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Regional Housing Need in California: The San Francisco Bay Area

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Abstract

This report evaluates California’s official housing target for the San Francisco Bay Area. While the Bay Area received a substantially larger target for the upcoming planning cycle than it had in the previous cycle, the relative increase in the Bay Area target was a lot smaller than that for the state’s other major metropolitan region, Los Angeles, which forms part of the Southern California Association of Governments. We argue that the Bay Area’s lower target reflects, in part, the state’s failure to account for the fact that the Bay Area leads the nation in supercommuters, many of whom work in the Bay Area but have been driven by the region’s housing shortage to live outside of it. State law requires an adjustment for regional “jobs-housing imbalance,” yet none was made. The Bay Area target was also deflated by the Association of Bay Area Governments’ choice of “comparator regions,” a choice which presupposed that the Bay Area should be benchmarked against similarly housing-supply-constrained regions; and by the state’s decision not to fully account for the needs of presently cost-burdened households. Altogether, we estimate that the announced target of 441,000 new housing units was at least 245,000 units short of the mark.

Introduction

This report evaluates the Department of Housing and Community Development’s (HCD) recently-announced determination of the [regional housing need for the San Francisco Bay Area](#). We think this determination is too low. We approach the question, “What Is the Bay Area’s Housing Need?” not from first principles, on which many people can reasonably disagree, but by using the methodology prescribed by California law. We identify several problems with Bay Area’s current housing target for the Bay Area, and we show how the target would change if these problems were corrected.

For the upcoming planning period, the state has assigned to the Association of Bay Area Governments (ABAG) a target of [441,176 housing units](#). This target is substantially higher than the region’s target for the last period, which reflects the application of new statutory requirements. However, on a relative basis, the ABAG increase (135%) was substantially smaller than the increase for the state’s other major metropolitan region, the Southern California Association of Governments, or SCAG (229%).

On an absolute basis, the new ABAG target is also incongruously small. For example, ABAG’s target for market-rate housing translates into annualized production of about 22,000 units. Bay Area jurisdictions are now permitting about [20,000 market-rate housing units annually](#). Deed-restricted affordable production amounts to a paltry [2,500 units per year](#).

To put these numbers in context, the legislature, building on research by the Legislative Analyst’s Office, has embraced the goal of doubling statewide production, and Gov. Newsom has called for a four-fold increase.¹ It’s very doubtful that these goals will be met without huge increases in market-rate production in cities where prices are high enough to make midrise and highrise construction viable. The Bay Area is ground zero. Meeting state housing production goals requires zoned capacity where there is demand.²

¹ Christopher S. Elmendorf, Eric Biber, Paavo Monkkonen & Moira O’Neill, Superintending Constraints on Housing Development: How California Can Do It Better (July 8, 2020), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3614085.

² Paavo Monkkonen & Spike Friedman, “Not Nearly Enough: California Lacks Capacity to Meet Lofty Housing Goals” (UCLA Lewis Center Issue Brief, 2019), <https://www.lewis.ucla.edu/research/california-lacks-capacity-to-meet-lofty-housing-goals/>.

- The overcrowding adjustment should have added about 115,000 units, rather than 95,000 units.
- Fully adjusting for the presently cost-burdened households would add about 150,000 units, rather than 9,000 units, to ABAG’s target.

Together, these corrections would **add at least 245,000 units to ABAG’s target.**

Background

The regional housing needs determination (“RHND”) is the fulcrum on which nearly everything in California’s housing framework turns. It establishes both an overall regional target for new housing over the eight-year planning cycle, and a division of that target into four affordability bands. Roughly 40% of the target must be accommodated on sites zoned for statutory minimum densities (30 units per acre in urban counties) or otherwise capable of accommodating lower-income housing. Whether subsidized or market-rate housing is ultimately developed on these sites, their existence ensures that some relatively affordable housing types, such as smaller units in multifamily buildings, can be produced.

Responsibility for setting the RHNDs is lodged in the Department of Housing and Community Development (HCD). While the department sets the targets in consultation with regional associations of local governments, the local role is advisory only. Gov’t Code 65584.01(b)(2).

The foundation of the RHND is a forecast of household growth. This is a deeply problematic basis on which to set housing targets, since population trends are a consequence of land-use policies.³ A region with very restrictive land-use controls will have low rates of household growth, but this hardly signifies that the region has little need for new housing. The region may well have massive housing need, albeit need which manifests as high housing prices and brutally long commutes rather than as high rates of new household formation. The Bay Area is a case in point.

The legislature has begun to wrestle with these problems. SB 375, a landmark climate-and-transportation bill passed in 2008, told HCD to account for “[t]he relationship between jobs and housing, including any imbalance between jobs and housing,” when setting the regional targets. Gov’t Code 65584.01(b)(1)(G).

³ Paavo Monkkonen, Michael Manville & Spike Friedman, “A Flawed Law: Reforming California’s Housing Element” (UCLA Lewis Center Issue Brief, 2019), <https://www.lewis.ucla.edu/research/flawed-law-reforming-california-housing-element/>.

the United States outside of the Bay Area counts as a comparator;⁵ and (3) a “high demand, high growth” alternative, anchored by metro areas that expanded their housing supply by at least 30% from 2000 to 2013.⁶

As among the comparator sets, the “high-growth, high-demand” benchmark is most appropriate for California’s major metropolitan regions. While the national benchmark has an obvious logic, it includes declining regions, such as the Rust Belt, which are inapt comparators because a lot of their housing stock consists of stranded assets, whose [market price is less than the cost of replacement](#). Such housing is very affordable while it remains standing but its low price is an indicator of regional decline, not a healthy housing market.

But just as it makes no sense to benchmark California’s high-demand metropolitan regions against the declining cities of the Midwest, it is equally misguided to use the [notoriously supply-constrained metros](#) of the Northeast and Northwest as comparators. SB 828 announces a “healthy housing market” norm, and the [legislative history](#) makes clear that the bill was intended to bring about large-scale increases in market-rate production. The most appropriate comparators, then, are metro regions that have accommodated positive economic shocks by allowing robust expansion of the housing stock.⁷

This is not to say that California should “sprawl” like Atlanta, Houston, Dallas, or Phoenix. Our state laws privilege higher density patterns of development. But if we’re not going to sprawl then we need to make it easy to build dense housing in high-demand places. The housing framework as augmented by SB 828 provides a mechanism to do this. The first step is to make large upward adjustments to the baseline, population-forecast RHND, based on housing market dynamics in

⁵ More specifically, we use the [combined statistical areas](#) designated by the U.S. Office of Management and Budget and the U.S. Census.

⁶ These metro areas are drawn from Edward Glaeser & Joseph Gyourko, “The Economic Implications of Housing Supply,” *Journal of Economic Perspectives* 32:3-30 (2018), fig.3 (2018). Glaeser and Gyourko study housing stock growth at the CBSA level. In our tables, we use the corresponding CSA, because CSAs are the geographic units employed by ABAG and HCD for making cost-burden, vacancy, and overcrowding adjustments. No doubt there are many other reasonable ways to define a set of “high growth” comparator jurisdictions, each of which would probably yield somewhat different results.

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- an unusually high share of professional workers, i.e., workers who can afford the expensive housing
- an unusually low share of service workers (workers unable to afford expensive housing in the supply-constrained market will commute in from outside the region, or be replaced by automation)

While we have undertaken to replicate ABAG’s analysis using ABAG’s preferred comparator regions, we do not endorse it.

Jobs-Housing Imbalance

Severe housing supply constraints plus a burgeoning economy have made the Bay Area a land of supercommuters. The resident working class is [hollowing out](#), displaced by high housing costs to more affordable regions like the Central Valley.

If regional housing targets were set solely on the basis of projected household growth, California’s housing framework would be at war with the state’s climate-change and transportation goals. As price-induced displacement from the Bay Area manifests as faster growth in the Central Valley, the Central Valley would be deemed to have greater “need” than the Bay Area. As Central Valley communities rezone to accommodate that “need” while the Bay Area keeps its barricades up, the housing-price disparity between the two regions would worsen, causing more and more cost-burdened households to relocate eastward, leading to more and more supercommuters, clogged highways, greenhouse-gas emissions, and [persistent spatial inequality](#).

Fortunately, the planning framework gives HCD a way to forestall this dynamic. The statute requires the department to consider “the relationship between jobs and housing, including any imbalance between jobs and housing,” and to make a “determination in writing on the assumptions ... and methodology” will use to account for this factor in setting the regional target.⁹ Gov’t Code 65584.01(b). This provision was added to the statute by SB 375, the landmark climate-and-transportation bill.

However, to the best of our knowledge, the jobs-housing adjustment has never been applied. The department’s failure to apply it is perhaps justified as to the many regions of the state in which nearly all workers are also residents. But for the Bay Area, the factor is absolutely essential. While

⁹ To be clear, a determination in writing is required for each of the enumerated adjustment factors, not just the jobs-housing factor.

ABAG counties. Multiplying these numbers by the “housing units per worker” ratio that ABAG’s own planning documents deem healthy and appropriate for the region (1/1.41),¹⁴ we obtain adjustments of:

- **137,524 units (supercommuters)**
- **85,689 units (net inflow)**

As between these candidate adjustments, we recommend the supercommuter adjustment, as it accounts for workers who have been driven by high housing prices near their place of employment to residences in the outer reaches of the ABAG region, not just for workers who commute from outside of the nine-county ABAG area. Put differently, a jobs-housing adjustment based on length of commute better corresponds to the purpose of SB 375 — reducing long, climate-damaging commutes — than does an adjustment based on the number of commuters who cross the regional border.

The other general approach to the jobs-housing adjustment is to use the comparator-region method, like HCD does for overcrowding and cost burden. We provide such results in the table below for illustration. However, we think the comparator-based approach is inapt with respect to the jobs-housing factor. The statute doesn’t ask for it, and for good reason: SB 375 aimed to make California a national leader in progressive, greenhouse-gas-reducing transportation planning. Keeping pace with the average state or region is not enough.

A further problem with the comparator approach is defining the set of comparators. More populous regions tend to have longer commute times, which may be a function in part of the sheer number of people and jobs in the region (congestion). On the other hand, of the five regions that are larger than the Bay Area by number of workers, three are notorious for exclusionary land use policies (New York, Boston, and Los Angeles), and a fourth (the Washington DC area) is hardly an exemplar. So benchmarking ABAG against this comparison set would fail to capture the commuting burden caused by the Bay Area’s land-use policies.

In any event, **Table 1** shows that even if HCD decided to use a comparator-based approach for the jobs-housing imbalance adjustment, ABAG would almost certainly receive a large increment to its RHND. **Indeed, using ABAG’s own choice of comparator jurisdictions would result in a jobs-housing adjustment of 59,491 - 119,623 units.** The low-end estimate adjusts for commutes exceeding 90 minutes; the high-end for commutes exceeding 60 minutes, i.e., “long” as well as “super-long” commutes.

¹⁴ [Regional Forecast of Jobs, Population, and Housing, Plan Bay Area 2040 Final Supplemental Report](#) (July 2017), p. 13.

Table 2.
Cost-Burden Adjustments: HCD Method

	Cost Burden (lower income, CHAS)	Cost Burden (lower income per ABAG)	Cost Burden (higher income, CHAS)	Cost Burden (higher income per ABAG)	Cost Burden (overall, CHAS)	Cost Burden (overall, ACS)	Rent
ABAG							
Rate	0.585	0.666	0.159	0.163	0.334	0.346	\$2,042
ABAG Comparators							
Rate	0.601	0.66	0.114	0.131	0.313	0.302	\$1,411
Difference	0.016	-0.006	-0.045	-0.032	-0.021	-0.044	
Adjustment (Units)	-2,827	1,147	11,305	7,966	9,237	18,979	
High-Growth Comparators							
Rate	0.562		0.086		0.286	0.276	\$1,150
Difference	-0.024		-0.073		-0.048	-0.07	
Adjustment (Units)	4,233		18,429		20,795	30,343	
Whole-Nation Comparators							
Rate	0.523		0.074		0.268	0.253	\$959
Difference	-0.063		-0.084		-0.066	-0.094	
Adjustment (Units)	11,229		21,261		28,438	40,486	

Data: ACS 5-year estimates (2014-2018) for combined statistical areas; CHAS 5-year estimates (2012-2016) for counties. Comparators are equally weighted. The ‘HCD method’ for cost-burden adjustment is to multiply the population-forecast RHNDs for below-80th-percentile (income) and above-80th-percentile households by the difference between (1) the cost-burden rate for such households in the target region (ABAG) and (2) the cost-burden rate for such households in the target region. The ‘overall, CHAS’ and ‘overall, ACS’ adjustments are counterfactual adjustments that would have been made if HCD used the overall cost burden rate instead of rates disaggregated by income class. Rent is ACS median rent by number of bedrooms, averaged across bedroom categories, and is provided to illustrate the absolute burden of housing-supply barriers across regions.

The takeaway is that the stakes of the third decision are very high. Although the size of the adjustment factor is quite sensitive to the choice of comparators, the RHND itself changes by only 10,000–20,000 units when the factor is applied just to hypothetical new households. This is an artifact of the Bay Area’s restrictive land-use policies, policies which naturally yield a [forecast of little growth](#). By contrast, if one applies the cost-burden adjustment factor to present as well as hypothetical future households, the choice among comparator regions becomes literally ten times more consequential.

No doubt there are many reasonable ways in which the department could make the required cost-burden adjustment. But however the department does it, it should be responsive to **presently cost-burdened households**. Again, the thrust of SB 828 was folding current needs into the RHND itself.

would be needed to bring market prices down to more affordable levels in the cost-burdened areas. Local governments in high cost-burden regions could also be required to remove minimum lot-size and unit-size controls, at least with respect to the “cost-burden adjustment” portion of the RHND, so that cost-burdened households have the option to purchase or rent housing services in smaller and thus more affordable packages. But however the department does it, the households whose cost-burdened status necessitates the adjustment must somehow factor into the equation.

REPLICATION OF HCD’S APPROACH: ADJUSTING THE “FORECASTED NEW HOUSEHOLDS” SUBSET OF THE “TOTAL HOUSEHOLDS” BASE

Table 2 replicates HCD’s current methodology for making the cost-burden adjustment, while showing how the adjustment would change if the comparison regions or data sources were changed.

HCD’s preferred methodology relies on a special tabulation of the [American Community Survey](#), known as the [Comprehensive Housing Affordability Strategy](#), or CHAS. This dataset enables one to estimate the number of cost-burdened households among quantiles of a county’s population, where the quantiles are defined with reference to area-median income. HCD disaggregates the cost-burdened population into households whose income is below the 80th percentile of area-median income, and households whose income exceeds that threshold. The department then calculates the corresponding proportions of cost-burdened households for the comparator region (or an average of comparator regions), computes the difference between comparator and target region, and multiplies the difference by the target region’s projected *growth* in households below and above median income.

To illustrate, if a target region projects household growth of 40,000 lower-income households and 60,000 moderate- and above-moderate-income households; if the target region’s cost-burden rate for below-80th-percentile households is 75% and the comparator region’s only 70%; and if the target region’s cost-burden rate for above-80th-percentile households is 30% to the comparator region’s 20%; then the total RHND adjustment would be $(75\% - 70\%) * 40,000 \text{ units} + (80\% - 70\%) * 60,000 \text{ units} = 8,000 \text{ units}$.

Columns 2 and 4 of **Table 2** report ABAG’s and HCD’s corresponding calculations for the Bay Area, based on ABAG’s preferred set of comparator jurisdictions. Columns 1 and 3 represent our attempt to replicate those calculations, using the 2012–2016 CHAS dataset. Our calculations came out a little differently, but the bottom line is very similar: essentially no adjustment to the lower-income RHND, and an upward bump of about 10,000 units to the moderate / above-moderate RHND.

The columns labeled “Cost Burden (overall)” show the adjustments that would have been made if HCD had used the overall rates of cost burden from the ACS or CHAS, rather than cost-burden

Table 4.
Overcrowding Adjustments

	Overcrowding Rate (ACS)	Overcrowding Rate (ABAG Calc.)
ABAG		
Rate	0.067	0.067
ABAG Comparators		
Rate	0.03	0.036
Difference	-0.037	0.031
Adjustment (Units)	113,363	94,605
High-Growth Comparators		
Rate	0.029	
Difference	-0.038	
Adjustment (Units)	116,235	
Whole-Nation Comparators		
Rate	0.025	
Difference	-0.042	
Adjustment (Units)	127,479	

Notes: Overcrowding rates were calculated using 2014-2018 ACS data for combined statistical areas (comparators) and counties (Bay Area), the same data source that ABAG and HCD used. CSAs within the comparison groups are equally weighted.

table explaining the RHND. Correcting this apparent error would increase ABAG’s housing target by **18,758 housing units**. Using the high-demand, high-growth comparators would increase it by **21,630 units**.

Vacancy

HCD is required by law to adjust the baseline, population-forecast RHND to account for the difference between the current vacancy rate and the rate appropriate “for healthy housing market functioning and regional mobility.” Gov’t Code 65584.01(b)(1)(E). The statute further instructs that “[t]he vacancy rate for a healthy rental housing market shall be considered no less than 5 percent.” *Id.*

The department implements this statutory provision by presuming that 5% is a healthy rate, and by defining vacancy fairly narrowly so as to include only for-rent and for-sale housing units.



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