**Data Visualization Checklist** (Emery, n.d.)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Description** | **2** | **1** | **0** | **n/a** |
| **Data are labeled directly**  -Position data labels near the data rather than in a separate legend. Eliminate/embed legends when possible because eye movement back and forth between the legend and the data can interrupt the brain’s attempts to interpret the graph. |  |  |  |  |
| **Labels are used sparingly**  -Labels used are informative and not redundant. |  |  |  |  |
| **Grid lines present when necessary**  -Grid lines muted, and present when precision is needed. |  |  |  |  |
| **Colors used for display in difference in data**  -Color is used to point out differences and not needlessly distracting. |  |  |  |  |
| **Proportion of graphics does not distort the data**  -Axis starts at same point, proportionate, and not misleading. |  |  |  |  |
| **Axes do not have unnecessary tick marks**  -Tick marks used to identify precision only |  |  |  |  |
| **Usability compared to Data Ink Ratio**  -Chart is readable without unnecessary graphics and information. |  |  |  |  |
| **Appropriate level of precision**  -Topic of chart does not have decimal precision when overall idea is large scale. |  |  |  |  |
| **The type of graph is appropriate for data**  -Data are displayed using a graph type appropriate for the relationship within the data. For example, change over time is displayed as a line graph, area chart, slope graph, or dot plot. |  |  |  |  |
| **Text sufficiently contrasts background**  -Black/very dark text against a white/transparent background is easiest to read. |  |  |  |  |
| **Graph is two-dimensional**  Avoid three-dimensional displays, bevels, and other distortions. |  |  |  |  |
| **Charts are simple to read**  -Information is close together and eyes do not need to move around to read the chart and data is intentionally ordered. |  |  |  |  |
| **Chart Titles are short and descriptive**  -Titles make sense and relate to information on chart. |  |  |  |  |
| **Text size is hierarchical and readable**  -Title are larger than annotations, which are larger than labels, which are larger than axis labels, which are larger than source information. |  |  |  |  |
| **Gridlines, if present, are muted**  -Color should be faint gray, not black. Full points if no gridlines are used. Gridlines, even muted, should not be used when the graph includes numeric labels on each data point. |  |  |  |  |

# References

Emery, S. E. (n.d.). Retrieved from http://stephanieevergreen.com/wp-content/uploads/2016/10/DataVizChecklist\_May2016.pdf