

1. Given a brief rationale for your design. What choices have you made? Is there something we need to know to interpret it?
 1. Because my goal is to emphasize the difference in “relative amount” between the ten purposes over time, I chose to use a stacked area plot. Although it can be hard to read the exact value from the stacked area plot of a given purpose in a specific year, the plot makes it clear as to which purpose is more prominent in a specific time window. For example, it is clear that “rail transport” becomes more prominent around 2008.
 2. To which purpose has a greater total disbursement amount (summed over time) than the other, I order the areas by the total amount such that the one at the bottom (i.e., air transport) has the largest value, and the one at the top (i.e., power generation/renewable source) has the least.
 3. I overlaid icons on top of the area of each of the purpose to make it easier for people to know which purpose each area represents for. This would also help those with color blindness to read the plot more easily. Note that these icons are under copyright licenses so if I wanted to publish the plot, I would either need to find a license-free version or create ones on my own.
 4. The icons were placed roughly around the year when the corresponding purposes become the most prominent. This also highlights which purpose is the most prominent in each time duration.
2. How have you adapted your initial design based on the feedback that you have gotten?
 1. One of the critiques correctly pointed out that because there are 10 unique colors, each for a unique purpose, it can be hard to distinguish between these ten colors. I therefore added an icon on top of the area of each purpose. This would also help those with color blindness to read the plot more easily.
 2. The critiques also correctly pointed out that it could be difficult for lay people to understand the exponential notations, so I changed the y-axis labels from exponents to character expression (e.g., from “ $2e+10$ ” to “20B”). I hope this would improve the readability for those who don’t know exponents.
 3. To address another critique about that using grey to color-code “rail transport” is not ideal because it shares the same color as the background, I convert the background color from grey to white.

4. To address another critique about that I didn't make it clear I was using the reduced dataset, I also updated the caption to make it clear that I was using the reduced dataset.
3. How did you make it (tell us the specific tools - especially if you did some programming). How faithful is your design to the actual data? (this might be anything from "it's completely a sketch based on my impressions from a quick look at the data" to "it was computed from the actual data" or anything in between - please be specific)
 1. I used R with the package "tidyverse" to transform the data and with the package "ggplot2" to visualize the reduced data set. The design is computed from the actual data. The output is then embedded into a word document in which I added the caption. I then convert the word document into a pdf file.