



# About the Community Opportunity Map Indicators

## Overview

The Community Opportunity Map (COM), developed by Community Attributes Inc. and customized for Casey Family Programs, is an interactive mapping platform that displays publicly available community data in user-specified geographic areas across the United States. Most demographic data for the COM was compiled using the American Community Survey (ACS), 5-year estimates; other data sources include National Low Income Housing Coalition (NLIHC), Johns Hopkins University, the US Department of Agriculture, the Bureau of Labor Statistics, the National Center for Education Statistics, and ED Data Express. See below for further information about the data sources, indicators, and geographies.

The COM is free to the public and designed to increase access to available information about communities, specifically drawing attention to **environmental and community indicators commonly associated with child maltreatment**. The information displayed in the COM does not represent an exhaustive list of community characteristics associated with child maltreatment, nor does the COM encompass all the information necessary to make critical decisions that impact communities. Instead, the COM is designed as a tool that can be utilized to inform decision-making, strategic intervention, calls to action, and stakeholder engagement to promote community health and well-being.

Questions regarding the COM, the indicators selected, the ACS, and how the COM can be used should be directed to [GeographicAnalysis@casey.org](mailto:GeographicAnalysis@casey.org). Questions regarding how the statistics are generated or technical issues using the COM should be directed to [help@communityattributes.com](mailto:help@communityattributes.com).

## About the Data Sources

The **ACS** is a nationally representative survey, conducted on an annual basis by the U.S. Census Bureau, measuring economic, social, housing, and demographic characteristics. The Census Bureau contacts more than 3.5 million households in the United States every year. Data collected helps communities, policymakers, and other stakeholders make data-informed decisions about resource allocation, service delivery, emergency planning, city planning, and other vital functions. Some ACS questions were tailored for Puerto Rico; the resulting questions are known as the Puerto Rico Community Survey. For more information, see the [ACS Information Guide](#).<sup>1</sup>

*Data Included: 5-year dataset, 2015-2019*

**The National Center for Education Statistics (NCES)** hosts the Common Core of Data (CCD) to provide statistics on primary, intermediate, and secondary public schools across the nation, including the number of students eligible for free or reduced-price lunch. For more information, see <https://nces.ed.gov/ccd/ccddata.asp>.

*Data Included: 2018-2019 school year*

**ED Data Express** provides state- and district-level education data collected by the **US Department of Education**, including the number of high school graduates. For more information, see <https://eddataexpress.ed.gov/>.

*Data Included: 2018-2019 school year*

Additional housing data is provided by the **National Low Income Housing Coalition (NLIHC)**, which releases annual reports on the accessibility and availability of affordable housing. The COM uses data from their *Out of Reach* reports, which provide data on the gap between low-income renters' wages and how many hours they would need to work to afford the cost of rental housing in communities across the US. For more information, see <https://reports.nlihc.org/oor>.

*Data Included: 2018*

**The US Department of Agriculture** maintains a national database on food access and other measures at the census tract level. The database informs policy makers and other stakeholders on various aspects of food security around the country. For more information, see <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx>.

*Data Included: 2015*

The **Johns Hopkins Coronavirus Resource Center** maintains a set of current data related to infections and deaths related to SARS-Cov-2 and COVID-19. For more information, please find Johns Hopkins data at <https://coronavirus.jhu.edu/us-map>. The status of the infection within each county drawn from Esri's COVID-19 Trends for U.S. Counties dataset. For more information, see <https://www.arcgis.com/home/item.html?id=a16bb8b137ba4d8bbe645301b80e5740>.

*Data updated daily*

**The Bureau of Labor Services' (BLS) Local Area Unemployment Statistics (LAUS)** provide current unemployment statistics at the county level. For more information, see <https://www.bls.gov/lau/#tables>. Community Attributes Inc. created a methodology to allocate county unemployment estimates to the tract level based on working age population, and previous statistics to show recent economic impacts at a community level.

*Data included: most recent 12 months*

## The Indicators

The following section provides information on how each indicator in the COM is operationalized. All data comes from the ACS, unless otherwise indicated.

### Child and Family (All data from ACS)

*Children under 5 in poverty* was operationalized as the percentage of the population of children under the age of 5 years in a geographic area for whom poverty status is determined whose household income in the past 12 months is below the poverty level.<sup>2</sup>

*Children without health insurance* was operationalized as the percentage of the population of children under the age of 19 years in a geographic area with no health insurance coverage.<sup>3</sup>

*Child to adult ratio* was operationalized as the ratio of the number of children under the age of 14 years to the number of adults aged 21 to 64 years in a geographic area.<sup>4</sup>

*Individuals without health insurance* was operationalized as the percentage of the population in a geographic area with no health insurance coverage.<sup>3</sup>

*Population under 18* was operationalized as the percentage of the population under the age of 18 in a geographic area.<sup>4</sup>

*People 65 and over* was operationalized as the percentage of the population over the age of 65 in a geographic area.<sup>4</sup>

*Single parent families* was operationalized as the percentage of family households who indicated a householder, with no spouse present, and living with related children under 18 years of age. In addition to data provided for single parent families, the data are provided separately for single mother families and single father families.<sup>5</sup>

### Education (All data from ACS, except where noted)

*Age 3 and 4 school enrollment* was operationalized as the percentage of 3 and 4-year-old children enrolled in preschool.<sup>6</sup>

*4-year HS graduation rate* was operationalized as the percentage of students in an adjusted cohort (first-time 9th-graders in a particular school year, adjusted by adding students who immigrate from another country or transfer into the cohort after 9<sup>th</sup> grade and subtracting any students who transfer out, emigrate to another country, or die) in a geographic area who graduated within 4 years with a regular high school diploma.<sup>7</sup> (From US Department of Education)

*Age 25+ with HS diploma/GED* was operationalized as the percentage of adults aged 25 and over in a geographic area who have a regular high school diploma, general educational development (GED) diploma, or alternative credential (or higher educational attainment).<sup>8</sup>

*Age 25+ without a HS diploma/GED* was operationalized as the percentage of adults aged 25 and over in a geographic area who *do not* have a regular high school diploma, general educational development (GED) diploma, or alternative credential (or higher educational attainment).<sup>8</sup>

*Age 25+ with a bachelor's degree or more* was operationalized as the percentage of adults aged 25 and over in a geographic area who have a bachelor's degree or more.<sup>8</sup>

### **Economy (All data from ACS, except where noted)**

*Unemployment rate* was operationalized as the percentage of the population aged 16 years and over in a geographic area who are in the civilian labor force and unemployed.<sup>9</sup>

*Poverty rate* was operationalized as the percentage of the population in a geographic area for whom poverty status is determined whose household income in the past 12 months is below the poverty level.<sup>10</sup>

*Households under 200% poverty* was operationalized as the percentage of the population in a geographic area for whom poverty status is determined whose household income in the past 12 months is 200% of the poverty line or less.<sup>11</sup>

*Household income* was operationalized as the household income in the past 12 months in inflation-adjusted dollars.<sup>12</sup>

*Current unemployment rate estimate* is the most recent monthly unemployment data provided by the Bureau of Labor Statistics' Local Area Unemployment Statistics.<sup>13</sup> Community Attributes Inc. developed a methodology to estimate current unemployment rate at the Census tract level by allocating county-level unemployment counts to Census tracts in proportion to the number of working-age residents and previously reported unemployment rate. This approach allows COM users to see the impact of economic disruptions such as the COVID-19 pandemic and respond without waiting for the release of Census data 12-18 months later.

### **Housing (All data from ACS, except where noted)**

*Work hours/week to rent a two-bedroom home at minimum wage* was operationalized as the number of hours a full-time worker must work at minimum wage to afford a modest rental home at HUD's fair market rent without spending more than 30% of their income on housing costs.<sup>14</sup> This data comes from the NLIHC and is only available by county/metro areas. (From National Low Income Housing Coalition)

*Home ownership rate* was operationalized as the percentage of owner-occupied housing units out of total occupied housing units in a geographic area.<sup>15</sup>

*Housing cost burden* was operationalized as the percentage of owners and renters in a geographic area living in occupied housing units paying 30 percent or more of their household income toward their mortgage or rent, where selected monthly costs as a percentage of household income could be computed.<sup>16</sup>

*Resident turnover* was operationalized as the percentage of the population in a geographic area aged 1 year and older who moved in the last year.<sup>17</sup>

*Vacant housing* was operationalized as the percentage of housing units in a geographic area that are unoccupied.<sup>18</sup>

### Accessibility (All data from ACS, except where noted)

*Access to healthy food* was operationalized as whether residents within a given census tract live within a half-mile of a grocery store or farmers market in urban areas, or 10 miles in rural areas.<sup>19</sup> (Data from the US Department of Agriculture)

*Accessing SNAP benefits* was operationalized as the number of people in a geographic area receiving SNAP (Supplemental Nutrition Assistance Program) benefits.<sup>20</sup>

*Computer and internet access* was operationalized as the number of households in a geographic area that have a computer and internet subscription in the home.<sup>21</sup>

*Reduced and free lunch eligibility* was operationalized as the percentage of students eligible for Free or Reduced lunch, reported by individual schools.<sup>22</sup> (Data from the National Center for Education Statistics)

*Commute mode* was operationalized as the number of people in a geographic area to commute by driving alone, transit, walking, carpool, or bicycle.<sup>23</sup>

### Demographic Characteristics (All data from ACS, except where noted)

At the bottom of each data category tab, the COM also includes demographic characteristics of neighborhoods that provide important context about communities, including:

- *Population*<sup>4</sup>
- *Foreign born*<sup>24</sup>
- *Race and ethnicity*<sup>25</sup>
- *Confirmed COVID-19 cases/100k residents*<sup>26</sup> (From Johns Hopkins University)
- *Confirmed COVID-19 deaths*<sup>27</sup> (From Johns Hopkins University)

### Map Options

The COM provides “Map Options” which allow overlays to be placed over the map and include:

- *College graduates*<sup>8</sup>
- *Limited English proficiency*<sup>28</sup>
- *People of color*<sup>4</sup>
- *Population density*<sup>29</sup>
- *Poverty rate*<sup>2</sup>
- *Unemployment rate*<sup>9</sup>

## Race/Ethnicity Disaggregation

Data for several of the indicators can be disaggregated by race (White, Black or African American, American Indian/Alaskan Native, Asian, Native Hawaiian/Other Pacific Islander, Other, Two or More Races) and ethnicity (Hispanic/Latino/a/x, non-Hispanic/Latino/a/x). It is important to note that some groups will be much lower or higher than the overall estimate, and because of smaller sample sizes, estimates may not average to the overall estimate.

The indicators with disaggregated data available (all from ACS) include:

### Child and Family

- Children under 5 in Poverty
- Children without Health Insurance
- Child to Adult Ratio
- Individuals without Health Insurance
- Population under 18
- Single Parent Families

### Education

- Age 25+ with a HS Diploma/GED
- Age 25+ without a HS Diploma/GED
- Age 25+ with Bachelor's Degree or More

### Economy

- Poverty Rate
- Household Income

### Housing

- Home Ownership Rate

### Accessibility

- Accessing SNAP Benefits

## Level of Geography

Estimates provided in the COM are extrapolated from the Census *tract* or *block group* level. Census tracts, which generally comprise between 1,200 and 8,000 people depending on the population density, are “relatively permanent statistical subdivisions of a county or equivalent entity. The primary purpose of census tracts is to provide a stable set of geographic units for the presentation of statistical data.”<sup>30</sup> Block groups are statistical divisions of census tracts.<sup>31</sup> Because some estimates in the COM are aggregated from these smaller geographic units, slight differences may exist between COM estimates and larger census-designated places such as ZIP code tabulation areas or cities.

Further, the COM allows the user to obtain information on ZIP codes as defined by the U.S. Postal Service and by congressional district. ZIP codes do not directly map onto the ZIP code tabulation areas used by the Census Bureau; instead, ZIP code estimates for the Community Opportunity Map are derived using information on the block groups and census tracts whose geographic center lies within the user-specified ZIP code. In other words, these ZIP code

estimates are approximations and may include some information on individuals residing outside of a given postal ZIP code.

It is also important to note that small area estimates, by their nature, carry larger margins of error. Some of this margin of error is reduced by using 5-year estimates from the ACS, but users should still use caution when interpreting community data from the COM. The COM provides a snapshot of information, but it is best used as a supplement to additional information available about communities, especially rich, qualitative information that cannot be captured by high-level area estimates.

## Reference Notes

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- <sup>1</sup> U.S. Census Bureau. (2017, October). American Community Survey information guide. Washington, DC: U.S. Census Bureau, U.S. Department of Commerce, Economics and Statistics Administration. Available at [https://www.census.gov/content/dam/Census/programs-surveys/acs/about/ACS\\_Information\\_Guide.pdf](https://www.census.gov/content/dam/Census/programs-surveys/acs/about/ACS_Information_Guide.pdf).
  - <sup>2</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B17001: Poverty status in the past 12 months by sex by age*. Available at <https://data.census.gov>.
  - <sup>3</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table C27001: Health insurance coverage status by sex and age*. Available at <https://data.census.gov>.
  - <sup>4</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B01001: Sex by age*. Available at <https://data.census.gov>.
  - <sup>5</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B17010: Poverty Status of Families by Family Type by Presence of Related Children by Age of Related Children*. Available at <https://data.census.gov>.
  - <sup>6</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table S1401: School Enrollment for Population 3 to 4 Years*. Available at <https://data.census.gov>.
  - <sup>7</sup> U.S. Department of Education, Four-Year Adjusted Cohort Graduation Rates. *SY 2018-2019 District-Level Graduation Rates*. Available at <https://eddataexpress.ed.gov/>.

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- <sup>8</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table C15002: Sex by educational attainment for the population 25 years and over.* Available at <https://data.census.gov>.
- <sup>9</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B23001: Sex by age by employment status for the population 16 years and over.* Available at <https://data.census.gov>.
- <sup>10</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B17020: Poverty status in the past 12 months by age.* Available at <https://data.census.gov>.
- <sup>11</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table C17002: Ratio of income to poverty level in the past 12 months.* Available at <https://data.census.gov>.
- <sup>12</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B19001: Household Income in the past 12 months (in 2019 inflation-adjusted dollars).* Available at <https://data.census.gov>.
- <sup>13</sup> U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics, (Monthly) County Data. Labor Force Data by County, not Seasonally Adjusted, Latest 14 Months. Available at <http://bls.gov/lau/#tables>
- <sup>14</sup> National Low Income Housing Coalition, Out of Reach: State Data. Available at <https://reports.nlihc.org/oor>.
- <sup>15</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B25003: Tenure.* Available at <https://data.census.gov>.
- <sup>16</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B25091: Mortgage Status by Selected Monthly Owner Costs as a Percentage of Household Income and Table B25070: Gross rent as a percentage of household income in the past 12 months.* Available at <https://data.census.gov>.
- <sup>17</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B99072: Allocation of residence 1 year ago for the population 1 year and over.* Available at <https://data.census.gov>.
- <sup>18</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B25002: Occupancy status.* Available at <https://data.census.gov>.
- <sup>19</sup> U.S. Department of Agriculture, Food Access Research Atlas, (2015) Food Access Research Atlas Data Download 2015. LILATracts\_halfAnd10. Available at <https://www.ers.usda.gov/data-products/food-access-research-atlas/download-the-data.aspx>.
- <sup>20</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B19058: Public Assistant Income or Food Stamps/SNAP in the Past 12 Months for Households.* Available at <https://data.census.gov>.
- <sup>21</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B28003: Presence of a Computer and Type of Internet Subscription in Household.* Available at <https://data.census.gov>.
- <sup>22</sup> National Center for Education Statistics, (2018-2019) Common Core of Data America's Public Schools. *Lunch Program Eligibility.* Available at <https://nces.ed.gov/ccd/files.asp#Fiscal:2,LevelId:7,SchoolYearId:33>, Page:1.
- <sup>23</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B08006: Sex of Workers by Means of Transportation to Work.* Available at <https://data.census.gov>.
- <sup>24</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B05002: Place of birth by nativity and citizenship status.* Available at <https://data.census.gov>.
- <sup>25</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B03002: Hispanic or Latino origin by race.* Available at <https://data.census.gov>.
- <sup>26</sup> Johns Hopkins University, COVID-19 Data Repository by the Center of Systems Science and Engineering (CSSE), (Daily) *ccsse\_covid\_19\_daily\_reports\_us. Table B25002: Confirmed.* Available at <https://github.com/CSSEGISandData/COVID-19>.
- <sup>27</sup> Johns Hopkins University, COVID-19 Data Repository by the Center of Systems Science and Engineering (CSSE), (Daily) *ccsse\_covid\_19\_daily\_reports\_us. Table B25002: Deaths.* Available at <https://github.com/CSSEGISandData/COVID-19>.
- <sup>28</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B16002: Detailed household language by household limited English speaking status.* Available at <https://data.census.gov>.
- <sup>29</sup> U.S. Census Bureau, American Community Survey, (Annual) American Community Survey 5-Year Estimates. *Table B01001: Sex by age.* Available at <https://data.census.gov>; and TIGER/Line Shapefiles containing areas of each block group, available at <https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html>
- <sup>30</sup> U.S. Census Bureau. (2012). *Geographic terms and concepts – Census tract.* Available from [https://www.census.gov/geo/reference/gtc/gtc\\_ct.html](https://www.census.gov/geo/reference/gtc/gtc_ct.html).
- <sup>31</sup> U.S. Census Bureau. (2012). *Geographic terms and concepts – Block group.* Available from [https://www.census.gov/geo/reference/gtc/gtc\\_bg.html](https://www.census.gov/geo/reference/gtc/gtc_bg.html).