

Understanding and Using American Community Survey Data

What State and Local Government Users Need to Know

Case Study #1: Minnesota State Demographic Center Analysis of Earnings in Urban and Rural Areas

The Standard Error in the case study is 0.599 and is calculated using the following formula:

$$SE(50percent) = DF * \sqrt{\frac{95}{5B} * 50^2}$$

With $DF = 1.3$ and $SE(50percent) = 0.599$, solving for B yields:

$$0.599 = 1.3 \sqrt{\frac{95}{5B} * 50^2}$$

$$B = \frac{95 * 50^2}{\left(\frac{0.599}{1.3}\right)^2 * 5} = 223731.26$$

However, I'm not sure how to calculate this value of approximately 223731 from the dataset.

Futhermore, using the formula provided in the email, $B = \frac{100-f}{f}$, the value of B would be $\frac{100-2.5}{2.5} = 39$ (unless I've misunderstood the email!).