

WHITE PAPER:

Why Research is Like Stew

If you were making a large pot of soup and a friend wanted to know how it tasted, what would you do?

Would you force them to eat the whole pot?

Would you force them to eat a large bowl?

Or,

Would you stir the pot, dip a large spoon into the pot and let them taste a spoonful?

That spoonful should have the same flavor as the rest of the pot. You have taken a sample of the soup and your friend now knows how the entire pot of soup will taste.

That's how surveys work.

The reason the soup in the spoon tastes the same as the soup throughout the pot is that is a good sample. Remember when you stirred the pot before dipping in the spoon? That made all the difference. Otherwise, the vegetables might have sat on the bottom and your friend would have only had the broth without the body.

It's the job of researchers at Zachry to make sure that the people we contact collectively make up a smaller image of the group as a whole. This smaller group is called a sample. The simplest way to make a sample is for everyone in the larger group to have an equal chance to be included in the survey.

If we have a consistent sample, then mathematics will allow us to apply what we learn to the whole pot. It's amazing the small number of people that are needed for good results. For example, if we ask 377 people their favorite ice cream flavor and 42% say chocolate, statistics tell us that the reality is that between 37 and 47% of the whole population prefer chocolate (+/-5%, margin of error) and that the odds of our being right are 19 in 20 (95% confidence level). The more people we ask, the better the odds are that we are right and the more tightly we can guess exactly how many prefer chocolate. Put another way, the more spoonfuls of soup we have, the more certain we are how the pot tastes.