

# PA Opportunity Map: *Definitions and Sources*

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## Household Income at Age 35

Average household income at age 35 for those who grew up in this area in the 1980s. Household income includes the individual's own earnings plus their spouse's earnings (if married). This measure tracks children born between 1978-1983 and measures their mean household income in 2014-2015 when they were approximately 32-37 years old. Data is based on federal tax returns linked to childhood addresses.

*National Median: \$44,000*

*Interpretation: Higher values indicate that children who grew up in this area tend to have higher household incomes in adulthood. This is a key measure of economic opportunity and intergenerational mobility.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Opportunity Insights at Harvard University. Variable: kfr\_pooled\_pooled\_mean (household income rank). Based on Census Bureau data cleared under CBDRB-FY18-319.

## Social Capital

Percentage of lower-income people's friends who are higher income in this area, measured in the 2020s. This measure captures the extent to which people from different socioeconomic backgrounds are connected to one another. It is calculated using friendship networks from Facebook data, measuring the share of high-socioeconomic status (SES) friends among low-SES individuals. ZIP code-level averages are displayed for each census tract.

*National Median: 43.8%*

*Interpretation: Higher values indicate greater economic connectedness—that is, people from different economic backgrounds interact more frequently. Research shows this measure strongly predicts upward economic mobility.*

Source: Social Capital Atlas ([data.humdata.org/dataset/social-capital-atlas](http://data.humdata.org/dataset/social-capital-atlas)) - Harvard University, based on Meta (Facebook) friendship network data. Developed by researchers Raj Chetty, Matthew Jackson, and colleagues.

## Single Parent Households

Estimated percentage of children living with a single mother in 2024. This measure represents the number of households with female heads (and no husband present) with own children under 18 years old, divided by the total number of households with own children present.

*National Median: 33%*

*Interpretation: Higher percentages may indicate greater economic stress on families and potential challenges in child development.*

Source: County Health Rankings & Roadmaps ([countyhealthrankings.org](http://countyhealthrankings.org)) - University of Wisconsin Population Health Institute. Based on U.S. Census Bureau American Community Survey 5-year estimates.

## Poverty Rate

Percentage of residents living below the federal poverty line in 2021. The federal poverty threshold varies by family size and composition. For example, in 2021, the threshold for a family of four (two adults, two children) was \$27,479 in annual income.

*National Median: 16%*

*Interpretation: Higher poverty rates indicate greater economic hardship in an area and are associated with reduced access to resources and opportunities.*

Source: USDA Economic Research Service Poverty Area Measures ([ers.usda.gov/data-products/poverty-area-measures](http://ers.usda.gov/data-products/poverty-area-measures)). Based on U.S. Census Bureau Small Area Income and Poverty Estimates (SAIPE) program.

## Gini Coefficient

Before-tax Gini coefficient for the county, 2023. The Gini coefficient is a statistical measure of income inequality that ranges from 0 to 1. A value of 0 represents perfect equality (everyone has the same income), while a value of 1 represents maximum inequality (one person has all the income). Values are truncated (not rounded) to three decimal places.

*Pennsylvania Average: 0.440*

*Interpretation: The higher the value, the more unequal the income distribution in the county.*

Source: U.S. Census Bureau American Community Survey 5-Year Estimates ([data.census.gov/table/ACSDT5Y2023.B19083](https://data.census.gov/table/ACSDT5Y2023.B19083)).  
Table B19083: Gini Index of Income Inequality.

## Total Murders

Total number of reported murder and non-negligent manslaughter incidents in the county in 2023. Murder and non-negligent manslaughter is defined by the FBI's Uniform Crime Reporting (UCR) program as 'the willful (non-negligent) killing of one human being by another.'

*Interpretation: Lower values indicate safer communities. Note that this is a count, not a rate, so larger counties may have higher totals even with lower per-capita crime rates.*

Source: Pennsylvania Uniform Crime Reporting System ([ucr.pa.gov/PAUCRSPublic](http://ucr.pa.gov/PAUCRSPublic)) - Pennsylvania State Police. County-level data from law enforcement agencies reporting to PA UCR.

## Other Crimes (Expandable Section)

County-level crime statistics for 2023, including:

- Violent Crimes: Total count of offenses involving force or threat of force
- Property Crimes: Total count of offenses involving theft or destruction of property
- Rape: Count of forcible sexual assault incidents
- Robbery: Count of taking property by force or threat of force
- Aggravated Assault: Count of unlawful attack with intent to inflict severe injury
- Burglary: Count of unlawful entry to commit theft or felony
- Larceny-Theft: Count of unlawful taking of property without force
- Motor Vehicle Theft: Count of theft or attempted theft of motor vehicles
- Arson: Count of willful burning or attempt to burn property

*Interpretation: All crime counts are reported at the county level. These represent incidents reported to and recorded by law enforcement agencies.*

Source: Pennsylvania Uniform Crime Reporting System ([ucr.pa.gov/PAUCRSPublic](http://ucr.pa.gov/PAUCRSPublic)) - Pennsylvania State Police. Based on FBI UCR Part I offense definitions.

## Upward Mobility

Percentage of low-income children raised here in the 1980s who rose to the top 20% of household income distribution in adulthood. This measure focuses on children born 1978-1983 whose parents were in the bottom 25th percentile of the national income distribution. It tracks what percentage of these children reached the top quintile (80th percentile or higher) of household income by 2014-2015.

*National Median: 9.9%*

*Interpretation: Higher values indicate greater upward economic mobility—that is, children from low-income families in this area were more likely to move into the upper-middle class or higher as adults.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Opportunity Insights at Harvard University. Variable: kfr\_pooled\_pooled\_p25 (household income rank for children from 25th percentile parents). Based on Census Bureau data cleared under CBDRB-FY18-319.

## Median Household Income

County-level median household income from the most recent American Community Survey 5-year estimates. This represents the middle value—half of households in the county earn more, and half earn less. Household income includes all income sources (wages, salaries, self-employment, interest, dividends, social security, retirement, public assistance, etc.) for all household members.

*Interpretation: Higher values indicate greater overall prosperity in the county. This measure reflects current economic conditions, unlike the historical measures from the Opportunity Atlas.*

Source: U.S. Census Bureau American Community Survey ([data.census.gov](http://data.census.gov)). Table S1901: Income in the Past 12 Months.

## Wage Growth

Average wage growth percentage for high school graduates, 2005-2014. This measures the change in hourly wages for workers with a high school diploma but no college degree. Wages are calculated by dividing average annual earnings by the product of average weekly hours worked and 52 weeks. Wage growth is computed as the difference in logarithms between 2010-2014 wages and 2005-2009 wages.

*U.S. Tract Average: 4.5%*

*Interpretation: Positive values indicate wages increased over this period, while negative values indicate declining wages. This measure is particularly important for understanding economic opportunity for workers without college degrees. Display color is green for positive growth, red for negative.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Variable: ln\_wage\_growth\_hs\_grad. Based on American Community Survey 2005-2009 and 2010-2014 data.

## Average Commute Time

Mean travel time to work in minutes for workers 16 years and older in the tract, measured in 2000. This includes all workers who do not work from home, across all modes of transportation (car, public transit, walking, etc.). Commute time is measured from when the worker leaves home to when they arrive at work.

*Interpretation: Longer commute times can indicate limited nearby employment opportunities, lack of affordable housing near job centers, or poor transportation infrastructure. Shorter commutes are associated with better quality of life and more time for family and community engagement.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Variable: mean\_commutetime2000. Based on U.S. Census Bureau 2000 Decennial Census data.

## Lack Health Insurance

Percentage of those under 65 without health insurance coverage in the county, 2023. This measure comes from the Small Area Health Insurance Estimates (SAHIE) program, which provides county-level estimates of health insurance coverage for all 50 states and the District of Columbia. It excludes those 65 and older because nearly all are covered by Medicare.

*U.S. Average: 8%*

*Interpretation: Higher percentages indicate more residents lack access to health insurance, which is associated with delayed medical care, worse health outcomes, and financial strain from medical expenses.*

Source: U.S. Census Bureau Small Area Health Insurance Estimates ([census.gov/programs-surveys/sahie.html](https://census.gov/programs-surveys/sahie.html)). Based on American Community Survey data with model-based adjustments.

## Life Expectancy

Life expectancy at birth in years, 2010-2015. This represents the average number of years a newborn would be expected to live if current mortality rates remained constant throughout their lifetime. Estimates are available at both the census tract and county level, with tract-level estimates pooling data across 2010-2015 for statistical reliability.

*U.S. Average 2015: 78.8 years*

*Interpretation: Higher life expectancy indicates better overall health outcomes and access to healthcare. Differences in life expectancy across areas can reveal stark health inequities.*

Source: CDC National Center for Health Statistics ([cdc.gov/nchs/data-visualization/life-expectancy](https://cdc.gov/nchs/data-visualization/life-expectancy)). Based on National Vital Statistics System mortality data and Census population estimates.

## Poor/Fair Health

Percentage of adults in the area who self-report their health status as 'fair' or 'poor' (as opposed to 'excellent,' 'very good,' or 'good'), 2022. This is a widely used measure of overall population health status that has been shown to predict mortality and healthcare utilization.

*Pennsylvania Average: 17%*

*Interpretation: Higher percentages indicate worse self-reported health status. Self-rated health is a powerful predictor of mortality, healthcare costs, and functional limitations.*

Source: CDC PLACES: Local Data for Better Health ([cdc.gov/places](https://cdc.gov/places)). Based on Behavioral Risk Factor Surveillance System (BRFSS) data with small area estimation models.

## Other Health Indicators (Expandable Section)

County-level health measures from CDC PLACES, 2022:

- Dentist Visit (past year): % of adults aged 18+ who visited a dentist or dental clinic in the past year
- Tooth Loss 65+: % of adults aged 65+ who have lost all their natural teeth due to decay or gum disease
- Insufficient Sleep: % of adults who report fewer than 7 hours of sleep on average in a 24-hour period
- Mammogram (women 50-74, past 2 yrs): % of women aged 50-74 who had a mammogram in the past 2 years
- Colorectal Screening (45-75): % of adults aged 45-75 who are up to date with colorectal cancer screening

*Interpretation: These measures provide insight into preventive health behaviors and health outcomes. Higher screening rates generally indicate better access to preventive care.*

Source: CDC PLACES: Local Data for Better Health ([cdc.gov/places](http://cdc.gov/places)). Based on Behavioral Risk Factor Surveillance System (BRFSS) with model-based small area estimates.

## Unemployment Rate

County-level unemployment rate from the most recent year available. The unemployment rate is the percentage of the civilian labor force (people who are working or actively seeking work) who are unemployed. It excludes people who are not actively looking for work.

*Interpretation: Higher unemployment rates indicate weaker labor market conditions and fewer job opportunities. Persistent high unemployment is associated with poverty, reduced tax revenues, and social challenges.*

Source: USDA Economic Research Service County-Level Data Sets ([data.ers.usda.gov/reports.aspx?ID=17828](http://data.ers.usda.gov/reports.aspx?ID=17828)). Based on Bureau of Labor Statistics Local Area Unemployment Statistics (LAUS).

## Educational Attainment

Percentage of adults aged 25 and older with a bachelor's degree or higher in the county. This includes those with bachelor's degrees, master's degrees, professional degrees, and doctoral degrees. Data is from the most recent American Community Survey 5-year estimates.

*Interpretation: Higher percentages indicate a more educated workforce, which is associated with higher incomes, lower unemployment, and better health outcomes. Educational attainment is a key driver of economic development.*

Source: USDA Economic Research Service County-Level Data Sets ([data.ers.usda.gov/reports.aspx?ID=17829](http://data.ers.usda.gov/reports.aspx?ID=17829)). Based on U.S. Census Bureau American Community Survey.

## Math Proficiency

Mean 3rd grade math test scores in 2013, measured at the school district level and allocated to census tracts. Test scores are standardized and comparable across districts. Districts are mapped to tracts by weighting the proportion of land area that each school district covers within a tract.

*Interpretation: Higher scores indicate better educational outcomes in elementary school, which are strong predictors of future academic achievement and economic success. Third grade is a critical transition point from 'learning to read' to 'reading to learn.'*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Variable: gsmn\_math\_g3\_2013. Based on Stanford Education Data Archive (SEDA). Developed by researchers at Stanford University.

## Teen Birth Rate

Percentage of women who grew up in this area in the 1980s who became teen parents. Specifically, this measures the fraction of women born 1978-1983 who ever claimed a child born when they were between ages 13-19 as a dependent on their tax return. This is a historical measure based on outcomes for those who grew up in the area, not current teen birth rates.

*National Median: 16%*

*Interpretation: Lower rates are generally associated with better educational and economic outcomes for women. Teen childbearing is linked to lower educational attainment, reduced earnings, and increased poverty. Note: This measures historical outcomes, not current teen birth rates in the area.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Variable: teenbrth\_pooled\_female\_mean. Based on Census Bureau data cleared under CBDRB-FY18-319.

## Percentage in Jail/Prison at Age 35

Percentage of those who grew up in this area in the 1980s who were incarcerated by their 30s. Specifically, this is the fraction of children born 1978-1983 who were incarcerated on April 1, 2010 (Census Day), when they were approximately 27-32 years old. Incarceration is defined as residing in a federal detention center, federal prison, state prison, local jail, residential correctional facility, military jail, or juvenile correctional facility.

*National Median: 1.2%*

*Interpretation: Lower values indicate fewer people from this area ended up incarcerated. Mass incarceration disrupts families and communities and is associated with reduced lifetime earnings and employment.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Variable: jail\_pooled\_pooled\_mean. Based on 2010 Decennial Census data matched to childhood addresses. Data cleared under CBDRB-FY18-319.

## Percentage Married at Age 35

Percentage of those who grew up in this area in the 1980s who were married by their 30s. Specifically, this is the fraction of children born 1978-1983 who filed their federal income tax return as 'married filing jointly' or 'married filing separately' in 2015, when they were approximately 32-37 years old.

*National Median: 51%*

*Interpretation: Marriage rates vary significantly by socioeconomic status, with higher-income individuals more likely to marry. While marriage can provide economic and social benefits, the relationship between marriage rates and economic opportunity is complex and influenced by cultural, economic, and social factors.*

Source: Opportunity Atlas ([opportunityatlas.org](http://opportunityatlas.org)) - Variable: married\_pooled\_pooled\_mean. Based on federal tax return data. Data cleared under CBDRB-FY18-319.

## Race/Ethnicity

Demographic breakdown by race and ethnicity from the 2020 Census. Categories include:

- White (non-Hispanic)
- Black or African American (non-Hispanic)

- Hispanic or Latino (of any race)
- Asian (non-Hispanic)
- American Indian and Alaska Native (non-Hispanic)
- Native Hawaiian and Other Pacific Islander (non-Hispanic)
- Some Other Race (non-Hispanic)
- Two or More Races (non-Hispanic)

Percentages are calculated as the share of total population in each category.

*Interpretation: Demographic composition provides context for understanding disparities in economic and health outcomes. Research from the Opportunity Atlas shows significant variation in outcomes by race and neighborhood.*

Source: U.S. Census Bureau 2020 Decennial Census

([census.gov/library/visualizations/2021/geo/demographicmapviewer.html](https://census.gov/library/visualizations/2021/geo/demographicmapviewer.html)). Table P1: Race and Table P2: Hispanic or Latino, and Not Hispanic or Latino by Race.

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*Note: Some indicators display tract-level data when available, falling back to county-level estimates when tract-level data is not available. The map interface clearly indicates the geographic level (tract or county) for each displayed value. National or state benchmarks are provided where available to help contextualize local values.*