

Below is a list of sources and variable definitions for the Root Causes dashboards and maps.

Dashboard Citations

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Data Sources & Definitions

Age

Variable: Median Age

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Median age by census tract

Variable: Age Groups

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population in each age group

Citizenship

Variable: U.S. Citizens

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population that is a U.S. citizen by birth or naturalization

Variable: Legal Permanent Residents of the U.S.

Source: CHI analysis of 2014-2018 American Community Survey Five-Year IPUMS Data File; Passel, J (2006). The Size and Characteristics of the Unauthorized Migrant Population in the U.S.: Estimates Based on the March 2005 Current Population Survey. Pew Hispanic Center Research Report. Crosswalked using Missouri Census Data Center "Geocorr 2014: Geographic Correspondence Engine."

Website: <https://ipums.org/>; <http://www.pewhispanic.org/2006/03/07/size-and-characteristics-of-the-unauthorized-migrant-population-in-the-us/>; <http://mcdc.missouri.edu/applications/geocorr2014.html>

Definition: Percentage of census tract population that is a non-citizen legal permanent resident of the U.S. All non-citizens who were not identified as immigrants without documentation (see below) are considered legal permanent residents.

Variable: Immigrants without Documentation

Source: CHI analysis of 2014-2018 American Community Survey Five-Year IPUMS Data File; Passel, J (2006). The Size and Characteristics of the Unauthorized Migrant Population in the U.S.: Estimates Based on the March 2005 Current Population Survey. Pew Hispanic Center Research Report. Crosswalked using Missouri Census Data Center "Geocorr 2014: Geographic Correspondence Engine."

Website: <https://ipums.org/>; <http://www.pewhispanic.org/2006/03/07/size-and-characteristics-of-the-unauthorized-migrant-population-in-the-us/>; <http://mcdc.missouri.edu/applications/geocorr2014.html>

Definition: Percentage of census tract population that is an immigrant without documentation. Note that the American Community Survey contains variables on citizenship but not on whether a person has legal documentation status. CHI developed a method for estimating documentation status based on a Pew Hispanic Center report describing the characteristics of the undocumented immigrant population in the U.S. CHI created a logistic regression model of the likelihood that a non-citizen was an undocumented immigrant based on these characteristics. For example, Pew's report estimated that 49 percent of undocumented immigrants in the United States are adult men, compared with 44 percent of non-citizens who have legal documentation. Therefore, CHI estimated a non-citizen was 12.5 percent more likely to lack legal documentation if he is an adult male — the difference between 49 percent and 44 percent. The full model was based on age, sex, employment status, and country of origin. Because individual-level data were required to build this model, estimates were developed using the IPUMS public use microdata area files. Census tract estimates were developed by crosswalking these microdata areas using a methodology developed by the University of Missouri.

Crime & Violence

Variable: Juvenile Arrest Rate per 1,000 Youth

Source: 2018 Colorado Bureau of Investigation; 2014-2018 American Community Survey Five-Year Files

Website: <https://www.colorado.gov/pacific/dcj-ors/ors-crimestats>

Definition: Number of juvenile arrests by county per 1,000 youth ages 10 to 17 by county. Every census tract within a county was assigned that county's value.

Variable: Homicide Rate

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment

Website: <https://data-cdphe.opendata.arcgis.com/>

Definition: Age-adjusted rate of homicide per 100,000 residents per census tract

Variable: Violent Death Rate

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment

Website: <https://data-cdphe.opendata.arcgis.com/>

Definition: Age-adjusted rate of violent death per 100,000 residents per census tract. Violent deaths include homicides, suicides, and unintentional firearm fatalities

Education & Employment

Variable: High School Diploma or More

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population age 25 or older with at least a high school diploma or equivalent

Variable: Less Than a High School Diploma

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population age 25 or older without a high school diploma or equivalent

Variable: Employment Rate

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract civilian labor force age 16 or older that is employed

Variable: Unemployment Rate

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract civilian labor force age 16 or older that is unemployed

Gender / Sex

Variable: Male

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population that is male

Variable: Female

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population that is female

Mental Health

Variable: Good Mental Health

Source: 2019 Colorado Health Access Survey

Website: <https://www.coloradohealthinstitute.org/research/CHAS>

Definition: Percentage of census tract population that reported having seven or fewer days of poor mental health in the past month. The Colorado Health Access Survey does not collect data at the census tract level, so a small-area estimation regression model was used to arrive at these estimates.

Variable: Poor Mental Health

Source: 2019 Colorado Health Access Survey

Website: <https://www.coloradohealthinstitute.org/research/CHAS>

Definition: Percentage of census tract population that reported having eight or more days of poor mental health in the past month. The Colorado Health Access Survey does not collect data at the census tract level, so a small-area estimation regression model was used to arrive at these estimates.

Health Care

Variable: Insured Rate

Source: 2019 Colorado Health Access Survey

Website: <https://www.coloradohealthinstitute.org/research/CHAS>

Definition: Percentage of census tract population that reported having health insurance coverage. The Colorado Health Access Survey does not collect data at the census tract level, so a small-area estimation regression model was used to arrive at these estimates.

Variable: Uninsured Rate

Source: 2019 Colorado Health Access Survey

Website: <https://www.coloradohealthinstitute.org/research/CHAS>

Definition: Percentage of census tract population that reported not having health insurance coverage. The Colorado Health Access Survey does not collect data at the census tract level, so a small-area estimation regression model was used to arrive at these estimates.

Variable: Physicians per 1,000 Residents

Source: Colorado Department of Regulatory Agencies 2019 roster; 2014-2018 American Community Survey Five-Year Files

Website: <https://apps.colorado.gov/dora/licensing/Lookup/GenerateRoster.aspx>

Definition: Number of actively-licensed physicians in a county per 1,000 county residents. Every census tract within a county was assigned that county's value.

Variable: Mental Health Providers per 1,000 Residents

Source: Colorado Department of Regulatory Agencies 2019 roster; 2014-2018 American Community Survey Five-Year Files

Website: <https://apps.colorado.gov/dora/licensing/Lookup/GenerateRoster.aspx>

Definition: Number of actively-licensed mental health providers in a county per 1,000 county residents. Mental health providers include licensed clinical social workers, licensed social workers, certified addiction counselors, licensed addiction counselors, registered psychotherapists, and licensed psychologists. Every census tract within a county was assigned that county's value.

Housing & Environment

Variable: Housing Stable

Source: 2019 Colorado Health Access Survey

Website: <https://www.coloradohealthinstitute.org/research/CHAS>

Definition: Percentage of census tract population that reported that they are not concerned about having a place to live over the next two months. The Colorado Health Access Survey does not collect data at the census tract level, so a small-area estimation regression model was used to arrive at these estimates.

Variable: Not Housing Stable

Source: 2019 Colorado Health Access Survey

Website: <https://www.coloradohealthinstitute.org/research/CHAS>

Definition: Percentage of census tract population that reported that they are concerned about having a place to live over the next two months. The Colorado Health Access Survey does not collect data at the census tract level, so a small-area estimation regression model was used to arrive at these estimates.

Variable: Homeownership

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of occupied housing units in each census tract that are owned by the occupant

Variable: Renting

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of occupied housing units in each census tract that are rented or occupied without payment by the occupant

Variable: Median Monthly Housing Cost

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Median cost of housing by census tract. Includes rent, mortgages, and utilities.

Variable: Median Home Value

Source: December 2019 Zillow ZTRAX

Website: <https://www.zillow.com/research/ztrax/>

Definition: Median home value by census tract. Zillow reports home values at the ZIP code, not census tract, level. A crosswalk was done to arrive at census tract estimates.

Variable: Living Alone

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population that lives alone

Variable: Not Living Alone

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population that does not live alone

Variable: Living in Overcrowded Homes

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households in a census tract that have more than one occupant per room

Variable: Not Living in Overcrowded Homes

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households in a census tract that have one occupant per room or less

Variable: Internet Access

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households by census tract that have internet access

Variable: No Internet Access

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households by census tract that do not have internet access

Variable: Air Quality Index

Source: 2019 Environmental Protection Agency Air Quality Index Report

Website: https://aqs.epa.gov/aqsweb/airdata/download_files.html#eighthour

Definition: Median Air Quality Index by county. The index measures air quality across five metrics: ground-level ozone, particle pollution, carbon monoxide, sulfur dioxide, and nitrogen dioxide. While data are available by census tract, the county-level values are generally considered more reliable.

Income

Variable: Median Income

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Median household income by census tract

Variable: At or Below Federal Poverty Level

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households by census tract with incomes at or below 100 percent of the federal poverty level

Variable: Above Federal Poverty Level

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households by census tract with incomes above 100 percent of the federal poverty level

Variable: At or Below 200 Percent of Federal Poverty Level

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households by census tract with incomes at or below 200 percent of the federal poverty level

Variable: Above 200 Percent of Federal Poverty Level

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of households by census tract with incomes above 200 percent of the federal poverty level

Variable: Gini Index of Income Inequality

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: A statistical measure of income inequity where 0 represents perfect equality and 1 represents perfect inequality.

Other Health Outcomes

Variable: Life Expectancy

Source: 2015 U.S. Small-area Life Expectancy Estimates Project (USALEEP), Centers for Disease Control

Website: <https://www.cdc.gov/nchs/nvss/usaleep/usaleep.html>

Definition: Life expectancy in years by census tract

Variable: Fertility Rate per 1,000

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment, custom data pull

Website: <https://www.colorado.gov/cdphe>

Definition: Number of births per 1,000 females by census tract

Variable: Teen Birth Rate per 1,000

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment, custom data pull

Website: <https://www.colorado.gov/cdphe>

Definition: Number of births to teens ages 15 to 19 per 1,000 females ages 15 to 19 by census tract

Variable: Low Birthweight Rate

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment

Website: <https://data-cdphe.opendata.arcgis.com/>

Definition: Number of low birthweight singleton births as a percentage of all singleton births. Low birthweight births are those where the baby weighs less than 2,500 grams (5 pounds, 8 ounces).

Variable: Overall Mortality Rate

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment

Website: <https://data-cdphe.opendata.arcgis.com/>

Definition: Age-adjusted rate of death from any cause per 100,000 residents per census tract

Variable: Suicide Rate

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment

Website: <https://data-cdphe.opendata.arcgis.com/>

Definition: Age-adjusted rate of suicide per 100,000 residents per census tract

Variable: Firearm Mortality Rate

Source: 2014-2018 Vital Statistics, Colorado Department of Public Health and Environment

Website: <https://data-cdphe.opendata.arcgis.com/>

Definition: Age-adjusted rate of firearm death per 100,000 residents per census tract. Includes both intentional firearm deaths (suicides and homicides) as well as unintentional deaths

Race, Ethnicity, and Language

Variable: Race / Ethnicity Groups

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population in each race/ethnicity group

Variable: Racial Segregation Index

Source: Robert Wood Johnson Foundation County Health Rankings

Website: <https://www.countyhealthrankings.org/>

Definition: Index ranging from 0 (complete integration) to 100 (complete segregation). The index is based on the percentage of white or non-white residents who would need to move to different census tracts in order for all census tracts to have racial distributions matching that of the entire county. By nature of the definition, these data must be reported at the county level. Every census tract within a county was assigned that county's value.

Variable: Speaks English at Home

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population speaking English at home

Variable: Does not Speak English at Home

Source: 2014-2018 American Community Survey Five-Year Files

Website: <https://data.census.gov/cedsci/>

Definition: Percentage of census tract population not speaking English at home

Substance Availability

Variable: Marijuana Retailers per 1,000 Residents

Source: Colorado Department of Regulatory Agencies

Website: <https://www.colorado.gov/pacific/enforcement/med-licensed-facilities>

Definition: Number of licensed marijuana retailers (medicinal or recreational) per 1,000 census tract residents

Variable: Alcohol Retailers per 1,000 Residents

Source: Colorado Department of Regulatory Agencies

Website: <https://www.colorado.gov/pacific/enforcement/liquor-license-lists>

Definition: Number of licensed alcohol retailers per 1,000 census tract residents

Variable: Tobacco Retailers per 1,000 Residents

Source: Colorado Department of Regulatory Agencies

Website: <https://trac-cdphe.opendata.arcgis.com/>

Definition: Number of licensed tobacco retailers per 1,000 census tract residents