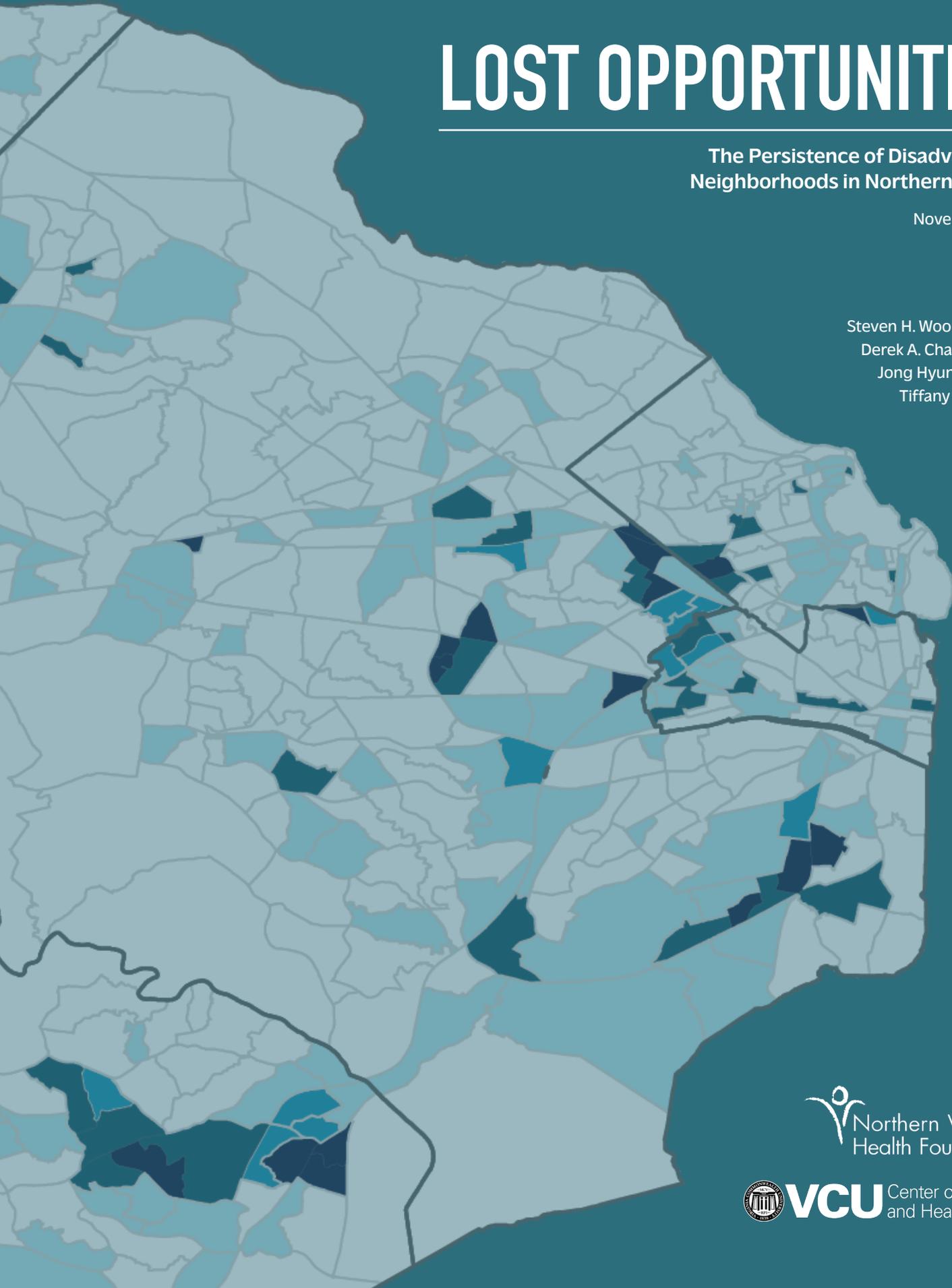


LOST OPPORTUNITIES

The Persistence of Disadvantaged
Neighborhoods in Northern Virginia

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 Northern Virginia
Health Foundation

 **VCU** Center on Society
and Health

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THE PERSISTENCE OF DISADVANTAGED NEIGHBORHOODS IN NORTHERN VIRGINIA

¹ This includes the independent cities within Fairfax County (Fairfax City and Falls Church) and Prince William County (Manassas, Manassas Park, and Manassas Park City). All references to Alexandria refer to the City of Alexandria.

² Woolf, S. H., Chapman, D. A., Lee, J. H., & Yang, H. (June 2023). *Dying Too Soon: In Northern Virginia, the Risk of Dying Before 75 Depends on Race, Ethnicity, and Address*.

³ Woolf, S. H., Chapman, D. A., Hill, L., & Snellings, L. (November 2017). *Getting Ahead: The Uneven Opportunity Landscape in Northern Virginia*.

⁴ Woolf, S. H. Center on Society and Health. (October 2021). *Deeply Rooted: History's Lessons for Equity in Northern Virginia*.

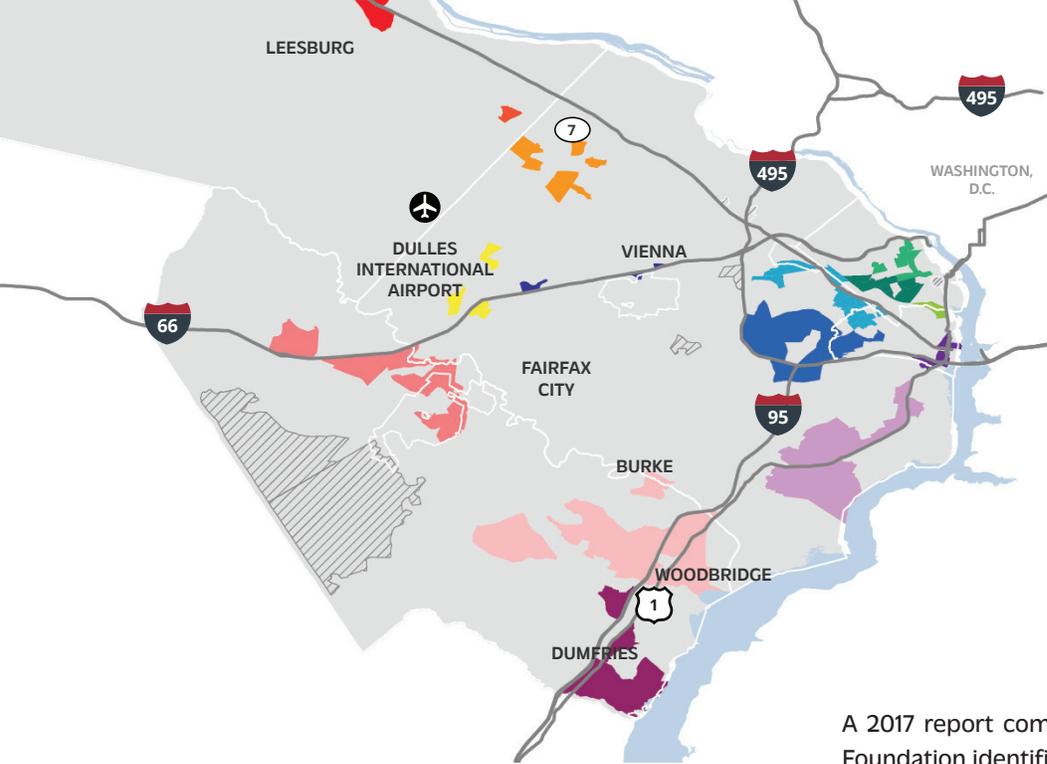


Figure 1.
“Islands of disadvantage” identified
in 2017 Northern Virginia Health
Foundation report

Northern Virginia is among the healthiest—and wealthiest—regions of the Commonwealth, but a closer examination reveals that the health and wellbeing of many residents varies greatly across the region. Northern Virginia—comprising Alexandria, Arlington County, Fairfax County, Loudoun County, and Prince William County¹—experiences large health disparities, even between adjacent neighborhoods. Life expectancy varies by as much as 16 years across the region, and the rate of premature death rates at the census tract level varies more than six-fold.²

Such health disparities have less to do with access to health care, which accounts for only 10–20% of health outcomes, than with the socioeconomic and environmental conditions in which people live. Health is determined by the social determinants of health: education, employment, and income; access to neighborhoods with affordable food, housing, transportation, and health care; racism; and threats to health (e.g., environmental toxins) and safety (e.g., violent crime).

A 2017 report commissioned by the Northern Virginia Health Foundation identified 15 “islands of disadvantage,” areas across the region with high poverty rates and low levels of education, income, health insurance, and other resources needed for good health (Figure 1).³ These disadvantaged neighborhoods were disproportionately represented by people of color, the legacy of systemic racism and the region’s history.⁴

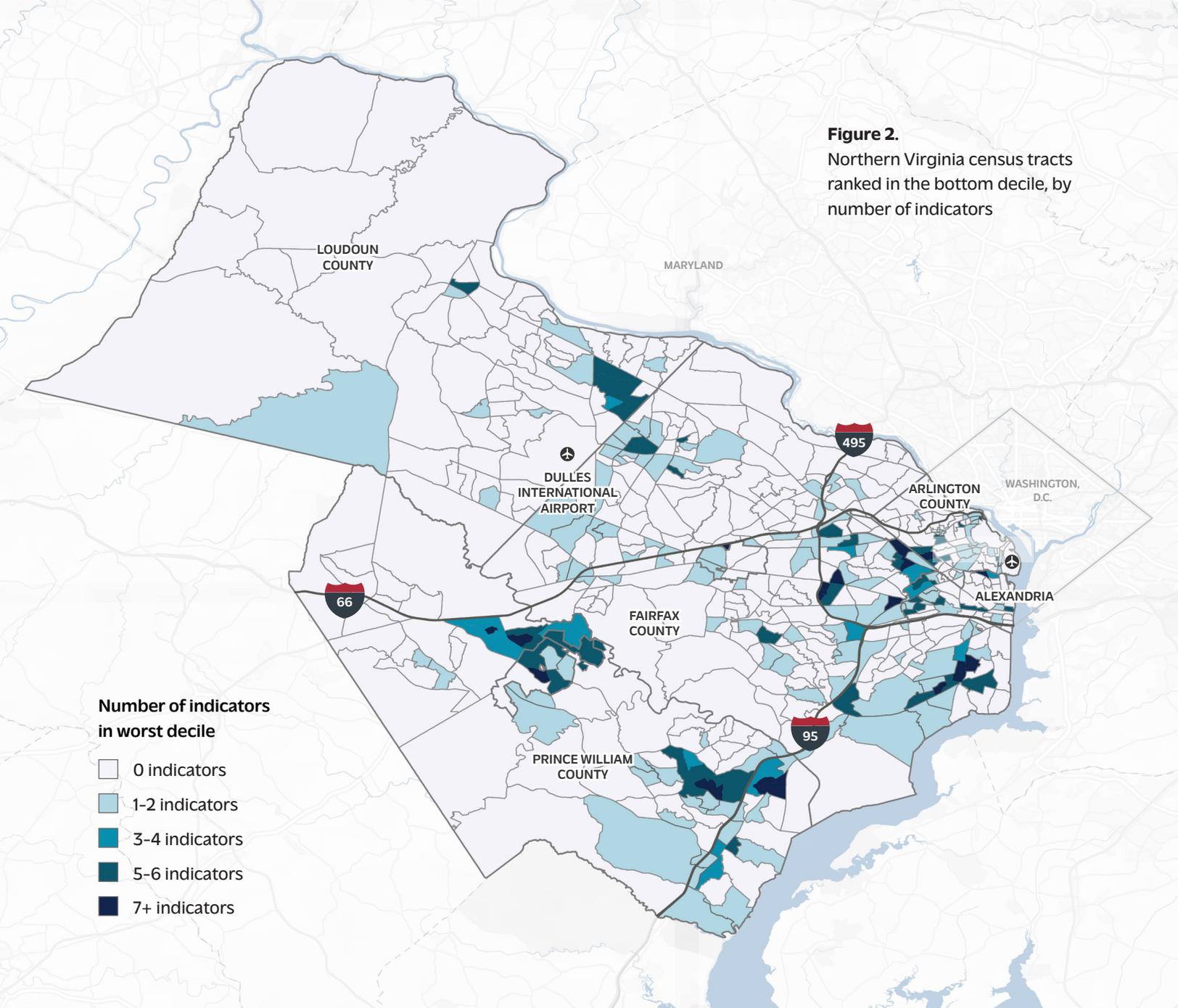
Since that report’s release in 2017, Northern Virginia has experienced positive and negative changes, ranging from advances and growth in the region’s economy and the diversity of its population to the horrific health and economic devastation produced by the COVID-19 pandemic. The Northern Virginia Health Foundation commissioned this follow-up report to explore changes that have occurred in the region over the past decade. It explores current data to assess what has become of the “islands of disadvantage” since the 2017 report was issued. Both the 2017 report and this report were produced by the Virginia Commonwealth University Center on Society and Health. See **Box 1** for Research Methods.

BOX 1: RESEARCH METHODS

The 2017 report relied on aggregated data collected over five years (2009–2013), taken from the American Community Survey. This report examines the most recently available American Community Survey data aggregated over the five-year period of 2017–2021. The researchers compared data by census tract for both time periods, 2009–2013 and 2017–2021, focusing on 11 indicators that influence health: the percentage of adults age 25 and older with a (1) high school diploma or (2) Bachelor’s degree, (3) the proportion of households in which no one spoke English exclusively or “very well,” (4) the unemployment rate, (5) median household income, (6) the poverty rate, (7) the child poverty rate, (8) the proportion of households with single parents, (9) overcrowded housing (percent of households with two or more occupants per room), (10) the share of the population dependent on public assistance, and (11) the share without health insurance.

The region’s 579 census tracts were then grouped into deciles. Deciles are used to group data into ten equally sized groups of census tracts. For each indicator, the bottom decile represented the 10% of tracts in Northern Virginia with the worst outcomes. Approximately 16% of census tracts ranked in the bottom decile on just one indicator. Census tracts that were more disadvantaged ranked in the bottom decile on multiple indicators: 8% ranked in the bottom decile on two indicators, 5% on three indicators, 4% on four indicators, and 7% on five or more indicators. The bottom deciles were determined for 2009–2013 and 2017–2021 to provide a common metric for making comparisons across time. The census map was redrawn during this time; some tracts were added, precluding a full comparison with 2009–2013 data. Direct comparisons were therefore restricted to the 464 census tracts that existed during both time periods.

Figure 2.
Northern Virginia census tracts ranked in the bottom decile, by number of indicators



ISLANDS OF DISADVANTAGE PERSIST IN NORTHERN VIRGINIA

Although the map contours have changed over time, areas of concentrated disadvantage persist in Northern Virginia. **Figure 2** highlights the tracts that ranked among the bottom 10% on multiple indicators in 2017–2021. Tracts with darker shading were in the bottom decile on multiple indicators. For example, census tract 2012.06 in the Arlandria area of Alexandria ranked among the bottom 10% on ten out of eleven indicators, with a poverty rate of 41%. More than half (54%) of adults lacked a high school diploma, only 29% had a Bachelor’s degree, and 24% lacked proficiency in English. Almost one third (31%) of the Arlandria population was uninsured. People of color and immigrants were disproportionately exposed to adverse living

conditions. In that Arlandria tract, 69% of the population was Hispanic and 49% was foreign-born.

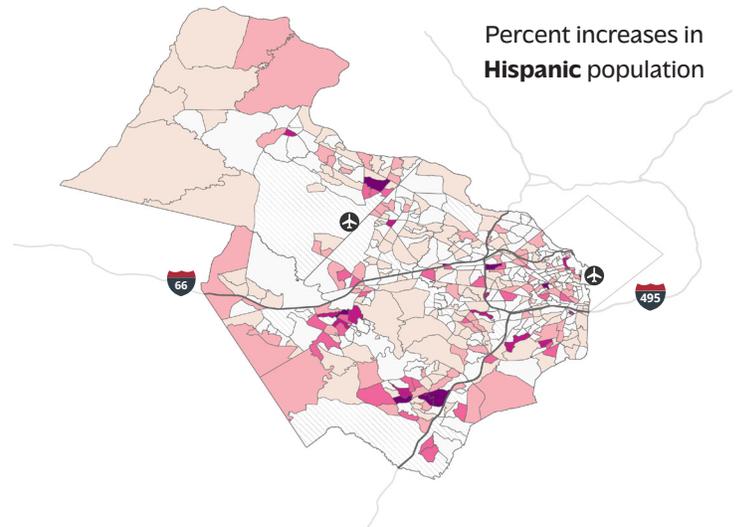
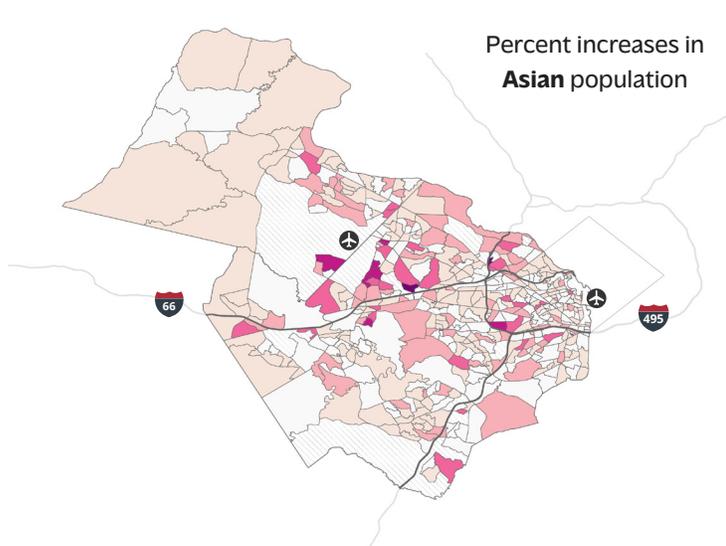
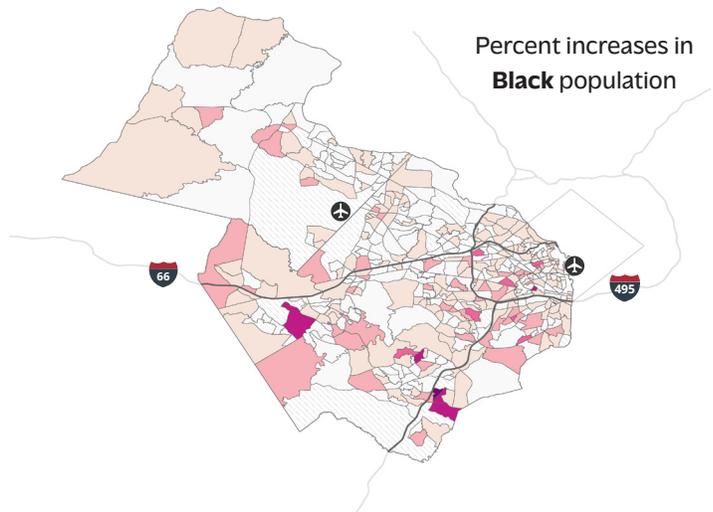
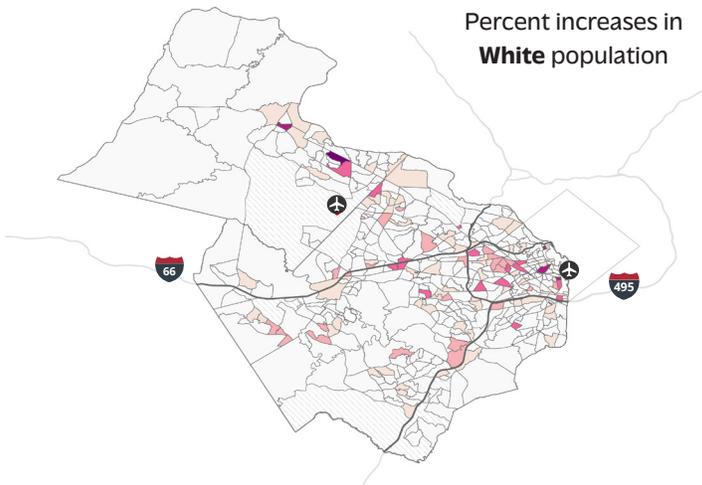
As seen in **Figure 2**, areas of concentrated disadvantage—where multiple adjacent tracts ranked in the bottom 10%—were located throughout the region, in Arlandria and the Beauregard, Landmark, and Shirley-Duke areas of Alexandria; the Glencaryn, Ballston, and Douglas Park areas of Arlington County; Annandale, Seven Corners/Bailey’s Crossroads, Hybla Valley, and Mount Vernon in Fairfax County; Sterling and Dulles Town Center in Loudoun County; and Bull Run, Manassas, Dale City, Woodbridge, and Dumfries in Prince William County.

Changes over time

The researchers compared data from 2009–2013 and 2017–2021 to identify positive and negative changes in living conditions that occurred over time between the two time periods. Data showing changes by census tract are available on the Northern Virginia Health Foundation website. The **Appendix** highlights—for each jurisdiction in Northern Virginia—how the tracts that ranked among the bottom 10% on one or more indicators shifted between 2009–2013 and 2017–2021.

Figure 3. Census tracts that experienced an increase in racial-ethnic composition between 2009–2013 and 2017–2021

Percent increase in share of population



Socioeconomic progress

Out of the 464 tracts in Northern Virginia with comparison data for both time periods, poverty rates decreased in 241 (52%) tracts. Progress occurred in other socioeconomic domains. Median household income increased in 426 (92%) tracts. The proportion of adults with a high school diploma increased in 276 (59%) tracts, and the share with a Bachelor's degree increased in 337 (73%) tracts. The uninsured rate decreased in 364 (78%) tracts.

During this time period, the population of Northern Virginia also became more racially and ethnically diverse. The share of the population that was Black, Hispanic, or Asian increased in 252 (54%) tracts, 275 (59%) tracts, and 291 (63%) tracts, respectively, while the proportion that was White increased in only 123 (27%) tracts.⁵ The maps in Figure 3 show which areas of the region experienced growth in each racial and ethnic group. Noteworthy is the growth of the White population in areas that were historically communities of color.

⁵ All references to Asian, Black, and White populations refer to those who do not identify as Hispanic.

Table 1. Socioeconomic conditions in census tract 1022 (Columbia Pike, Arlington County), 2009–2013 vs 2017–2021

	2009–2013	2017–2021
High school diploma	79%	73% ↓
Bachelor’s degree	33%	29% ↓
Limited English	13%	15% ↑
Single-parent household	47%	45% ↓
Unemployment	11%	4% ↓
Median household income	\$42,571	\$64,872 ↑
Poverty (all ages)	29%	19% ↓
Child poverty	49%	27% ↓
Reliance on public assistance	14%	9% ↓
Overcrowded housing	11%	9% ↓
Uninsured	40%	23% ↓

The region’s progress reached some areas within the “islands of disadvantage” identified in the Northern Virginia Health Foundation’s 2017 report. For example, census tract 1022—located along Columbia Pike in Arlington County— had one of the region’s highest poverty rates but experienced a 34% reduction in poverty between 2009–2013 and 2017–2021. The child poverty rate fell from 49% to 27%. Median household income increased from \$42,571 to \$64,872, and the proportion of the population that was uninsured or relied on public assistance decreased by 43% and 33%, respectively.⁶ People of color benefitted from this progress—83% of the population in tract 1022 (along Columbia Pike in Arlington) was non-White (**Table 1**).

Gentrification

In some areas, economic progress was accompanied by increases in the size of the White population, potentially reflecting gentrification and displacement of people of color. For example, in tract 1017.01 in the Courthouse of Arlington County, median household income increased from \$87,233 to \$132,603 and the poverty rate plummeted from 19% to 5%. However, the share of the population that was White grew from 48% to 68%, while that of the Black and Asian populations declined by 42% and 72%, respectively. Displacement also

appears to have occurred in other areas, such as Old Town Alexandria and areas of Annandale.⁷ The White population also increased in the historically Black neighborhood of Green Valley/Nauck (tract 1031) in Arlington County, which was established in the mid-1800s by formerly enslaved Black families.⁴ Between 2009–2013 and 2017–2021, the Black population in that census tract decreased from 42% to 24%, while the White population increased from 24% to 41%.

Socioeconomic decline

Many tracts that were already struggling in 2009–2013 experienced further economic setbacks, such as increases in the poverty rate. For example, in 2009–2013, the poverty rate was already high (17%) in census tract 4528.01, located in the economically marginalized area of Bailey’s Crossroads in Fairfax County. By 2017–2021, the poverty rate in that tract had climbed to 30%. Child poverty in that tract had nearly doubled, from 32% to 63%. Setbacks also occurred in educational attainment and English literacy, employment, and overcrowded housing (**Table 2**). These conditions disproportionately affected people of color. While the share of the population that was White decreased from 49% to 36%, the share that was Black or Asian increased (from 18% to 26% and from 12% to 23%, respectively).

Table 2. Socioeconomic conditions in census tract 4528.01 (Bailey’s Crossroads, Fairfax County)

	2009–2013	2017–2021
High school diploma	91%	92% ↑
Bachelor’s degree	56%	48% ↓
Limited English	8%	12% ↑
Single-parent household	36%	19% ↓
Unemployment	2%	11% ↑
Median household income	\$82,457	\$72,227 ↓
Poverty (all ages)	17%	30% ↑
Child poverty	32%	63% ↑
Reliance on public assistance	2%	10% ↑
Overcrowded housing	6%	16% ↑
Uninsured	20%	13% ↓

⁶ Although conditions generally improved in census tract 1022, there were exceptions on some indicators. For example, educational attainment decreased: the share of adults with a high school diploma or Bachelor’s degree decreased by 7% and 14%, respectively.

⁷ For example, in census tract 2012.04 in the Potomac Yard area of Alexandria, where the share of the population that was White increased from 38% to 56%, median household income increased by 41% and the proportion of adults with a Bachelor’s degree increased by 70%. In census tract 4521.02 in Annandale, where the share of the population that was White increased from 27% to 41%, median household income increased by 85% and the poverty rate fell by 77%.

Setbacks of this sort occurred throughout the region. For example, between 2009–2013 and 2017–2021, census tract 6110.02 in Loudoun County saw the poverty rate increase from 10% to 18%. Low-income tracts that experienced increases in poverty between 2009–2013 and 2017–2021 were located throughout areas of Alexandria (Beauregard, Shirley-Duke), Arlington County (Hall’s Hill, Lyon Park/Fort Myer, Columbia Pike, National Landing), Fairfax County (Herndon/Reston, Centreville, Fair Oaks/Fairfax, Merrifield, West Springfield, Bailey’s Crossroads, Annandale, Franconia, Hybla Valley, Fort Belvoir, Lorton), Loudoun County (Ashburn, Sterling), and Prince William County (Manassas, Dale City/Woodbridge, Dumfries, Dawson’s Landing). Dramatic setbacks also occurred in indicators other than poverty.

In tract 6116.02 in the Sterling area of Loudoun County, overcrowded housing increased by 122%.

In census tract 2005 in the Shirley-Duke area of Alexandria, the share of the population with a Bachelor’s degree decreased by 24%.

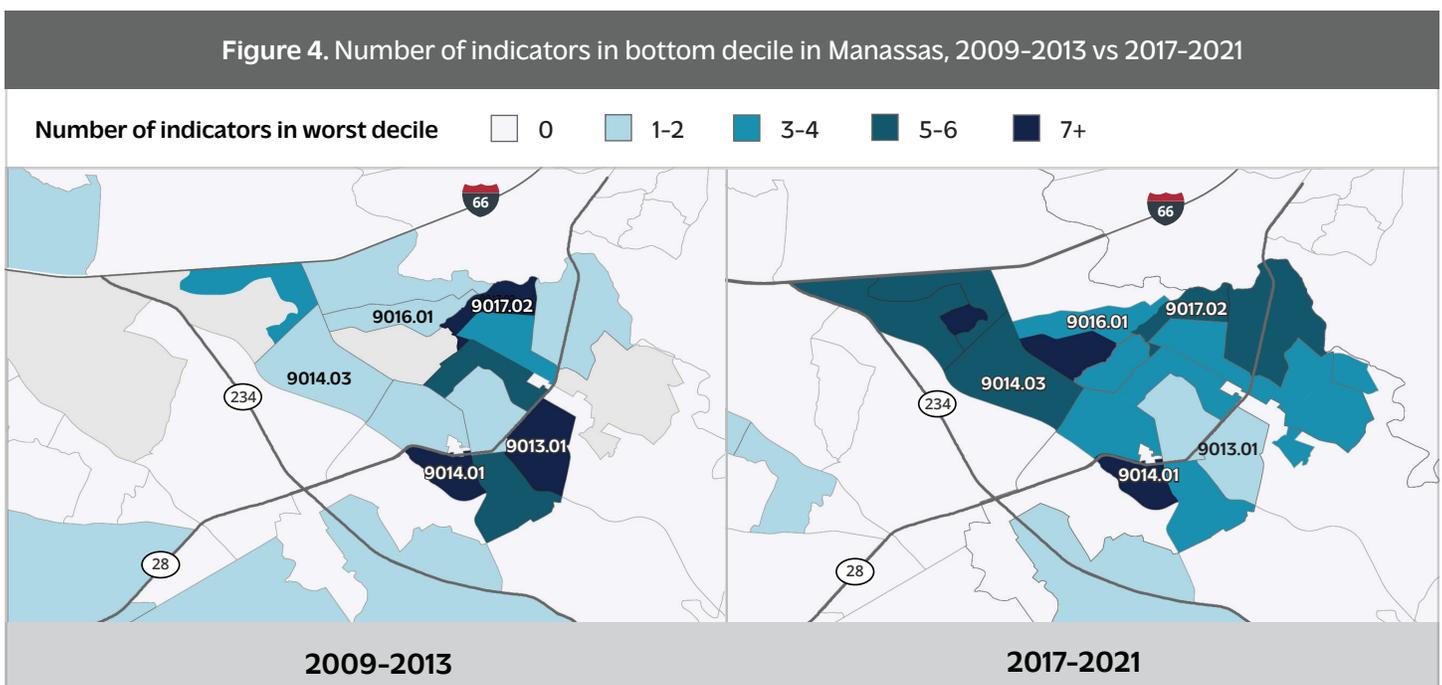
In Hybla Valley, the share of the population dependent on public assistance increased by 152% in tract 4215 and the uninsured rate increased by 123% in tract 4154.01.

The shifting footprint of disadvantage

The geographic footprint of the islands of disadvantage evolved between 2009–2013 and 2017–2021, often reflecting changes in demographic composition and socioeconomic conditions. For example, as shown in **Figure 4**, Manassas experienced an increase in the number of census tracts that ranked in the bottom decile. It also experienced an influx of Hispanic residents. For example, in census tract 9014.03 in the Bull Run area of Prince William County, the Hispanic population increased by 53%, while the White population decreased by 38%. Between 2009–2013 and 2017–2021, the proportion of the population with limited English tripled (rose by 302%), median household income increased by only \$2,140, the poverty rate increased by 60% (child poverty by 184%), and overcrowded housing increased by 187%. In the neighboring census tract 9016.01, also in the Bull Run area, where the Hispanic population also increased, the share of adults with a high school diploma or Bachelor’s degree decreased by 6% and 28%, respectively, and the poverty rate rose by 187%.

Some areas of Manassas did experience improved conditions. For example, in census tract 9017.02 in the Loch Lomond area, where the Hispanic population rose by 38%, median household income increased by \$33,866, and the poverty rate and the share of population dependent on public assistance fell by 69% and 81%, respectively. In census tract 9103.01 in the city center of Manassas, the share of adults with a high school diploma or Bachelor’s degree increased by 8% and 30%, respectively. Poverty rates fell by 68% (child poverty by 86%), dependence on public assistance, overcrowded housing, and the uninsured rate decreased by 43%, 81%, and 58%, respectively.

Progress in parts of Manassas may have been accomplished by gentrification. For example, in census tract 9104.01, located in the city center, the poverty rate decreased from 21% to 12% but the racial composition also changed. The share of the population that was White increased from 20% to 26%, while the Black population decreased from 24% to 12%.



Analysis

This study examined the social determinants of health in Northern Virginia, comparing conditions in 2009–2013 versus 2017–2021. The analysis showed that the region experienced considerable social and economic progress; median household income increased in 92% of tracts. Approximately half of all census tracts saw poverty rates decrease. However, the study demonstrated the persistence of “islands of disadvantage,” clusters of marginalized census tracts where residents, disproportionately people of color, lived amid conditions that adversely affect health. The location of these neighborhoods aligned closely with those identified in the 2017 report by the Northern Virginia Health Foundation.

Many marginalized communities experienced progress on some indicators, such as increases in educational attainment and income, and decreases in poverty, dependence on public assistance, and lack of health insurance coverage. Some of this progress may reflect the efforts of local jurisdictions (e.g., city and county government) and nongovernmental organizations to increase investments in marginalized communities and adopt equity-oriented policies. Between 2009–2013 and 2017–2021, a number of initiatives aimed at diversity and inclusion resulted in transformative changes in public policy and formal efforts to address systemic racism. In allocating resources, some programs specifically targeted the 15 “islands

of disadvantage” named in the Northern Virginia Health Foundation’s 2017 report.

The data suggest that progress in some areas may have come at the price of displacement. Areas historically occupied by people of color became upscale, gentrified, expensive, and increasingly White. In the same time period, Black and Asian populations grew in areas of Prince William County (e.g., Manassas and Dale City), Loudoun County (e.g., Sterling), and Fairfax County (e.g., Route 1 corridor).

This study examined data from 2017–2021, which included the first two years of the COVID-19 pandemic, a crisis during which the region experienced devastating health and socioeconomic setbacks. The pandemic also brought federal, state, and local “COVID relief” programs that offered economic assistance, eviction moratoriums, and other support to many families in need. Low-income households experienced an increase in benefits through SNAP, Medicaid, the Child Tax Credit, and other federal supports, most of which discontinued in 2023. It is unclear whether COVID relief may account for some of the progress that this study observed in 2017–2021. Future analyses of data from 2022 and beyond may reveal the degree to which that progress was short-lived (as COVID relief expired) or was long-lasting.



Policy solutions

The persistence of concentrated areas of disadvantage in Northern Virginia, a region known for its affluence and resources, underscores the need for targeted investment in marginalized neighborhoods. Health disparities, such as higher disease rates and shorter life expectancy, exist in these “islands of disadvantage” not only because of limitations in accessing health care but also deficiencies in the social determinants of

health. These deficiencies are products of history and modern-day policies that maintain barriers to health and opportunity for communities of color and low-income families.

Key priorities to expand opportunity and health across Northern Virginia include the following:

Education

Expand opportunities for preschool education, equitable funding of schools and teachers in marginalized school districts, and improved access to affordable vocational training and college.

Food security

Increase access to food outlets that sell fresh produce and other healthful foods, food pantries and financial assistance for families in need, and reduce the density of fast food restaurants and outlets selling alcoholic beverages.

Employment opportunities and benefits

Increase access to good jobs that offer livable wages and benefits such as health care insurance, paid leave, and retirement plans.

Affordable housing

Promote land use and development policies that increase access to affordable, quality housing in neighborhoods with healthful and safe living conditions and financial assistance for families struggling with unstable housing or homelessness.

Affordable transportation

Broaden the footprint of bus lines, Metrorail, and other transit services to increase access to public transportation and limit fare increases to ensure affordability for low-income commuters.

Access to health care

Improve access to health care insurance, reduce shortages in access to clinicians and facilities (notably to primary, dental, and mental health care and to Medicaid providers), improve the quality of health care services, and assist low-income patients with out-of-pocket costs for doctors' visits, prescription drugs, and other services.

Environmental justice

Increase the resilience of marginalized communities to deal with extreme heat or cold and severe weather events (e.g., flooding) associated with climate change, and address the disproportionate exposure of communities of color to polluting facilities, toxic exposures, and unhealthy air and water supplies.

Attention to systemic racism, opportunity, and inclusion

Acknowledge the history and legacy of systemic racism and expand efforts across Northern Virginia agencies and institutions to promote inclusive policies, eliminate implicit bias, and reduce discrimination against people of color.

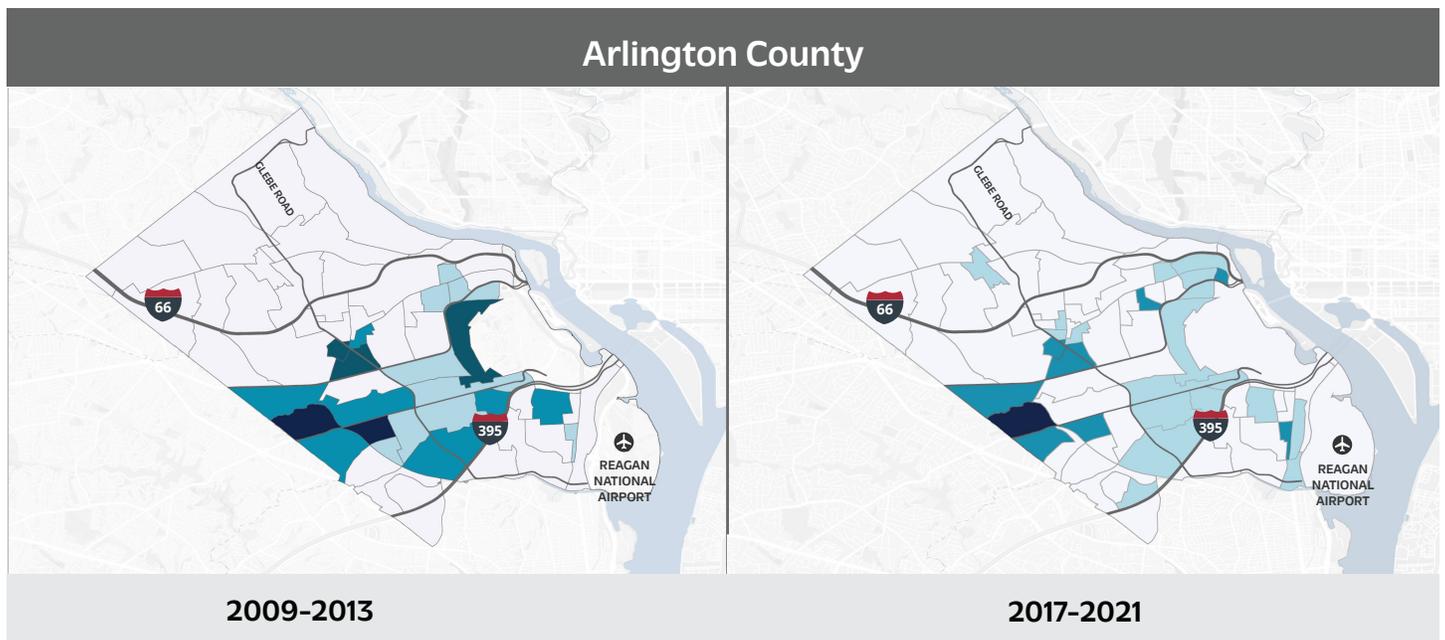
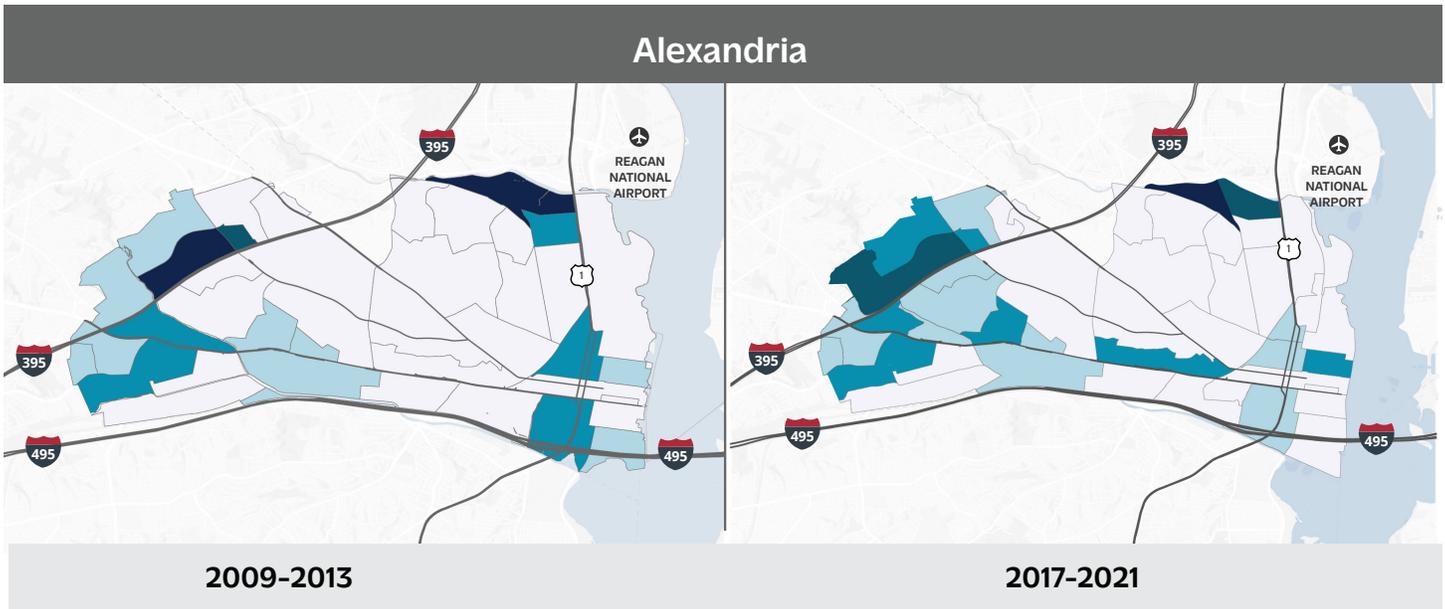
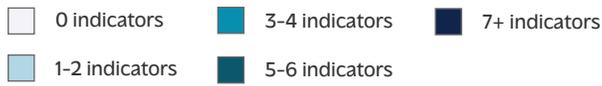
Several local governments and organizations have launched a variety of initiatives in pursuit of these goals, but more must be done. It is also important for local governments and community stakeholders to be mindful of those whose lives may have been temporarily improved through federal programs that are no longer providing support. Too many residents of Northern Virginia—a region known for its wealth and resources—continue to live in

poverty, often in close proximity to prosperous neighborhoods. These conditions affect their health and contribute to deep disparities in disease rates, mortality, and life expectancy. The work ahead is challenging but essential. All residents of Northern Virginia deserve the opportunity to pursue a better life and good health. Structural barriers that stand in the way must be dismantled, and many partners in Northern Virginia are prepared to do just that.

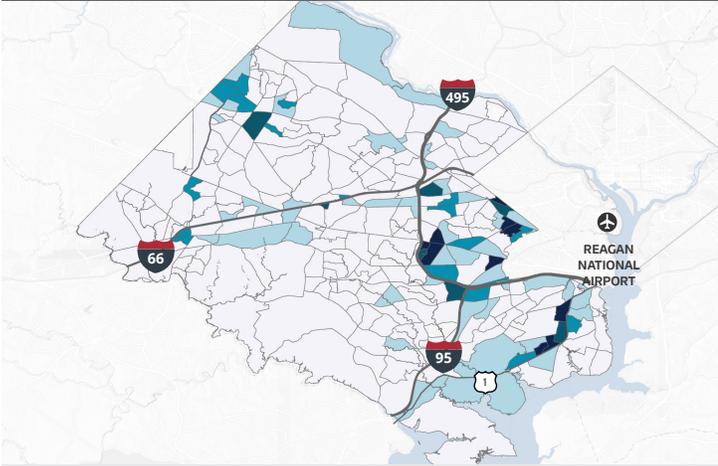
APPENDIX

These maps highlight the tracts that ranked among the bottom 10% on one or more indicators in 2009-2013 and 2017-2021. Tracts with darkest shading were in the bottom decile on seven or more indicators.

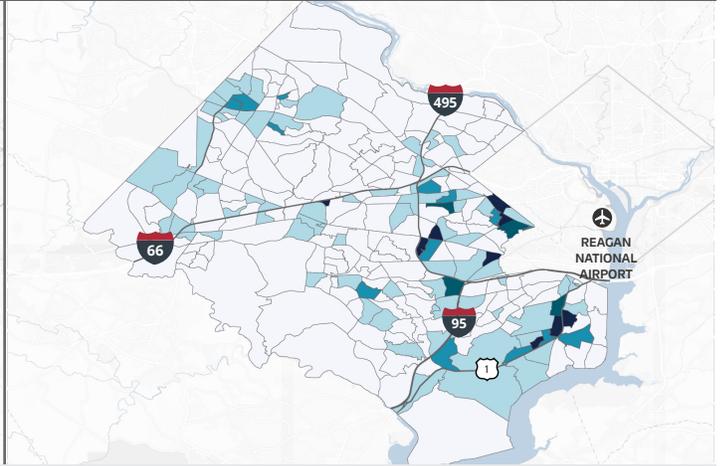
Number of indicators in worst decile



Fairfax County

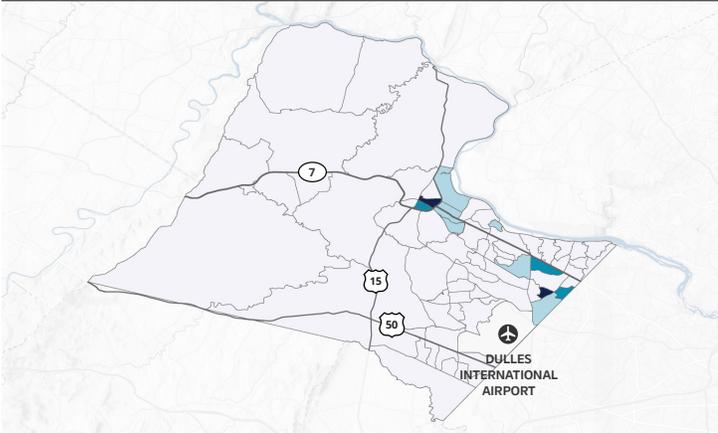


2009-2013

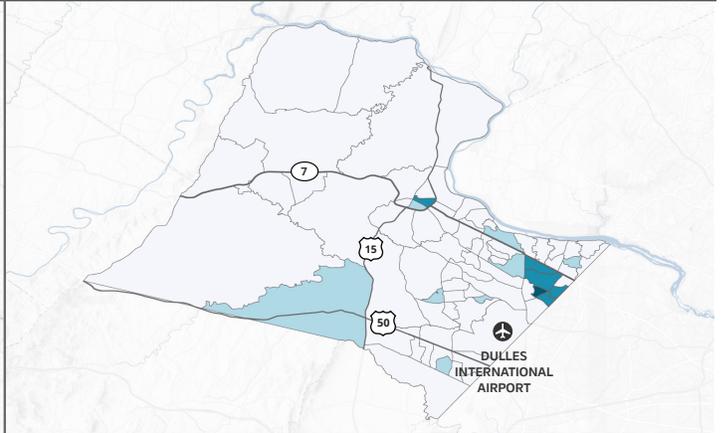


2017-2021

Loudoun County



2009-2013

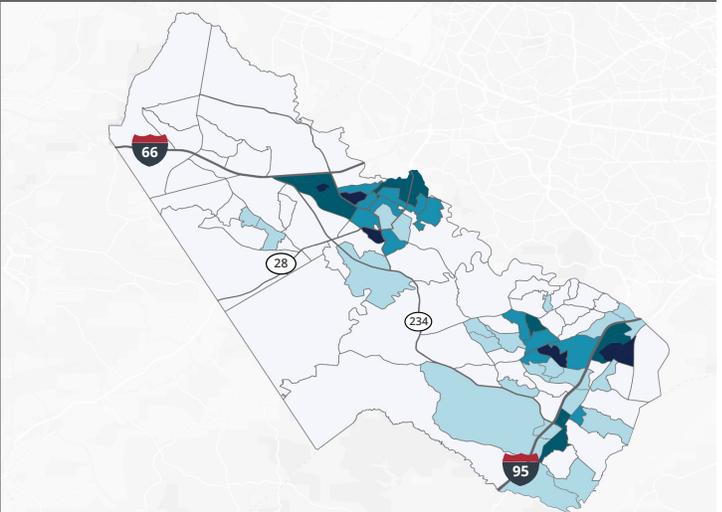


2017-2021

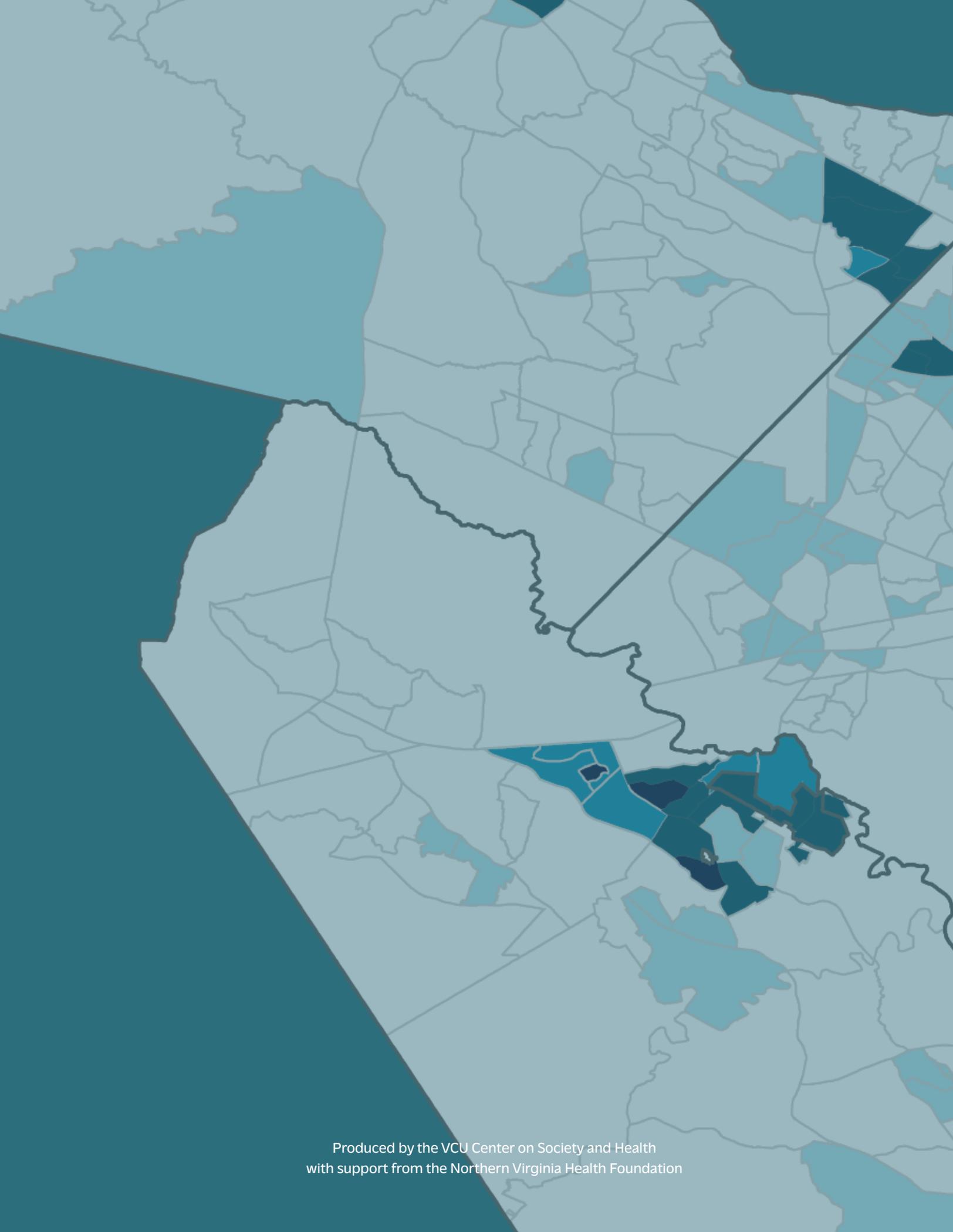
Prince William County



2009-2013



2017-2021



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