

Quality of Life



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Content The Quality of Life Index (QoLI) database is a block group and higher level database that combines many different sources to show where the best places are to live and do business. The database consists of a main index derived from five sub-indexes: economic, health, community, leisure and physical environment. These sub-indexes are based upon specific variables within each category.

Methodology The indexes are presented in two separate forms, the first as a 0-1000 score, and the second as a standard 100 based index.

At the block group level, each specific variable is ordered and ranked for all block groups and given a value from zero to 1,000. The sub-indexes are averages of these ranks weighted by the importance of the specific variables. The main index is the weighted average of the sub-indexes as follows:

Economic	25%
Health	15%
Community	25%
Leisure	15%
Physical Environment	20%

At higher geography levels, the specific variable ranks, the sub-indexes and the main QoLI are all weighted averages based on the populations of the contained block groups (or partially contained block groups).

In the index version, the scores at each geographic level are balanced to a weighted index of 100 nationwide.

Economic Sub-Index The economic sub-index is the weighted average of rankings of various specific variables relating to income, cost of living and employment.

The income variables are median household income for the current year (MEDINCCY), change in median household income from 2000 to the current year (MICH00_CY), percentage of income from private sources (PVTINCP) and affluence (AFFLUENCE).

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The sources of the sub-indexes are as follows:

- MEDINCCY comes directly from our Estimates and Projections database.
- MICHoo_CY is a calculation: median household income for the current year minus median household income from 2000.
- PVTINCP is initially calculated for the current year using regression based Census 2000 for median age and median income. This is applied to current year median age and median income and then normalized to current year levels for higher geographies from the American Community Survey (ACS).
- AFFLUENCE comes directly from our Applied Analytics database.

The CoL variables are property tax (PTAX), local sales tax (SALESTAX) and state income tax (STINCTAX).

PTAX is calculated using data provided by Onboard Informatics regarding average home prices and average property tax down at the block group level. If insufficient data was available at the block group level, data was taken for lowest level with data available, either tract, county or state.

SALESTAX data comes from zip2tax.com, which provides a database of sales tax at the ZIP code level. The data was brought down to the block group level by cross-referencing block groups and ZIP codes. STINCTAX amounts were calculated for each state by using each state's income bracket rates on the nationwide household by income array. Each state's income bracket rates come from a variety of government sources.

The employment variables are an unemployment rate for the current year (UECYRATE), change in unemployment from 2000 to the current year (UICHoo_CY), the index of dissimilarity of the local employment by industry (IDISS), the employment stability value (ESV) and the number of employees in the local employment market (NEMP).

UECYRATE comes directly from our Estimates and Projections database and represents the number of unemployed people 16+ in the labor force divided by the total number of people 16+ in the labor force including those in the armed forces.

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UICHoo_CY CY is a calculation: unemployment percentage for the current year minus unemployment percentage from 2000.

IDISS is a measure of how different the employment market within a 60-minute drivetime is from the overall labor market in the United States. The higher the index of dissimilarity, the more likely the employment market does not have a good balance of industries.

ESV is a measure of the health of the industries in the employment market within a 60-minute drivetime. If growing industries are found in the employment market, ESV is higher, if less healthy industries are more represented ESV is lower.

NEMP represents the total number of employees within a 60-minute drivetime. A higher number of employees indicates more employment opportunity.

Health Sub-Index

The health sub-index is the weighted average of various specific variables relating to incidence of disease and availability of medical care.

The health variables are percent of the population ages 10 and up that are overweight or obese (PCTOO10P), the incidence of diabetes per 100 adult population (DIABP100), the incidence of death by heart disease per 100,000 population (HDDP100K), the incidence of Cancer per 100,000 population (CPER100K), the availability of hospitals (HOSP_SCR) and the availability of physicians (PHYS_SCR).

PCTOO10P is based on data compiled by the National Survey of Children's Health and the CDC's Behavioral Risk Factor Surveillance System. Originally, the numbers are compiled at the state level. They are brought down to the block group level with regression calculations using median income, a variable correlated to obesity.

DIABP100 is based on data compiled by the CDC. The numbers were compiled at the state level and brought down to the block group level with regression calculations using median household income, a variable correlated to incidence of diabetes.

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HDDP100K is based on data compiled by the National Center for Health Statistics. The numbers were compiled at the state level and brought down to the block group level with regression calculations using obesity rates.

CPER100K is based on data compiled by the U.S. Cancer Statistics Working Group. United States Cancer Statistics: 1999–2007 Incidence and Mortality Web-based Report. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention and National Cancer Institute. Data is for the state level and were brought down to the block group level based on straight cross-reference.

HOSP_SCR is an accessibility index for hospitals by number of employees within 60 miles of each block group.

PHYS_SCR is an accessibility index for physicians by number of employees within 30 miles of each block group.

Community Sub-Index

The community sub-index is the weighted average of various specific variables relating to family makeup, school quality, higher learning education accessibility and crime.

The community variables are percent of population that has been married that is not separated or divorced (MARCYN), percent of family households with children that are also have a married couple (HSMCCHR), public school quality index (SQI), accessibility to local community colleges and to local universities (COMCLG_SCR and UNIV_SCR) and indexes of both personal and property crimes (PERSCRM and PROPCRM).

- MARCYN is a calculation using data from our Estimates and Projections database: (married population plus widowed population) divided by population that is or has been married.
- HSMCCHR is a calculation using data from our Estimates and Projections database: married couple family households with children divided by family households with children.
- SQI is based on school ratings derived from nationwide data from the National Report Card and school data provided by National Center for Education Statistics. Block groups were given a school quality index scores based on the standardized scores and student teacher ratios of the schools in close

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- proximity.
- COMCLG_SCR is an accessibility index for community colleges by number of employees within 30 miles of each block group.
- UNIV_SCR is an accessibility index for universities by number of employees within 30 miles of each block group.
- PERSCRIM is personal crime rates from our CrimeRisk database.
- PROPCRIM is property crime rates from our CrimeRisk database.

Leisure Sub-Index

The leisure sub-index is the weighted average of various specific variables relating to cultural environment, retail environment, food environment and other leisure activity environment.

The leisure variables are accessibility to cultural activities (CULTURAL_SCR), accessibility to retail shopping (RETAIL_SCR), accessibility to food shopping and full service restaurants (FOOD_SCR) and accessibility to other leisure related activities (OLEISURE_SCR).

- CULTURAL_SCR is a weighted average of the accessibility indexes by number of employees for museums, botanical gardens, libraries and live performing arts.
- RETAIL_SCR is the accessibility index by number of employees for retail establishments within 30 miles of each block group.
- FOOD_SCR is the accessibility index by number of employees for full service restaurants and food retailers within ten miles of each block group.
- OLEISURE_SCR is a weighted average of the accessibility indexes by number of employees for casinos, bowling alleys, campgrounds, fairgrounds, family entertainment centers, theme parks, sports venues, health clubs, ice skating rinks, race tracks, ski resorts, golf courses and tennis courts.

Physical Environment Sub-Index

The physical environment sub-index is the weighted average of various specific variables relating to climate factors, natural hazards, air quality and population density.

The physical environment variables are climate index (CLIMATEI),

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earthquake risk (QUAKERISK), weather risk (WEATHERRISK), air quality index (AIRQUALI) and population density (POPDENS).

- CLIMATEI is a calculated index based on a number of factors. One-fifth of the score is determined by the average high temperature month by month, one-fifth by the average low temperature month by month, one-fifth by the cooling degree days, one-fifth by the heating degree days and one-fifth by the average annual rainfall (absolute distance from 15") and the average annual snowfall.
- QUAKERISK comes directly from our natural hazards risks database.
- WEATHERRISK comes directly from our natural hazards risks database.
- AIRQUALI is an average of the various air pollution indexes. These include ozone, carbon monoxide, lead NO₂ and particulate matter.
- POPDENS is a calculation: current population divided by square miles.

Further Information

Contact customer service at 877-944-4AGS or email support@appliedgeographic.com.