Housing Racial Bias

By Numair Shiekh, Vladislav Vetroff, Maanit Malhan, Loc Hoang, Malakai Maher

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Goal

Our plan is to compare Zillow's data amongst its competitors such as Redfin and Realtor in order to showcase racial bias within the housing market based on their demographic.

Zillow Datasets vs Competitors

Zillow
- https://www.zillow.com/research/data/

Redfin
- https://www.redfin.com/us-housing-market
- https://www.redfin.com/news/data-center/

Realtor
- https://www.realtor.com/research/data/

Example of Datasets

HOME VALUES

- **Zillow Home Value Index (ZHVI):** A measure of the typical home value and market changes across a given region and housing type. It reflects the typical value for homes in the 35th to 65th percentile range. Available as a smoothed, seasonally adjusted measure and as a raw measure.

  Zillow publishes top-tier ZHVI ($, typical value for homes within the 65th to 95th percentile range for a given region) and bottom-tier ZHVI ($, typical value for homes within the 5th to 35th percentile range for a given region).

  Zillow also publishes ZHVI for all single-family residences ($, typical value for all single-family homes in a given region), for condo/coops ($), for all homes with 1, 2, 3, 4 and 5+ bedrooms ($).

  Note: Starting with the January 2023 data release, and for all subsequent releases, the full ZHVI time series has been upgraded to harness the power of the neural Zestimate.

  More information about what ZHVI is and how it's calculated is available on this overview page. Here's a handy ZHVI User Guide for information about properly citing and making calculations with this metric.

- **Mortgage Payment:** An estimate of the monthly mortgage payment on a new home purchase with the average interest rate of that month. The home value is estimated using smoothed and seasonally adjusted ZHVI. If the down payment is less than 20%, the monthly mortgage payment includes 1% mortgage insurance.

- **Total Monthly Payment:** An estimate of the total monthly payment on a new home purchase with current interest rates. The total monthly payment includes the mortgage payment, homeowner's insurance, property taxes, and maintenance costs worth 0.5% of the home's value. The home value is estimated using smoothed and seasonally adjusted ZHVI. If the down payment is less than 20%, the monthly mortgage payment includes 1% mortgage insurance. Homeowners insurance rates and property tax rate estimates vary by region.

Data Type

ZHVI 2-Bedroom Time Series ($)

Geography

State

Download

RegionID,SizeRank,RegionName,RegionType,StateName,State,City,Metro,CountyName,BaseDate,2025-02-28,2025-04-30,2026-01-31
91982,1,77494,zip,TX,TX,Katy,"Houston-The Woodlands-Sugar Land, TX",Fort Bend County,2025-01-31,0.1,1.4,-0.2
61148,2,08701,zip,NJ,NJ,Lakewood,"New York-Newark-Jersey City, NY-NJ-PA",Ocean County,2025-01-31,-0.2,0.7,-0.7
91940,3,77449,zip,TX,TX,Katy,"Houston-The Woodlands-Sugar Land, TX",Harris County,2025-01-31,0.1,1.4,-0.2
62080,4,11368,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Queens County,2025-01-31,-0.1,0.3,-0.3
91733,5,77084,zip,TX,TX,Houston,"Houston-The Woodlands-Sugar Land, TX",Harris County,2025-01-31,0.1,1.3,-0.2
93144,6,79936,zip,TX,TX,El Paso,"El Paso, TX",El Paso County,2025-01-31,0.1,0.9,1.3
62093,7,11385,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Queens County,2025-01-31,-0.1,0.4,-0.4
92593,8,78660,zip,TX,TX,Pflugerville,"Austin-Round Rock-Georgetown, TX",Travis County,2025-01-31,0.3,2.0,-0.5
62019,9,11208,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.4
95992,10,90011,zip,CA,CA,Los Angeles,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.2,1.6,-0.2
91926,11,77433,zip,TX,TX,Cypress,"Houston-The Woodlands-Sugar Land, TX",Harris County,2025-01-31,0.2,1.1,-0.2
84630,12,60629,zip,IL,IL,Chicago,"Chicago-Naperville-Elgin, IL-IN-WI",Cook County,2025-01-31,0.2,2.1,0.4
96193,13,90650,zip,CA,CA,Norwalk,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.3,1.7,-0.2
96361,14,91331,zip,CA,CA,Los Angeles,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.3,1.8,-0.2
74101,15,37013,zip,TN,TN,Nashville,"Nashville-Davidson--Murfreesboro--Franklin, TN",Davidson County,2025-01-31,0.3,1.7,1.2
62046,16,11236,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.5,-0.5
61807,17,10467,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Bronx County,2025-01-31,-0.1,0.4,-0.4
62085,18,11373,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Queens County,2025-01-31,0.0,0.2,-0.2
62037,19,11226,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.3,-0.3
62018,20,11207,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.5
70829,21,30044,zip,GA,GA,Lawrenceville,"Atlanta-Sandy Springs-Alpharetta, GA",Gwinnett County,2025-01-31,0.2,1.7,1.6
96025,22,90044,zip,CA,CA,Los Angeles,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.2,1.6,-0.2
96817,23,92336,zip,CA,CA,Fontana,"Riverside-San Bernardino-Ontario, CA",San Bernardino County,2025-01-31,0.3,1.7,1.3
97771,24,94565,zip,CA,CA,Pittsburg,"San Francisco-Oakland-Berkeley, CA",Contra Costa County,2025-01-31,0.7,2.9,-1.4
92036,25,77573,zip,TX,TX,League City,"Houston-The Woodlands-Sugar Land, TX",Galveston County,2025-01-31,0.1,1.2,-0.1
96816,26,92335,zip,CA,CA,Fontana,"Riverside-San Bernardino-Ontario, CA",San Bernardino County,2025-01-31,0.3,1.7,1.3
96083,27,90201,zip,CA,CA,Bell,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.2,1.6,-0.2
96107,28,90250,zip,CA,CA,Hawthorne,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.3,1.7,-0.2
61639,29,10025,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",New York County,2025-01-31,-0.2,0.5,-0.5
90654,30,75052,zip,TX,TX,Grand Prairie,"Dallas-Fort Worth-Arlington, TX",Dallas County,2025-01-31,0.0,1.5,0.1
96239,31,90805,zip,CA,CA,Long Beach,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.2,1.6,-0.2
62025,32,11214,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.3,-0.3
84620,33,60618,zip,IL,IL,Chicago,"Chicago-Naperville-Elgin, IL-IN-WI",Cook County,2025-01-31,0.2,1.8,0.3
97223,34,93307,zip,CA,CA,Bakersfield,"Bakersfield, CA",Kern County,2025-01-31,0.2,1.5,1.7
96125,35,90280,zip,CA,CA,South Gate,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.2,1.6,-0.2
62044,36,11234,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.4
96368,37,91342,zip,CA,CA,Los Angeles,"Los Angeles-Long Beach-Anaheim, CA",Los Angeles County,2025-01-31,0.3,1.8,-0.2
96990,38,92683,zip,CA,CA,Westminster,"Los Angeles-Long Beach-Anaheim, CA",Orange County,2025-01-31,0.3,1.9,-0.2
61790,39,10314,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Richmond County,2025-01-31,-0.1,0.4,-0.4
62031,40,11220,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.4
84639,41,60639,zip,IL,IL,Chicago,"Chicago-Naperville-Elgin, IL-IN-WI",Cook County,2025-01-31,0.2,2.1,0.4
92341,42,78245,zip,TX,TX,San Antonio,"San Antonio-New Braunfels, TX",Bexar County,2025-01-31,-0.1,1.0,-1.0
62030,43,11219,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.5
96882,44,92503,zip,CA,CA,Riverside,"Riverside-San Bernardino-Ontario, CA",Riverside,2025-01-31,0.3,1.7,1.3
92481,46,78521,zip,TX,TX,Brownsville,"Brownsville-Harlingen, TX",Cameron County,2025-01-31,0.2,1.7,2.7
62017,47,11206,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.2,0.5,-0.5
62032,48,11221,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.5
61796,49,10456,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Bronx County,2025-01-31,-0.1,0.4,-0.4
96825,50,92345,zip,CA,CA,Hesperia,"Riverside-San Bernardino-Ontario, CA",San Bernardino County,2025-01-31,0.3,1.8,1.3
91968,51,77479,zip,TX,TX,Sugar Land,"Houston-The Woodlands-Sugar Land, TX",Fort Bend County,2025-01-31,0.1,1.3,-0.2
96546,52,91911,zip,CA,CA,Chula Vista,"San Diego-Chula Vista-Carlsbad, CA",San Diego County,2025-01-31,0.4,2.2,1.4
70828,53,30043,zip,GA,GA,Lawrenceville,"Atlanta-Sandy Springs-Alpharetta, GA",Gwinnett County,2025-01-31,0.2,1.7,1.6
62034,54,11223,zip,NY,NY,New York,"New York-Newark-Jersey City, NY-NJ-PA",Kings County,2025-01-31,-0.1,0.4,-0.4
399727,55,78542,zip,TX,TX,Edinburg,"McAllen-Edinburg-Mission, TX",Hidalgo County,2025-01-31,0.3,1.3,2.4

Example Test Case

Homes in majority-Black neighborhoods are valued lower than homes in majority-White neighborhoods

We will look at neighborhoods with >70% black population compared to neighborhoods with >70% white population

if the price difference is significant even after similar factors of size, square footage, year it was built, etc.

• We can assume lower quality of life and baises based on racial bias

Demographic Data set

- US Federal Government
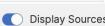   - https://www.census.gov/data.html

    By State datasets:

    https://www.census.gov/library/stories/state-by-state/new-hampshire-population-change-between-census-decade.html#race-ethnicity

Examples of Data

Label	Mansfield town, Tolland ...
⌄ Total:	25,892
⌄ Population of one race:	24,540
White alone	18,544
Black or African American alone	1,342
American Indian and Alaska Native alone	61
Asian alone	3,790
Native Hawaiian and Other Pacific Islander alone	19
Some Other Race alone	784

// United States / Connecticut / Tolland County, Connecticut / Mansfield town, Tolland County, Connecticut   ⬤ Display Sources

Populations and People
Total Population
25,892
P1 | 2020 Decennial Census

Income and Poverty
Median Household Income
$45,388
S1901 | 2021 American Community Survey 5-Year Estimates

Education
Bachelor's Degree or Higher
58.0%
S1501 | 2021 American Community Survey 5-Year Estimates

Employment
Employment Rate
47.2%
DP03 | 2021 American Community Survey 5-Year Estimates

Housing
Total Housing Units
6,956
H1 | 2020 Decennial Census

Health
Without Health Care Coverage
1.9%
S2701 | 2021 American Community Survey 5-Year Estimates

Families and Living Arrangements
Total Households
6,482
DP02 | 2021 American Community Survey 5-Year Estimates

Race and Ethnicity
Hispanic or Latino (of any race)
2,206
P9 | 2020 Decennial Census