US Census Demographic Project

Which states have the best transportation?

Links:

https://public.tableau.com/views/USCensusDataProject_16495026489100/Whichstateshavethebesttransportation_1?:language=en-US&:display_count=n&:origin=viz_share_link

Summary:

In order to find out which country has the best transportation; it is necessary to take into account the various factors so that the scale on which we will decide is really reflective of the quality of transportation.

• The number of transportations used does not necessarily express the quality of transportation in the state, because this is affected by the population of this state, and there is a difference in population of the different states.

• The transportation time taken is a good indicator of the quality of transportation, but some factors must also be taken into account. For example, the short time does not necessarily indicate the quality of transportation, because this is also affected by the population in the end, as there are remote states with a small number of residents.

• What should be considered is the time taken in relation to the population, To do this i created a new column

(transportation quality) in which the ratio between the average transportation time to the population in each state is calculated, whenever the ratio is lower, this indicates that this state has better transportation.

- We find that the states (District of Columbia, Delaware, Connecticut, New Jersey,) are the best.
- But it must be taken into account that these states have a very small number of residents compared to the rest of the states, and this has another effect, as public transportation is used faster than usual, even if this transportation is the same type of transportation used in the worse states, and there are also many factors and dimensions others that should influence this conclusion are the quality of roads in the state.
- We can ignore the first few states from this list because they are considered remote and have a small number of residents, and consider that the next states in the list are the best.

- The average was used because this measure expresses time.

Design:

• The bar chart was used instead of the map for faster and easier reading and because the map is not needed as a filter because there is only one visual.

• Arrange the bars in ascending order, where the states at the top are the best in transportation because they are the least in time.

Resources:

N/A

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How does income and poverty look across America?

Links:

https://public.tableau.com/authoring/USCensusDataProject_16495026489100/Dashboard1#1

Summary:

• Is there a relationship between the general income in the state and the rate of poverty in it?

In general, the chart showed that the income in most states is greater than the poverty rate, but there are two states in which the poverty rate appears greater than the state's income, namely (Mississippi, Puerto Rico). This leads us to a quick conclusion that these states are the poorest states.

• To see a clearer relation, it would be better to calculate the most income states and the poorest states based on income per capita, and this is a good indicator because it takes into account many factors and in the end calculates the value of income per capita.

• The chart showed that the states (District of Columbia, Connecticut, New Jersey, Rhode Island, Massachusetts, Maryland) are the richest, and the states (Puerto Rico, Mississippi, Arkansas, Georgia) are the poorest according to per capita income.

• We may now wonder what makes the income per capita rate great or small. Is there a certain industry in this state that its people are professional in, or is there an impact on the geographical area or even ethnicity?

To see this relationship, I created a scatter plot chart between the income per capita and the values of other measures.

We can deduce from the chart some important relationships between per capita income and other factors:

• Ethnicity: no relationship.

• Gender: no relationship.

• Population: no relationship.

• Construction workers: strong positive.

• Self-employed: moderate positive.

• Private work: strong positive.

• Transportation using drive: strong positive, but we certainly do not confirm the existence of causation.

• Number of home workers: moderate positive.

Design:

• In the income and poverty chart, the colors were modified to become more consistent, and the data was arranged in descending order for ease of reading.

• In the scatter plot chrt, the colors of the data points were modified to be all the same color, and a filter was added to the scales to know only one relationship also the type of this filter was modified to become single value drop down.

• In the dashboard: the map was used as a filter, the titles were modified instead of being deleted to be an hint of the chart, the places were modified.

Resources:

N/A

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What is the nature of transportation in the state with the largest number of workers from home in relation to the population?

Links:

https://public.tableau.com/authoring/USCensusDataProject_16495026489100/Dashboard2#1

Summary:

• we must first determine which state has the largest number of workers from home relative to the population in this state. To do this, we create a column (work at home percent) with the percentage of workers from home from the state's population

• (Nebraska) is the state with the largest workers from home relative to the population

• In the second chart, I am trying to find out what are the common transportations in this state. We find that, driving is the common way of transportation like the rest of the states, but we also find a very good percentage of using other transportation and walking on foot, and this is not found in most other states, and also the number of drivers is relatively few This indicates that traffic congestion in this state is moderate.

• Returning to the transportation quality chart, contrary to what is expected, we find that Nebraska occupies a bad position in the quality of transportation, but this is

explained by the high percentage of the persons who walk instead of using other transportation, which leads to that they take a longer time to reach and this is a bad indicator in relation to the standard witch we used to measure the quality of transportation is time. And also because the area of the state is not small.

Design:

• In the workers from home chart, the sum was used because the purpose is to know the number.

• In the other chart, i placed a state filter to filter the results according to the state of Nebraska, only those who are interested in it.

• The colors of the bars have been modified to make them all the same color instead of the multiple colors that were set by default.

• also i removed the legend that represents the color because it is written next to each bar what it represents.

• In the dashboard: I added the first chart (transportation quality chart) to see the quality of transportation in Nebraska, I kept the state filter to see the type of transportation in other states as well, not just in Nebraska, I added a highlighter to focus on a specific state only in this

case Nebraska, which has the largest nmber of workers from home.

Resources:

N/A