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Changing Rental Affordability in California Regions: Application of the Constant Quartile Mismatch Indicator

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on housing interconnections and problem trends.*

This conference presentation is adapted from and extends an article published in April 2019 by the authors in HUD's journal, *Cityscape*, here applied to California MPO Regions with 2017 data.

Myers, D., & Park, J. (2019). A Constant Quartile Mismatch Indicator of Changing Rental Affordability in U.S. Metropolitan Areas, 2000 to 2016. *Cityscape: A Journal of Policy Development and Research*, 21(1), 163–200.

<https://www.huduser.gov/portal/periodicals/cityscpe/vol21num1/article7.html>

Background

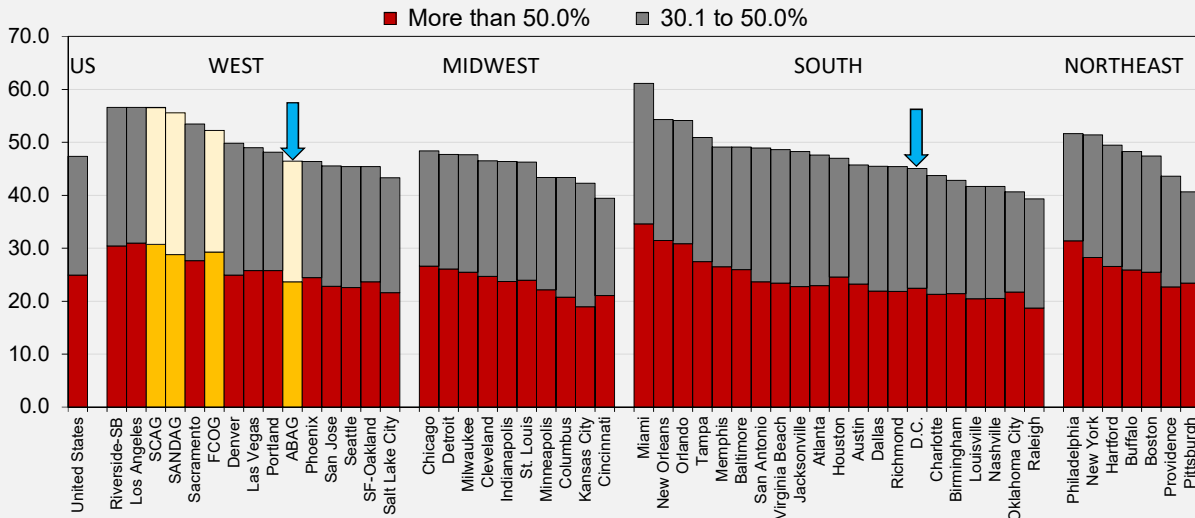
Rental affordability crisis has drawn widespread attention for its severity since the onset of the Great Recession (HUD 2017; JCHS 2018; NLIHC 2019)

Indicators of rental affordability are useful tools for measuring the growing problems and for **comparing places** — and there are several alternatives — yet a crucial criterion of **good indicators** is that an indicator **must not be misleading**

Traditional rent burden indicator — more than 30% of income required for rent — is most commonly used, yet it has proven **inadequate** for many reasons, particularly for **comparing large metropolitan areas**

Surprisingly Similar Rent Burden Across Regions, Plus Curious Anomalies of ABAG Region and Washington D.C.

Share of Renters Paying More than 30 (or 50) Percent of Income, US, 50 Largest Metros, and California MPO Regions, 2017



Faults with the Traditional Rent Burden Indicator

1. These metros ***can't really be all so similar*** on affordability
2. The Bay Area and Washington, DC, ***CANNOT be more affordable*** than the national average – that is nonsensical
3. Rent burden ***DISGUISES*** the problem: is it ***rent's too high*** or ***income's too low?*** What has been ***changing the most?***
4. Rent burden ***averages all income groups together***, so we can't tell if the incidence of high rent burden is driven by ***only the lowest income group or middle income groups as well***

New Method of Tracking ***Growing Mismatch of Incomes and Rents***

The idea of the Myers-Park (2019) method is to show the ***changing rent distribution***, marking it into ***four equal quartiles in 2000***, and then see in future years how many of the rental units have ***shifted over time into the top quartile***

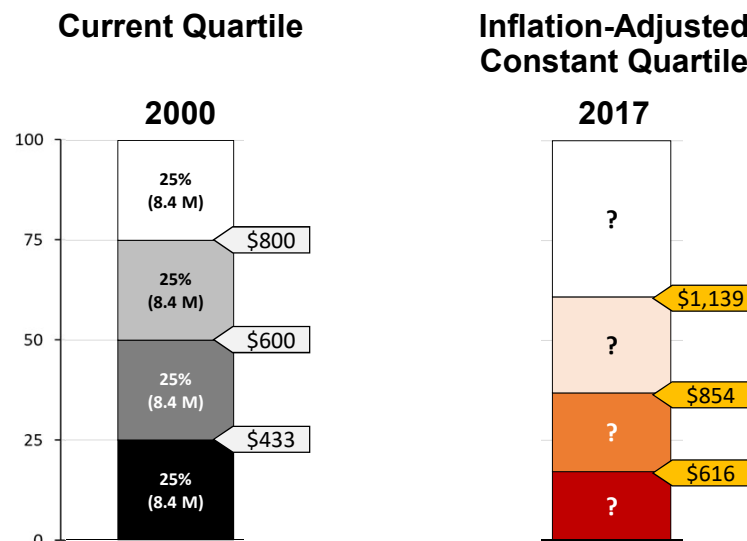
Separately, we show the ***changing income distribution*** of renters, marking that also into ***four equal quartiles in 2000***, and then seeing how incomes of renters also ***shift into higher or lower quartiles***

How great is the mismatch?

Here, we see how the new ***Constant Quartile Mismatch indicator*** helps ***disentangle rent and income effects***, and how it can ***reveal the true variation*** of affordability problems across regions

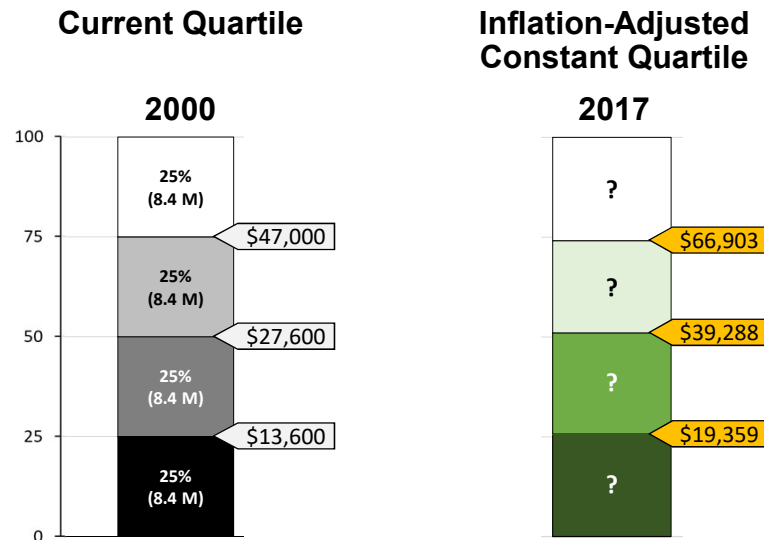
Definition of Constant Quartiles

Quartile Rent Distribution of Renter Households, Under Current and Inflation-Adjusted Constant Definitions, U.S., 2000 and 2017



Sources: 2000 Decennial Census and 2017 American Community Survey IPUMS Microdata files (Ruggles et al., 2018).

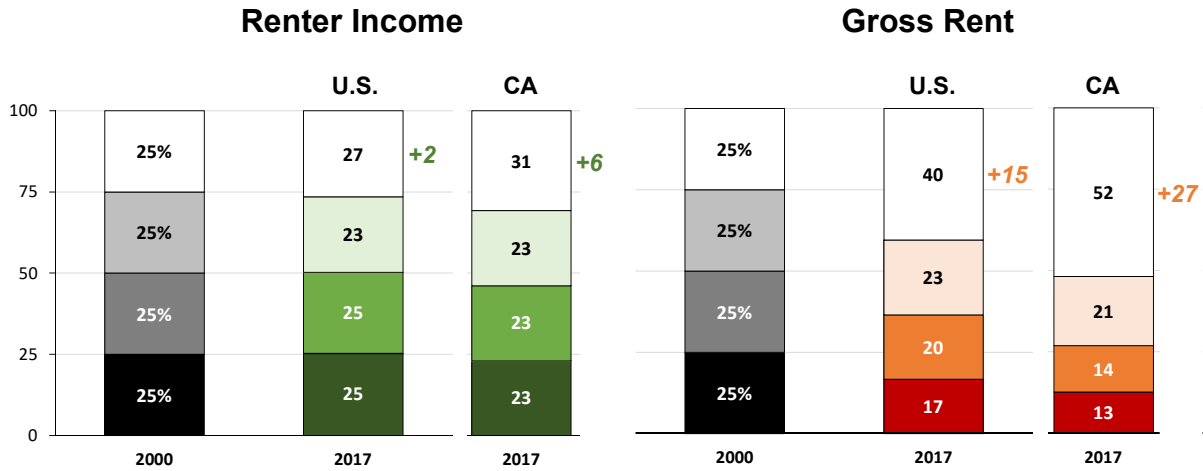
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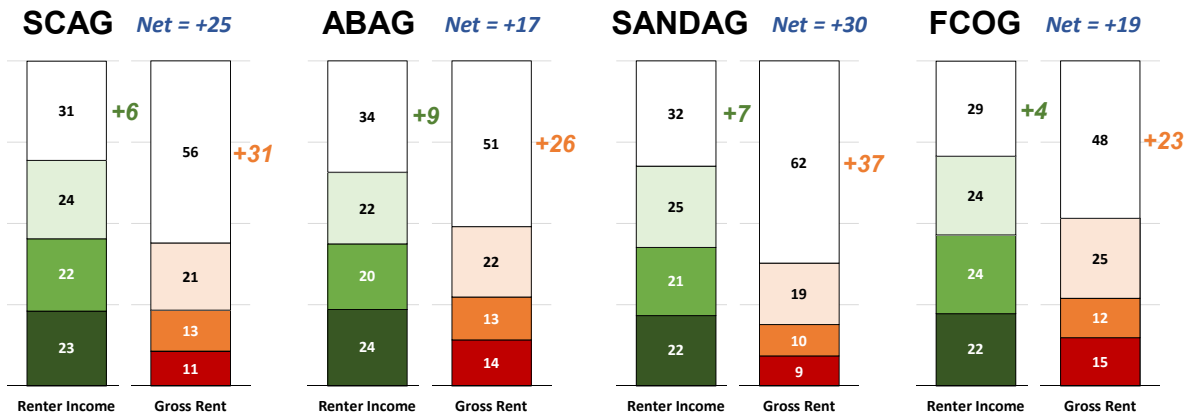
***Evidence from
the Mismatch Indicator for
the Nation, California,
and CA MPO Regions***

Soaring Rent Relative to Sluggish Income of Renters, United States and California, 2000 to 2017



Sources: Analysis with Myers-Park CQM method applied to the following data: 2000 Decennial Census and 2017 American Community Survey IPUMS Microdata files (Ruggles et al., 2018).

Incomes Are Growing across CA MPO Regions, While Rents Are Growing Even Faster, 2000 to 2017



Sources: Analysis with Myers-Park CQM method applied to the following data: 2000 Decennial Census and 2017 American Community Survey IPUMS Microdata files (Ruggles et al., 2018).

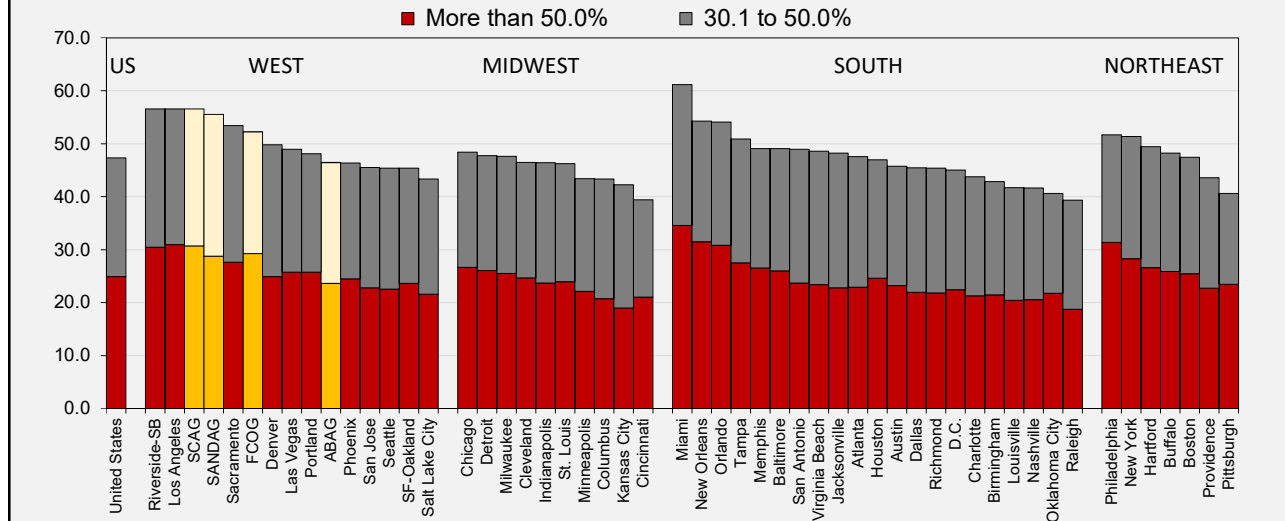
Summing Net Mismatch at Both High and Low End

- **Rental** share change less **income** change in *highest quartile*
 = Net mismatch at *high end*
 (e.g. **+ 22**) - **(+ 4)** = + 18 worse affordability alignment
 (e.g. **+ 22**) - **(- 4)** = + 26 worse affordability alignment
- **Rental** share change less **income** share change in *bottom quartile*
 = Net mismatch at *low end* (X by -1, to convert negatives to positive)
 (e.g. **(- 12)** - **(+ 2)** = - 14 X (-1) = + 14 worse affordability alignment
 (e.g. **(- 12)** - **(- 3)** = - 9 X (-1) = + 9 worse affordability alignment
- **Total Mismatch** is *net High End + net Low End*

**Where is
Least or Most
Affordable?**

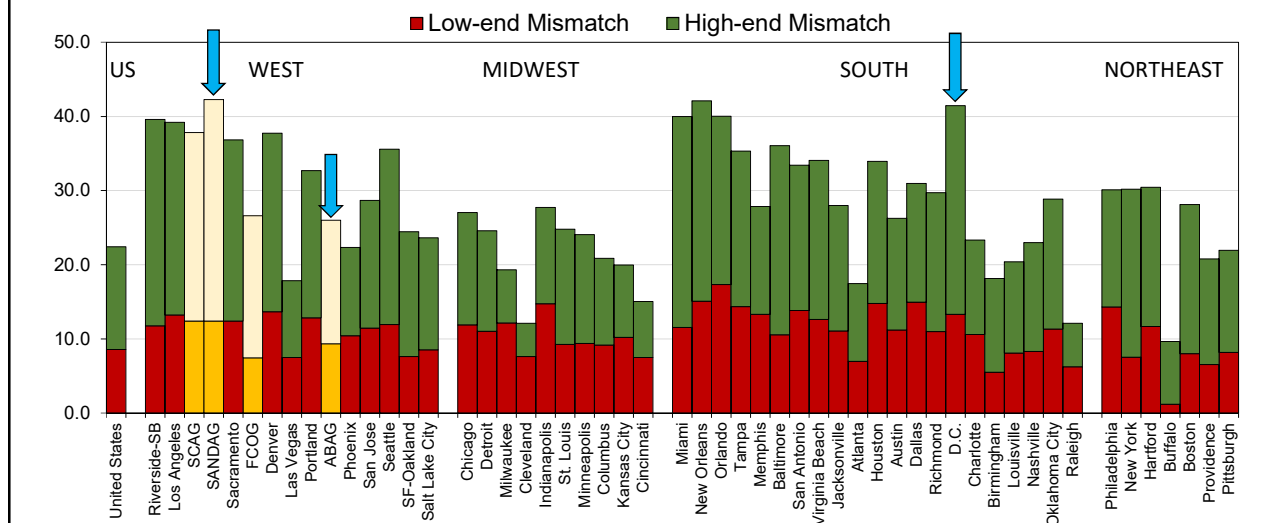
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Share of Renters Paying More than 30 (or 50) Percent of Income, US, 50 Largest Metros, and California MPO Regions, 2017



Least Affordable SANDAG and D.C. Due to Serious Mismatches at Both Ends of the Market, While Most Affordable Buffalo and Raleigh

Constant Quartile Affordability Mismatch at High and Low End of Rental Markets, US, 50 Largest Metros, and CA MPOs, Changes from 2000 to 2017



Discussion

- **Traditional indicator** shows **very similar** affordability problems across regions, fully 45 of 50 large metros are within +/- 8pp. of national average (47.4%) — even **ABAG (46.5%) and D.C. (45.0%)** were **more affordable** than the nation
- **CQM indicator** offers an alternative view on rental affordability, emphasizing **growing stress** on renters at both the **high and low ends** of the distribution and emphasizing **growing mismatch of rent and income** distributions
- Our mismatch indicator can **work very well with other indicators**, including in combination with the **traditional rent burden**
- The mismatch indicator **offers a broader characterization of growing affordability problems that afflict both poor and middle incomes**

Key References

Myers, D., & Park, J. 2019. "A Constant Quartile Mismatch Indicator of Changing Rental Affordability in U.S. Metropolitan Areas, 2000 to 2016," *Cityscape: A Journal of Policy Development and Research* 21 (1): 163–200. <https://www.huduser.gov/portal/periodicals/cityscpe/vol21num1/article7.html>

Collinson, R. 2011. "Rental Housing Affordability Dynamics, 1990–2009," *Cityscape: A Journal of Policy Development and Research* 13 (2): 71–103.

Joice, P. 2014. "Measuring Housing Affordability," *Cityscape: A Journal of Policy Development and Research* 16 (1): 299–307.

Joint Center for Housing Studies of Harvard University. 2018. *The State of the Nation's Housing*. Cambridge, MA: JCHS.

Lens, Michael C. 2018. "Extremely Low-Income Households, Housing Affordability and the Great Recession," *Urban Studies* 55 (8): 1615–1635.

National Low Income Housing Coalition. 2018. *The Gap: A Shortage of Affordable Homes*. Washington, D.C.: NLIHC.

Stone, Michael E. 2012. "Shelter Poverty." In *The Encyclopedia of Housing*, edited by Andrew T. Carswell. Thousand Oaks, CA: SAGE Publications.

U.S. HUD. 2017. *Worst Case Housing Needs: 2017 Report to Congress*. Washington, D.C.: HUD.

Thank You

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<https://sites.usc.edu/popdynamics/housing/>

for further information on the Haynes Foundation
supported project on housing interconnections and problem trends,
and 11 housing publications in 2018-19