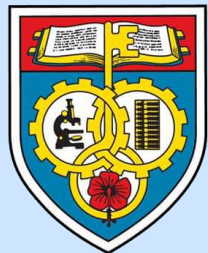


Data Viz with



+ a b l e a u[®]



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What is Data Visualization??

The use of various **visual aids** on data to describe, represent, contrast, discover patterns, draw attention, stimulate interest, focus on, ...

**A picture is worth a
thousand words.**

Find Stories in Our Data



We can **imagine** various stuffs when looking at a data.

This gives us **insights!**

Tell Stories using Our Data



Knowing data helps us **select intended perceptions to convey our messages.**

Understanding Data Types



Discrete

Countable data



Continuous

Measurable data



Binary

Only 2 categories



Nominal

More than 2 categories



Ordinal

Categories with orders

Missing Values

Non-zero value



null



0



undefined



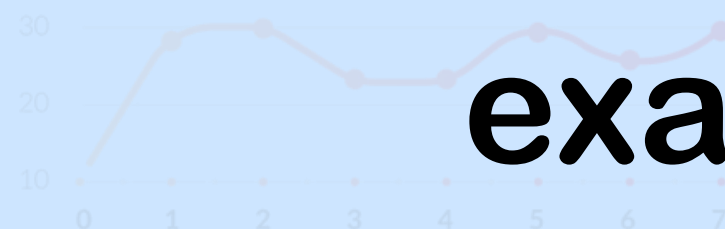
[Meme] I dont have a good title for this.

Let's look at some examples of chart.

Lorem Ipsum



Dolor si amed



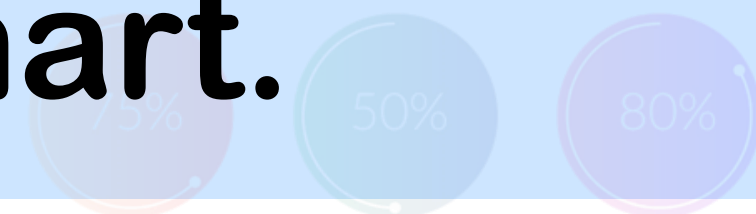
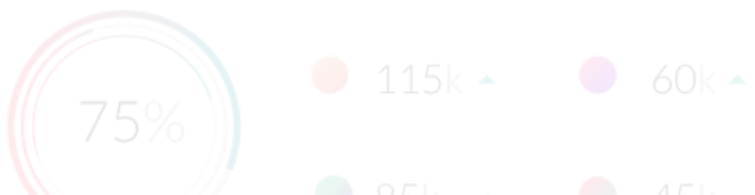
Sed diam



Euismod tincidunt

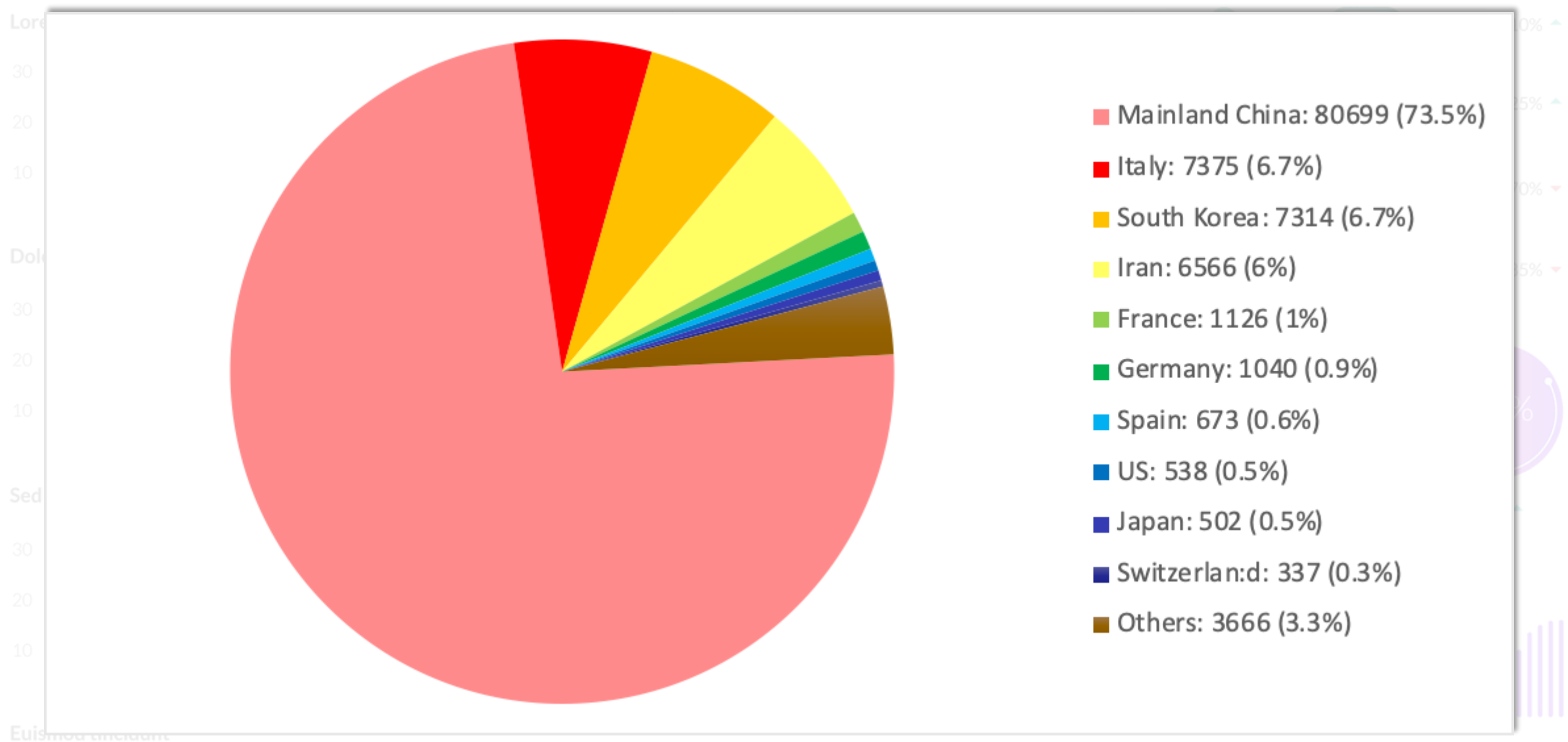


Dolore magna



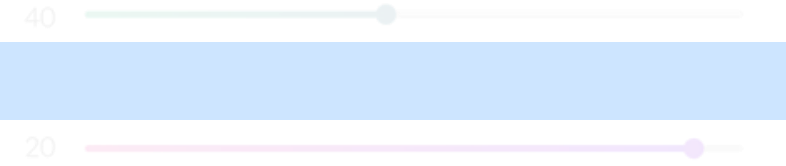
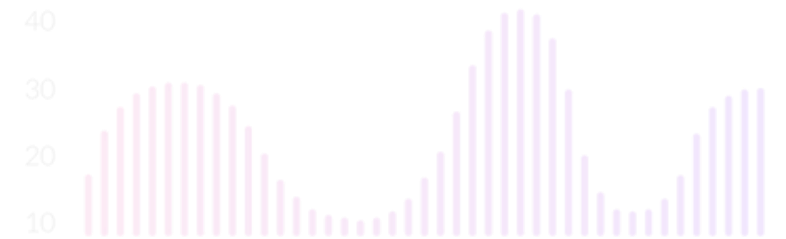
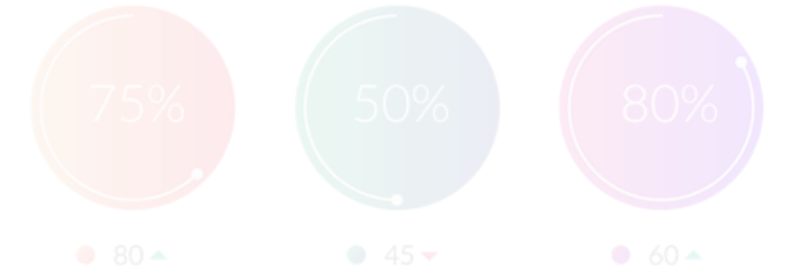
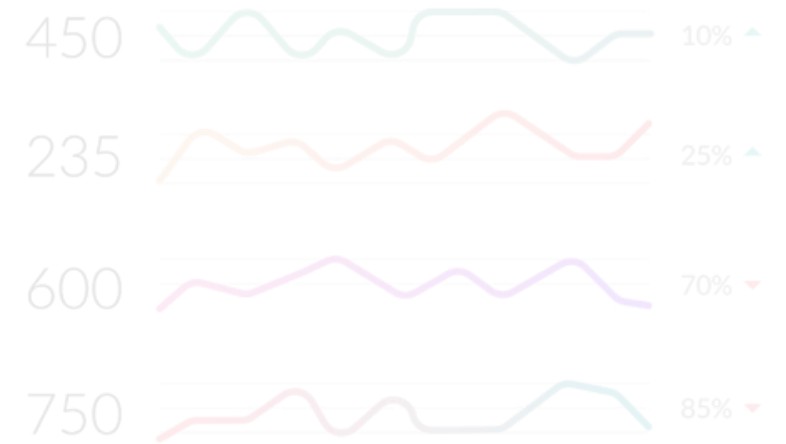
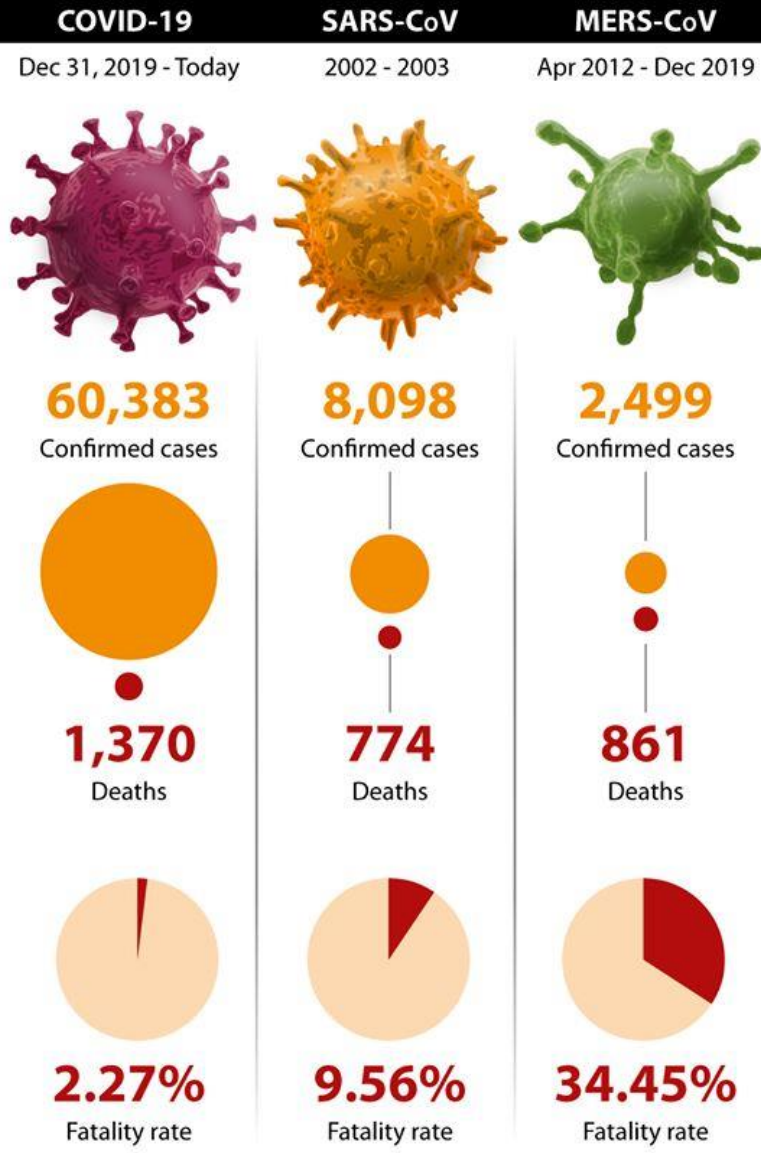
80% 45% 60%



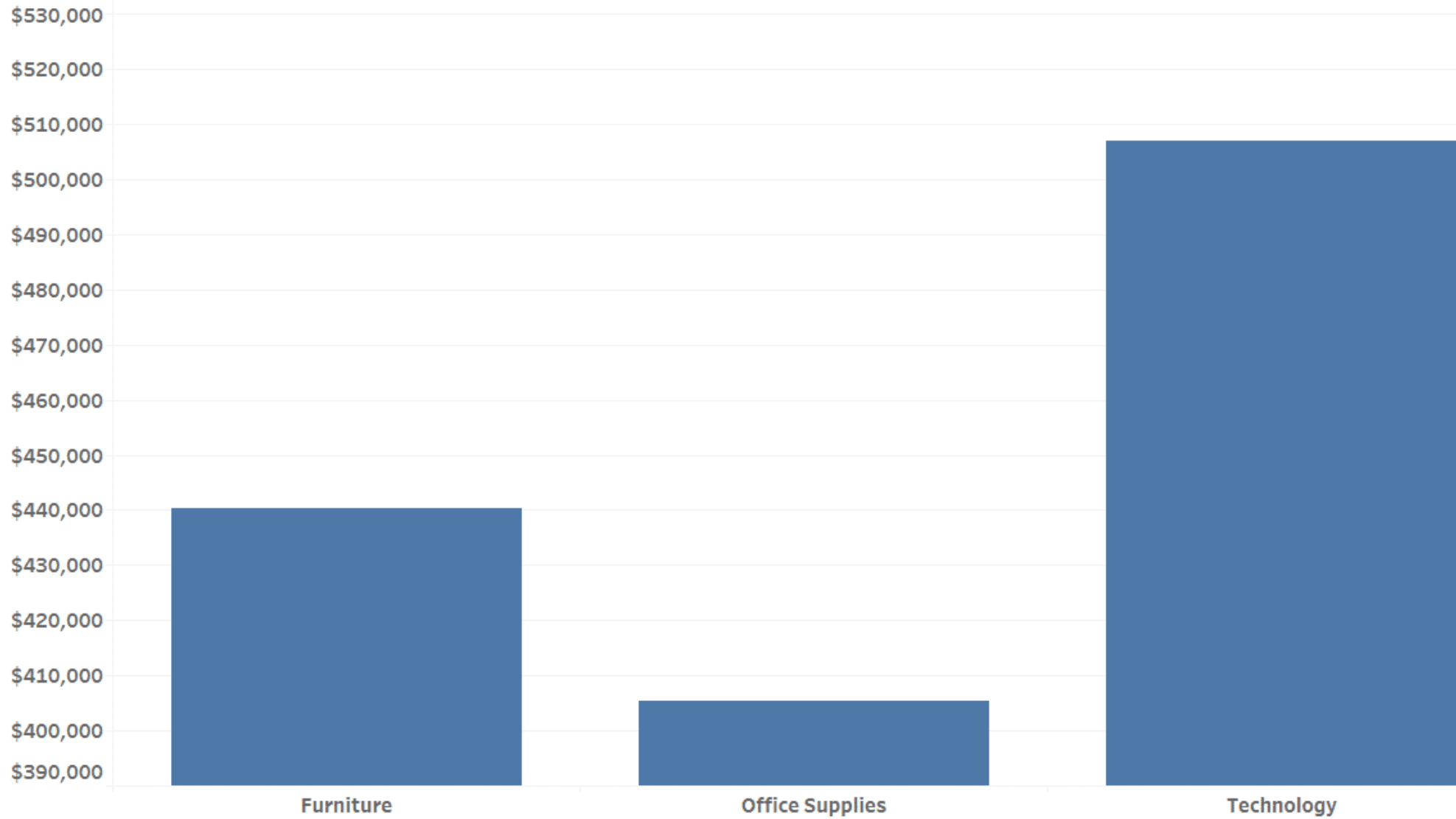


Source: <http://thinkagile.net/covid-19-pie-chart-best-practices/>

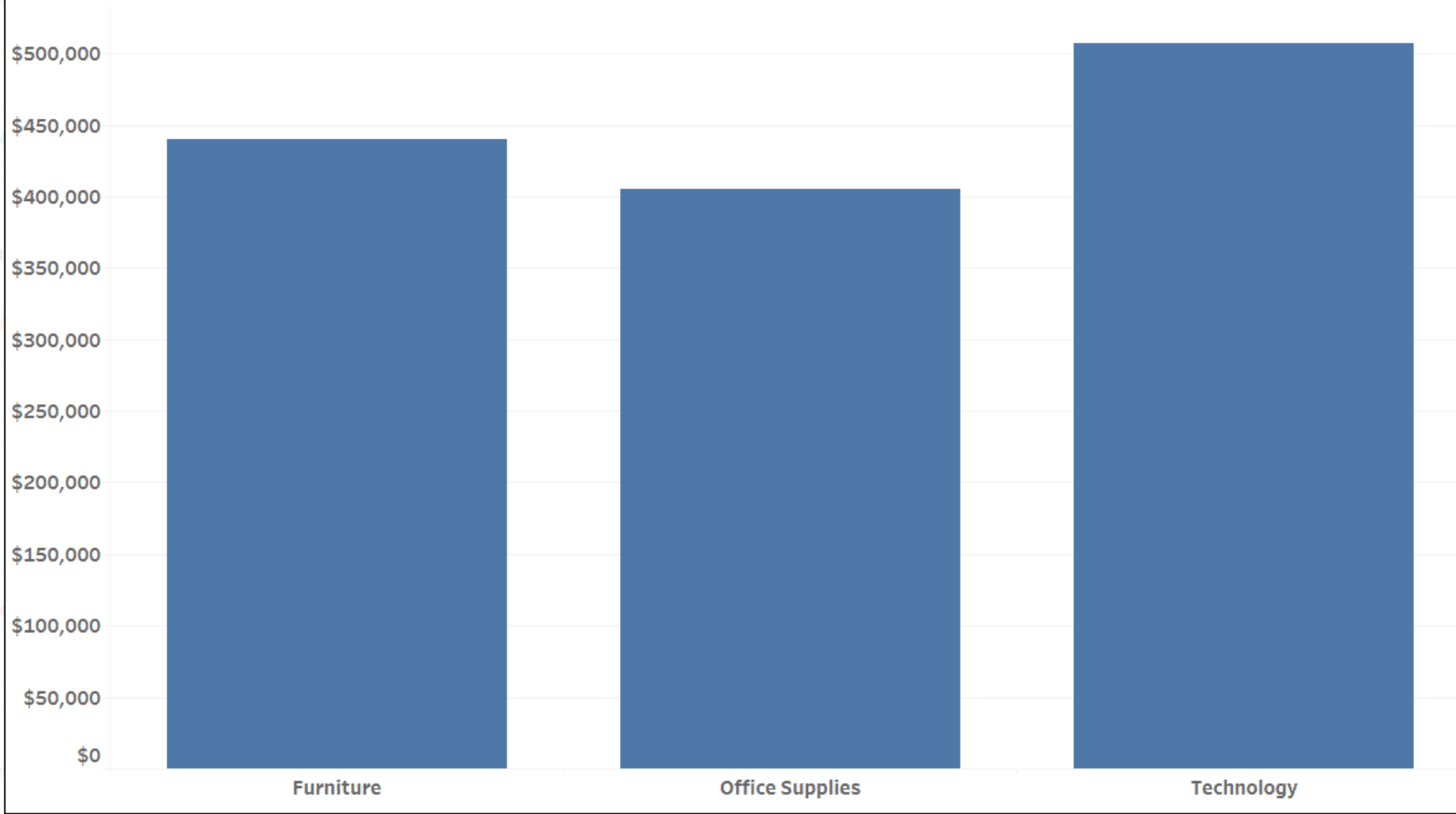
LESS DEADLY BUT MORE CONTAGIOUS

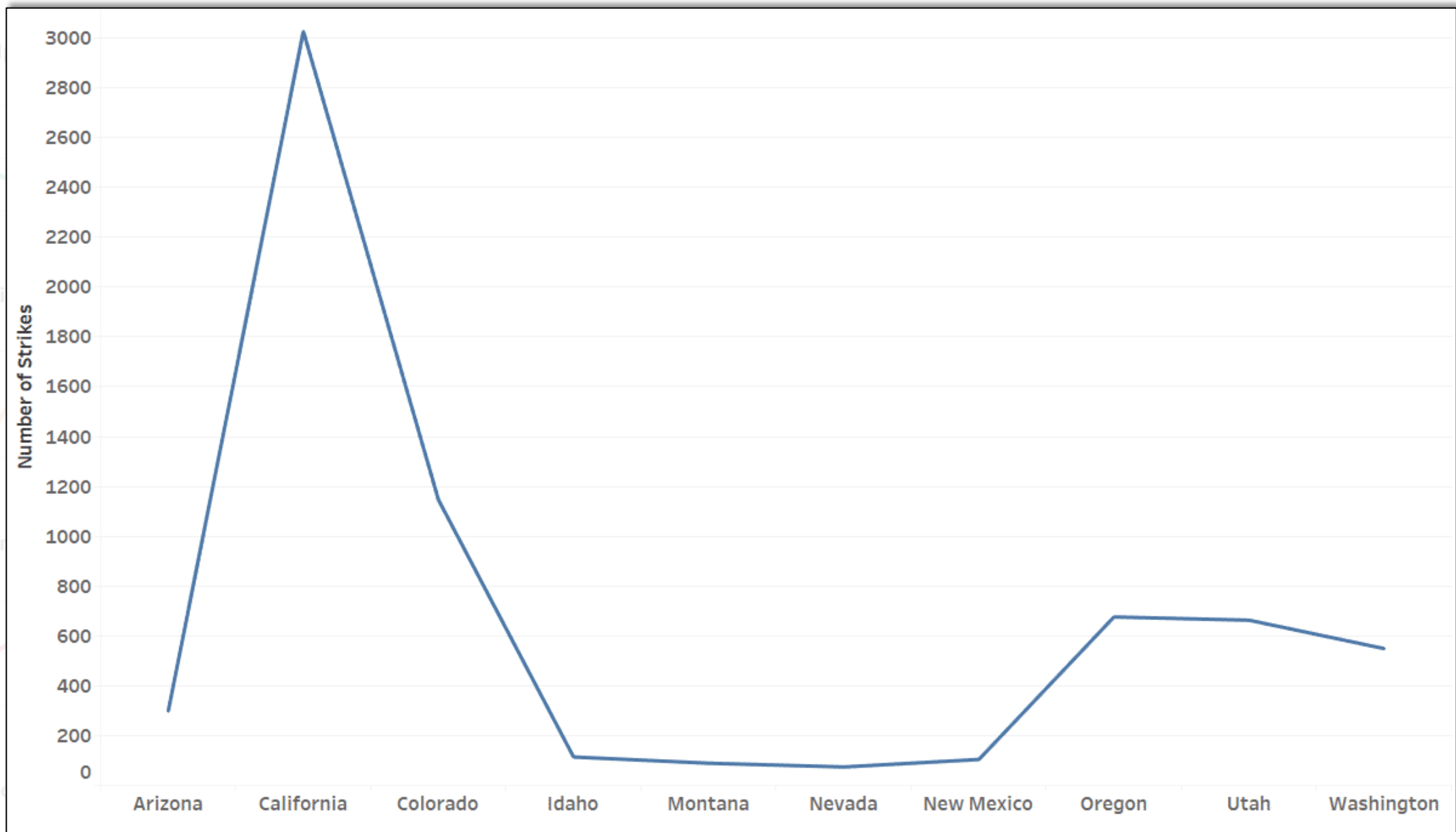


Shipping cost

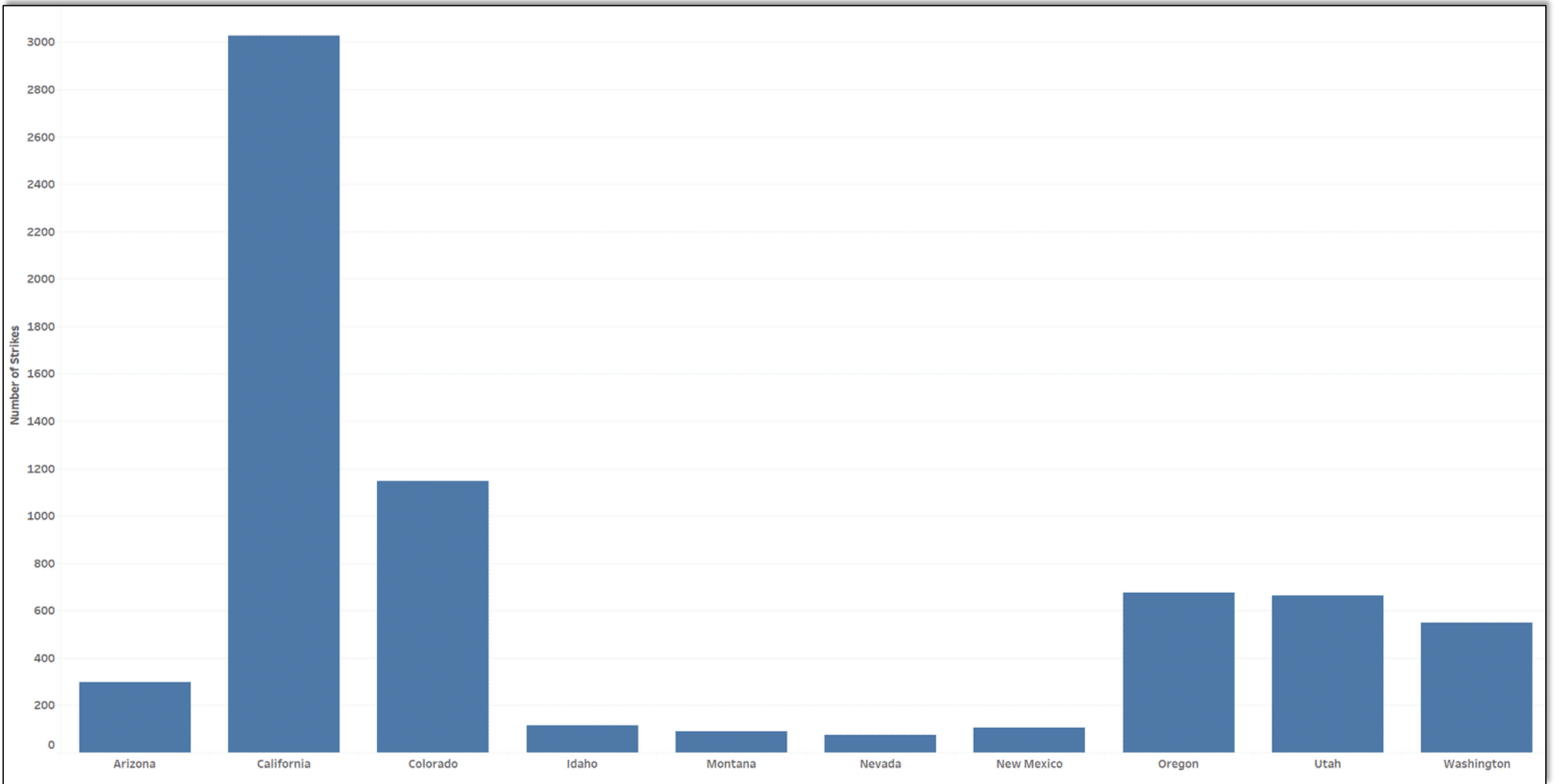


Shipping cost



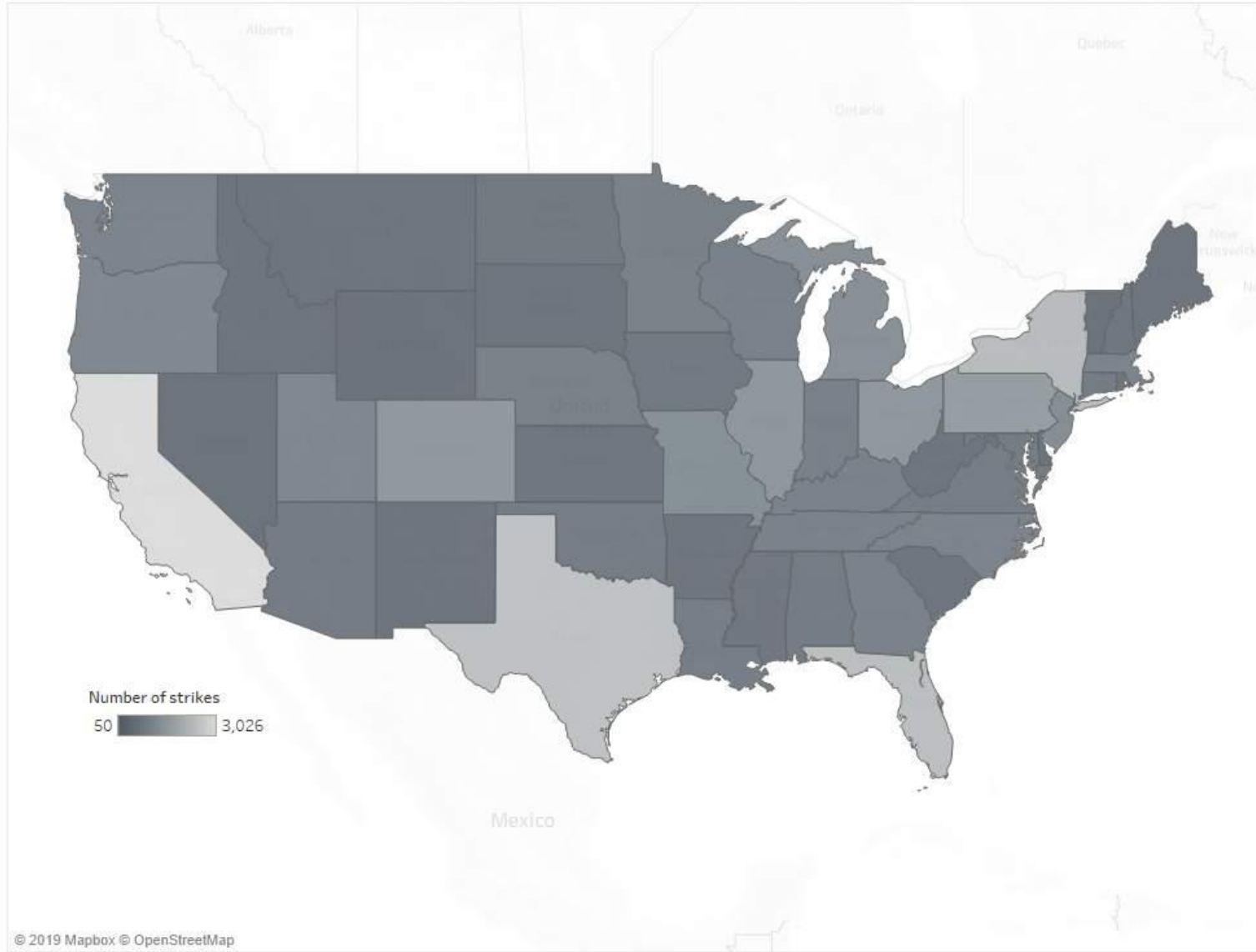


Source: Tableau

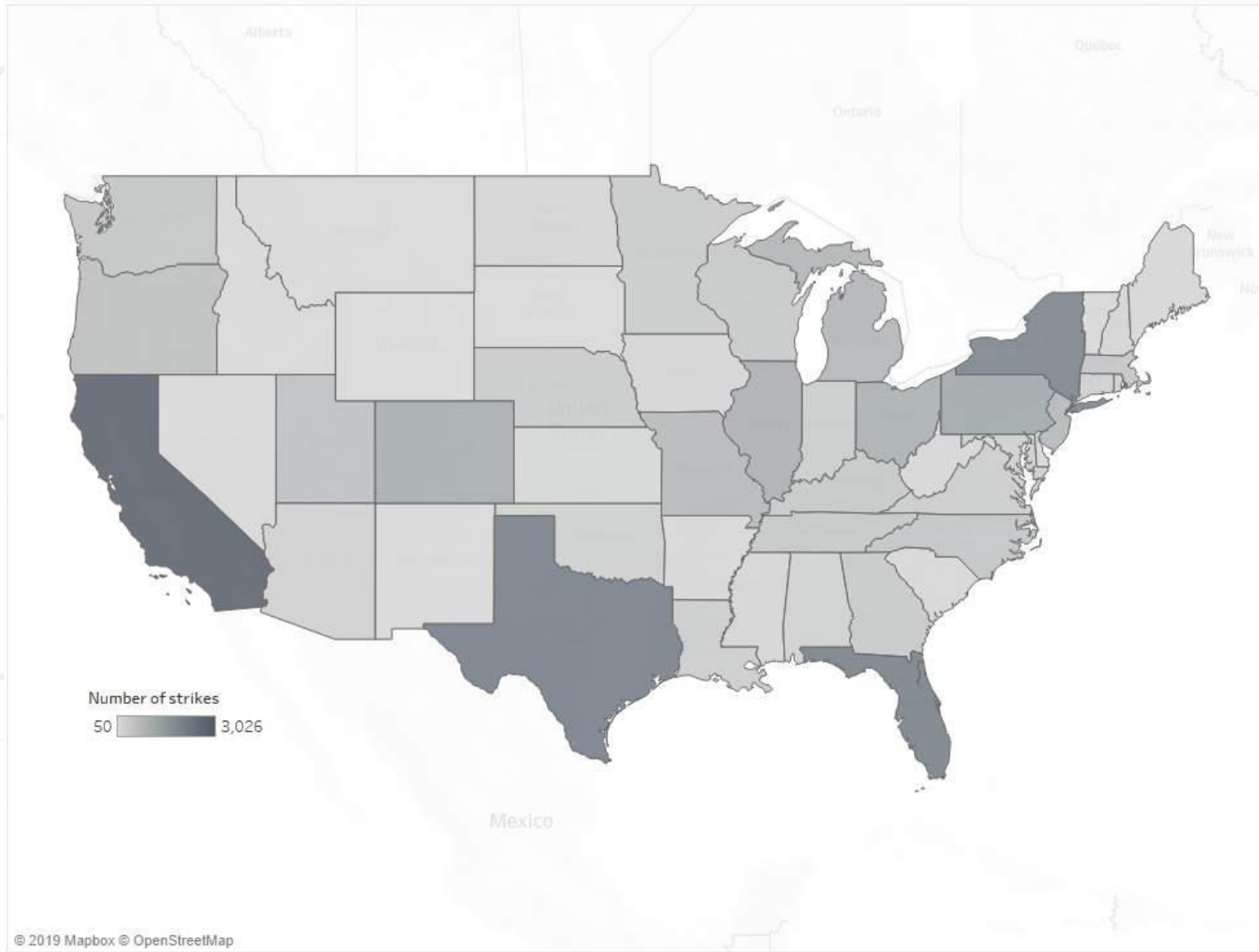


Source: Tableau

Wildlife Strike Occurrences by State



Wildlife Strike Occurrences by State



Common Viz Issues

➔ Inappropriate choice of chart type

➔ Too much information

➔ Poor choice of visuals (color, patterns, lines, ...)

➔ Inconsistent visuals and scales

➔ Inaccurate quantitative representation

Data Viz Tips

- Be **curios**. Think. Develop our **senses** to spot weird patterns or trends.
- Focus on our **audience**. Different audiences may interpret differently.
- Ensure **clarity, precision, efficiency**

Data Viz Inspirations

<https://datavizproject.com>

<https://www.coronatracker.com/>

<https://www.arcgis.com/apps/dashboards/bda7594740fd40299423467b48e9ecf6>

Last Question

How many **dimensions** can we represent in a single chart?

x-axis, y-axis, secondary y-axis, colour, size/area, shape/pattern, ... (anymore?)



Tools

- Tableau Desktop for Students (2 years free license): <https://www.tableau.com/academic/students>
- Tableau Online: <https://sso.online.tableau.com/public/idp/SSO>
- Tableau Public: <https://public.tableau.com/en-us/s/>

Resources

- Tableau e-learning (after signing up Tableau for Students): <https://elearning.tableau.com/>
- Tableau free training: <https://www.tableau.com/learn/training/20211>