meeting of the American Educational Research Association.
- Asson, S., Frankenberg, E., Maselli, A., Burfoot-Rochford, I., Fowler, C.S., & Buck, R.K. (2022). Data access and the study of educational equity: Implications from a national school boundary data collection effort. *Education Finance and Policy*, 1–31.
- Bischoff, K. (2008). School district fragmentation and racial residential segregation: How do boundaries matter? *Urban Affairs Review*, 44 (2), 182–217.



GETTY IMAGES

Castro, A.J., Parry, M., & Siegel-Hawley, G. (2022). "All schools are not created equal": An analysis of public comments on school rezoning. *Education Policy Analysis Archives*, 30 (13), 1-34.

Diem, S., Welton, A.D., Frankenberg, E., & Jellison Holme, J. (2016). Racial diversity in the suburbs: How race-neutral responses to demographic change perpetuate inequity in suburban school districts. *Race, Ethnicity and Education*, 19 (4), 731-762.

Fairfax County Public Schools. (2021). *School boundary adjustments*. www.fcps.edu/about-fcps/facilities-planning-future/school-boundary-adjustments

Frankenberg, E., Ee, J., Ayscue, J.B., & Orfield, G. (2019). *Harming our common future: America's segregated schools 65 years after Brown*. The Civil Rights Project and the Center for Education and Civil Rights.

Frankenberg, E., Fowler, C.S., Asson, S., & Buck, R.K. (2023). Demographic change and school attendance zone boundary changes: The case of Montgomery County, MD and Fairfax County, VA between 1990 and 2010. *Russell Sage Foundation Journal of Social Sciences*, 9 (2), 75-103.

Frey, W.H. (2014). *Diversity explosion: How new racial demographics are remaking America*. The Brookings Institution.

Holme, J.J., Diem, S., & Welton, A. (2014). Suburban school districts and demographic change: The technical, normative, and political dimensions of response. *Educational Administration Quarterly*, 50 (1), 34-66.

Howard County Public School System. (2019). *Superintendent presents boundary review recommendations*. <https://news.hcps.org/news-posts/2019/08/superintendent-presents-boundary-review-recommendations>

Kane, T.J., Riegg, S.K., & Staiger, D.O. (2006). School quality, neighborhoods, and housing prices. *American Law and Economics Review*, 8 (2), 183-212.

Lareau, A. & Goyette, K. (Eds.). (2014). *Choosing homes, choosing schools*. Russell Sage Foundation.

MGT Consulting. (2021). *Boundary policy best practices review: Final report*. Fairfax County Public Schools.

Mickelson, R. & Nkomo, M. (2012). Integrated schooling, life course outcomes, and social cohesion in multiethnic democratic societies. *Review of Research in Education*, 36 (1), 197-238.

Reardon, S.F., Grewal, E.T., Kalogrides, D., & Greenberg, E. (2012). *Brown fades: The end of court-ordered school desegregation and the resegregation of American public schools*. *Journal of Policy Analysis and Management*, 31 (4), 876-904.

Reardon, S.F., Weathers, E.S., Fahle, E.M., Jang, H., & Kalogrides, D. (2019). *Is separate still unequal? New evidence on school segregation and racial academic achievement gaps* (Working Paper No. 19-06). Center for Education Policy Analysis.

Richards, M.P. (2017). Gerrymandering educational opportunity. *Phi Delta Kappan*, 99 (3), 65-70.

Rotberg, I.C. (2020). Crossroads: Integration and segregation in suburban school districts. *Phi Delta Kappan*, 101 (5), 44-49.

Schotz, A. (2021, May). Broader redistricting could help MCPS attain ideals, boundary report says. *Bethesda Magazine*.

Schwartz, H. (2010). *Housing policy is school policy: Economically integrative housing promotes academic success in Montgomery County, Maryland*. Century Foundation.

St. George, D. (2019, November 22). Controversial redistricting plan adopted in Maryland school system. *The Washington Post*.

Taseen, S., Asson, S., Frankenberg, E., Chandler, R.F., Fowler, C., & Buck, R.K. (2021). *School boundary changes and diversification in a suburban school district: The case of Howard County, Maryland*. The Center for Education and Civil Rights.

Taylor, K. & Frankenberg, E. (2021). Student assignment policies and racial and income segregation of schools, school attendance zones, and neighborhoods. *Educational Administration Quarterly*, 57 (5), 747-775.



"Mrs. Burgett, I'm drawing a blank!"

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