**Proposal for Project 1**

**Team:** A Dictionary of Data Analists

**Team Members:**

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**Housing Market vs. Household Income**

Our project is based on the fluctuation of the housing market and the average household income in the United States over the past decade (2011-2021). We plan to compare the different regions of the United States(NE, SW, S, NW, etc.) along with other popular trends that have occured. Some of these trends include migration between rural, suburban, and urban areas, changes in demand and value of properties. As part of our analysis we will take into consideration major events that may have impacted the data.

**Hypothesis**

Our hypothesis is that housing costs have increased dramatically over the past decade while median household income has stagnated.

**Data Sources Utilized:**

Housing/real estate APIs

<https://rapidapi.com/auth/sign-up?referral=/search/realtor>

<https://rapidapi.com/blog/best-real-estate-apis/>

<https://rapidapi.com/auth/sign-up?referral=/attomdatasolutions/api/attom-property>

<https://rapidapi.com/blog/best-real-estate-apis/>

Census data

<https://www.census.gov/topics/housing.html>

<https://www.census.gov/data.html>

<https://www.census.gov/data/developers/guidance/api-user-guide.html>

Redfin Data

<https://www.redfin.com/news/data-center/>

Kaggle/Zillow

[Zillow House Price Data | Kaggle](https://www.kaggle.com/paultimothymooney/zillow-house-price-data)

**Research Questions:**

* How does the average household income compare in the different regions of the country?
* How does the average cost of rent/mortgage compare in the different regions of the country?
* Are the average household income and the average cost of rent/mortgage mutually exclusive?
* Are there any trends of migration from urban to rural, or vice versa?
* How has each of these topics changed over the past decade?
* Are there any areas of the country where housing costs are inline with median household income?

**List of things to have visuals for:**

* Average income vs real estate prices (national compared to regional income vs costs)
* Region based housing market
* Rural vs urban housing market
* (proposal) racial based housing market

**Potential outlier/unaccounted for transactions:**

<https://www.wsj.com/articles/in-tight-housing-market-thousands-of-homes-are-reserved-for-certain-buyers-11622021400>

Defining/ sorting data

“regions”

What’s “affordable” (30%)? Of monthly income