IS 445 - ACG/ACU: Data Visualization - Fall 2023

Visualization Report 7

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The visualization titled **"The Salary You Need to Buy a Home in 50 U.S. Cities"** was published on August 1, 2022, by Avery Koop on the Visual Capitalist website.

One of the primary measures of one's potential to achieve the "American Dream" is their ability to become a homeowner. However, homeownership largely depends on one's income, which determines whether they qualify for a mortgage and the mortgage amount. The visualization graphically maps out the annual income required for home ownership in 50 different U.S cities, raising the question of how realistic and is the American Dream given the average national income and the income requirement needed to achieve it.

I liked the visualization because it makes such an important comparison of home prices and average income depending on the region of the U.S. one lives in. This shows us the cost of living in a given region. For example, we can see a huge difference between the cost of a median home in the Midwest cities and the price of the same home on the West Coast.

I didn't like the color gradient used to depict home prices since it is difficult to put a value on some of the colors provided on the map. The scale of these colors also has a 100,000-dollar range, which is a huge value. The yellow bars used to show salary requirements in each city were helpful but might also be difficult to interpret if the actual value wasn't provided on each bar.
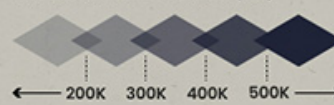
I also think that the average income in each state or in the presented metro cities should be provided as the real measure of the affordability of a home in the given city. Without this information, we can not evaluate the affordability of homes in these cities.

SALARY NEEDED TO BUY A HOME
in 50 U.S. Metro Areas

The American dream traditionally includes a big house with an equally large yard and a white picket fence. But with the **country's median home price coming close to $370,000** how realistic is home ownership for Americans in 2022?
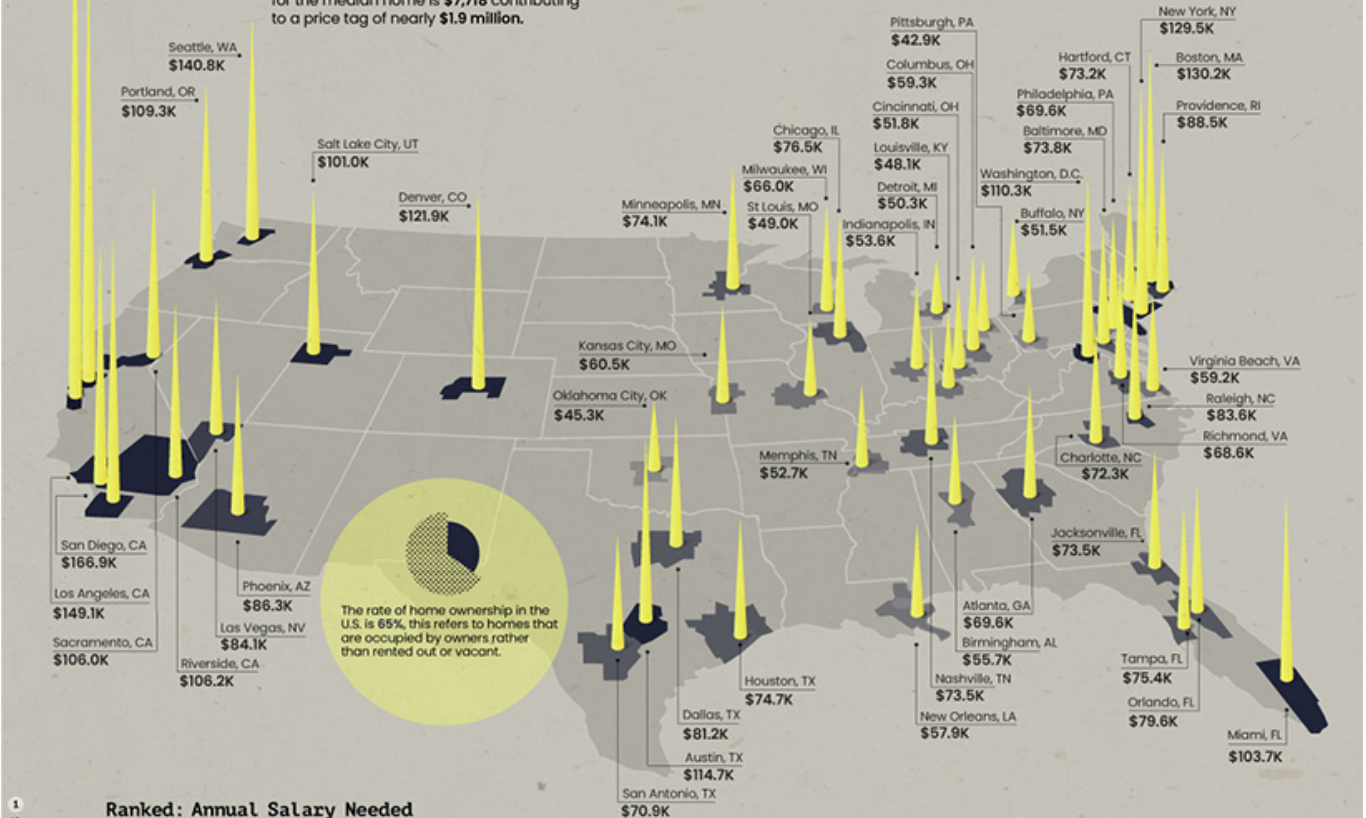
Median Home Price (USD)

← 200K 300K 400K 500K →

Annual Salary Needed (USD)

200K
150K
100K
50K

San Jose, CA
$330.8K

In San Jose, the monthly mortgage payment for the median home is $7,718 contributing to a price tag of nearly **$1.9 million.**

San Francisco, CA
$249.7K

Seattle, WA
$140.8K

Portland, OR
$109.3K

Salt Lake City, UT
$101.0K

Denver, CO
$121.9K

Pittsburgh, PA
$42.9K

Columbus, OH
$59.3K

Cincinnati, OH
$51.8K

Chicago, IL
$76.5K

Milwaukee, WI
$66.0K

Minneapolis, MN
$74.1K

St Louis, MO
$49.0K

Louisville, KY
$48.1K

Detroit, MI
$50.3K

Indianapolis, IN
$53.6K

Washington, D.C.
$110.3K

Buffalo, NY
$51.5K

Hartford, CT
$73.2K

Philadelphia, PA
$69.6K

Baltimore, MD
$73.8K

New York, NY
$129.5K

Boston, MA
$130.2K

Providence, RI
$88.5K

Virginia Beach, VA
$59.2K

Raleigh, NC
$83.6K

Richmond, VA
$68.6K

Kansas City, MO
$60.5K

Oklahoma City, OK
$45.3K

Memphis, TN
$52.7K

Charlotte, NC
$72.3K

The rate of home ownership in the U.S. is 65%, this refers to homes that are occupied by owners rather than rented out or vacant.

San Diego, CA
$166.9K

Los Angeles, CA
$149.1K

Sacramento, CA
$106.0K

Phoenix, AZ
$86.3K

Las Vegas, NV
$84.1K

Riverside, CA
$106.2K

Atlanta, GA
$69.6K

Birmingham, AL
$55.7K

Nashville, TN
$73.5K

New Orleans, LA
$57.9K

Jacksonville, FL
$73.5K

Tampa, FL
$75.4K

Orlando, FL
$79.6K

Miami, FL
$103.7K

Houston, TX
$74.7K

Dallas, TX
$81.2K

Austin, TX
$114.7K

San Antonio, TX
$70.9K

Ranked: Annual Salary Needed

Nationwide, the median salary needed to purchase a home is almost **$76,000.**

National Average

1 San Jose, CA
2 San Francisco, CA
3 San Diego, CA
4 Los Angeles, CA
5 Seattle, WA
6 Boston, MA
7 New York, NY
8 Denver, CO
9 Austin, TX
10 Washington, D.C.
11 Portland, OR
12 Riverside, CA
13 Sacramento, CA
14 Miami, FL
15 Salt Lake City, UT
16 Providence, RI
17 Phoenix, AZ
18 Las Vegas, NV
19 Raleigh, NC
20 Dallas, TX
21 Orlando, FL
22 Chicago, IL
$75.5K
23 Tampa, FL
24 Houston, TX
25 Minneapolis, MN
26 Baltimore, MD
27 Nashville, TN
28 Jacksonville, FL
29 Hartford, CT
30 Charlotte, NC
31 San Antonio, TX
32 Atlanta, GA
33 Philadelphia, PA
34 Richmond, VA
35 Milwaukee, WI
36 Kansas City, MO
37 Columbus, OH
38 Virginia Beach, VA
39 New Orleans, LO
40 Birmingham, AL
41 Indianapolis, IN
42 Memphis, TN
43 Cincinnati, OH
44 Buffalo, NY
45 Detroit, MI
46 St Louis, MO
47 Louisville, KY
48 Cleveland, OH
49 Oklahoma City, OK
50 Pittsburgh, PA