

Closing Equity Gaps in DC's Wards and Neighborhoods

Technical Appendix

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This technical appendix accompanies the interactive tool “[DC Equity Gaps Tool: Closing Equity Gaps in DC's Wards and Neighborhoods](#)” and provides detailed explanations of the indicators and their data sources. The tool provides data for the District of Columbia at the city level, for the 8 council wards, and for 43 neighborhood clusters. Neighborhood clusters are defined by the DC Office of Planning and are used for planning and related purpose.¹ Neighborhood clusters 42 (Observatory Circle), 45 (National Mall, Potomac River), and 46 (Arboretum, Anacostia River) are not displayed because they have fewer than 200 people or 200 housing units.

Some of the source data are provided to or obtained by Urban–Greater DC for geographic areas, such as census tracts and census block groups, that do not line up perfectly with DC wards and neighborhood clusters. The Urban–Greater DC team mapped these data to each set of geographical boundaries using population weights to split tracts or block groups, when necessary. Consequently, for some indicators at such geographic levels, the indicators represent close approximations of the values, rather than precise counts.

Indicator Definitions

Broadband internet

This indicator is the share of households in the selected geography who have a broadband internet subscription via cable, fiber optic, or DSL. These types of service are more likely to meet the download speeds needed for normal internet use.²

- **Source:** American Community Survey
- **Years:** 2013–17

People above poverty

This indicator is the share of people in the selected geography whose incomes fall above the poverty threshold, a national benchmark used to estimate how many people lack enough income to meet basic needs.³ Poverty thresholds account for family size and composition.

- **Source:** American Community Survey
- **Years:** 2013–17

Children above poverty

This indicator is the share of children under age 18 whose family incomes fall above the poverty threshold in the selected geography. Poverty thresholds account for family size and composition.

- **Source:** American Community Survey
- **Years:** 2013–17

Full-time workers earning a living wage

This indicator is the share of full-time workers ages 16 and older with annual earnings over \$35,000 in the selected geography. A working adult in DC needs to earn over \$35,000 a year to have a living wage—that is, the minimum amount he or she needs to afford basic necessities.⁴

- **Source:** American Community Survey
- **Years:** 2013–17

Family income over \$75,000 per year

This indicator is the share of family households with annual income over \$75,000 in the selected geography. Families with incomes below \$75,000 may not be able to live in safe and decent housing, afford quality child care, keep food on the table, and pay for medical expenses or other urgent needs. A family household is a one with a householder living with at least one other household member who is related to them by birth, marriage, or adoption.⁵

- **Source:** American Community Survey
- **Years:** 2013–17

Unemployment rate

This indicator is the share of people ages 16 and older in the civilian labor force who are jobless, actively seeking work, and available to take a job.

- **Source:** American Community Survey
- **Years:** 2013–17

Workers with less than a 45-minute commute to work

This indicator is the share of workers ages 16 and older who spend less than 45 minutes traveling from home to work each day—whether by car, public transportation, or some other means—in the selected geography.

- **Source:** American Community Survey
- **Years:** 2013–17

Small business lending per employee

This indicator is calculated by dividing the average annual total of Community Reinvestment Act business loans between \$10,000 and \$1,000,000 from 2014 to 2016 by the number of employees in businesses that have less than 50 employees. Loans originated for less than \$1,000,000 and are secured by “nonfarm or nonresidential real estate” or “commercial and industrial loans” are considered small business loans for the purposes of reporting for the Community Reinvestment Act. The number of private primary jobs in businesses with fewer than 50 employees from the Local Employment-Household Dynamics Origin-Destination Statistics (LODES) Workplace Area Characteristics file in 2015 was used as a proxy for the number of small business employees.

- **Sources:** Community Reinvestment Act aggregate reports from the Federal Financial Institutions Examination Council⁶ and Local Employment-Household Dynamics Origin-Destination Statistics (LODES) Workplace Area Characteristics (2015)
- **Years:** 2014–16

Adults with a postsecondary degree

This indicator is the share of adults 25 years and older who have earned either a two-year (associates) or four-year degree from a college or university.

- **Source:** American Community Survey
- **Years:** 2013–17

People who live within one mile of a retail bank branch

This indicator is the share of population who live within one mile of a retail banking location in the selected geography. Retail banking branches are defined as a “full service retail office” by Federal Deposit Insurance Corporation. Population counts are as of the 2010 decennial census.

- **Sources:** Federal Deposit Insurance Corporation Bank Data and Statistics and the 2010 Decennial Census
- **Year:** 2018

Premature deaths per 1,000 population

This indicator counts the number of deaths before age 75 per 1,000 people in the selected geography. It has been adjusted by the ages of people living in a community, using the age distribution for DC overall in 2010, so areas with older or younger populations can be compared. The premature death rates are presented averaged over 2014 to 2016.

- **Source:** DC Department of Health, Vital Records Division
- **Years:** 2014–16

Births to mothers who received adequate prenatal care

This indicator is the share of births to mothers who received adequate prenatal care during their pregnancy. Adequate prenatal care is defined using the Kessner index.⁷ To be adequate, prenatal care

must begin at a gestational age of 13 weeks or earlier and must meet the recommended number of visits.

- **Source:** DC Department of Health, Vital Records Division
- **Year:** 2016

People who live within one mile of a major grocery store

This indicator calculates the share of population who live within one mile of a grocery store with healthy food options in the selected geography. The DC Office of Planning determined which large or national chain grocery stores in the District had healthy food options. The research team also included major grocery chains in Maryland located within a mile of DC residents. Population counts are as of the 2010 decennial census.

- **Sources:** DC Office of the Chief Technology Officer and the 2010 Decennial Census⁸
- **Year:** 2018

Homeownership rate

This indicator is the share of housing units that are occupied by the owner, either owned free and clear or owned with a mortgage, in the selected geography.

- **Source:** American Community Survey
- **Years:** 2013–17

Households with a housing cost burden

This indicator is the share of households who pay 30 percent or more of their monthly income toward housing costs (rent and utilities for renters or mortgage, taxes, fees, insurance, and utilities for homeowners) in the selected geography.

- **Source:** American Community Survey
- **Years:** 2013–17

Home sales affordable to the average household of color

This indicator calculates the share of home sales of single-family homes and condominium units that are affordable to first-time homebuyers in the selected geography at the average income of households

headed by people of color in DC, \$68,362 in 2012–16. The research team used the methodology Tong describes in a 2004 report to calculate affordability of sales.⁹ The calculations use the 2016 effective interest rate (3.69 percent) for a conventional mortgage on a single-family home in DC from the Federal Housing Finance Agency’s Monthly Interest Rate Survey.¹⁰ The calculations assume a 10 percent down payment for first-time homebuyers and include the cost of private mortgage insurance.

- **Source:** Real property data from the DC Office of Tax and Revenue and the American Community Survey
- **Year:** 2017¹¹

Violent crimes per 1,000 population

This indicator counts the number of Part I violent crimes as defined by the Federal Bureau of Investigation’s Uniform Crime Reporting statistics. Part I violent crimes are homicide, rape, aggravated assault, and robbery. This indicator only counts crimes that have been reported to the police. To allow for comparisons across areas with different population sizes, the indicator is reported as a rate per 1,000 people using the population for an area from the 2010 decennial census.

- **Sources:** District of Columbia Metropolitan Police Department¹²
- **Year:** 2017

Notes

- ¹ “Neighborhood Clusters,” Government of the District of Columbia, last updated April 22, 2003, <http://opendata.dc.gov/datasets/neighborhood-clusters>.
- ² See Michael J. R. Martin, “Deconstructing the Digital Divide: Identifying the Supply and Demand Factors That Drive Internet Subscription Rates,” Working Paper 2019-05 (Suitland, MD: US Census Bureau, 2019).
- ³ “Poverty Guidelines,” Office of the Assistant Secretary for Planning and Evaluation, US Department of Health and Human Services, accessed October 25, 2018, <https://aspe.hhs.gov/poverty-guidelines>; “How the Census Bureau Measures Poverty,” US Census Bureau, last revised August 16, 2018, <https://www.census.gov/topics/income-poverty/poverty/guidance/poverty-measures.html>.
- ⁴ Carey Anne Nadeau and Amy K. Glasmeier, “Bare Facts About the Living Wage in America 2017–2018,” Living Wage Calculator, August 30, 2018, <http://livingwage.mit.edu/articles/31-bare-facts-about-the-living-wage-in-america-2017-2018>; “Living Wage Calculation for District of Columbia, District of Columbia,” Living Wage Calculator, accessed October 25, 2018, <http://livingwage.mit.edu/articles/31-bare-facts-about-the-living-wage-in-america-2017-2018>.
- ⁵ Glossary: Family household,” US Census Bureau, accessed October 25, 2018, https://www.census.gov/glossary/#term_Familyhousehold.
- ⁶ See Federal Financial Institutions Examination Council, *A Guide to CRA Data Collection and Reporting* (Fairfax, VA: Federal Financial Institutions Examination Council, 2016).
- ⁷ See David M. Kessner, James Singer, Carolyn E. Kalk and Edward E. Schlesinger “Infant Death: An Analysis by Maternal Risk and Health Care,” in *Contrasts in Health, volume 1*, (Washington, DC: Institute of Medicine and National Academy of Sciences, 1973) pp. 203.
- ⁸ “Grocery Store Locations,” Government of the District of Columbia, last updated August 10, 2018, <http://opendata.dc.gov/datasets/grocery-store-locations>.
- ⁹ See Zhong Yi Tong, *Homeownership Affordability in Urban America: Past and Future* (Washington, DC: Fannie Mae Foundation, 2004).
- ¹⁰ “Monthly Interest Rate Survey (MIRS),” Federal Housing Finance Agency, accessed October 25, 2018, <https://www.fhfa.gov/DataTools/Downloads/Pages/Monthly-Interest-Rate-Data.aspx>.
- ¹¹ The original tool released in November 2018 used real property data for 2017 that had been downloaded from the DC Office of the Chief Technology Officer as of May 2018. The revised tool released in June 2019 used data downloaded as of September 2018, producing small changes to the indicators.
- ¹² “Crime Incidents in 2017,” Government of the District of Columbia, last updated January 1, 2017, <http://opendata.dc.gov/datasets/crime-incidents-in-2017>.

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