US Census Data – Nadav Oved

NOTE: Findings are detailed in the links.

Question 1 - Which states have the best transportation?

Dashboard link: <u>us_trans_nadav_oved | Tableau Public</u>

Summary:

Me being aware of the relative complexity of the question above, I have decided to compare transportation efficiency by an aggregated calculated field:

Public Transportation User Count / Average Commute Time

The dashboard consists of 2 charts: one is a geographical representation, and the other is a bar chart.

NOTE: It would've been a much more accurate factor if county surface area was given.

Although my the comparison isn't perfect, I felt like it would rightly appreciate the more populated states, as they succeed in maintaining low commute time while serving many users

Findings: It appears as if most of the states have similar transportation efficiency levels. A positive exeception is New York, which comes on top by a huge gap. It's important to note that more populated states have higher transportation factors, beacuse they have more public transport users

Design:

I've chosen to visualize this factor in two different charts, because I felt like a geo map and a bar chart would nicely complement each other: the geo map offers the viewer a more physical representation of the findings, but does not adequately supply a numeric, magnitude-wise comparison. This is complemented by the bar chart.

Resources: N / A

Question 2 - How income (per capita) level is distributed across the US?

Story link: (left caption)

Summary:

Given the source's various income data, it was clear that there were many ways I could investigate income distribution. Personally, I was interested in income per capita. The dashboard consists of a geo map expressing the income (per capita) levels across the US.

Findings: It is notcible that most states have medium level of income per capita. At the upper bound, we have

The District Of Columbia with 47K per capita. At the lower bound, we have Puerto Rico with 11K.

Design:

I created a geo chart colored by the different income levels, as I felt it would be an adequate explanatory representation of the income data, while giving its viewers a clear mental image of the distribution of poverty across the US. In addition, I made sure the color palette would be appropriate for colorblind audience.

Resources: N / A

Question 3 - What correlation (if any) is present between geolocation and poverty percentage?

Story link: (right caption)

Summary:

I felt like it was a question I was genuinely interested in, and indeed, it produced very interesting results (see 'Findings' below). The dashboard consists of two scatter plots, one for each geolocation parameter (latitude / longitude). Personally, it was my favorite question, because it made me think about poverty and financial situation from a geographical aspect, with which I didn't get a lot of prior to it.

Findings

- *poverty percentage / longitude correlation = 0.575*. There's a moderate positive correlation between how eastern a state is to its poverty percentage. i.e., we can expect povery levels to **rise** as we go **east**.
- *poverty percentage / latitude correlation = -0.61*. There's a moderate negative correlation between how nothern a state is to its poverty percentage. i.e., we can expect the poverty levels to **rise** as we go **south**.

Design:

Because geolocation consists of longitude and latitude, I created two scatter charts, with vertical axis representing the poverty percentage, and the horizontal representing the longitude / latitude value of a state.

Although one might consider scatter charts more of an exploratory means, I felt it was the right tool for conveying the findings to the viewer, as the question is very statistical in nature.

Resources: N / A