Driving Question-

"**How does childcare affordability change in Ohio (county wise) across Races, Age of the child and Child care settings"**

a. The first visual tool helps a family understand how their burden of childcare costs may change based on their demographics and the type of care facility they want for their children. The average childcare cost burden as a % of median income is 14% across Ohio.
   But families might benefit from more specific numbers when they are making life decisions.

For example, a Hispanic family with a toddler is considering moving from Akron (Summit) to Cleveland (Cuyahoga) or Cincinnati (Hamilton). Let's say they want their child to be in a center based child care. Then this tool identifies that between the options, childcare cost wise they may be able to save around 4% of their income if they move to Cincinnati instead of Cleveland.

b. My 2nd focus area provides a more comprehensive view of the affordability landscape in Ohio through a Heatmap.
   For example, some insights from this are :

   i. Overall Hispanics, Blacks, (American Indians and Alaskan Natives) have the toughest time affording childcare.
   ii. Cuyahoga, Franklin, Hamilton, Harrison, Jefferson, Mahoning and Trumbull counties have the lowest affordability across the state
   iii. It is cheaper for everyone if their children are older and/or they opt for home based care.

I've outlined the tip of the iceberg of this problem space although it is open to additional exploration. At this point, this research can be used by **parents and to be parents,** or by other researchers who could use the heatmap as a starting point for more focused research.

Data Sources:

1. https://www.countyhealthrankings.org/health-data/health-factors/social-economic-factors/income/median-household-income?year=2024&tab=1&state=39

2. https://www.dol.gov/agencies/wb/topics/featured-childcare

Limitations of this Project

- In the data set for median income, for certain races there were empty data points which I replaced with the average of the median income values for that race across all the

counties. This results in limited accuracy in the affordability % for those races in those counties.

Alternative Approach

- The missing data values could be replaced by more accurate data based on secondary research.
- Alternatively a more complete median income dataset could have given more accuracy, or I could have excluded the races with most missing values.

Next Steps

- Creating the data visualization on a Ohio county level map, where each county's affordability would be represented by a color scale. And a hover text for each county to contain all the other required information.
- Further secondary research to refine accuracy of input data
- Exploring other areas like impacts of childcare affordability on career or lifestyle choices