Purchasing Power

The attached spreadsheets are designed to accurately calculate federal income tax, state income tax and FICA tax (Social Security and Medicare tax) on an individual's annual wage/salary. Taxes are computed assuming a single filer, standard deduction, and no additional dependents. The accounting firm, Eide Bailly, prepares the calculations and they should be accurate within $5 annually.

Once we know how much in taxes are due we can determine after tax wages (gross salary less taxes). This is how much money a worker has left over once the government has taken out the correct amount of payroll taxes.

We also know that different areas/regions have different costs of living. For example, New York City has a much higher cost of living than Sioux Falls. To determine the cost of living in any given city or state the US Bureau of Economic Analysis (BEA) compares millions of price points on goods and services across the nation, and produces Regional Price Parities (RPP).

The national average of all costs is 100%. A state or city with lower average costs will have an RPP of less than 100% (SD'S is 88.3%), and a city or state with a higher cost of living will have an RPP over 100% (for example, Hawaii's RPP is 118.4%).

So, to determine purchasing power, we divide after tax wages by a given city or state's RPP. This is the only way to have a meaningful comparison of wages in different cities and states.

The true measure of how well you're paid is not your gross pay; rather it is how much you can buy with your wages after the government has taken its share.

Note: The BEA will release the 2017 RPPs in May of 2019.