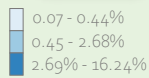
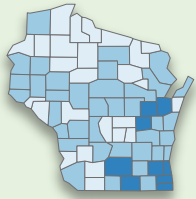


Is Wisconsin both mentally and physically taxing to live in ?

Vibrant communities are the building blocks of the counties. Counties as a whole build the state's economy and improve the standard of living through taxes. In a thriving economy, social disparity disrupts both liveability and income. In the U.S., Social disparity is a prevalent issue. Let us understand how certain critical indicators - Mental distress, Unemployment rate, Food insecurity, excessive drinking, Life expectancy affect owing to social disparity. This map showcases the variations across counties with Chernoff's faces, attempting to humanize the data. Food insecurity causes high mental distress in Wisconsin based on the correlation indices. And interestingly, the unemployment rate has the least correlation with excessive drinking.

Population as percentage 2021



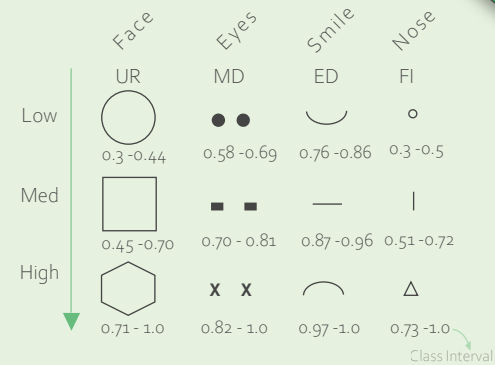
There is a huge disparity in the spread of population across the state.

Milwaukee has the highest population with 945,726.

Florence has the least population with 4,295.

The data breaks are geometric intervals as several counties have low population. This inset map helps understanding the of the current map better.

Chernoff face legend:



Metadata and classification:

The data values are raw, therefore all values are standardized before plotting. Secondly, the data breaks for Chernoff's faces are manual break. The first break is from minimum outlier to median, followed by median to third quartile, and last break covers the highest outliers. The aim of breaks is to focus on outliers.

Parameters & Annotations

Unemployment Rate : UR (Population % \geq 16 yrs unemployed)

Mental distress : MD (Adults % \geq 14 days per month)

Excessive Drinking : ED (Adults % $>$ prescribed drinking)

Food Insecurity : FI (Total Population %)

*Note all values are standardized, therefore range is 0 - 1.

Correlation coefficient table

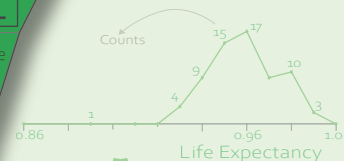
	MD	UR	FI	ED
MD		0.72	0.85	-0.44
UR	0.72		0.84	-0.32
FI	0.85	0.84		-0.50
ED	-0.44	-0.32	-0.50	

Highest Correlation

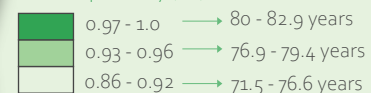
Lowest Correlation

Marathon County ranks as the healthiest county in Wisconsin. There are only 19% smokers, 26% has excessive drinking problem. And has least uninsured population about 6%.

Menominee County ranks as least healthiest in Wisconsin. There are 34% smokers, 71% alcohol impaired deaths in 2021



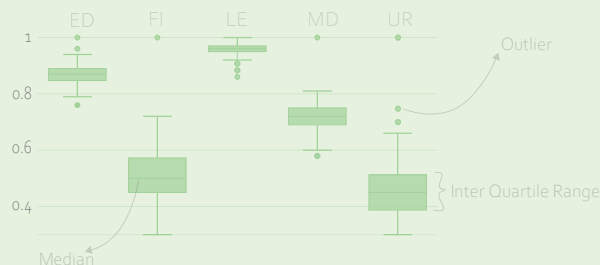
Life Expectancy (LE)



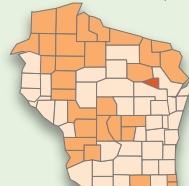
Key measures:

Life expectancy (LE) is defined as an average age a person could live. The minimum value of LE is marked at Menominee county with 71.55 years. The maximum value of LE is marked at Pepin County with 82.92 years. The median LE of Wisconsin is about 79.43 years which interprets that at least 50% of the counties register a higher LE. The Standard deviation is about 1.84 years. About 3 counties fall in the bracket of median LE - Oconto, Walworth and Sauk.

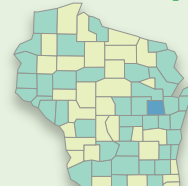
Understanding the data ! Data blocks - Box & Whisker Plots



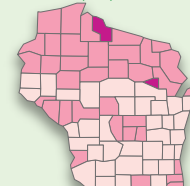
Food Insecurity



Excessive Drinking



Unemployment Rate



Mental distress

