Notes

The raw data for this project originates from XXX. For this project, the raw data was scaled and standardized several ways. First, each variable was assigned to a category where a high value equates to a high opportunity ("higher value is better"), or where a high value equates to a low opportunity ("lower is better").

Z-score

The z-score value represents the number of standard deviations x is from the mean. The z-score calculation is:

Where "higher is better": $z\,score = \frac{x - mean}{standard\,deviation}$

Where "lower is better": $z\,score = \frac{x - mean}{standard\,deviation} \times (-1)$

Weights nominal

The weights nominal value represents where x falls nominally in the range of values, on a 0-10 scale. The weights nominal calculation is:

Where "higher is better": $weights\,nominal = \frac{x - minimum\,value}{maximum\,value - minimum\,value} \times 10$

Where "lower is better": $weights\,nominal = 10 - \frac{x - minimum\,value}{maximum\,value - minimum\,value} \times 10$

Weights standard score

The weights standard score normally distributes the z score of x on a 0-10 scale. **This is the primary variable mapped in this tool.** It is calculated according to:

Where "higher is better": $weights\,standard\,score = (normal\,distribution\,of\,z\,score) \times 10$

Where "lower is better": $weights\,standard\,score = 10 - (normal\,distribution\,of\,z\,score) \times 10$

Weights rank

The weights standard score normally distributes the z score of x on a 0-10 scale. It is calculated according to:

Where "higher is better": $weights\,rank = \frac{rank\,of\,the\,nominal\,weight\,of\,x}{number\,of\,tracts\,with\,data\,on\,x} \times 10$

Where "lower is better": $weights\,rank = \frac{rank\,of\,the\,nominal\,weight\,of\,x}{number\,of\,tracts\,with\,data\,on\,x} \times 10$