

FACT SHEET

Geospatial Data – Environmental Justice: Communities of Color

Overview

Virginia EJScreen+ is an interactive geospatial visual interpretation of the [Virginia Environmental Justice Act \(§2.2-234 and 2.2-235\)](#) which defines an “Environmental Justice Community” as any “low-income community or community of color.” Its “Community of Color” layer aims to provide datasets that match the “Community of Color” definitions within the Virginia Environmental Justice Act.

Dataset Summary

The [Virginia Environmental Justice Act §2.2-234 and 2.2-235](#) defines “Community of Color” in two ways:

- “[A]ny geographically distinct area where the population of color, expressed as a percentage of the total population of such area, is higher than the population of color in the Commonwealth expressed as a percentage of the total population of the Commonwealth.”
- A geographically distinct area where the community of color portion of the area is composed primarily of one of the following groups defined in the “Population of Color” definition: Black, African American, Asian, Pacific Islander, Native American, other non-white race, mixed race, Hispanic, Latino, or linguistically isolated. In these cases, the individual population of color as a percentage in that area, exceeds the individual population of color as a percentage in the Commonwealth.

This dataset uses census tracts to represent geographically distinct areas as smaller geographic units like census block groups or census blocks run a higher risk of large margins of error and risk of privacy concerns as individuals may be identifiable. A census tract is a small part of a county, city, or town, that typically contains approximately 4,000 people, and not more than 8,000 people.

Dataset Description and Purpose

This dataset represents the geospatial extent as polygons and the corresponding attribution for census tracts that meet both definitions of Communities of Color, according to the Virginia Environmental Justice Act, or the excerpt below:

- “Community of Color” definition: “‘Community of color’ means any geographically distinct area where the population of color, expressed as a percentage of the total population of such area, is higher than the population of color in the Commonwealth expressed as a percentage of the total population of the Commonwealth. However, if a community of color is composed primarily of one of the groups listed in the definition of “‘population of color,’” the percentage population of such group in the Commonwealth shall be used instead of the percentage population of color in the Commonwealth.”

The referenced “population of color” definition is also provided below:

- “Population of Color” definition: “‘Population of color’ means a population of individuals who identify as belonging to one or more of the following groups: Black, African American, Asian, Pacific Islander, Native American, other non-white race, mixed race, Hispanic, Latino, or linguistically isolated.”

The Census Tract and associated data are based on 2019-2023 ACS 5-year Data accessed from sources in the table below:

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Dataset Credits:

Data layers created by DEQ based off of ACS 5-year Census Data.

Additional Map Credits: VGIN, ESRI, etc.

Update Cycle:

This dataset will be updated on a 5-year cycle as census bureau ACS 5-year data becomes available.

Term	Name	Location/Link
Shape file	2024 Census Tiger Lines Tracts for Virginia	Census Tiger Lines
Table	B02001 Race (State and Tract)	CensusData.gov
Table	B03002 Hispanic or Latino Origin by Race (State and Tract)	CensusData.gov
Table	C16002 Household Language by Household Limited English Speaking Status (State and Tract)	CensusData.gov

Methodology

The 2019-2023 ACS Community of Color statewide percentage is 1 minus the white alone population times 100 which equals 38.27%. For the part of the dataset that represents populations of color, all the census tracts included in this dataset have community of color percentages greater than 38.27%.

$$\frac{\text{Total population of color in census tract}}{\text{total population of the census tract}} > \frac{\text{Total population of color state wide (38.27)}}{\text{total population of the census tract (100)}}$$

For the part of the dataset that represents individual populations of color, the necessary demographic data exists in Race, Ethnicity, and Limited English-Speaking Status 2019-2023 ACS Census records.

Individual Population of Color	Statewide Percentage (%)
Black/African American	18.75
Asian	6.86
Native Hawaiian/Pacific Islander	0.07
American Indian and Alaskan Native (Native American)	0.31
Other non-white race	4.06
Mixed race	8.23
Hispanic or Latino	10.73
Limited English Proficiency (Linguistically Isolated)	2.70

Using these records, the individual population of color that represents the largest share of the total population of color in that census tract is identified by comparing the percentage of the primary individual population of color to the statewide population of that same group. If the percentage of:

$$\frac{\text{identified population of color that is the largest share of the total population of color in census tract}}{\text{total population in that census tract}} > \frac{\text{that same individual population of color population statewide}}{\text{total statewide population}}$$

Then the census tract is identified as a population of color census tract.

Resource Constraints / Use Limitations

This dataset forms the communities of color based on populations of color consistent with the Virginia Environmental Justice Act. Crediting the Virginia Department of Environmental Quality when using this data source is requested. [Public REST endpoints](#) are available and updated as changes are made.

Data Disclaimer

In collaboration with various agencies and organizations, DEQ strives to deliver accurate, useful, and up-to-date information. While every effort is made to ensure the accuracy of the data, it is possible that errors may arise from the physical sources used in developing these resources. Users should be aware of potential limitations and take responsibility for how they use the information, considering factors such as potential errors, original map scale, collection methodology, and data currency. For accurate application, users should consult relevant federal, state, or local resource management officials. Please report any errors or omissions to DEQ via email or phone. By accessing DEQ data, you agree to the terms and conditions outlined above.

Data Quality

The data included comes from authoritative federal and state sources including U.S. Census Bureau, VGIN, and DEQ. These data are believed to be maintained with a high degree of accuracy.

Spatial Reference Information

[NAD83, Virginia Lambert (EPSG: 3968) <https://epsg.io/3968>]

Terminology

Term	Definition
Community of Color	Any geographically distinct area where the population of color, expressed as a percentage of the total population of such area, is higher than the population of color in the Commonwealth expressed as a percentage of the total population of the Commonwealth. However, if a community of color is composed primarily of one of the groups listed in the definition of "population of color," the percentage population of such group in the Commonwealth shall be used instead of the percentage population of color in the Commonwealth.
Population of Color	A population of individuals who identify as belonging to one or more of the following groups: Black, African American, Asian, Pacific Islander, Native American, other non-white race, mixed race, Hispanic, Latino, or linguistically isolated.
Environmental Justice Community	Any low-income community or community of color
Percent Population of Color in the Commonwealth	(Total State Population minus the Population White Only) divided by the Total Population) = 38.27%. From Census table B02001 Race at the state level
Virginia Community of Color	When either of the following is true: 1) The percentage Population of Color by Census Tract is greater than the percent Total Population of Color of the Commonwealth. The Census Tract Population of Color is greater than 38.27% 2) Individual Population of Color composing the largest share of the Population of Color by Census Tract divided by the Census Tract's population is greater than the same Individual Population of Color's statewide population divided by the total statewide population
Percent Population of Color	Total Census Tract Population minus Total Census Tract Population White Only, then divided by the Total Census Tract Population, then multiplied by 100
Primarily	Individual Population of Color composing the largest share of the Population of Color for each Census Tract
Percent Primarily	Percent of the Individual Population of Color composing the largest share of the Population of Color by Census Tract
Individual Population of Color	A Community of Color where the largest share of the Population of Color in that area exceeds that same group's statewide population as a percentage

Data Dictionary / Field Information

Field Name	Field Alias	Field Explanation
COUNTYFP	COUNTY FIPS	5-digit Federal Information Processing <i>Series</i> (FIPS) codes, assigned and maintained by the Census Bureau.
GEOID	GEOID	Geographic identifiers assigned to geographic entities by the Census Bureau to facilitate the organization, presentation, and exchange of geographic and statistical data
OBJECTID	OBJECTID	ArcGIS unique identifier for each feature in a feature class or table.
COUNTYNAME	County Name	County Name as approved by the Virginia General Assembly
ALAND	Area Land (m ²)	Area of land measured in square meters
AWATER	Area Water (m ²)	Area of water measured in square meters
Primarily	Primarily	Individual population of color composing the largest share of the population of color by Census tract

Field Name	Field Alias	Field Explanation
PctPrimarily	Percent Primarily	By census tract for each individual population of color: Individual population of color composing the largest share of the census tract's population of color divided by the census tract's population x 100
PctPOC	Percent Population of Color	By census tract for each listed population of color take: (Total Census Tract Population – Total Census Tract Population White Only)/Total Census Tract Population) x 100
COCYN	Community of Color Y/N	Affirms, or negates whether a census tract is a community of color
COC01	Community of Color 0/1	Affirms, or negates as binary, whether a census tract is a community of color; 1 = yes, 0 = no
StatusType	Status Type	Labeled as either VACOC or INDVPOC because it meets one of the statements below: 1) The percentage Population of Color by Census Tract is greater than the percent Total Population of Color of the Commonwealth. The Census Tract Population of Color is greater than 38.27% (VACOC) 2) Individual Population of Color composing the largest share of the Population of Color by Census Tract divided by the Census Tract's population is greater than the same Individual Population of Color's statewide population divided by the total statewide population (INDVPOC)
Shape_Length	Shape Length	ESRI Geometry Length – calculates the distance of a line for a polygon
Shape_Area	Shape Area	ESRI Geometry Area - calculates the distance of an area for a polygon

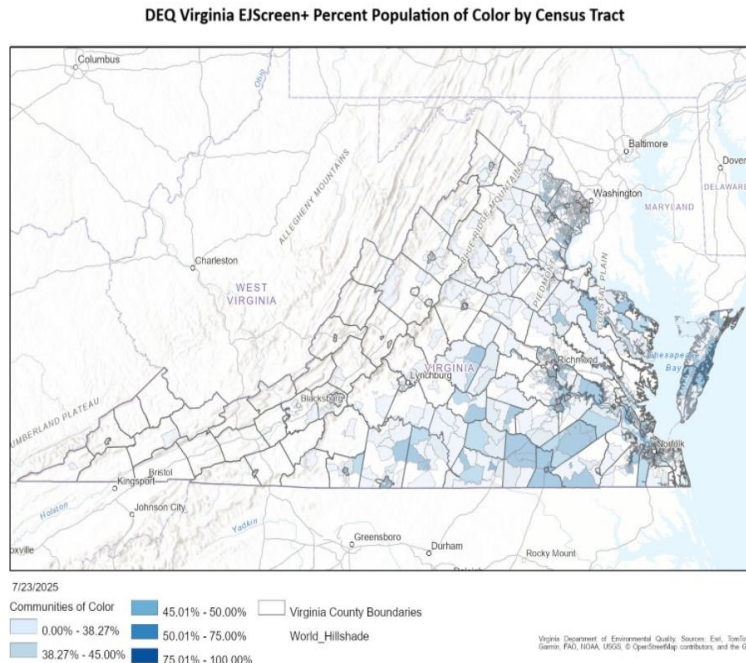


Figure 1 - Screenshot of Virginia EJScreen+ Communities of Color identified in shades of blue.