2.1: Why It Matters- Summarizing Data Graphically and Numerically

Why understand how to summarize collected data both graphically and numerically?

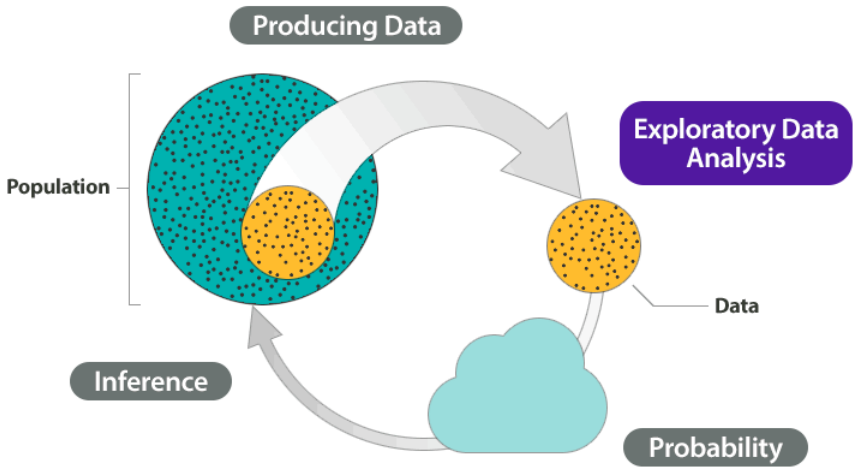
Before we begin *Summarizing Data Graphically and Numerically*, let's see how the new ideas in this module relate to what we learned in the previous module, *Types of Statistical Studies and Producing Data*.

Recall the Big Picture:

We begin a statistical investigation with a research question. The investigation proceeds with the following steps:

- Produce Data: Determine what to measure, then collect the data. ← **Types of Statistical Studies and Producing Data**
- Explore the Data: Analyze and summarize the data (also called exploratory data analysis). ← **Summarizing Data Graphically and Numerically**
- Draw a Conclusion: Use the data, probability, and statistical inference to draw a conclusion about the population.

The previous module focused on methods for collecting reliable data. In this module, we focus on summarizing and analyzing data. In the Big Picture of Statistics, we call this **exploratory data analysis**.



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