

Data Visualization Project

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1. **My Essential Question & Answer**
2. **How I Got My Data**
3. **IDE Setup**
4. **Showing You The Website**

Essential Question

“Are we headed for a cost-of-living crisis based on how rents and median incomes have changed over time in major U.S. cities?”

Answer

Data from major U.S. cities shows that rents are rising faster than incomes. This growing gap means more households may soon struggle to afford housing if these trends continue.

How I Got My Data

Initial Datasets:

Rent Data: A file with monthly payment info by city over multiple years.

Income Data: A huge CSV (350k+ rows) containing median income by ZIP code.

Filtering & Matching ZIP Codes:

Mapped ZIP codes from the large income file to the cities I cared about in the rent data.

Removed all irrelevant ZIP codes, drastically reducing the dataset size.

Aggregating Income:

Grouped the filtered income data by city (or ZIP → city mapping) to compute average/median incomes.

Created a city-level CSV with fewer rows, making it easier to visualize.

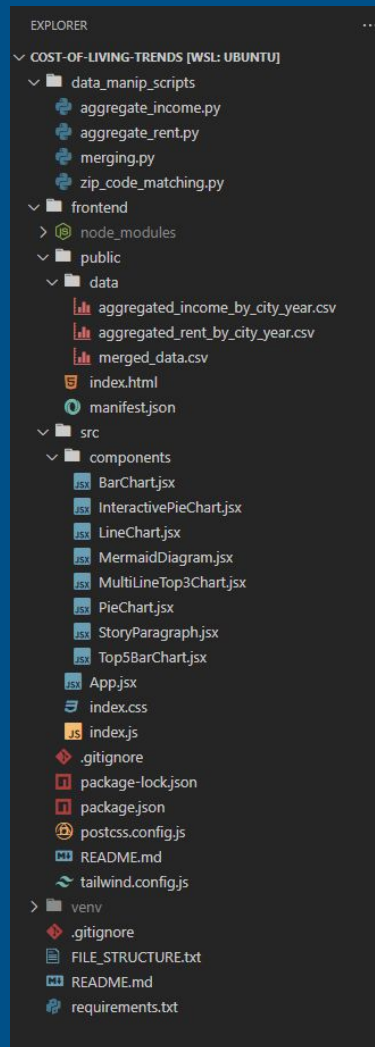
Merging with Rent Data:

Joined the aggregated income dataset and the rent dataset by City (and Year, if available).

Ended up with a merged_data.csv that shows both average rent and median income side by side, perfect for my analysis and website visualizations.

IDE Setup

This is how my IDE is setup and my file structure



7 directories, 28 files

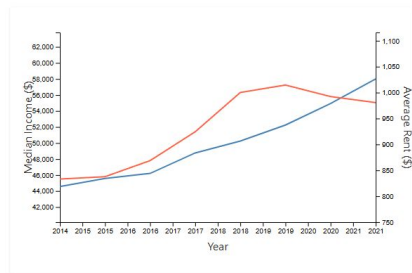
My Website:

Are We Headed for a Cost-of-Living Crisis?

Examining How Median Incomes and Rents Shape Our Economic Future

Incomes vs. Rents: The Growing Gap

Let's start by zooming in on one city. Over the past several years, rents (red) have often outpaced median household incomes (blue). When rents rise faster than incomes, families face an increased cost burden that can limit their financial freedom. Hover over either line to see which metric you're examining.



This chart may look modest, but it reveals an important trend: even a small difference between income and rent growth can compound over time, leading to housing insecurity and reduced savings for many households.

Thank you