Can Indirect Strategies Reduce Shortages, Restrain Housing Cannibals, and Promote Affordability?

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Based on research supported by the Haynes Foundation and the National Multifamily Housing Council
Themes Addressed

1. Where did the housing crisis come from? How big? So many interconnections, anomalies, and misperceptions

2. How does housing affordability result or get measured?

3. To understand growing needs, follow the people

4. How does housing shortage exert its effects?

5. The growing evidence for indirect solutions
Nationwide
But Most Acute
in California
How Big is the Housing Shortage Really?

Includes future needs plus present unmet needs

Statewide

2017-2025 McKinsey (2016) = 3.5M (438K per year)
2017-2025 USC (HRB 1) Pop based, using 2000 norm = 2.8M (354K per year)

Key regions

2014-2022 ABAG RHNA = 188K (24K per year) only future needs?
2021-2029 SCAG RHNA = 456K (57K per year) by staff, but members vetoed

→ 1.3M (163K per year) by HCD determination 8/22/19

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Slowdown in New Construction in California

Annual Building Permits by Structure Type, California, 1960 to 2018

Expanding new construction after bust, but still much below average 160K permits per year for the last 59 years

Sources: U.S. Census Bureau’s Building Permits Survey.

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How to Measure Needs for *Households that Don’t Exist?*

An existential problem.....

*Cannot measure needs or affordability for HHs that do not exist because would-be HHs cannot find enough housing units*

*Housing needs* must be estimated from either the number of people or jobs, but not from the existing HHs

- *Population* based, using normal household formation rates
- *Jobs-housing* based, using “normal” relationships of permits to job growth from the past
**Strong Relations** Between New Construction and Job Growth Before the Recession, Five Eras Since 1980, Largest 100 Metros

![Graphs showing the relationship between new construction and job growth across different eras](image)

**Notes:** New construction per year (%) = Summed annual bldg. permits (2-year lagged) / start year households x 100 / length of years; Job growth per year (%) = (end year jobs – start year jobs) / start year jobs x 100 / length of years.

**Sources:** U.S. Census Bureau’s Building Permits Survey; Bureau of Economic Analysis (BEA)’s Employment Data; Decennial Census and American Community Survey IPUMS Microdata Files.
**Strong Relations** Between New Construction and Job Growth

Before the Recession, Five Eras Since 1980, Largest 100 Metros

<table>
<thead>
<tr>
<th>Period</th>
<th>Coefficient on Job Growth</th>
<th>Constant Term</th>
<th>R-squared</th>
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<tr>
<td>1980–89</td>
<td>0.80</td>
<td>0.12</td>
<td>0.68</td>
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<tr>
<td>1990–99</td>
<td>0.52</td>
<td>0.53</td>
<td>0.71</td>
</tr>
<tr>
<td>Boom (2000 Through 2006)</td>
<td>0.59</td>
<td>1.08</td>
<td>0.56</td>
</tr>
<tr>
<td>Bust (2007 Through 2011)</td>
<td>0.34</td>
<td>1.37</td>
<td>0.17</td>
</tr>
<tr>
<td>Recovery (2012 Through 2017)</td>
<td>0.29</td>
<td>0.25</td>
<td>0.34</td>
</tr>
<tr>
<td>Average of 80s, 90s, and Boom</td>
<td>0.64</td>
<td>0.58</td>
<td></td>
</tr>
</tbody>
</table>

Relations Across 100 Metros

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Choices for Counting Annual Housing Needs in California, 2017 to 2025

Existing Backlog and Future Needs per Year, Population-based, 1000s, Including 5% Vacancies and 0.15% Annual Replacements

<table>
<thead>
<tr>
<th></th>
<th>Annual Housing Needs 2017 to 2025 (Thousand Units per Year)</th>
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<tbody>
<tr>
<td>2017 Standard</td>
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<tr>
<td>Only count future</td>
<td></td>
</tr>
<tr>
<td>needs</td>
<td>187</td>
</tr>
<tr>
<td>Exclude current</td>
<td></td>
</tr>
<tr>
<td>unmet needs</td>
<td></td>
</tr>
<tr>
<td>2000 Standard</td>
<td></td>
</tr>
<tr>
<td>Only count future</td>
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<tr>
<td>needs</td>
<td>198</td>
</tr>
<tr>
<td>Include unmet</td>
<td></td>
</tr>
<tr>
<td>since 2006</td>
<td>314</td>
</tr>
<tr>
<td>Include unmet</td>
<td></td>
</tr>
<tr>
<td>since 2000</td>
<td>354</td>
</tr>
</tbody>
</table>

Avg. actual permits in 2017 & 2018

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When Growing Rental Demand Meets Limited Housing Supply

Conceptual Diagram for Explaining the Rental Housing Shortage

**DEMAND**
- Depressed Homeownership
- Millennial Arrival in Adulthood
- Other Population Growth

**SUPPLY**
- Restricted Supply of Workers
- Financing & Land Constraints
- Political Resistance

Great Recession & Aftermath

Increased Rental Demand

Depressed Construction

Rental Housing Shortage

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Interconnections in the Housing Market with Owners at the Top While the Lowest Income Multifamily Renters at the Bottom, 2017

United States (120M HHs) | California (13M HHs) | LA Metro (4.3M HHs) | SF-Oak Metro (1.7M HHs)
---|---|---|---
Homeowners | 63.9% | 54.9% | 48.5% | 54.8%
SF Renters | 12.4% | 16.5% | 15.0% | 12.3%
MF Renters (80%+ AMI, Moderate or Higher-income) | 8.2% | 11.3% | 14.9% | 14.2%
MF Renters (50–80% AMI, Low-income) | 4.0% | 5.1% | 7.0% | 5.6%
MF Renters (0–50% AMI, Very Low-income) | 11.4% | 12.2% | 14.7% | 13.1%

Sources: 2017 American Community Survey IPUMS Microdata Files.

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Breakdown of Total Housing Stock, By Tenure and Subsidy, Cities of LA, San Francisco, New York, and Chicago

34.0% of Low-cost Rentals* Were *Taken* by Relatively Higher-income Renters in the Cities of LA and San Francisco, 2017

* Low-cost rental units in the City of San Francisco are defined for THIS analysis by gross rents lower than $1,388/month (2017$) which is 30%-rent-burden-ceiling for very low-income San Franciscan HH (<50% of City of SF median HH income, $111,000 in 2017); For City of LA, low-cost rental units are defined lower than $750/month (2017$) based on the city’s median HH income of $60,000 in 2017.

**Low-Cost Successfully Occupied** by Very Low-income (0–50% AMI)
Either Subsidized or Rent Regulated/Unregulated Market-rate

Sources: Analysis by JungHo Park, 2017 American Community Survey IPUMS Microdata Files.
Long-term Homeownership Rates, US and California, 1960 to 2018

Sources: 1960 to 2000 Decennial Census
IPUMS Microdata Files; 2006 through 2018 American Community Survey.

Dowell Myers, USC Price
Big consequences of falling homeownership rates for the rest of the housing market.

Sources: 1960 to 2000 Decennial Census, IPUMS Microdata Files; 2006 through 2018 American Community Survey.
Increasing Homeownership Gap, California, 1980 to 2018

Gap Between Homeownership Rate of Age 35-44 Minus Age 65+, Percentage Point Difference

Sources: 1960 to 2000 Decennial Census IPUMS Microdata Files; 2006 through 2018 American Community Survey.

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Affordability Problems Are Everywhere But Not Measured Effectively
Long-term Trend of Rent Burden, United States, 1980 to 2017

Paying more than 30% of Income on Rent

Paying more than 50% of Income on Rent

Sources: 1980 to 2000 Decennial Census and 2006 through 2017 American Community Survey IPUMS Microdata Files.

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Surprisingly Similar Rent Burden Across Regions, Plus Curious Anomalies of SF-Oakland and Washington D.C.

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

- More than 50.0%
- 30.1 to 50.0%

Sources: 2017 American Community Survey IPUMS Microdata Files.

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**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.

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Soaring Rent Relative to Sluggish Income of Renters, United States and Los Angeles Metro, 2000 to 2016

Sources: Myers and Park (2019)
https://www.huduser.gov/portal/periodicals/cityscpe/vol21num1/article7.html
Metropolitan Areas Where *Incomes Are Growing*, While *Rents Are Growing Even Faster*, 2000 to 2016

**SF-Oakland**
- Renter Income: 23
- Gross Rent: 24
- 19
- 34
- 49

**San Jose**
- Renter Income: 18
- Gross Rent: 29
- 14
- 32
- 49

**Washington, D.C.**
- Renter Income: 19
- Gross Rent: 27
- 11
- 31
- 58

Sources: Myers and Park (2019)

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Where Does Housing Need Come From?

Follow the People!
A Small Amount of Housing Growth is from *Outsiders* Moving into California, Los Angeles, and the Bay Area

% of Population Each Year that Moved into a Housing Unit, 2006 to 2018

Sources: 2006 through 2018 American Community Survey.

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Growth by Age in California: Then and Now

Sources: Dowell Myers, Census Bureau decennial census of 1990 and 2010, and CA DOF 2017 vintage projections
More than Half of Young California and Bay Area Residents Are Homegrown

Birthplace Origins of Residents, By Age Group, 2017

- Orange: Born in California
- Light Gray: Born Other States
- Green: Foreign Born

California:

- Total:
- 75+: 50%
- 65-74: 25%
- 55-64: 50%
- 45-54: 75%
- 35-44: 100%
- 25-34: 75%
- 18-24: 50%
- 5-17: 25%
- under 5: 0%

SF-Oak Metro:

- Total:
- 75+: 100%
- 65-74: 75%
- 55-64: 50%
- 45-54: 25%
- 35-44: 0%
- 25-34: 25%
- 18-24: 0%
- 5-17: 0%
- under 5: 100%

Sources: 2017 American Community Survey.

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**Tripling** Ratio of Seniors to Workers in the Bay Area Since 2010

Upsurge After 2010 in SF-Oakland, LA, California, and U.S. Overall

Why the Rising Ratio Matters

- Growing weight of pensions and health care
- Weakened base of taxpayers
- Relatively fewer workers
- More potential home sellers than potential buyers
- Elderly dominant society could have more volunteers


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Payoff from Following the People

These population dynamics—and others as well—shape the politics surrounding housing problems and potential solutions.

Demographics also shape housing demand and housing needs itself. Using a housing demographic approach we can estimate needs that are not directly measurable through housing units or household income.

Old ideas of housing demography are finding new relevant applications......
How Does the Housing Shortage Exert Its Effects on People?
Too much competition for too little supply

= *Pressure cooker* on prices and displacement

But what exactly are the mechanics on that?
Diverted Homeowners Pancake into the Rental Market, California

Sources: 1960 to 2000 Decennial Census IPUMS Microdata Files; 2006 through 2018 American Community Survey.

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Increasing Homeownership Gap = Greater Rental Demand

Gap Between Homeownership Rate of Age 35-44 Minus Age 65+, Percentage Point Difference

Sources: 1960 to 2000 Decennial Census IPUMS Microdata Files; 2006 through 2018 American Community Survey.

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Multitudes of Millennials Trying to Form Households: Peak is Now Age 29

Peak Millennial Births, Annual Births in the US, 1960 to 2017

Sources: Graphs based on Figure 1 of Myers, D. (2016). Peak Millennials: Three Reinforcing Cycles That Amplify the Rise and Fall of Urban Concentration by Millennials. Housing Policy Debate, 26(6), 928–947; National Vital Statistics Reports, Vol. 67, No. 8, November 7, 2018

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Declining Household Formation in California

Total Household Formation (HHs per capita) Compared to the Same Age in 2000

Sources: Graphs based on Figure 5 of Myers, D. (2016). Peak Millennials: Three Reinforcing Cycles That Amplify the Rise and Fall of Urban Concentration by Millennials. Housing Policy Debate, 26(6), 928–947.

Ratchet Downward for Millennials

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**Sharply Declined** Homeowner Households

Formation of Owner HHs (per capita) Compared to the Same Age in 2000, California

Sources: Graphs based on Figure 5 of Myers, D. (2016). Peak Millennials: Three Reinforcing Cycles That Amplify the Rise and Fall of Urban Concentration by Millennials. *Housing Policy Debate*, 26(6), 928–947.
Rental Competition Multiplies from GenXers

Formation of Renter HHs (per capita)
Compared to the Same Age in 2000, California

Sources: Graphs based on Figure 5 of Myers, D. (2016). Peak Millennials: Three Reinforcing Cycles That Amplify the Rise and Fall of Urban Concentration by Millennials. Housing Policy Debate, 26(6), 928–947.
When Growing Rental Demand Meets Limited Housing Supply

Conceptual Diagram for Explaining the Rental Housing Shortage

**Demand**
- Depressed Homeownership
- Millennial Arrival In Adulthood
- Other Population Growth
- Increased Rental Demand

**Supply**
- Restricted Supply of Workers
- Financing & Land Constraints
- Political Resistance
- Depressed Construction

**Rental Housing Shortage**

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How Does the Shortage Get Resolved?
Shortage Breeds *Downward Raiding and Cannibalization*

Would-be homeowners diverted into rentals

- Luxury New Rentals
  - $$$
  - 1.2 M
- Older Luxury Rentals
  - $$
- Middle Class Rentals
  - $$
- Working Class Rentals
  - $  

Higher-income renters taking medium-cost rentals

Millennials coming of age and forming households

1.2 M *Dislodged*

20.3% of 2017 actual renters; 9.2% of 2017 actual HHs

thinning the ranks of lower income residents who are forced to double-up or worse

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Growing Evidence Suggesting Need for Indirect Solutions
Massive Solutions Are Needed

Beginning with 200,000 subsidized units targeted to very low-income HHs with the worst housing needs,

but extending to many times more low-income HHs living in market rate housing and burdened with excessive rents,

and including also a great many middle class HHs facing their own affordability problems or burdened by their grown children who are camped at home for lack of suitable entry-level housing.

Whether or not its exactly 3.5 Million homes that are needed, how in the world are we to deliver on that goal?
Limited Budget Capacity for Direct Solutions

Federal Government

$782 billion deficit for Fiscal Year 2018, about 17 percent ($116 billion) greater than the deficit for FY 2017

and projected to keep falling deeper in debt, with no new room for funding housing needs

State Government

$21 billion surplus in January 2019, enough to build 42,000 new units

or to subsidize 105,000 units for 20 years (at $10k per unit per year)
Advantages of Indirect Solutions

Direct solutions are attractive, but expensive and grossly inadequate in scale.

Solutions to problems don’t always lie where the problems appear.

Indirect solutions may go to the root causes, be more economical, and also more sustainable.

We need to leverage the rest of the housing market to produce more favorable opportunities for lower income households as well as the middle class.
Consider These 4 Indirect Solutions

- **Solution 1** — *get the diverted homeowners OUT of rental competition*—most are in apartments, not SF rental

- **Solution 2** — *multiply the vacancy chains stemming from newly built units*

- **Solution 3** — *siphon demand OUT of working/middle class family homes and into newly built housing*

- **Solution 4** — *use filtering to grow future opportunities for low-income HHs by producing more middle-income housing today*
New Attention to Vacancy Chains

Old idea that every new unit stimulates a chain of moves, creating opportunities for 3 or more additional HHs. (Kristof 1965; Lansing 1969)

Chain is broken when the inmover does NOT leave a vacant unit behind (due to HH formation, in-migration from another metro, etc.)

Newest work is using the Infutor marketing database to trace residential histories. Not clear that vacancies are left behind—could just be roommates or partners leaving.

Evan Mast (2019) estimates migrants from out of MSA fill 45% of newly built units in his sample of metros. Note that centrally located new housing has special attraction for migrants lacking local familiarity.
Market Rate Housing Can Save the Working Class

Evan Mast (2019) shows new market rate housing stimulates 20 moves from low-income neighborhoods for every 100 new units built. Or 50 moves from below-median neighborhoods.

Middle income construction will have more impact on working class than luxury—because it is a closer substitution—but all housing serves to absorb excess demand that otherwise would scavenge downward in income level.

These indirect linkages may be hard to prove to neighborhood activists. Case examples and role playing exercises might help.

An excess of market rate housing would facilitate filtering opportunities, but how much can that be believed? see next!
Can Filtering Increase Low-income Opportunities?

HUD declares filtering is the traditional means of creating lower-income housing opportunity. Over time properties obsolesce and are made less competitive, commanding lower rents.

Many people have lost faith in “trickle down” strategies. Filtering requires a surplus supply if this favorable sorting is going to work. Under shortage conditions, its effects could be reversed.

A current research project supported by the research foundation of the National Multifamily Housing Council (NMHC) is tracing apartment filtering between 1980 and 2017 in the largest metros. Filtering is measured by an increased occupancy by very low-income tenants (income < 50% of MSA median).
Success of Filtering in Apartments of Each Vintage

Median Rent

Sources: 1980 to 2000 Decennial Census and 2006 through 2017 American Community Survey IPUMS Microdata Files.

Preliminary

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Slowdown in New Construction in California

Annual Building Permits by Structure Type, California, 1960 to 2018

Forgone filtered housing of today and the future

Sources: U.S. Census Bureau’s Building Permits Survey.
Thank you

Visit USC PopDynamics
https://sites.usc.edu/popdynamics/housing/

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→ See updated and expanded study in HUD’s *Cityscape*: https://www.huduser.gov/portal/periodicals/cityscpe/vol21num1/article7.html

