Unekwu Noel Abdullahi - Tableau Project

1. Insight no.1

Link -
https://public.tableau.com/shared/GH34ZXJW8?:display_count=n&:origin=viz_share_link

Summary - We created a dynamic dashboard that shows the top 10 states most affected by unemployment and also went further to show the racial spread with a pie chart in the tooltip to show geospatial relationships between the affected states on a map.Puerto Rico has an usually high unemployment rate at 19% compared to all other states which are between the 10%-12%.Hispanics are the dominant ethnic group in Puerto-Rico with over 95% of the population and does not have the ethnic diversity like other states.We observed clusters with highest unemployment mostly around the SouthEastern United States and Puerto Rico on the map.

Design - Using the map, we looked for groups of states with related characteristics in the same area. We chose to show the user's ethnicity as a pie chart in the tooltips to avoid making them navigate to another page. The pie chart clearly shows the breakdown of racial groups.

Resources -

- Top N and Bottom N
- Embed Worksheet in Tooltip

2. Insight no.2

Link -
https://public.tableau.com/shared/4HXPHHM68?:display_count=n&:origin=viz_share_link

Summary - This is an interactive Dashboard showing the 5 states with the highest and lowest commute times.The Percentage column charts shows the varying proportions of the commute types which can be viewed by hovering the mouse on the different states.

New york has the highest mean commute time of 32 minutes, by category District of Columbia has the highest commuting in public transportation which is about 38% .It

seems people avoid driving because of the availability of public transport.These are clear signs that District of columbia has the most efficient transportation system in the united states based on these two factors.

The highest commute times are clustered around the North-East coast .The states with the lowest commute times are clustered around the North Western United states with South Dakota having the lowest commute time of 17 minutes.

Driving Is the most used commute type for both the highest and lowest commute times in most cases except for the District Of Columbia. It is observed that the top states with the highest commute times have more people commuting in public transportation which significantly reduces commute time.

Design - Using the map, we looked for groups of states with related characteristics in the same area. The map is set by default to 5 but can be adjusted based on viewer discretion to any number less than 10.We chose to show the different commute types categories by percentages with column charts in the tooltips to avoid making the viewer navigate to another page. The column charts clearly shows the breakdown of the different commute types by percentage for each broad group on the dashboard and sub groups in the map.Percentage column charts are the same as stacked charts but show values as a percentage meaning that all the bars are the same length. You can use them in the same way as stacked charts and they are particularly useful when comparing relative differences.

Resources -

- [Top N and Bottom N](#)
- [Embed Worksheet in Tooltip](#)
- [https://help.anaplan.com/01423aaa-8100-4f20-8d2b-accca933bbca-Column-Charts](#)

3. Insight no.3

Link -
https://public.tableau.com/shared/K2YW43CR9?:display_count=n&:origin=viz_share_link

Summary - This is an interactive Dashboard showing the 5 states with the highest and lowest incomes.The disparity between the highest and lowest is so huge with

Maryland having the highest income of $78,765 and Puerto Rico with the lowest income of $20,721.

Asides Puerto Rico The income range of the other 4 states with the lowest income is comparable between $38,910 and $43,296 .The top 5 states have comparable income between $73,264 and $78,765.

The Pie chart shows the ethnic spread in the United states with the highest and lowest income. Whites dominate both categories closely followed by blacks in the Top 5 income states while Hispanics are the second most dominant ethnic group in the Top bottom states.

The percentage of Whites and blacks in both Top 5 and Bottom 5 states are almost the same, but the hispanics are more in the bottom 5 states.

Design - Bar charts are excellent for displaying categories with associated numbers, thus each state's name and income were plotted using bar charts. This chart has a dynamic choice of states, so the user can choose to see the top and bottom income.Clicking on each bar highlights the pie chart showing the ethnic distribution within that state. Orange-Blue colors were selected to ensure it is friendly to color blind people.

Resources -

Top N and Bottom N