

Project 6: Build Data Dashboards

In the Udacity Business Analyst Nanodegree

Telling Stories with Data in Tableau

Intro:

My story shows the uneven economic distribution of Income that trends into Poverty using Tableau data-visualization dashboards. This inequality is due to many factors. I will be using the data from the census table in the acs2015-county-data.csv database to show three Insights into

Poverty in the US

In this [Story](#) I use 3 Dashboards to allow the viewer 3 data visualization Insights into **Poverty in the US** from the 2015 census data. My main focus is on displaying how having a reliable Commute to a Job to receive Income is necessary to stay away from Unemployment and above the Poverty line.

The [Story](#) opens on [Dashboard 2](#) to center my main query on the source of Income which is Jobs and Commute. Then on the left [Dashboard 1](#) without Income you fall under the Poverty level. On the right [Dashboard 3](#) being Unemployed possibly from lack of reliable transportation is associated with higher Poverty.

Insight 1:

- **Title:** **Lower Median Income associated with Higher Poverty**
- **Question:** Does the census data show if **Lower median Income is associated with Higher Poverty?**
- **Main Insight:** Yes. As Median Income goes down the Poverty rate goes up.
- **Links:** [Dashboard 1](#)
- **Summary:** Lower Median Income is associated with higher Child and adult Poverty by State is the main insight I would like to be clear to the viewer. No or low Income can be caused by many things. The main point is to show a link between Median Income and Average Percentage of adult and Child Poverty by State..
- **Design:** I choose 3 horizontal Bar charts side-by-side to display Median Income by State next to Adult Poverty and Child Poverty as Average Percentages. My design consideration was to compare how when the Median Income is low or null by smaller Bar length the Average Percentage of Poverty is larger. Lower Income States show higher Poverty.
- **Resources:** <https://aspe.hhs.gov/poverty-guidelines>

Insight 2:

- **Title:** **Average Percentage of Jobs and Commutes by State**
- **Question:** How important is Commute in maintaining a Job and maintaining Income?
- **Main Insight:** We know from experience no or low income will cause you to fall under the Poverty level. Very important from becoming Unemployed! Many people walk to Jobs like Alaska..
- **Links:** [Dashboard 2](#)
- **Summary:** The ability to live above the Poverty line relies on Income from a Job. Reliable transportation is still critical in maintaining a Job and Income. Otherwise you become on Unemployment. Reliable Commute is Key for most Jobs! Unless you work from home remotely!
- So reliable transportation is critical to not become Unemployed.
- **Design:** In the center [Dashboard 2: Average Percentage of Jobs and Commutes by State](#),
- I used an interactive filter so when you Select a State the 2 charts above, Jobs by State and Commutes by State, will show the census data by categories as Average Percentage when you Hover over or Select, click, the State of choice.

The top 2 charts above are chosen as Bar charts to show the higher and lower average percentages by category by choosing a State from Select a State on the lower Map chart .

- **Resources:** No ride No Job.
<https://www.businessinsider.com/lack-of-transport-is-a-major-obstacle-to-employment-for-americas-poor-2018-1>
- Mean Commute is less a factor now as remote work jobs have increased * during the covid19 pandemic.
<https://www.brookings.edu/blog/up-front/2020/04/06/telecommuting-will-likely-continue-long-after-the-pandemic/>
- Remote jobs are expected to continue to increase in number.

Insight 3:

- **Title:** **Higher Unemployment associated with Higher Poverty**
- **Question:** Does the census data show if **Higher Unemployment is associated with Higher Poverty?**
- **Main Insight:** Yes. With no or low Income from a Job people trend below the Poverty level.
- **Link:** [Dashboard 3](#)
- **Summary:** Higher Unemployment can be the result of many factors. Such as transportation, lack of skills required, racial discrimination. Becoming Unemployed is related to being below the Poverty level.
- **Design:** I used a Tree and Bubble to allow the viewer 2 ways to visually see that higher Unemployment trends with higher Poverty. The top Tree chart shows larger size as higher Poverty and higher Unemployment as darker color shade. The lower Bubble chart shows higher Unemployment as larger size and higher Poverty as darker color shade.
- **Resources:** Unemployment reference charts job losses during covid19 pandemic
https://public.tableau.com/views/USUnemploymentUpdatedJuly2020/Dashboard1?:language=en&:display_count=y&:origin=viz_share_link
- Unemployment is at an all time high in 2020.

Summary: With no Income from being Unemployed (due to lack of Commute) leads to Higher Poverty.

Links:

https://public.tableau.com/profile/frida.rode#!/vizhome/Project_6_census_16032029502210/Story1

Dash1

https://public.tableau.com/shared/Z5N4PW5DC?:display_count=y&:origin=viz_share_link

Dash2

https://public.tableau.com/shared/GCG75WB5H?:display_count=y&:origin=viz_share_link

Dash3

https://public.tableau.com/views/Project_6_census_16032029502210/Story1?:language=en&:display_count=y&:origin=viz_share_link

