

Chart Selection Worksheet

Choose a chart from the question, variable types, and communication goal.

Start with the analytical question

Question	Good starting point	Key check
How is one variable distributed?	Histogram, density, box, or dot plot	Show scale, spread, and unusual values
How do groups compare?	Dot, interval, box, violin, or bar chart	Show uncertainty or raw data when useful
How are two numeric variables related?	Scatterplot	Check form, clusters, and overplotting
How does a measure change over time?	Line or run chart	Preserve time order and intervals
How do parts contribute to a whole?	Sorted bar or carefully designed stacked bar	Use a meaningful denominator

Design choices

- ☐ Use a title that states the question or finding and label axes with units.
- ☐ Choose an honest scale and avoid unnecessary three-dimensional effects.
- ☐ Use direct labels, readable ordering, and a colorblind-safe palette.
- ☐ Show sample size, uncertainty, missingness, or data source when interpretation depends on them.
- ☐ Check the chart at its final display size and in grayscale when relevant.

Decision record

Audience and decision supported

Selected chart and why it fits

Accessibility and validation checks

Use this resource with the related DataStatPro guide. Adapt every decision to the approved protocol, data structure, and destination requirements.