Measuring Housing Affordability in America

April 25, 2022

Moderator:
Jamie Woodwell, Mortgage Bankers Association

Panelists:
Dan McCue, Harvard Joint Center for Housing Studies
Jennifer Turnham, HUD Office of Policy Development and Research
Jaya Dey, Freddie Mac
Eddie Seiler, Mortgage Bankers Association

A Look at Housing Affordability

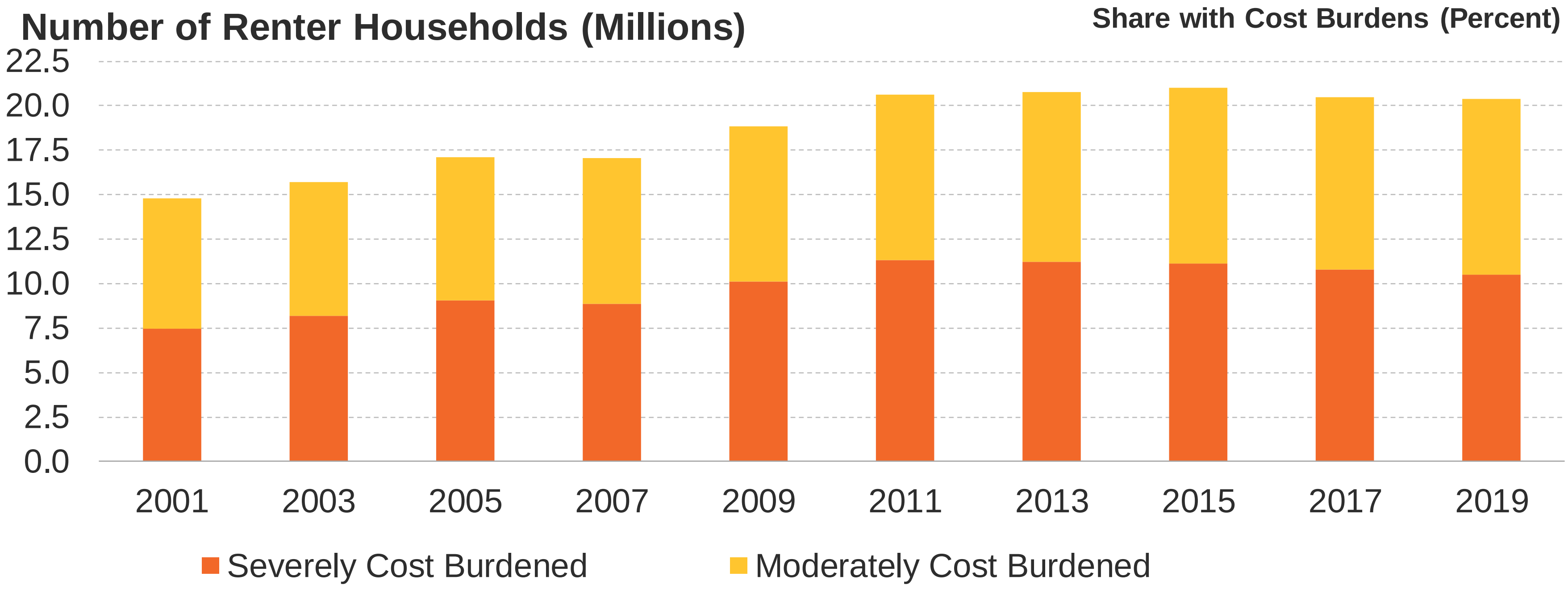
MBA/Convergence: Measuring Housing Affordability in America

Daniel McCue

4/25/2022

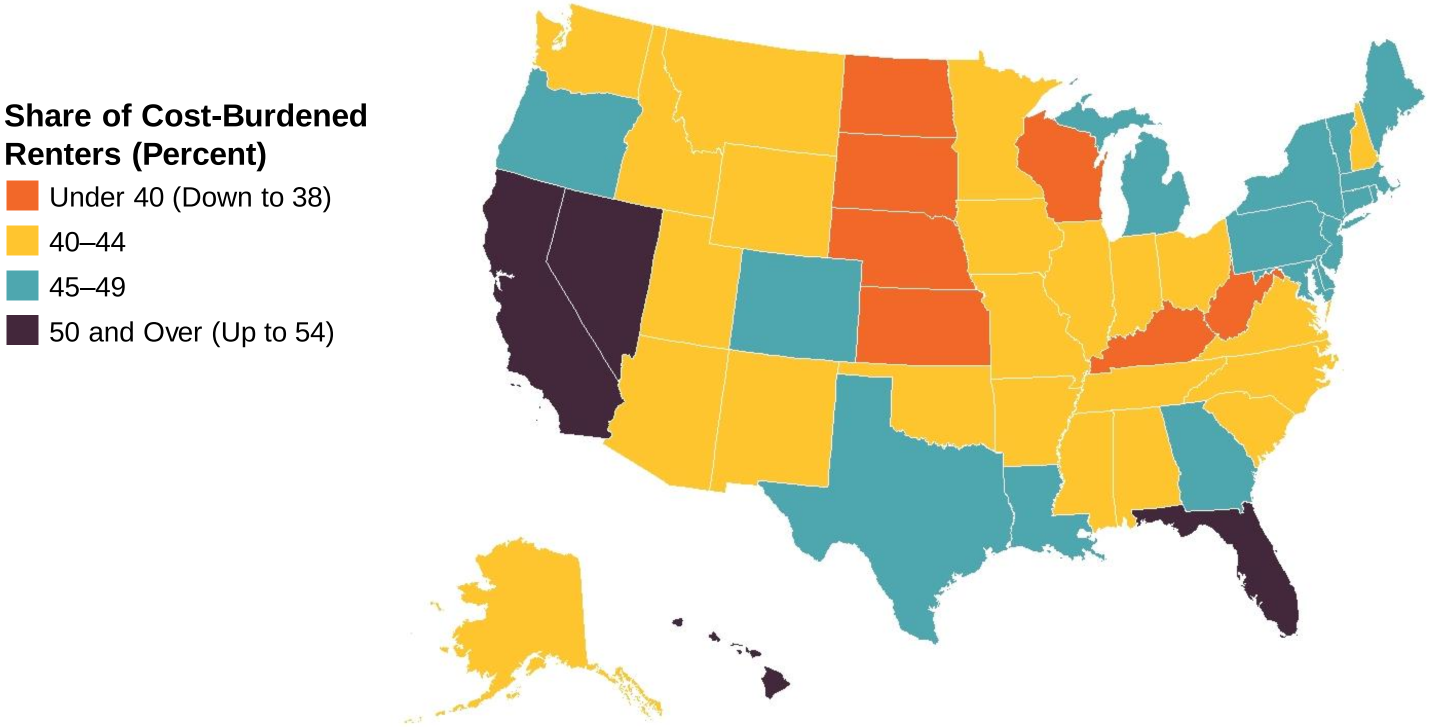
JCHS
JOINT CENTER FOR HOUSING STUDIES
OF HARVARD UNIVERSITY

Leading Into the Pandemic, Over 20 Million Renter Households were Cost Burdened



Notes: Moderately (severely) cost-burdened households pay more than 30% (more than 50%) of income for housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens.
Source: JCHS tabulations of US Census Bureau, American Community Survey 1-Year Estimates.

Even in the Most Affordable States, More than a Third of Renters Face Cost Burdens



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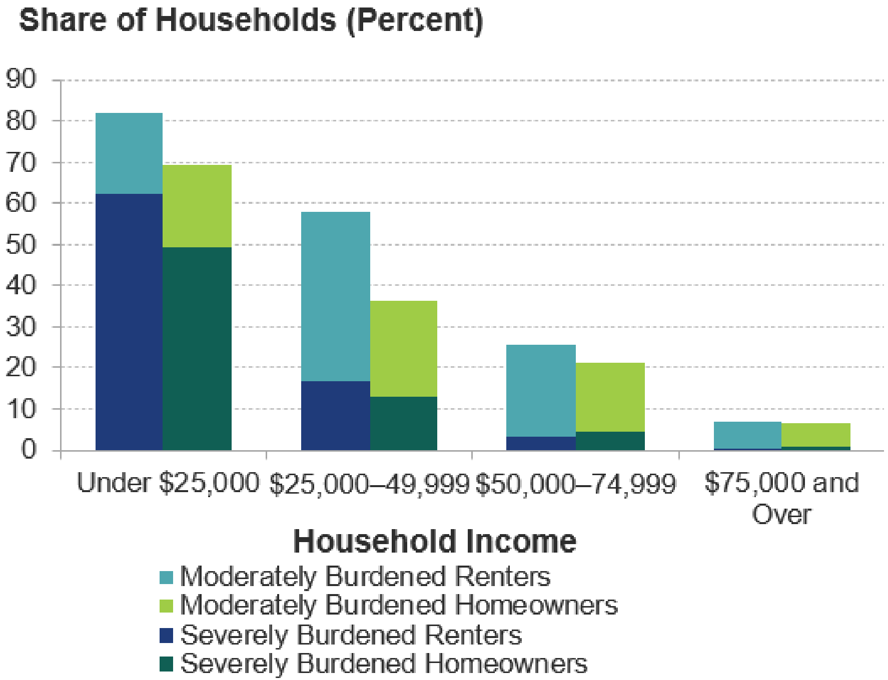
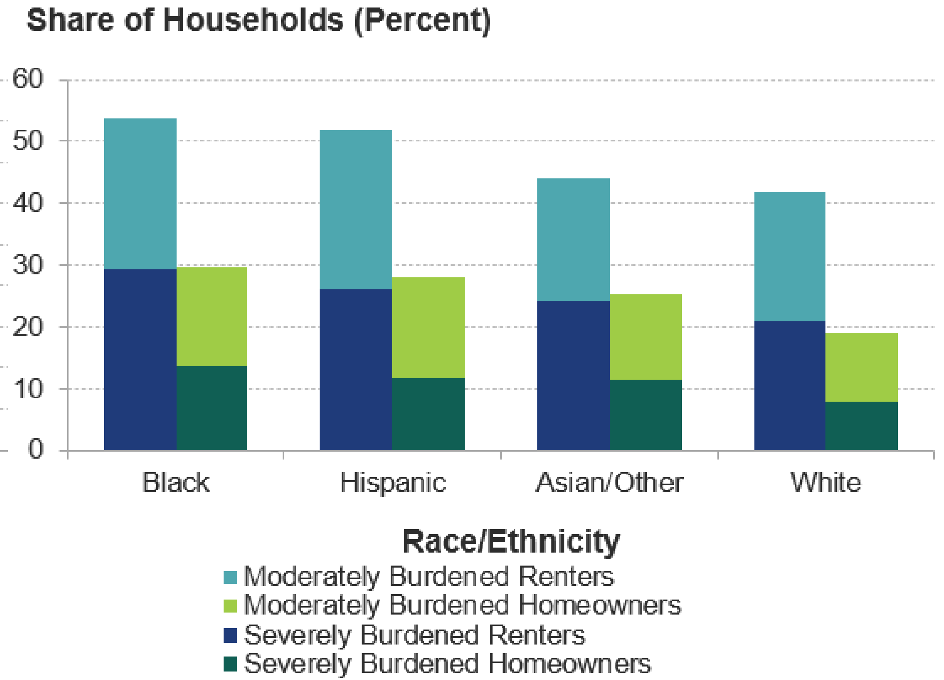
Source: JCHS tabulations of US Census Bureau, 2019 American Community Survey 1-Year Estimates.

Cost Burden Rates are Highest for Renters, Low Income Households and Households of Color

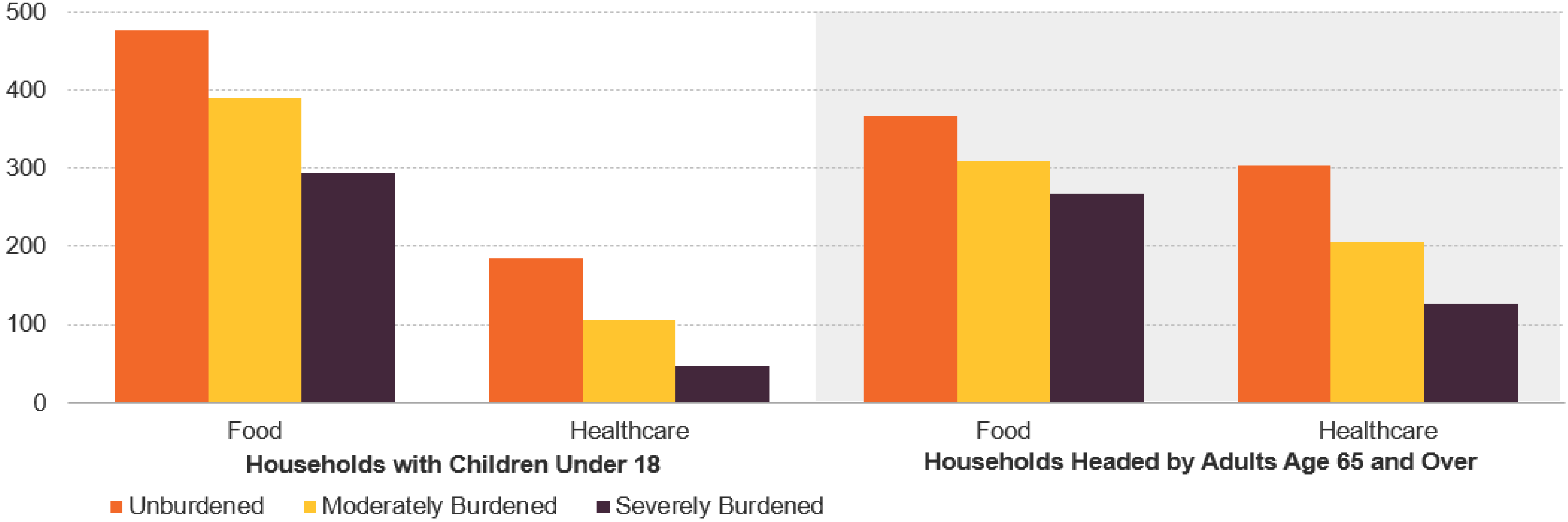




Notes: Cost-burdened (severely cost-burdened) households pay more than 30% (more than 50%) of income for housing. Households with zero or negative income are assumed to have burdens, while households paying no cash rent are assumed to be without burdens.
Source: JCHS tabulations of US Census Bureau, 2019 American Community Survey 1-Year Estimates.

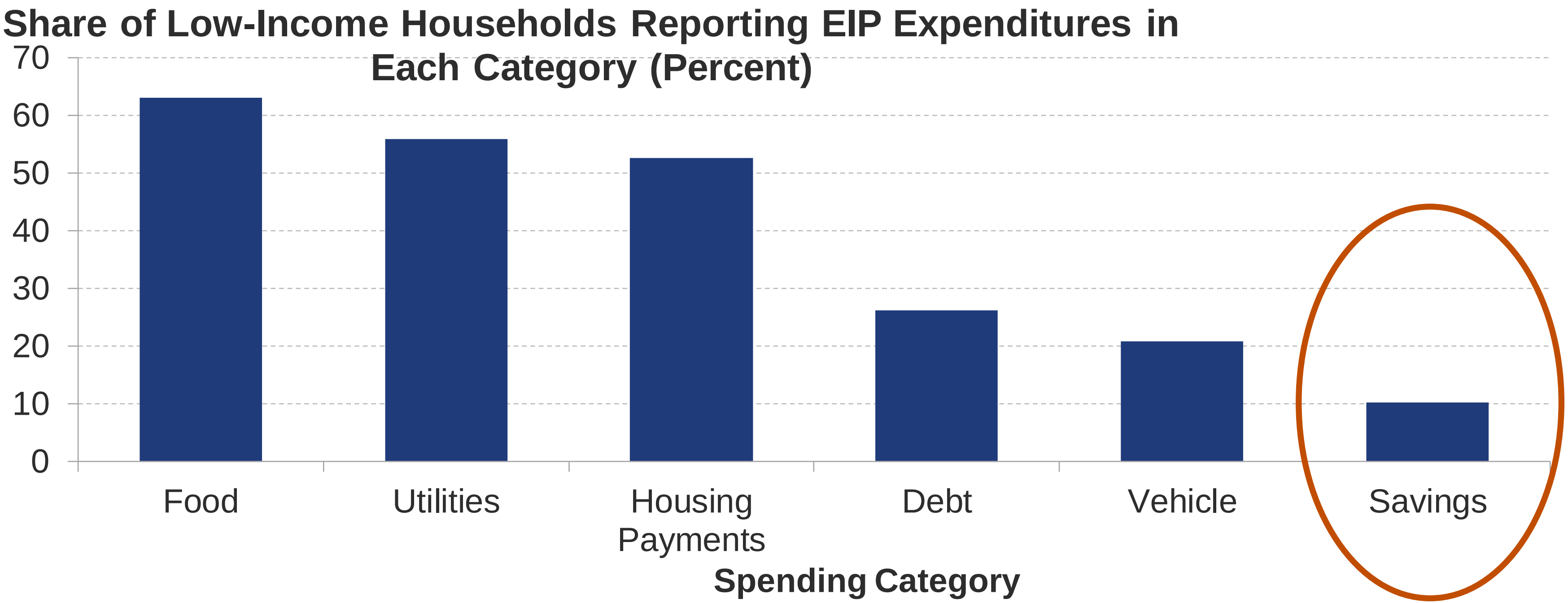
High Housing Costs Force Difficult Spending Tradeoffs

Monthly Expenditures of Lowest-Income Households (Dollars)



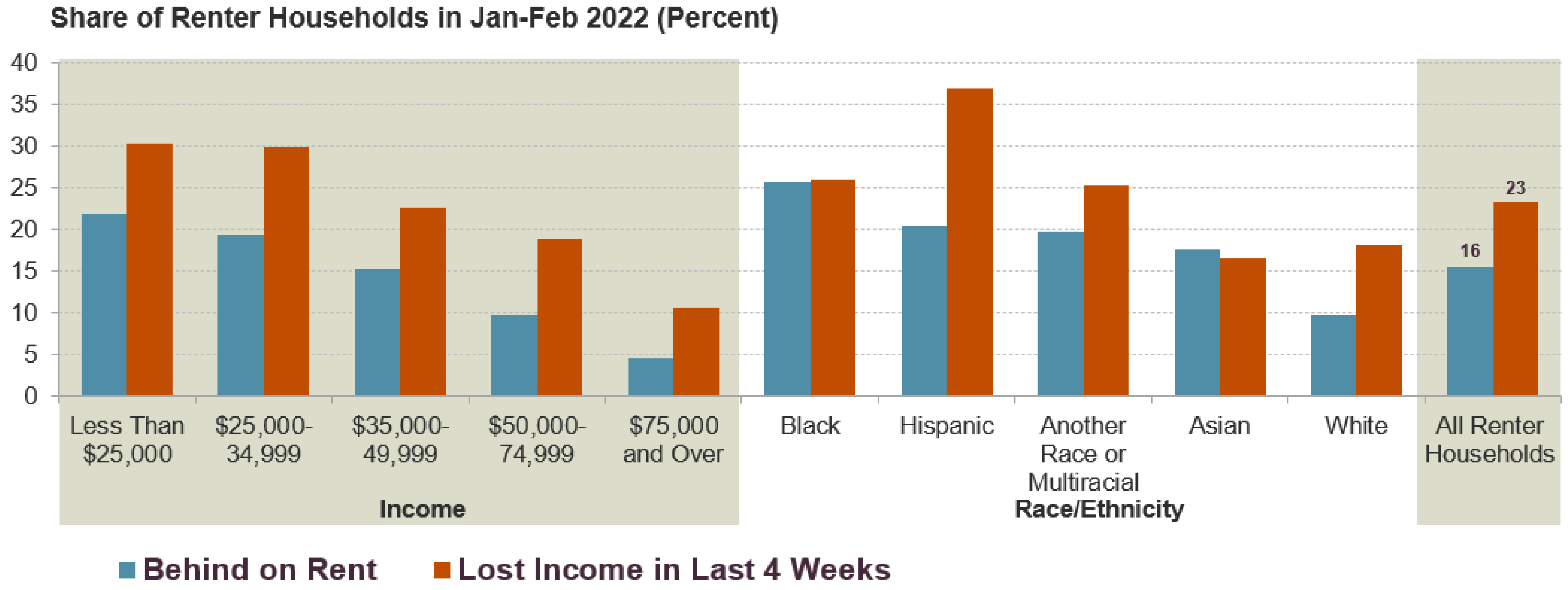
Notes: Chart shows renter households in the bottom quartile of expenditures, which are considered lowest-income households. Households are considered moderately (severely) burdened if housing accounts for more than 30% (50%) of their expenditures. Health expenditures include out-of-pocket costs and premiums.
Source: JCHS tabulations of Bureau of Labor Statistics, 2020 Consumer Expenditure Survey.

Most Low-Income Households Spent Their Economic Impact Payments on Essentials Like Food, Utilities, and Housing



Notes: Low-income households earned less than $25,000 in 2019. Data only include households that received an economic impact payment during the seven days prior to the survey. Responses are not mutually exclusive. Debt includes credit card debt, student loans, and other liabilities.
Source: JCHS tabulations of US Census Bureau, Household Pulse Surveys, January–March 2021.

Still In Early 2022, Significant Shares of Lower-Income Renters and Households of Color Remain Distressed



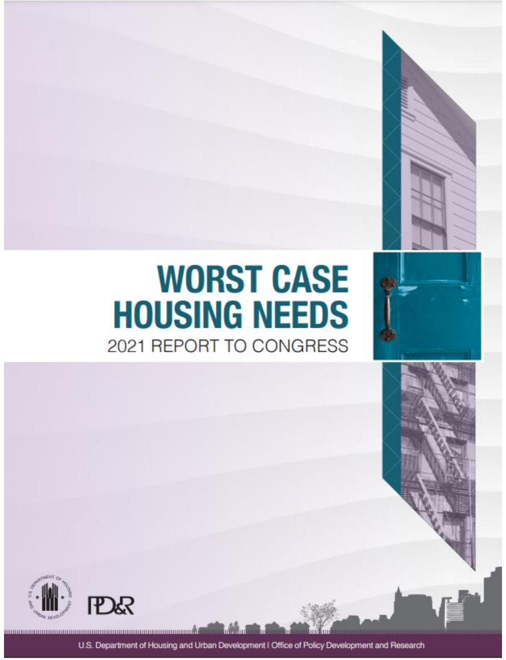
Notes: Households behind on rent were not caught up at the time of the survey. White, Black, Asian, Multiracial households, and households of another race are non-Hispanic. Hispanic households may be of any race.
Source: JCHS tabulations of US Census Bureau, Household Pulse Surveys, Weeks 41-42, January--February 2022.

Housing Affordability and Worst Case Housing Needs

April 25, 2022

Worst Case Housing Needs Reports

- HUD's reporting on acute housing needs of renter households began in the late 1980s
- 2021 Report is the 18th in the series
- All WCN reports are posted to huduser.org



Data Source for Measuring Worst Case Needs

- American Housing Survey (AHS)
  - Sponsored by HUD and conducted by the U.S. Census Bureau
  - Conducted every two years
  - Longitudinal survey of a sample of housing units (does not include people experiencing homelessness)
- Two-year lag between collection of AHS data and publication of Worst Case Needs (WCN) Report
  - 2021 WCN Report is based on 2019 AHS

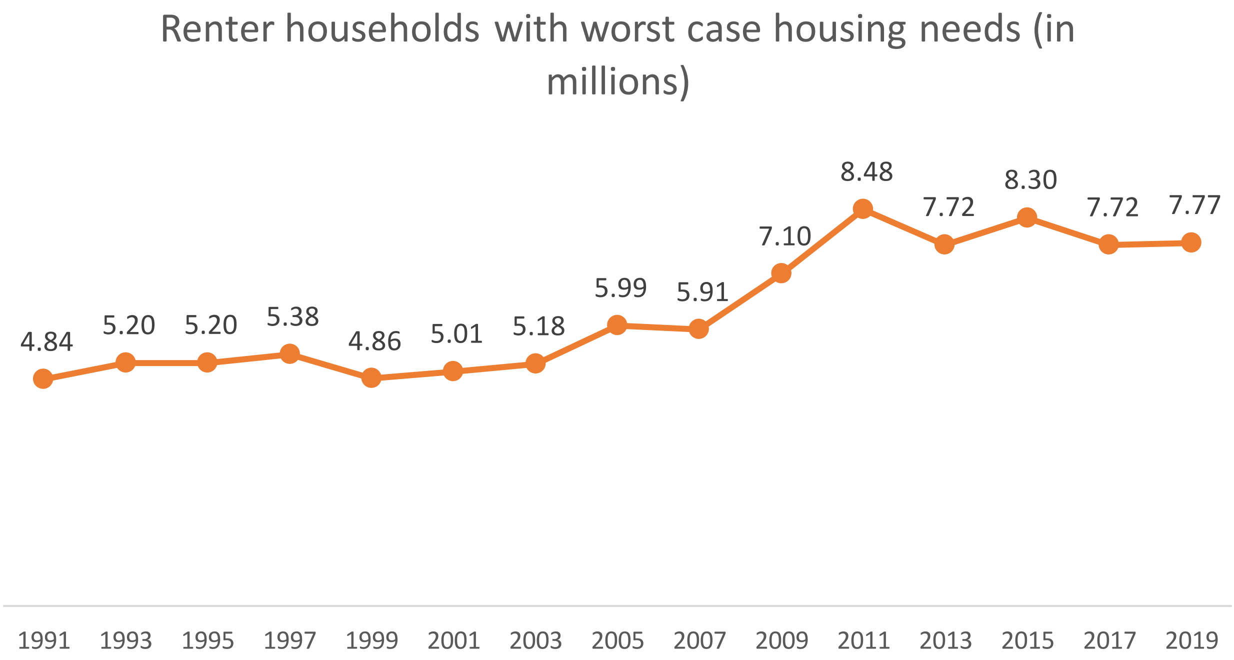
Worst Case Housing Needs

- Households with worst case housing needs are:
  - Renter households
  - Who do not receive housing assistance
  - Who have incomes at or below 50% of the Area Median Income (“very low-income”)

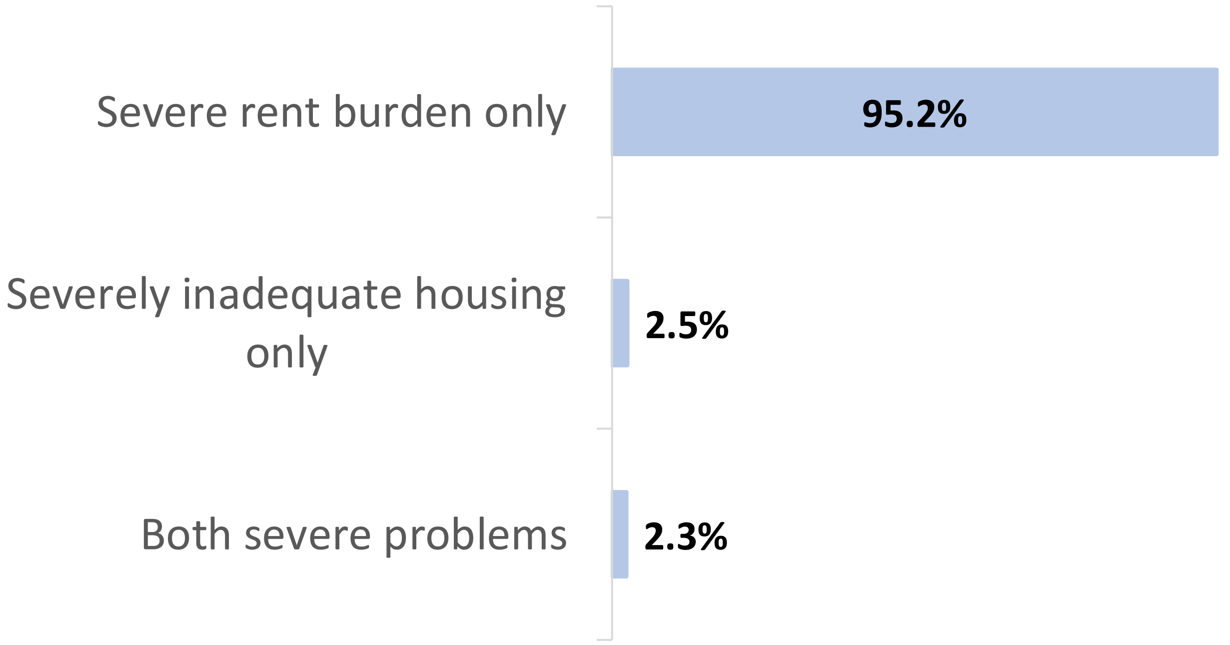
  AND

  - Pay more than 50% of their household income on rent (“severe rent burden”), OR
  - Live in severely inadequate conditions, OR
  - Experience both severe rent burden and severely inadequate conditions.

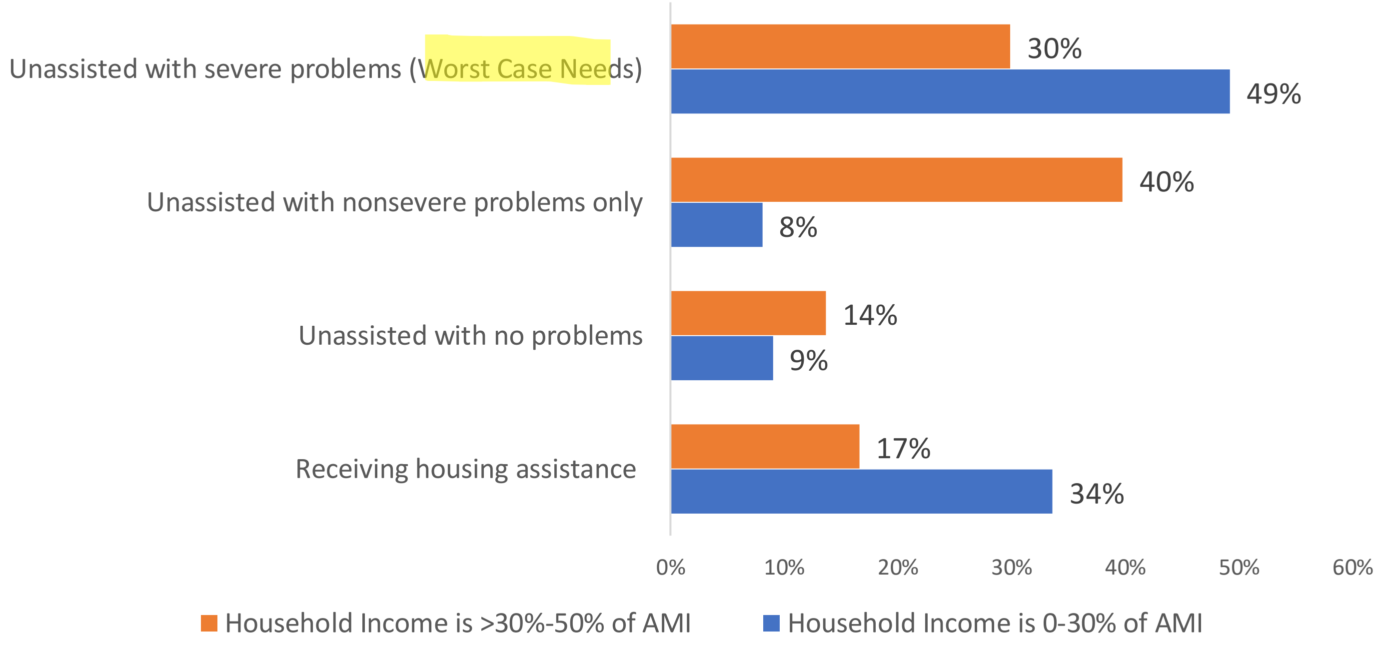
Trends in Worst Case Housing Needs



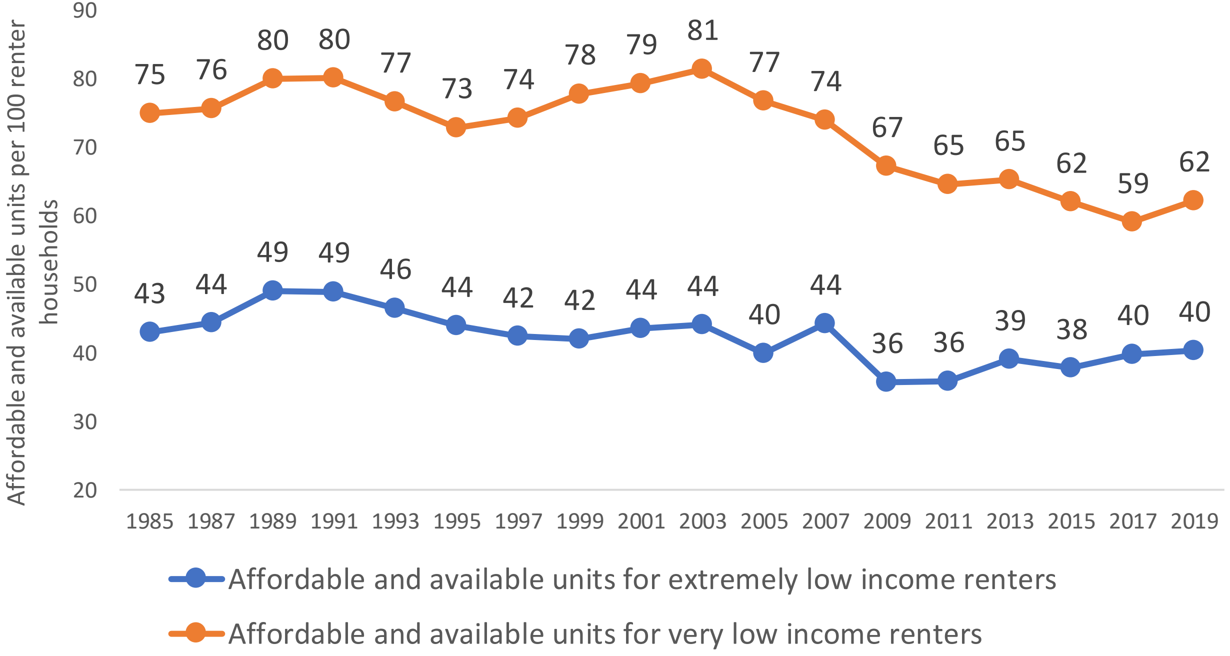
Rent Burden Drives Worst Case Needs



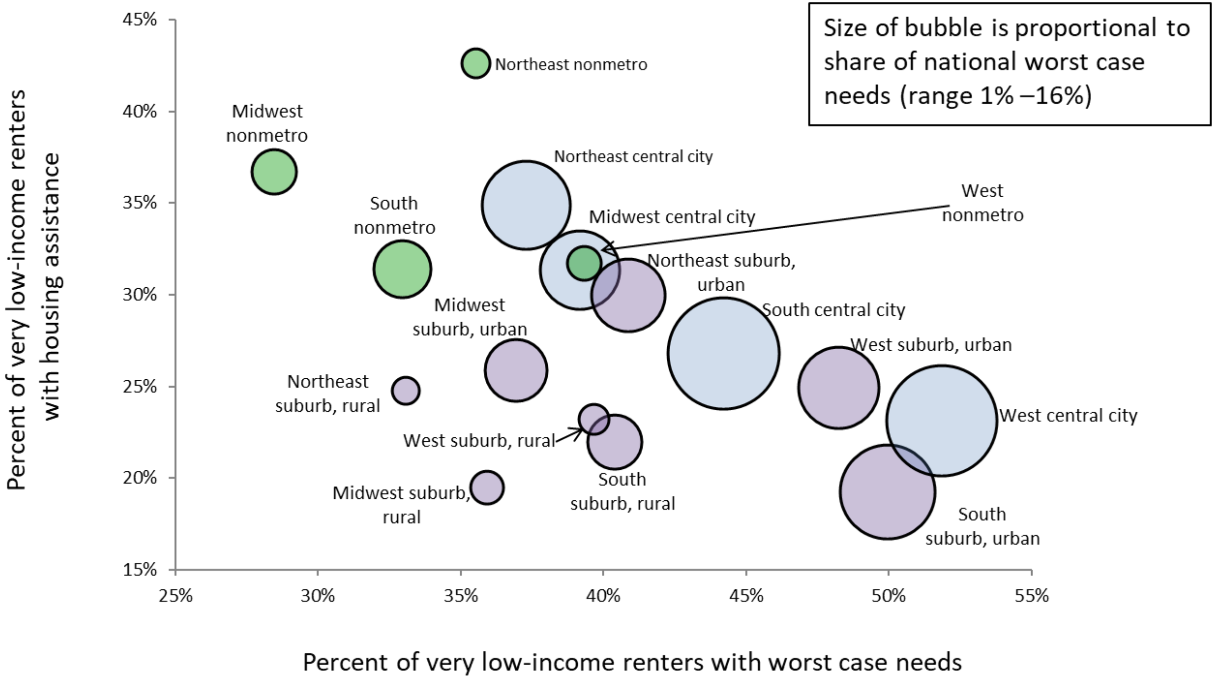
Housing Needs and Assistance by Income Group



Housing Mismatch Estimates



Regional Patterns of Worst Case Needs and Relationship to Housing Assistance



First-Time Homebuyer Affordability

Presenter: Jaya Dey, PhD
SF Client and Community Engagement, Freddie Mac

Motivation

- Housing affordability is an important barrier to homeownership
  - Can vary by local geography and over time
  - Can drive the composition of recent homeowners (minorities, millennials, Gen Z)
- Accurate measurement of affordability can help us to:
  - Identify solutions to bridge minority homeownership gap
  - Help inform future homeownership sustainability
- We propose a ***new*** approach to evaluate affordability of future borrowers based on their creditworthiness and income distribution at local geographic level.

Existing Affordability Measures

- Ratio approach
  - A house is affordable if the housing payment does not exceed a certain percentage of the household's income (e.g., HUD, NAR, NAHB/Wells Fargo, CAR, FHFA, Fisher et al. 2009).
  - Indexes are different by how they consider the cost of housing and affordable income.
- Residual income approach
  - A house is affordable if the remaining income after housing payment meet a threshold of non-housing consumption (e.g., Stone 1990, 1993, 2006; Kutty 2005; Herbert et al. 2018).
  - The threshold varies by level of income, household size and household type.
- Income distribution approach
  - A house is affordable if the renter has same or higher income than a recent borrower (HARI, Urban Institute).

First-Time Homebuyer Affordability

- Compare the income distribution of **future first-time homebuyers (“Mortgage Ready” renter)** to the income distribution of recent **first-time homebuyers.**

- Income-based measure: assume a **“Mortgage Ready”** renter with income $80K can afford a home recently purchased by a first-time homebuyer with same or lower income level.

Defining "Mortgage Ready"

- We define "Mortgage Ready" as a status for potential future borrowers ages 45 and younger, who exhibit certain credit characteristics that could qualify them for a mortgage.
  - These definitions are research-based assessments and does not relate to our Guide or underwriting criteria.
- We define "Near Mortgage Ready" as a likely status of potential future borrowers ages 45 and younger, who are reasonably close in time to being "Mortgage Ready".

Non-Mortgage Owner (Age ≤ 45)

"Mortgage Ready"

(all the following)

- Credit Score ≥ 661
- DTI ≤ 25%
- No foreclosures in 84 months
- No bankruptcies in 84 months
- No severe delinquencies in 12 months

"Near Mortgage Ready"

(all the following)

- Credit Score ≥ 600 and < 661
- DTI ≤ 25%
- No foreclosures in 84 months
- No bankruptcies in 84 months
- No severe delinquencies in 12 months

"Nor Currently Mortgage Ready"

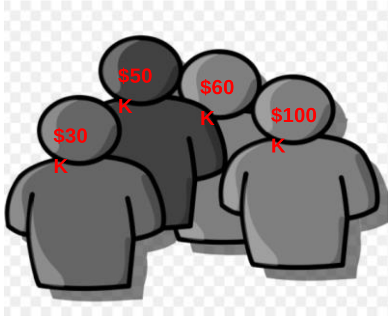
(any of the following)

- Credit Score< 600
- DTI > 25%
- Foreclosures in 84 months
- Bankruptcies in 84 months
- Severe delinquencies in 12 months

Note: Mortgage readiness – Based on research criteria ***not*** actual underwriting.

An example

Mortgage Ready (MR)



First-Time
Homebuyer
(FTHB)

Income Bucket	"Mortgage Ready" Share	Corresponding Income Cutoff	FTHB Share	Cumulative FTHB Share	Share of MR renters who can afford a house	MSA Affordability
1	25%	<=$30K	33%	33%	8.25% (25%*33%)	8.25%
2	25%	30K-50K	33%	67%	16.75% (25%*67%)	25%
3	25%	50K-60K	33%	100%	25% (25%*100%)	50%
4	25%	60K-100K	0%	100%	25% (25%*100%)	75%

An example (continued)

Income Bucket	"Mortgage Ready" Share	Corresponding Income Cutoff	FTHB Share	Cumulative FTHB Share	Share of MR renters who can afford a house	MSA Affordability
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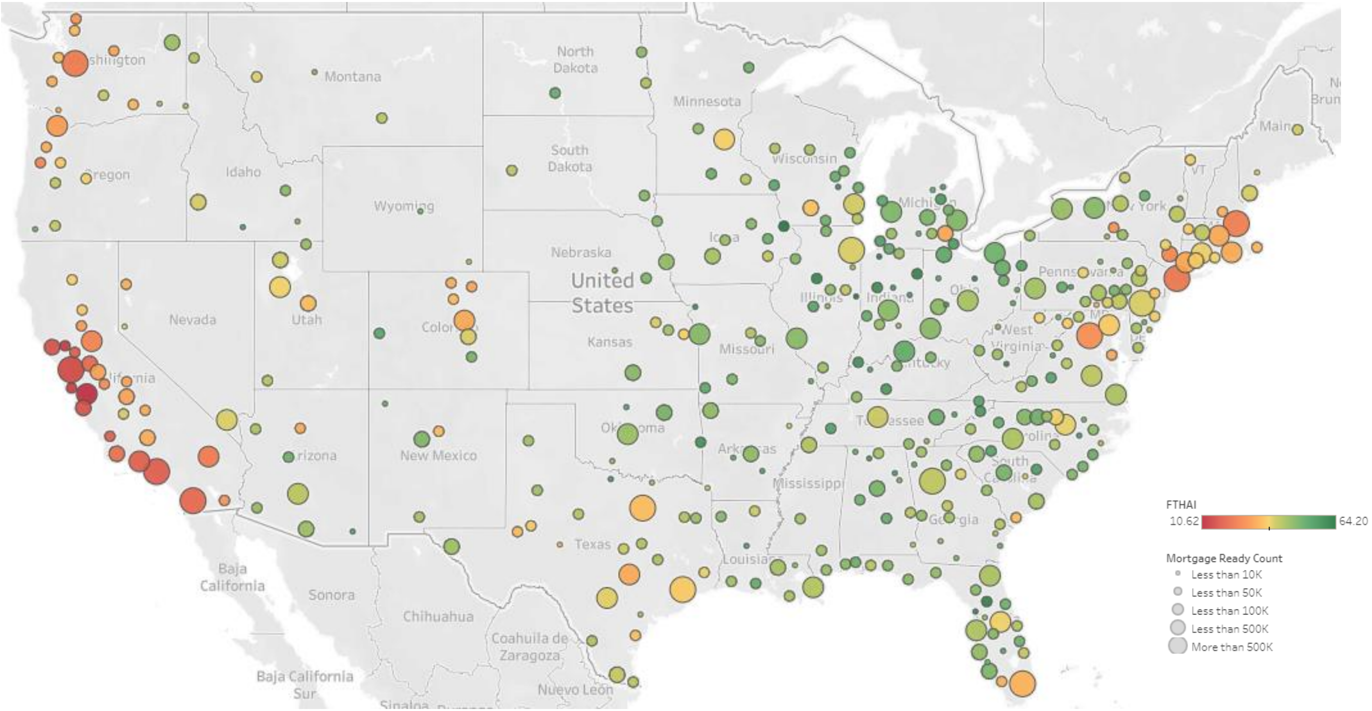
2	25%	30K-50K	0%	0%	0% (25%*0%)	0%
3	25%	50K-60K	67%	67%	16.75% (25%*67%)	16.75%
4	25%	60K-100K	33%	100%	25% (25%*100%)	$\boxed{41.75\%}$

Many “Mortgage Ready” are concentrated in coastal areas with lower affordability.

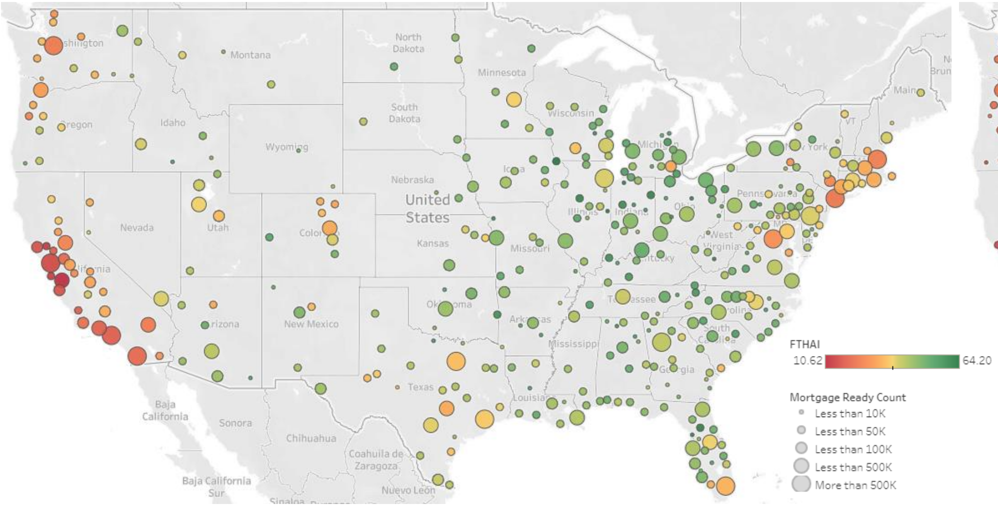


Source: Freddie Mac calculations using anonymized credit bureau data and National Mortgage Database, 2019.

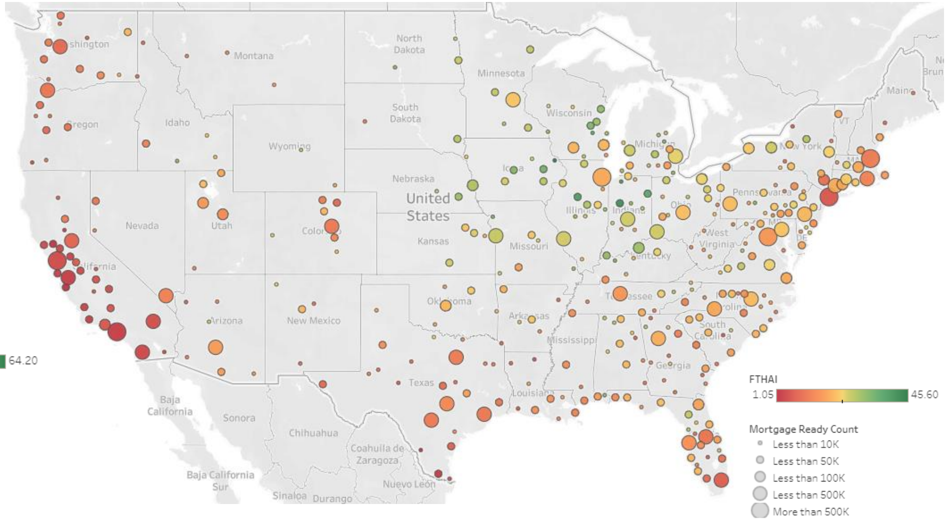
Note: Freddie Mac’s First-time Homebuyer Affordability measures how many creditworthy renters have enough income to purchase a home by comparing creditworthy renters’ income distribution to recent first-time homebuyers’ income distribution at local geographic level.

Southern cities are less affordable to their LMI "Mortgage Ready" population.

All



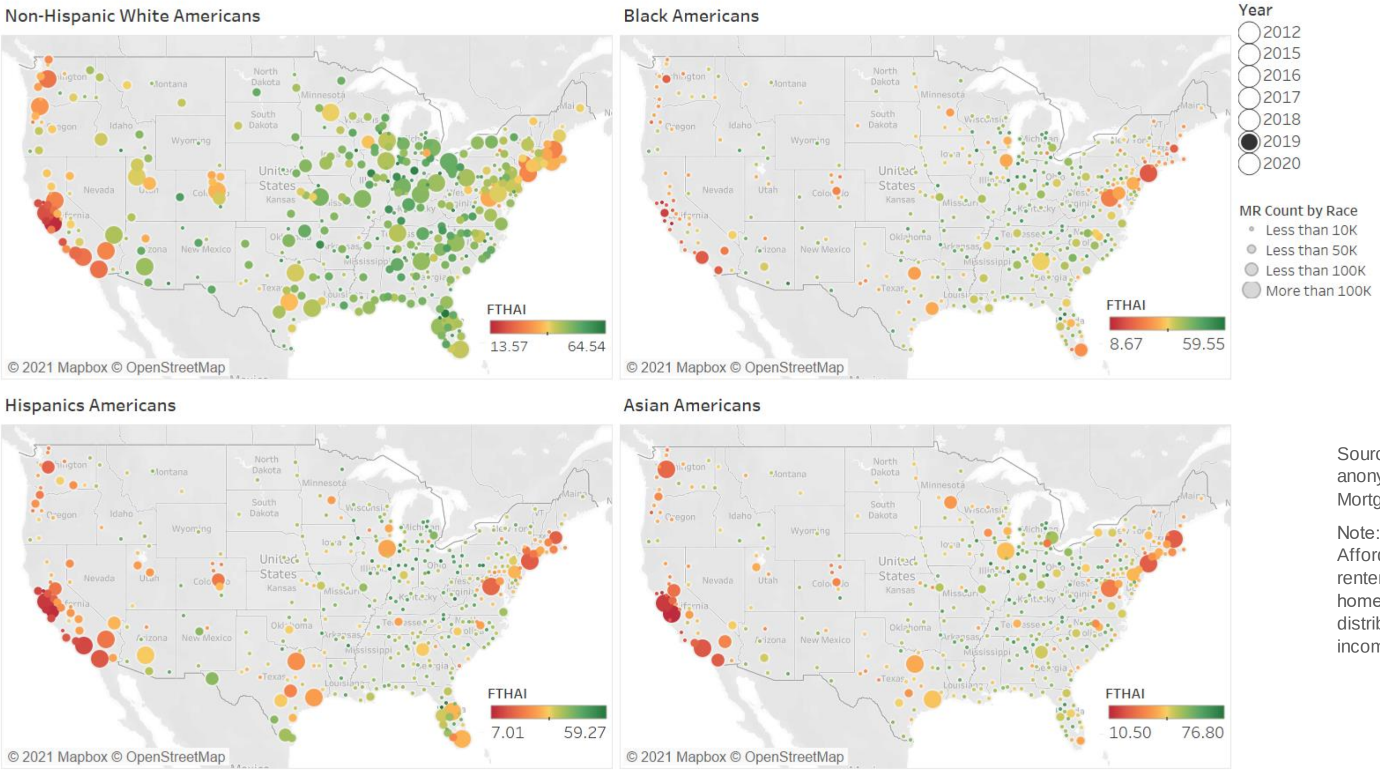
LMI



Source: Freddie Mac calculations using anonymized credit bureau data and National Mortgage Database, 2019.

Note: Freddie Mac's First-time Homebuyer Affordability measures how many creditworthy renters have enough income to purchase a home by comparing creditworthy renters' income distribution to recent first-time homebuyers' income distribution at local geographic level.

Southern and midwestern cities are more affordable to Black population. Latino and Asian population live in less affordable areas.



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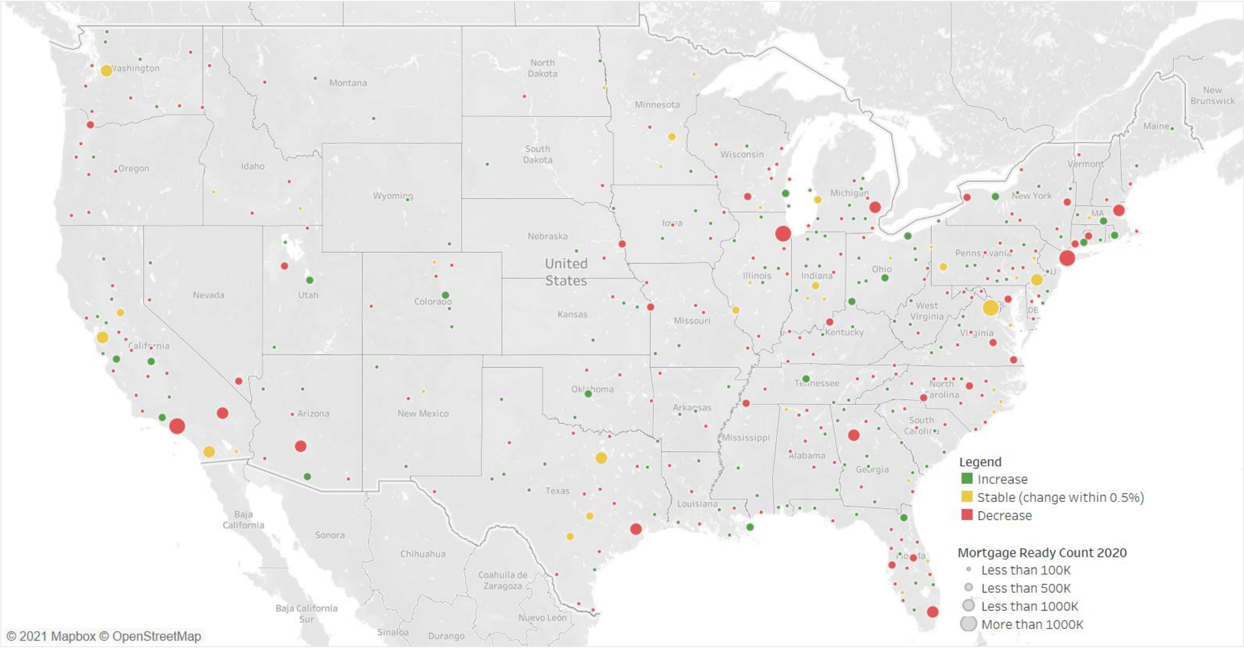
Affordability declined for most cities during the pandemic.

Change in FTHAI 2019-2020



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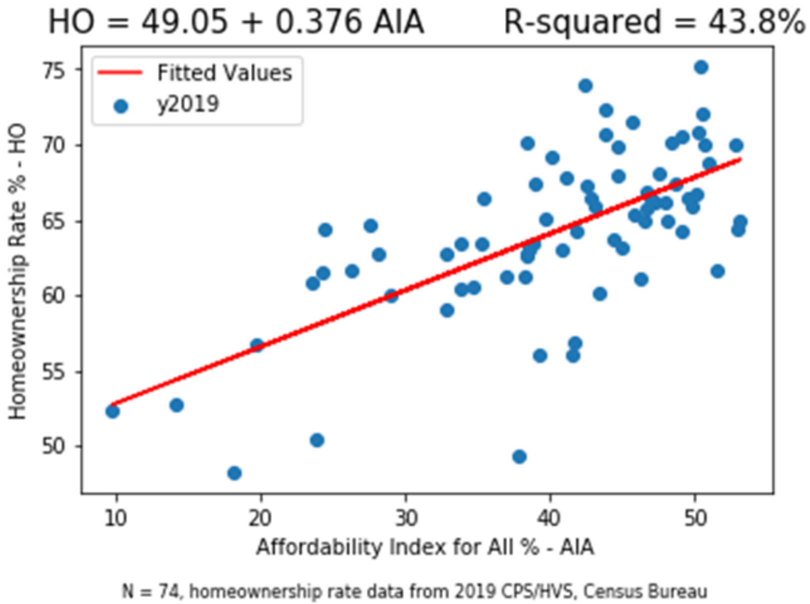
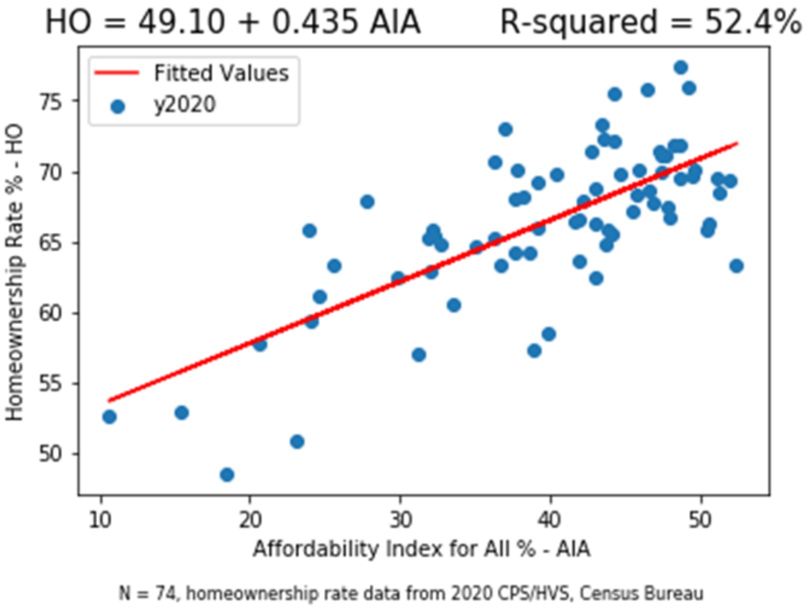
First-Time Homebuyer Affordability And Homeownership Rate





To Conclude

- Our approach allows us to evaluate the local affordability of future borrowers based on their credit characteristics and income distribution.
- Housing affordability became more severe after COVID-19 crisis.
  - Minorities living in high-cost areas need more time to save and can benefit from low-down payment products.
  - Manufactured housing, Shared Equity, Affordable Housing Preservation products can offer solutions to expand affordable housing stock.
- While our approach does not consider down payment challenge, we find most first-time homebuyers put less than 6% down towards their mortgages. A separate research shows that the time needed to save 3% down payment is less than 1 year in many areas across the country.

Appendix

Freddie Mac Single-Family

Data and Definition

- Credit Bureau data (September, 2012-2020)
  - A consumer is “**mortgage ready”** if he or she does not have a mortgage, is 45 or younger, has a credit score of 661 or above, has a debt-to-income ratio not exceeding 25 percent, has no foreclosures or bankruptcies in the past 84 months, and has no severe delinquencies in the past 12 months.
  - Income is measured by Credit Bureau’s proprietary model.

- National Mortgage Database (NMDB 2012-2020)
  - Owner-occupied home purchase loans only
  - Borrowers are considered as **first-time homebuyers** if they are age 45 or younger and have no previous mortgage in the preceding 7 years.
  - Income is based on loan application income.

CONVERGENCE: Measuring Housing Affordability in America

MBA's Purchase Applications Payment Index (PAPI)

April 25, 2022

Prepared by:

Eddie Seiler

Mortgage Bankers Association

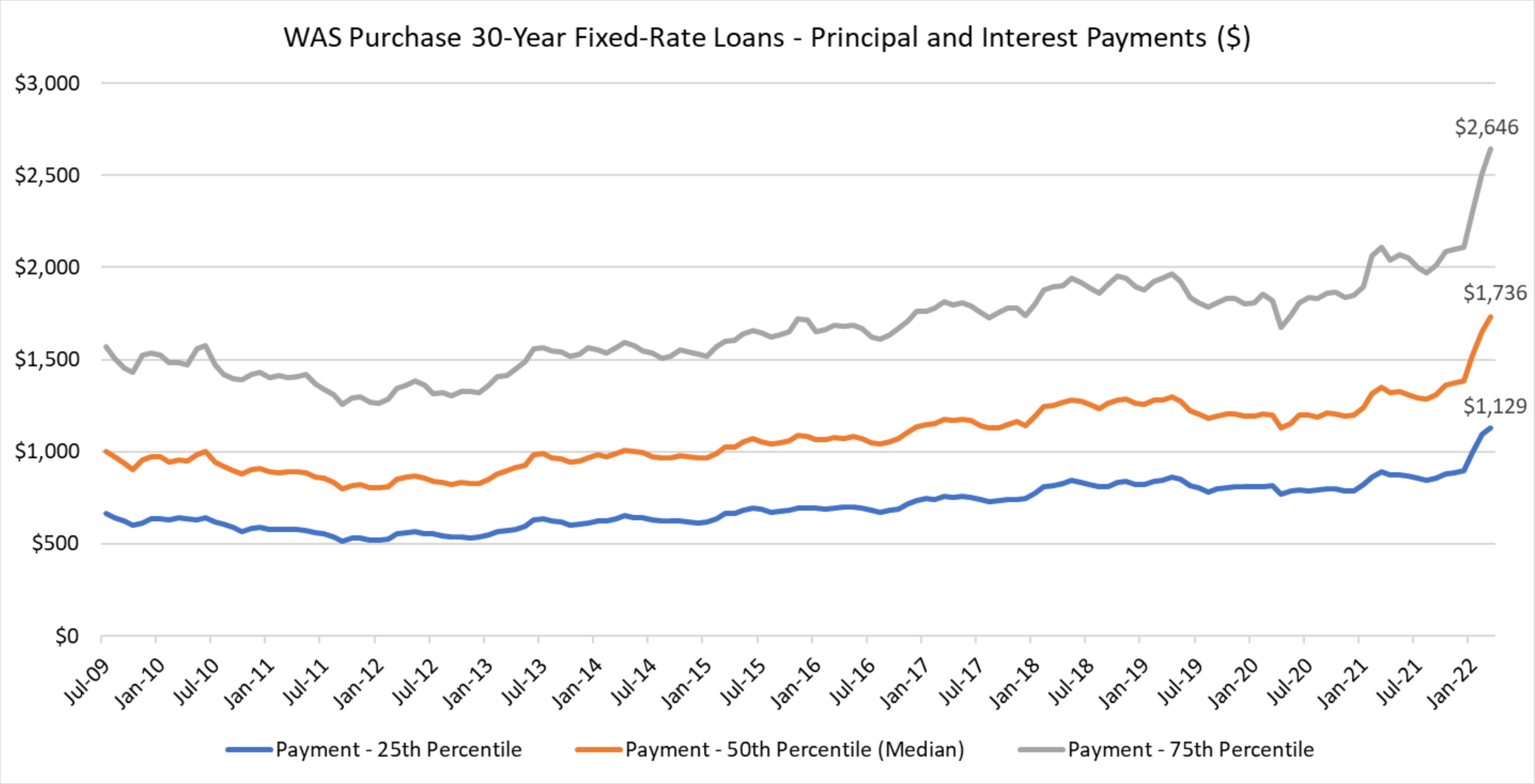
Introducing MBA's Purchase Applications Payment Index (PAPI)

- PAPI measures how new mortgage payments—consisting of principal and interest—vary across time relative to income.

- Higher index values indicate that the mortgage payment to income ratio is higher than in a month where the index is lower—indicating that homebuyer affordability has decreased.
  - The PAPI increases as mortgage application loan amounts increase, as the interest rate on the mortgages increase, and/or as earnings decline.

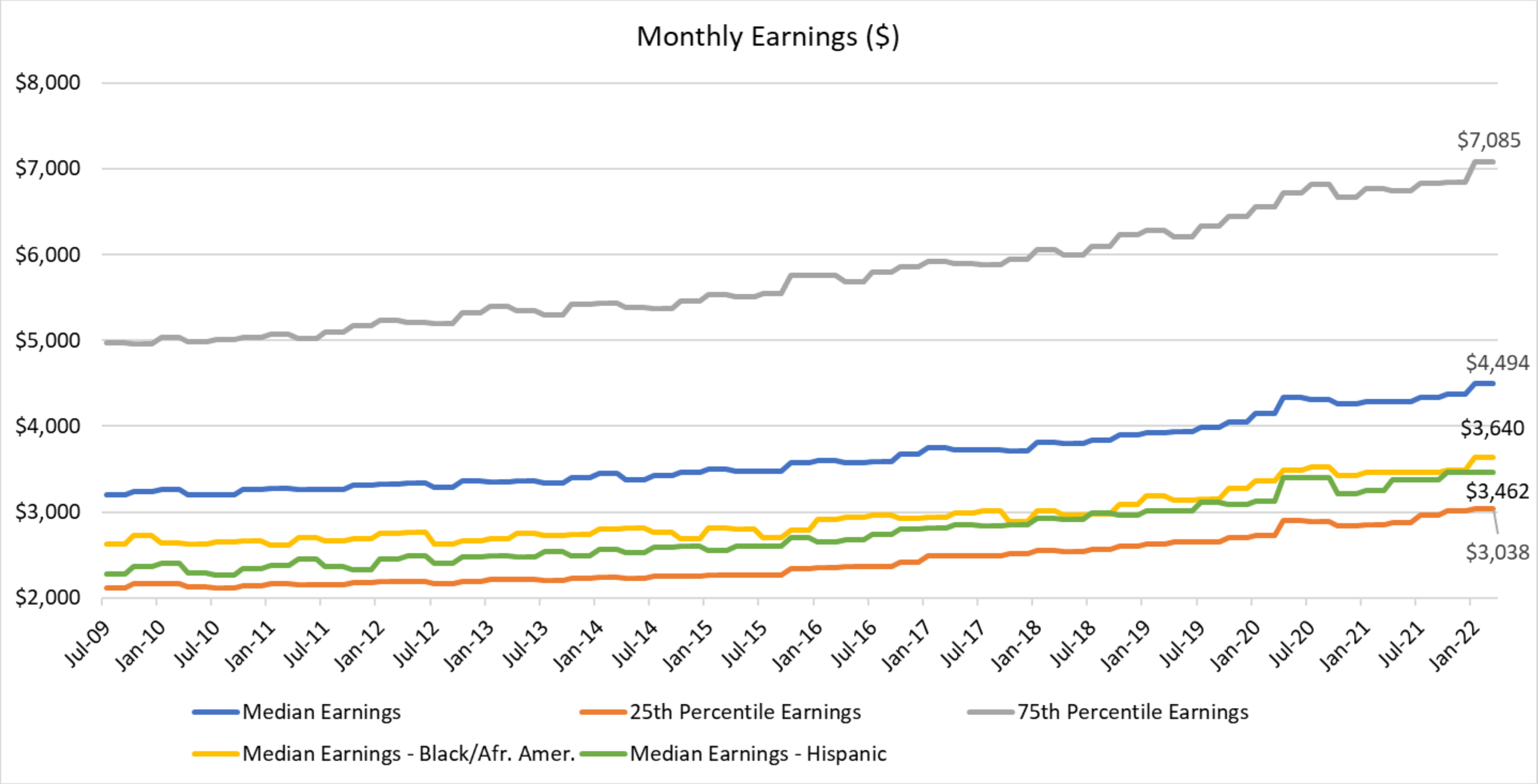
- PAPI directly uses MBA's Weekly Applications Survey data to calculate mortgage payments.

Weekly Applications Survey – Payments



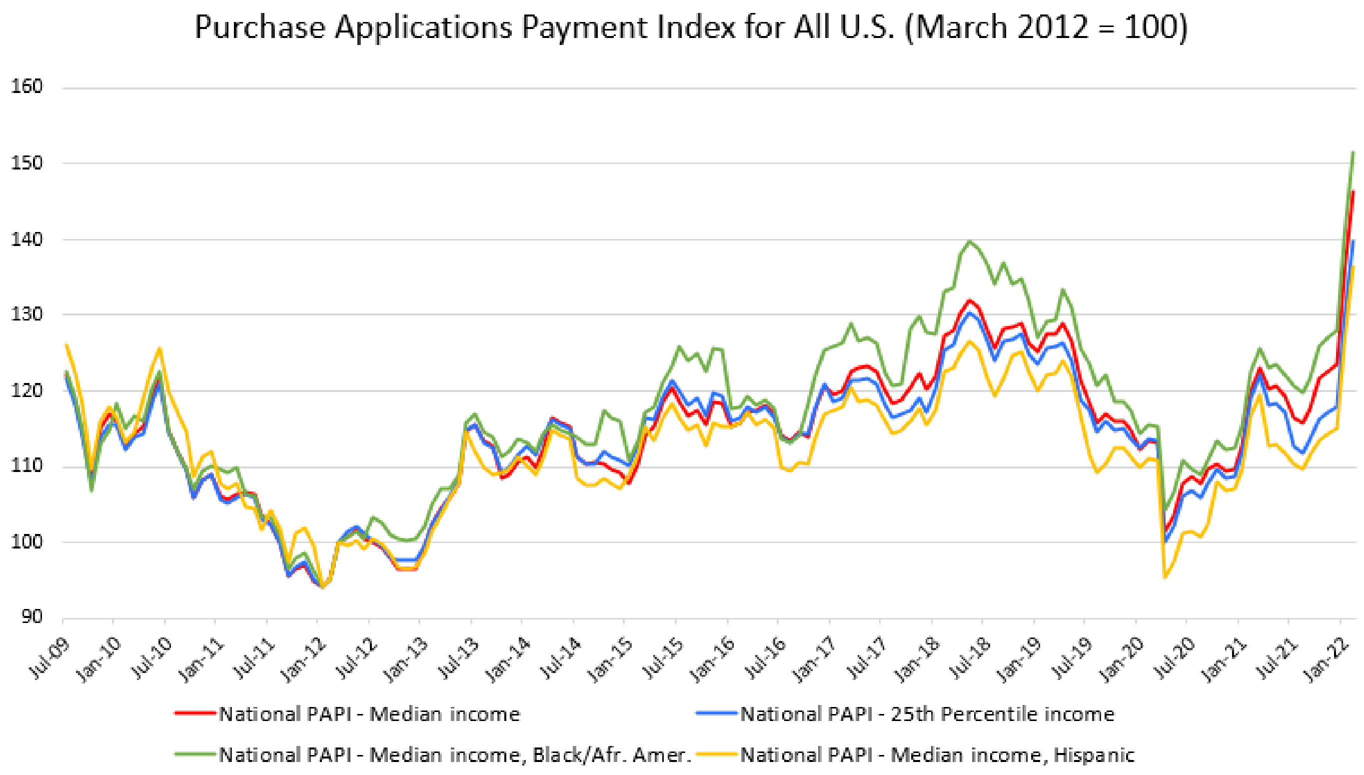
Source: MBA Weekly Applications Survey

Bureau of Labor Statistics – Monthly Income

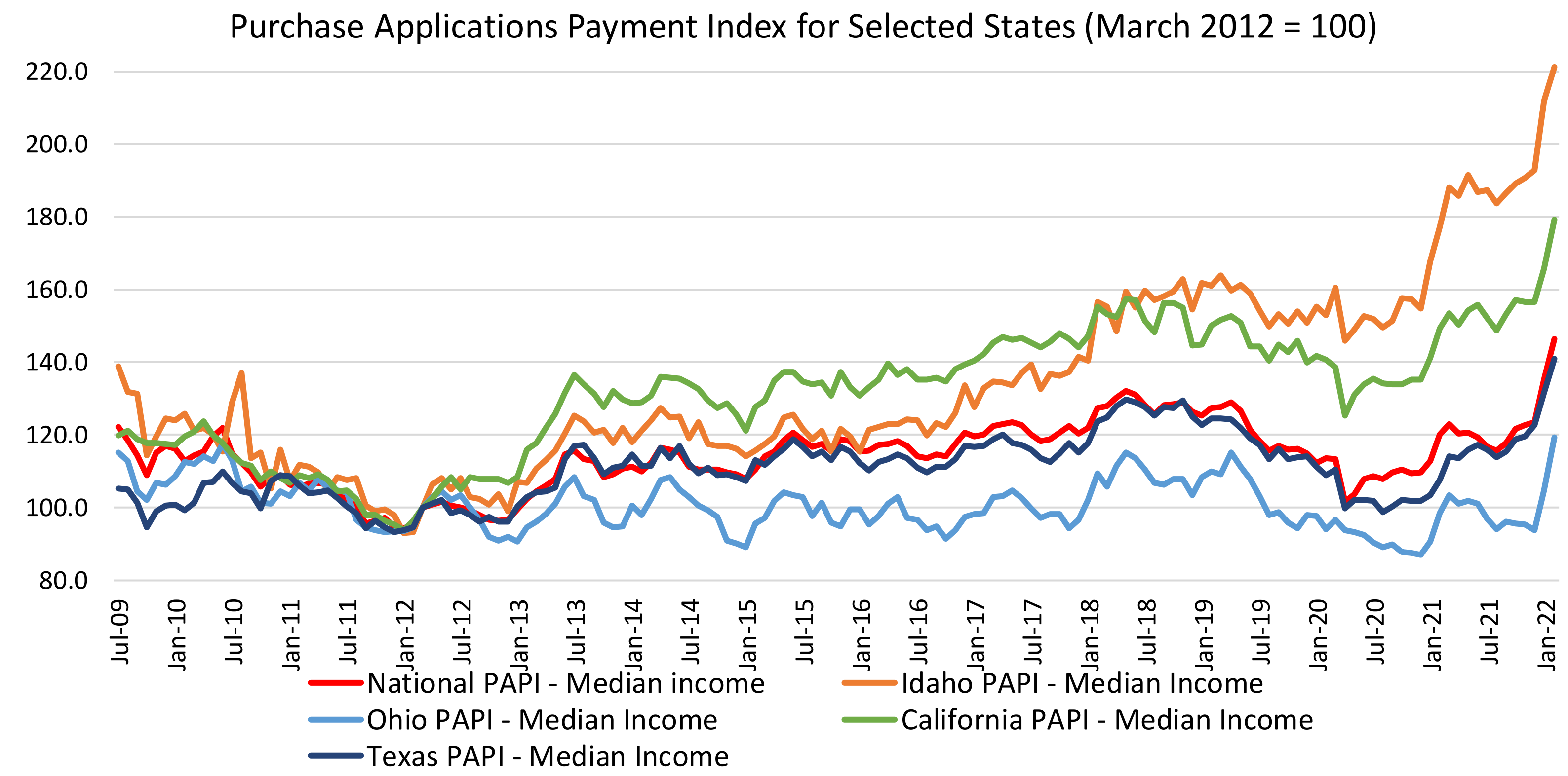


Source: U.S. Bureau of Labor Statistics' Current Population Survey (CPS).

National PAPI Series, through Feb 2022, by Race/Ethnicity

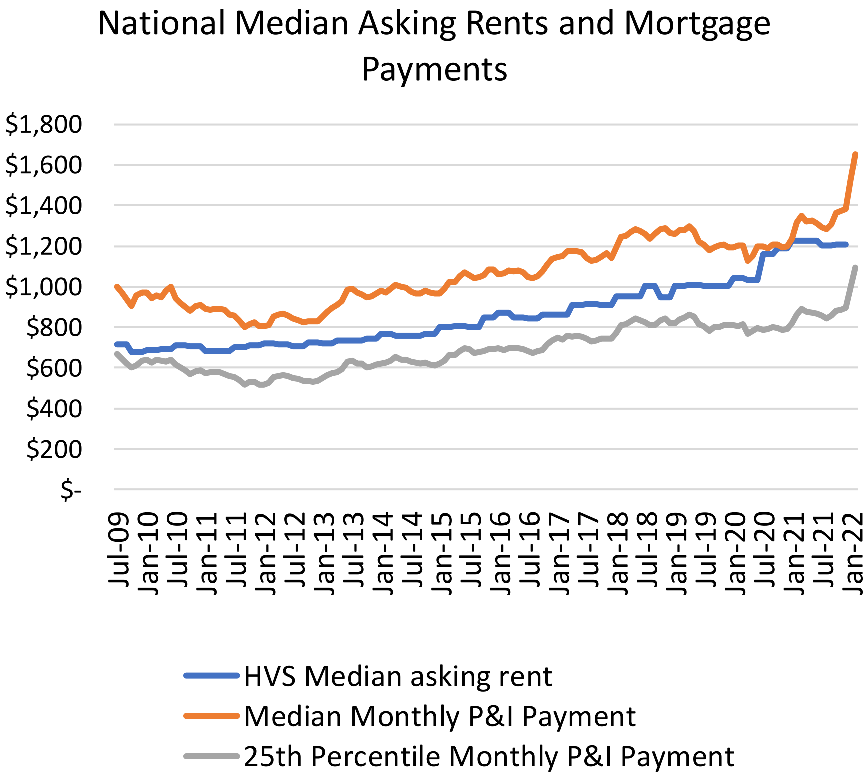


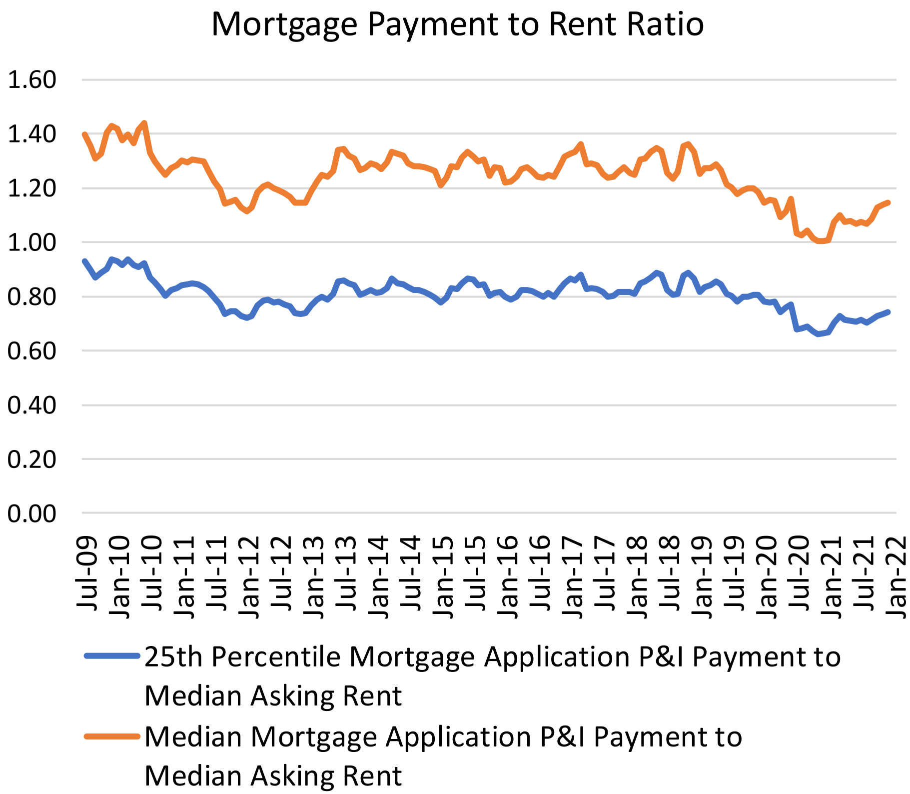
PAPI for selected states (April 1 COTW)



Sources: MBA Weekly Applications Survey, Bureau of Labor Statistics

Asking Rents and Mortgage P&I





Sources: MBA Weekly Applications Survey, Bureau of Labor Statistics, Census

Contact Information and MBA Resources

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