Life Expectancy by Census Tracts

# Highlights

* These census tract life expectancy data represent the average number of years a person can expect to live in each census tract in Kansas.
* These estimates complement other health measures and social determinants that impact life expectancy at a community level.
* We have several hundred health measures available at county and regional levels, but this is the first major health outcome indicator that can tell a neighborhood how their health is doing.
* We have found that life expectancy can vary widely among census tracts within a city or county.
* Sharing these data enables communities to talk to elected officials, policy makers, and community development leaders about changes in transportation, access to healthy food, affordable housing, and education & job training.

# Background

* United States Small-Area Life Expectancy Estimates Project (USALEEP) is funded by Robert Wood Johnson Foundation.
* The Office of Vital Statistics, part of the KDHE Bureau of Epidemiology and Public Health Informatics, partnered with the National Center for Health Statistics (NCHS) to produce life expectancy estimates - or the *average* number of years a person can expect to live - in each census tract in the United States.
* These estimates will complement other measures of health at the county, state, and national levels, by providing a measure of life expectancy at the *community* level.
* All data geocoded using the same methodology
* Six years of data used 2010-2015
* The indicator most widely identified as the ideal measure of a population’s mortality experience is life expectancy at birth.
* Its estimation is complex. It requires the calculation of a life table that includes six distinct functions and a minimum number of age groups and total population size below which the estimates become unstable and unreliable.
* Project is significant in that it is groundbreaking, can improve the health of all Americans regardless of place of residence and raises awareness of health disparities at a community level.

# Potential Data Uses

* Better understand disparities
* Make decisions about:
  + Transportation
  + Grocery stores
  + Physical activity requirements
  + Healthy school meals
  + Community safety
  + Health care access
* Help direct limited dollars to where there is the most need
* Determine which neighborhoods need investment to fund health clinics, preschools, community centers, housing, etc.

# Statewide analysis

The LEEP dataset includes life expectancy at birth estimates for 723 Kansas Census Tracts. Life expectancy at birth ranges from 62.5 years in Census Tract 041800 (in Wyandotte County) to 89.7 years in Census Tract 962600 (in Gray County). The following table shows census tract counts for 5-year age range groups for life expectancy:

|  |  |
| --- | --- |
| LE range (years) | Number of Tracts |
| 60.0 – 64.9 | 1 |
| 65.0 – 69.9 | 12 |
| 70.0 – 74.9 | 123 |
| 75.0 – 79.9 | 377 |
| 80.0 – 84.9 | 190 |
| 85.0 and over | 20 |
| Total | 723 |

Census tracts in the 85.0 years and over range for life expectancy are found in the following counties: Clark (1), Douglas (1), Ford (1), Gray (1), Harvey (1), Haskell (1), Johnson (7), Morton (1), Riley (2), Saline (1), Sedgwick (2), and Stanton (1).

Census tracts in the under 70.0 years ranges for life expectancy are found in the following counties: Cherokee (2), Leavenworth (1), Sedgwick (7), Shawnee (1), and Wyandotte (2).

**Disparities within counties**

In 14 Kansas counties, the disparity between the census tract with the highest life expectancy and the tract with the lowest life expectancy was greater than 10.0 years. Disparity was highly concentrated in Kansas’ most populous counties:

*Counties* *Population Density Peer Group*

Johnson, Leavenworth, Sedgwick, Shawnee, Wyandotte Urban

Butler, Harvey, Montgomery, Reno, Riley, Saline Semi-Urban

Ford, Labette Densely-Settled Rural

Republic Rural

In 15 Kansas counties, the disparity between the census tract with the highest life expectancy and the tract with the lowest life expectancy fell in the range 6.0 - 9.9 years. Again, disparity was concentrated in Kansas’ most populous counties:

*Counties* *Population Density Peer Group*

Douglas Urban

Crawford, Geary, Miami Semi-Urban

Allen, Atchison, Cherokee, Cowley, Finney, McPherson, Seward Densely-Settled Rural

Gray, Wilson Rural

Edwards, Greenwood Frontier

In 37 Kansas counties, the disparity between the census tract with the highest life expectancy and the tract with the lowest life expectancy fell in the range 2.0 – 5.9 years.

*Counties Population Density Peer Group*

Franklin Semi-Urban

Barton, Bourbon, Dickinson, Doniphan, Ellis, Jackson, Densely-Settled Rural

Jefferson, Lyon, Neosho, Osage, Pottawatomie, Sumner

Anderson, Clay, Cloud, Coffey, Ellsworth, Grant, Linn,

Marion, Marshall, Mitchell, Nemaha, Ottawa, Phillips, Pratt,

Rice, Russell, Thomas, Wabaunsee, Woodson Rural

Gove, Rush, Sherman, Smith Frontier

In 14 Kansas counties, the disparity between the census tract with the highest life expectancy and the tract with the lowest life expectancy was less than two years (most of these counties included no more than two census tracts):

*Counties Population Density Peer Group*

Brown, Harper, Morris, Pawnee, Stevens, Washington Rural

Barber, Decatur, Graham, Meade, Ness, Rooks, Sheridan, Frontier

Stafford

Twenty-five Kansas counties showed no disparity in life expectancy between census tracts because they included only one census tract.

*Counties Population Density Peer Group*

Haskell, Norton, Scott Rural

Chase, Chautauqua, Cheyenne, Clark, Comanche, Elk,

Greeley, Hamilton, Hodgeman, Jewell, Kearny, Kiowa,

Lane, Lincoln, Logan, Morton, Osborne, Rawlins, Stanton,

Trego, Wallace, Wichita Frontier