Demographic shifts in the child population of Washington D.C., 2010-2021[1]

As an input to inform the revision of school boundaries, this research brief presents data on changes in the child population of Washington DC over the last decade. The brief describes how these changes occurred by age group, race/ethnicity and geographic residence, focusing primarily on the period from 2010 to 2019. Additionally, evidence on the population changes that occurred during the pandemic, between 2019 and 2021, is provided , although less emphasis is given to this period because those changes may have been temporary.

Table 1 shows a significant increase in the population of young children (ages 0-11) between 2010 and 2021. Specifically, the child population aged 0-4 and 5-11 increased by 35.3% and 40.5%, respectively, as shown in column 7 of Table 1. However, the population of older children (ages 12-17) remained relatively constant during the same period, with only a slight increase of 0.9%.

The pace of demographic changes varied across race/ethnicity groups. In particular, column 7 of Table 1 demonstrates that Hispanic and Non-Hispanic White populations grew rapidly in the youngest age groups. Specifically, the Hispanic population aged 0-4 increased by 62.9% between 2010 and 2019, while the Non-Hispanic White population increased by 61.8%. Similar changes were observed for the child population aged 5-11.

On the other hand, column 7 also demonstrates that the Non-Hispanic Black population showed slower growth, with smaller proportional increases in population size, 11.5% for the 0-4 population and 18.5% for the child population aged 5-11. Although the Non-Hispanic Black population of older children (12-17) declined between 2010-2019 by 17.8%, columns 4 to 6 of Table 1 demonstrate that children from Non-Hispanic Black households have remained the largest ethnoracial group across all ages in the school-age population of Washington DC.

Table 1 also provides information on changes during the pandemic, between 2019 and 2021. Column 8 shows that the largest population changes were observed in the age

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group 0-4, with a decline in population of 9.5%. All race/ethnicity groups in this age group experienced reductions, except for Non-Hispanic Asians. The reductions were particularly large for Non-Hispanic Blacks (-13.1%) and Hispanics (-10.5%), and smaller for Non-Hispanic Whites (-4.1%). The population of children aged 5-11 increased slightly (0.9%), while the population of children aged 12-17 increased by 5.3%. In what follows, we give less emphasis to this period since the changes associated with the COVID pandemic may have been temporary.

Table 1: Population of children aged 0-17 in the District of Columbia, 2010-2021

		Levels			Population shares (%)			Changes (%)	
Age group	Race/Ethnicity	2010	2019	2021	2010	2019	2021	2010 to 2019	2019 to 2021
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
0 to 4	Non-Hispanic Black alone	18,384	20,498	17,804	55.2%	45.5%	43.7%	11.5%	-13.1%
	Non-Hispanic White alone	8,040	13,008	12,471	24.2%	28.9%	30.6%	61.8%	-4.1%
	Hispanic or Latino	4,730	7,703	6,894	14.2%	17.1%	16.9%	62.9%	-10.5%
	Non-Hispanic Two or More Race Groups	1,413	2,446	2,110	4.2%	5.4%	5.2%	73.1%	-13.7%
	Non-Hispanic Asian alone	654	1,262	1,399	2.0%	2.8%	3.4%	93.0%	10.9%
	Non-Hispanic American Indian and Alaskan Native	56	98	81	0.2%	0.2%	0.2%	75.0%	-17.3%
	Total	33,277	45,016	40,760	100%	100%	100%	35.3%	-9.5%
5 to 11	Non-Hispanic Black alone	23,626	27,910	27,207	65.4%	55.0%	53.1%	18.1%	-2.5%
	Non-Hispanic White alone	6,337	10,433	11,274	17.5%	20.5%	22.0%	64.6%	8.1%
	Hispanic or Latino	4,461	9,015	9,111	12.3%	17.8%	17.8%	102.1%	1.1%
	Non-Hispanic Two or More Race Groups	1,019	2,149	2,284	2.8%	4.2%	4.5%	110.9%	6.3%
	Non-Hispanic Asian alone	622	1,179	1,252	1.7%	2.3%	2.4%	89.5%	6.2%
	Non-Hispanic American Indian and Alaskan Native	68	97	98	0.2%	0.2%	0.2%	42.6%	1.0%
	Total	36,133	50,783	51,226	100.0%	100.0%	100.0%	40.5%	0.9%
12 to 17	Non-Hispanic Black alone	23,843	19,611	20,256	74.8%	61.0%	59.8%	-17.8%	3.3%
	Non-Hispanic White alone	3,648	5,754	6,200	11.5%	17.9%	18.3%	57.7%	7.8%
	Hispanic or Latino	3,182	5,038	5,546	10.0%	15.7%	16.4%	58.3%	10.1%
	Non-Hispanic Two or More Race Groups	675	980	1,135	2.1%	3.0%	3.4%	45.2%	15.8%
	Non-Hispanic Asian alone	431	715	661	1.4%	2.2%	2.0%	65.9%	-7.6%
	Non-Hispanic American Indian and Alaskan Native	80	58	54	0.3%	0.2%	0.2%	-27.5%	-6.9%
	Total	31,859	32,156	33,852	100.0%	100.0%	100.0%	0.9%	5.3%

Source: Kids Count Data Center – The Annie E. Casey Foundation - Population Division, U.S. Census Bureau.

We now shift our focus to changes in the geographic distribution of the child population by age, which are depicted in Figure 1. The maps provide insight into demographic changes across census tracts and corroborate the patterns presented in Table 1, which generally apply to most neighborhoods in the District. Specifically, the majority of census tracts indicate positive changes (represented by the green color) in the number of children aged 0-4 and 5-9, suggesting a widespread increase in the number of young children. Additionally, the third map shows proportional decreases in the population aged 10-19, implying a demographic transition of the school-aged population toward younger ages in many neighborhoods.

Figure 1: Percent changes in children aged 0-19 in the District of Columbia, 2010-2019

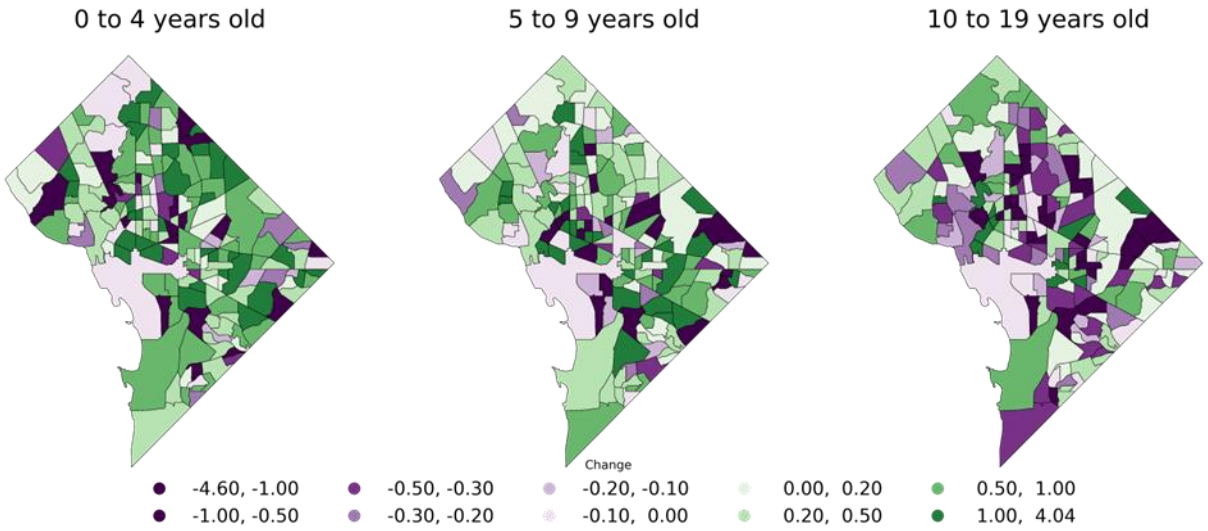

Figure 1 *shows the percentage change in the child population aged 0-4, 5-9 and 10-19 between 2010 and 2019. Change is calculated within census tracts, which are small subdivisions used by the Census Bureau to collect and reliably compare statistical data over time. Different colors represent positive (green) and negative (purple) changes in population, with varying shades representing the magnitude of those demographic changes. For example, darker greens mean larger positive increases.*

Figure 2 compares the geographic distributions of the child population by race/ethnicity in 2010 (top panel) and 2019 (bottom panel). The maps in this figure help contextualize the population changes by race observed between 2010 and 2019 relative to the patterns of residential segregation that already existed in 2010. As of 2019, the Non-Hispanic White population density was highest west of Rock Creek Park in Ward 3 and western Ward 4. The Non-Hispanic Black population density was highest east of the Anacostia River in Wards 7 and 8. The Hispanic population was smaller and more evenly spread throughout the District. Overall, a comparison of the two panels of Figure 2 demonstrates that the residential racial segregation has been relatively persistent over the past decade.

Figure 2: Proportion of children aged 0-19 by race/ethnicity in the District of Columbia, 2010 and 2019

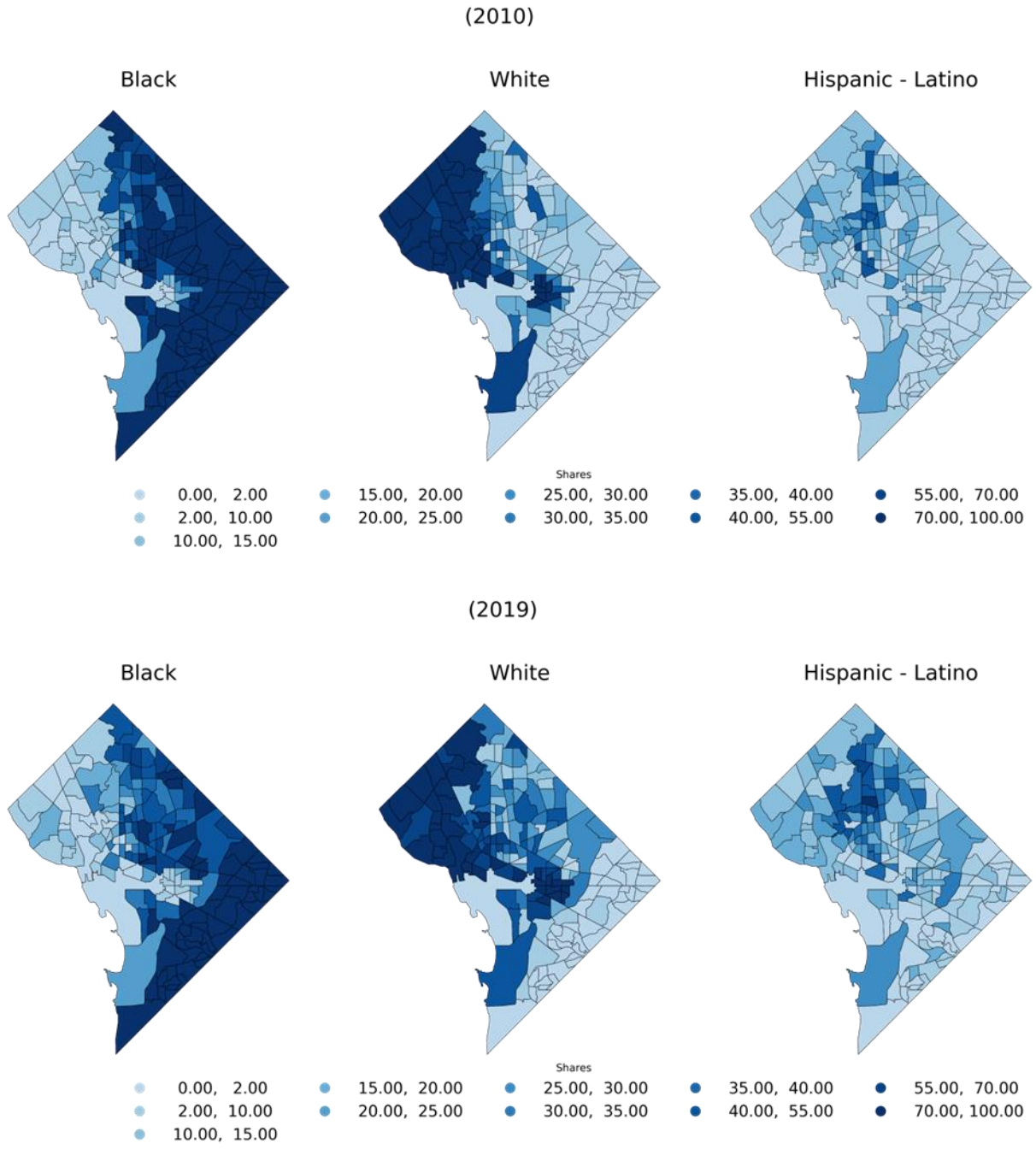

Figure 2 *displays the racial and ethnic composition of residents aged 0-19 in 2010 (top panel) and 2019 (bottom panel). The maps focus on the three largest race/ethnicity groups.: Non-Hispanic Black, Non-Hispanic White, and Hispanic.*

Although as illustrated in Figure 2, residential racial discrimination has been relatively persistent over the past decade, Figure 3 illustrates changes in the geographic distribution of the child population by race/ethnicity and age group. The demographic shift by race/ethnicity is particularly noticeable at the boundaries with neighboring suburbs. In Wards 7 and 8, the density of the non-Hispanic Black population increased while the densities of Non-Hispanic White and Hispanic populations decreased since 2010. Conversely, the opposite pattern emerged in Ward 3 and western Ward 4, where the density of Non-Hispanic White and Hispanic populations increased while the density of Non-Hispanic Black population decreased. The changes in population density are more mixed in the southwest, where the District borders the urban jurisdiction of Arlington and Fairfax County.

Figure 3: School-age population changes by race/ethnicity in the District of Columbia, 2010-2019

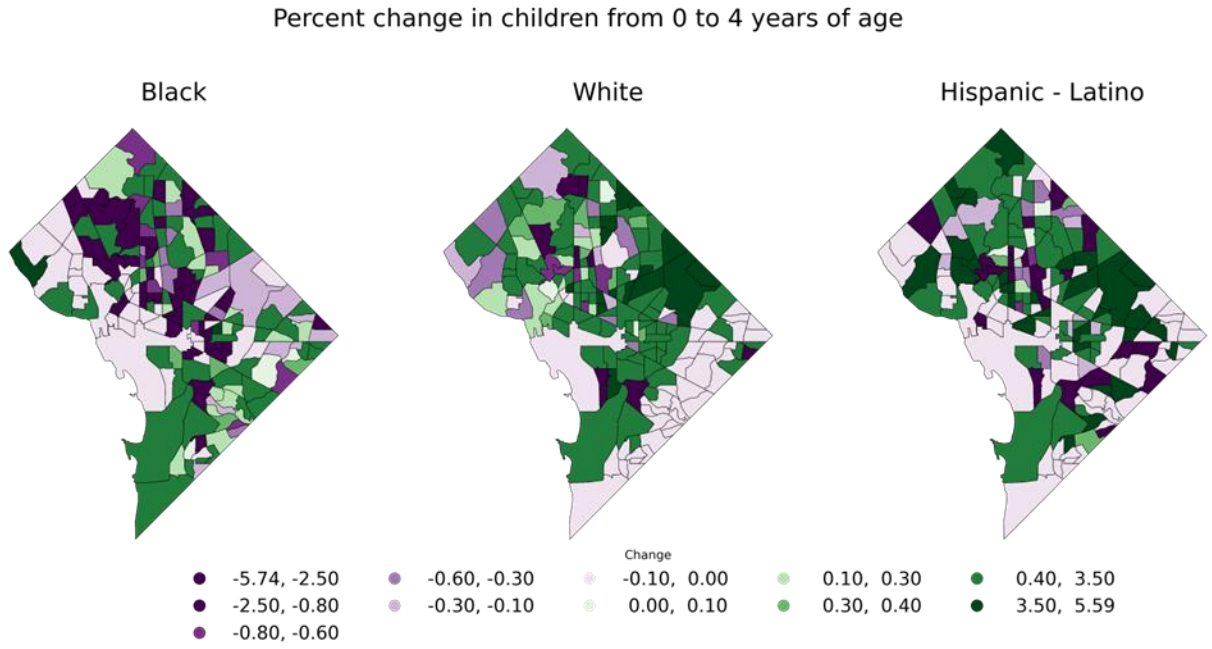

Figure 3 *shows how the racial and ethnic composition of the 0-4, 5-9, and 10-19 age groups has changed across neighborhoods since 2010. The maps focus on the three most represented race/ethnicity groups as of 2021: Non-Hispanic Black, Non-Hispanic White, and Hispanic.*

Final Comments

In conclusion, this brief demonstrates that redrawing school boundaries is a complex and multifaceted process requiring careful consideration of demographic changes, educational equity, and community input, beyond changes in population alone. Table 1 demonstrates a significant increase in the number of young children in particular neighborhoods or census tracts of the District, making it necessary to ensure there is enough capacity to accommodate the growing population. However, if school boundaries are drawn based solely on school capacity, it can significantly shape the demographic composition of schools, reinforcing patterns of residential segregation. This presents a challenge for the District, given the significant changes in the child population by age, race/ethnicity, and neighborhood over the past decade, as documented in Figures 1, 2, and 3.

The significant demographic shifts across race/ethnicity groups suggest that school boundaries should be redrawn to ensure equal educational opportunities across neighborhoods, promoting diverse schools that provide students with equal access to resources and opportunities. However, it is important to note that Figures 1, 2, and 3 show only the shifting child demographics by age and race/ethnicity, and do not account for other characteristics of children and households that matter for school boundaries, such as language proficiency, test scores, and socioeconomic status/indicators of need or disadvantage. The readiness of schools and the resources necessary to accommodate the needs of a changing population depend on all of these factors. Although the maps do not account for socioeconomic status, they reveal patterns of residential racial segregation and the potential for school boundary decisions to affect school racial integration.

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