HUD CAN USE HOUSING MARKET DATA TO INFORM FAIR HOUSING ACCOUNTABILITY

SALIM FURTH
Senior Research Fellow, Mercatus Center at George Mason University

EMILY HAMILTON
Research Fellow, Mercatus Center at George Mason University

EDWARD J. PINTO
Resident Fellow and Director, AEI Housing Center, American Enterprise Institute

TOBIAS PETER
Director of Research, AEI Housing Center, American Enterprise Institute

Thank you for the opportunity to comment on the US Department of Housing and Urban Development's (HUD's) proposed rule, Affirmatively Furthering Fair Housing (AFFH). The Mercatus Center at George Mason University is dedicated to bridging the gap between academic ideas and real-world problems and to advancing knowledge about the likely consequences of proposed regulation for private markets.

The American Enterprise Institute (AEI) Housing Center has three primary objectives: (1) provide transparent and objective mortgage and housing market trends data at unprecedented levels of detail; (2) foster a stable system of mortgage finance that promotes sustainable homeownership; and (3) develop market-based solutions to the nation's shortage of economical housing. The AEI Housing Center pursues these objectives through the use of the best available data and by producing rigorous research on important policy issues.

This comment represents the views of no particular party or interest group.

In a previous comment on the advanced notice of proposed rulemaking for AFFH, we explain why we think that it's appropriate for HUD to rank grantees based on their housing market outcomes and why Community Development Block Grants (CDBGs) are an appropriate tool for

For more information, contact
Mercatus Outreach, 703-993-4930, mercatusoutreach@mercatus.gmu.edu
Mercatus Center at George Mason University
3434 Washington Blvd., 4th Floor, Arlington, VA 22201

The ideas presented in this document do not represent official positions of the Mercatus Center or George Mason University.

providing carrots and sticks to localities based on their ranking. We've attached that comment here, as it provides the theoretical foundation for our response to the agency's request for comment on the proposed rule.

In this comment, we start by developing a formula that HUD can use to rank grantees on their housing market outcomes. This portion includes answers to HUD's questions 7, 8, 9, 14, 16, 17, 18, 21, and 22. Then we provide answers to questions unrelated to the formula but for which we are equipped to provide insights.

INTRODUCTION TO THE FORMULA

HUD should be applauded for focusing the shared mandate to affirmatively further fair housing on the crucial housing problem of the present day: the paucity of housing supply in desirable locations and the attendant increase in prices. Not every era will have the same challenge. This approach would have missed the mark in 1900 or 1960 and will hopefully have made itself obsolete by 2060.

Supply restriction is not the only shortcoming of HUD grantees—in some places, long-standing patterns of segregation or deteriorating housing quality loom much larger—but it is the most widespread problem. And it is the only housing problem that is primarily caused by the current political choices of HUD grantees.

HUD should, can, and will continue to work with each grantee on other problems. But to craft a rule that will be applied fairly to Miami Beach, Honolulu, Bangor, Anchorage, and everywhere in between, HUD must keep its focus on the most widespread problem, and the one for which localities can be held most directly accountable.

We argue below that HUD is right to focus on housing supply as the central challenge of the era and to use a data-driven ranking of market outcomes to guide its engagement with grantees. Identifying top performers will highlight success stories such as Milpitas, California, which has bucked the Bay Area trend by allowing a rapid expansion of its housing supply in areas accessible to the hottest job market in America. Another success, Frisco, Texas, has provided even more high-quality homes, with a growth model that says yes to tall multifamily buildings as well as vast subdivisions and major employers.

HUD has plenty to learn from the worst performers as well. When iconically rich, zero-growth communities such as Miami Beach, Greenwich, and Marin County receive taxpayer funds intended for "low- and moderate-income" residents, HUD ought to give extra scrutiny to the use of those funds.[1] In our view, the refusal to allow residential construction is a *prima facie* failure to affirmatively further fair housing.

Ranking grantees according to their responses to the key contemporary challenge is the beginning, not the end, of an accountable relationship between HUD and its grantees. It will help HUD focus, but can never replace the actual work of understanding each city in its particularity.

LETTING THE MARKET LEAD

Opponents of housing construction have many justifications for their opposition, including the mistaken idea that some places are inherently expensive. Consider the following comments:

---

1. Is CDBG being used for just single-family renovations, guaranteeing that no house in an exclusive community falls too far behind the Joneses? Or is CDBG being used to fund public improvements to further augment the sale prices of million-dollar homes?

According to PLAN-Boulder County, a citizens' organization in Boulder County, Colorado, "Proponents of this ordinance [to allow communal living 'co-ops' in single-family residential neighborhoods], by seeking to place higher density occupancies in single-family neighborhoods, are essentially asking the community to give them access to a sector of the housing market that they can't pay for themselves."[2]

In response to a report about the need for affordable housing in Westchester County, New York, a commenter named Bill expressed that "if people can't afford to live where they want, then they should find somewhere else to live that's more affordable to them. This is America and that's how it works."[3]

Lauryn Suter, a resident of Portland, Oregon, stated misgivings about a proposed residential infill project in the Laurelhurst neighborhood: "Portland is a large and vibrant city, and not everyone who wants to live here is going to be able to afford to. I want to live on Military Road in Lake Oswego, and no one is advocating on my behalf. I accept this, as I cannot afford to live there. Many people are going to have to come to this same acceptance regarding Portland."[4]

These comments exemplify a standard argument made by the defenders of land use regulation. Luxury localities, the logic goes, are like luxury restaurants, luxury cars, and luxury cruises. But the logic can be easily inverted: If people want to prevent development on their neighbors' land, why don't they buy the land? "Neighborhood defenders" are forced to seek regulatory barriers against development precisely because lower-income renters and buyers could outbid them if multifamily housing were permitted.[5] Governments, not markets, erect the paper wall around exclusionary neighborhoods.[6]

Market-led solutions to affordability and opportunity have proven superior to government-led solutions because governments are typically responsive to incumbents. This was true in Soviet Moscow, where low-density central areas were reserved for Communist Party officials, shunting regular Russians to apartment blocks on the periphery;[7] and it remains true in Boulder County, Colorado, and Westchester County, New York, where incumbent voters are committed to blocking change. In cities old and new, where markets are the principal determinant of land use, incomes and building types mix more freely.[8]

Market leadership does not, of course, leave governments without a job to do. Poor and powerless individuals are especially in need of government protection of their civil and property rights. The Fair Housing Act advances this objective. It disciplines not the market, but abuses in

2. "PLAN-Boulder Position on Proposed Ordinance to Allow Cooperative Housing in Single Family Neighborhoods," PLAN-Boulder County, October 1, 2016.
3. Peter Katz, "Report: Westchester County's Affordable Housing Needs Should Tap Unused Office Parks," Westfair Online, November 20, 2019.
4. Lauryn Suter (Testimony to the Portland City Council, January 12, 2020), https://www.portlandmaps.com/bps/testimony/item.cfm#search=Military%20road&itemID=72824.
5. Katherine Levine Einstein, David M. Glick, and Maxwell Palmer, *Neighborhood Defenders: Participatory Politics and America's Housing Crisis* (Cambridge, MA: Cambridge University Press, 2019).
6. The phrase "paper wall" and its documentation in many Boston suburbs owes to Amy Dain, *The State of Zoning for Multi-Family Housing in Greater Boston* (Boston, MA: Massachusetts Smart Growth Alliance, June 2019).
7. Alain Bertaud and Bertrand Renaud, "Cities without Land Markets: Location and Land Use in the Socialist City" (Policy Research Working Paper No. 1477, World Bank, Washington, DC, June 1995).
8. Kuniko Fujita and Richard Child Hill, "Residential Income Inequality in Tokyo and Why It Does Not Translate into Class-Based Segregation," in *Residential Segregation in Comparative Perspective: Making Sense of Contextual Diversity*, ed. Thomas Maloutas and Kuniko Fujita (London: Routledge, 2012); Clé Lesger and Marco H. D. Van Leeuwen, "Residential Segregation from the Sixteenth to the Nineteenth Century: Evidence from the Netherlands," *Journal of Interdisciplinary History* 42, no. 3 (2012): 333–69.

and of the market. Likewise, governments can offer income support or housing vouchers for those who cannot afford housing even in a dynamic market with vigorous price competition.

Most households of all income levels live in housing built and managed by the private sector. How well the private sector is able to serve low- and moderate-income households depends largely on local government policy, and this has two implications for HUD in its consideration of the present rule. Generally, HUD ought to be skeptical of grantees claiming to affirmatively further fair housing while preventing the market from providing new housing, especially in relatively affordable forms such as apartments and manufactured homes. Specifically, HUD's top-line evaluative metrics ought to focus on market outcomes such as housing creation and rent rather than on government initiatives or plans.

CONSTRUCTION, AFFORDABILITY, AND FAIR HOUSING

In our view, a high-demand jurisdiction cannot affirmatively further fair housing while blocking housing construction. A shocking number of HUD's grantees have, at the same time, high prices for housing and five-year housing stock growth rates below 1 percent.

Without construction (or a high vacancy rate) in a region people want to move to, the arrival of a new resident must involve the displacement of a previous resident or (in the case of a vacancy) of a competing migrant. For HUD to pursue integration along racial or income lines without housing construction, it would have to put its finger on the scale in favor of one group. For example, banning "source of income discrimination" helps Section 8 voucher holders get homes, but if construction is banned, it does so at the expense of nonvoucher holders.

No matter how fair it is, a game of musical chairs always results in someone sitting on the floor. (By contrast, in the game of affirmatively furthering fair chairs, the players win when a chair ends up personless, rather than every other person ending up chairless.)

There are two ways to measure the success of construction in easing the housing crunch: quantity and price. We present a framework through which HUD can rank jurisdictions on a weighted average of their housing stock growth and the price of housing.

Housing markets are regional, so housing construction in high-income communities creates, via vacancy chains and equilibrium effects, better housing opportunities for low-income people in the region even if low-income people do not occupy those newly constructed units.[9] Since brand-new housing is generally expensive, this pattern is the norm, not the exception.

COURAGE TO CHANGE

[Relevant to Questions for Comment 14 and 18]

This rule can only succeed if it focuses on the things that grantees can change. Localities have direct control over many aspects of land use regulation.[10] An extensive empirical and

---

9. When one household moves out of a housing unit, it frees up the unit it left behind. More often than not, the household is moving up to a more expensive home from a less expensive home, freeing up a housing unit that's now affordable to households earning less than the original mover. Economists call this process "filtering." New research demonstrates empirically that this filtering process in fact improves housing affordability. Xiaodi Li, "Do New Housing Units Raise Rents in Your Backyard?" (working paper, NYU Furman Center for Real Estate and Urban Policy, New York, October 2019); Evan Mast, "The Effect of New Market-Rate Housing Construction on the Low-Income Housing Market" (Upjohn Institute Working Paper No. 19-307, W.E. Upjohn Institute, Kalamazoo, MI, July 2019).

10. Robert C. Ellickson, "Zoning and the Cost of Housing: Evidence from Silicon Valley, Greater New Haven, and Greater Austin" (working paper, 2020).

theoretical literature, reviewed elsewhere,[11] shows that restrictions on density and discretionary reviews constrain new housing supply and drive up development costs, which are passed on to buyers and renters. At the regional level, extensive supply constraints, such as density restrictions and urban growth boundaries, push prices higher when demand for housing increases. Reforming land use regulations that stand in the way of housing construction or drive up construction costs is the best way that most localities can affirmatively further fair housing.

In order to keep the focus on the policy levers within a grantee's recent control, we believe HUD should measure the prices of newly built homes, not existing ones. Many suburbs allow construction only if the construction is at a high price point: using a large lot, achieving a minimum square footage, using high-end cladding, tricking out with environmental gizmos, and so on. Others allow a mix of units, including multifamily, manufactured, and middle housing,[12] and have lower average new home prices as a consequence.

Some supporters of the 2015 AFFH rule have emphasized the importance of localities building subsidized housing in high-opportunity neighborhoods in their efforts to affirmatively further fair housing.[13] But this approach does nothing to allow increased income and racial integration for the vast majority of households that will continue living in market-rate housing.

Indeed, the 2015 AFFH rule was focused on patterns of segregation, which are the sordid legacy of a history of racial exclusion enforced by governments, vigilantes, and smiling real estate agents in fedoras.[14] The federal government is uniquely implicated.[15] However, segregation is largely outside the direct control of current local governments. When a previous generation attempted to break up areas of concentrated poverty with urban renewal, the result was to unwittingly pile a new injustice upon the old.[16] Today, large public investments in low-income neighborhoods have raised fears of gentrification.[17]

The indirect approach to reducing segregation through land use deregulation is much more promising: localities have an immense amount of power over private land. The second-order

---

11. For a review of the economic literature on the relationship between land use regulations and housing supply, see Joseph Gyourko and Raven Molloy, "Regulation and Housing Supply" (NBER Working Paper No. 20536, National Bureau of Economic Research, Cambridge, MA, October 2014). Matthew A. Turner, Andrew Haughwout, and Wilbert van der Klaauw identify a causal relationship between land use regulation and home prices. They find that a one-standard-deviation increase in the level of land use regulations reduces land prices by 36 percent. These lower land prices reflect the fact that developers have fewer opportunities to put land to more intensive uses under more binding regulations, resulting in higher housing prices. Matthew A. Turner, Andrew Haughwout, and Wilbert van der Klaauw, "Land Use Regulation and Welfare," *Econometrica* 82, no. 4 (2013): 1341–1403.
12. Middle housing includes townhomes, two- to four-family homes, accessory dwelling units, apartments over stores, and other types of housing that do not neatly fit into the "detached single-family" and "multifamily" categories.
13. Michael Allen, *HUD's New AFFH Rule: The Importance of the Ground Game* (New York: NYU Furman Center, 2015).
14. Richard Rothstein, *The Color of Law: A Forgotten History of How Our Government Segregated American* (New York: Liverlight Publishing Corporation, 2017).
15. The AEI Housing Center has documented this history of the federal government in a recent HUD comment letter. The letter shows that, commencing in 1921, the federal government was the driving force behind the widespread adoption of zoning by municipalities and the near-exclusive shift to zoning districts restricted to one-unit, single-family structures. The US Department of Commerce was complicit in promoting the use of geographically separated zoning districts consisting of (1) one-unit, single-family structures or (2) multifamily structures (including two- to four-unit structures) to keep racial and ethnic groups separate. Beginning in 1934 the Federal Housing Administration took over from the Department of Commerce and continued to play a pivotal role in using zoning to keep black individuals and immigrants from southern and central Europe in zoning districts segregated from whites. For more, see Edward J. Pinto and Tobias Peter, *Comment Letter on Eliminating Regulatory Barriers to Affordable Housing* (Washington, DC: American Enterprise Institute, 2020).
16. Jon C. Teaford, "Urban Renewal and Its Aftermath," *Housing Policy Debate* 11, no. 2 (2010): 443–65.
17. Conor Dougherty, *Golden Gates: Fighting for Housing in America* (New York: Penguin Press, 2020); Martin Di Caro, "As H Street Changes, Can Long-Time Residents Stay?," WAMU, May 22, 2014.

effects of reforms to land use regulation, especially in the most exclusionary suburbs, will do more to reverse historic injustices than the first-order effects of pursuing integration through a token number of income-restricted units.[18]

Housing quality is another aspect of housing markets that is largely outside current local governments' control. HUD has a statutory concern for the quality and safety of housing. But grantees have relatively little control over local housing quality, which is mostly a function of age and local incomes. New homes are almost always in good shape; the homes of the affluent are as well. Old homes inhabited by low-income people are the locus of quality problems, so cities that have an old housing stock and a large number of low-income residents will be, on average, those with the worst housing-quality problems. Rather than penalizing or shaming the grantees with the greatest housing-quality deficits, HUD should identify and work with them.[19]

Thus, while HUD should remain deeply concerned about many other aspects of the housing market, grantee accountability should be centered on local land use regulations, the policy causing segregation that is most within grantees' authority to reform. Fair Housing Act violations, such as racial steering or discriminating against protected classes of potential tenants, are facially illegal. Indications of discrimination in the housing market should of course be investigated by HUD and state fair housing offices and prosecuted by the US Department of Justice. Neither the 2015 rule nor the proposed rule affect Fair Housing Act enforcement.

CONCEPTUAL CAVEATS

According to the proposed rule, HUD intends to use a universal ranking system to grade grantees. We agree with this approach, subject to several caveats.

- A good ranking can only measure one thing at a time. If HUD decides to measure two distinct concepts—say, progress toward racial integration on the one hand and housing market flexibility on the other—it should use two rankings and reward and penalize the best and worst performers, respectively, on each.
- The formula must be flexible and should change over time to incorporate the highest-quality data sources or needed conceptual changes.
- For example, HUD must emphasize that the ranking is only a starting place for maintaining accountable relationships with its grantees. A city may allow for plenty of new construction at relatively low price points and, at the same time, use its CDBG funds corruptly.
- All data users must recognize the fundamental limitations of data. Data are not perfect. Errors and administrative changes occur. Whatever formula is adopted, HUD should

---

18. See research on the relationship between regulation and segregation in Jonathan Rothwell, *Land Use Politics, Housing Costs, and Segregation in California Cities* (Berkeley, CA: Terner Center for Housing Innovation, 2019); Jessica Trounstine, *Segregation by Design: Local Politics and Inequality in American Cities* (Cambridge: Cambridge University Press, 2018); Jonathan T. Rothwell and Douglas S. Massey, "Density Zoning and Class Segregation in U.S. Metropolitan Areas," *Social Science Quarterly* 91, no. 5 (2010): 1123–43; and Rolf Pendall "Local Land Use Regulation and the Chain of Exclusion," *Journal of the American Planning Association* 66, no. 2 (2000): 125–42. Research by the AEI Housing Center has found that metro areas with a larger share of new construction sales, such as Dallas and Raleigh, have moved toward greater racial integration at the census tract level than metro areas with a lower share of new construction sales, such as Los Angeles. AEI Housing Center, "Housing Supply, Home Prices, and Affirmatively Furthering Fair Housing" (PowerPoint presentation, Council of Economic Advisers roundtable event, Washington, DC, March 28, 2019), https://www.aei.org/housing-supply-home-prices-and-affirmatively-furthering-fair-housing/.
19. Joint research between the AEI Housing Center and the Mercatus Center shows that new construction activity can help replace an aging and decrepit housing stock. See the case study of Bergen County in Pinto and Peter, *Comment Letter*.

scrutinize implausible outcomes and allow a grantee to challenge its ranking if it can show that it arises from errant data.

Although no system can be perfect, we present a formula in this comment that we believe is more transparent and fairer than a subjective system and more feasible than somehow creating new metrics to measure "fair housing" as such.

THE CHALLENGE OF LOW-DEMAND PLACES

Many grantees are in regions suffering from long-term stagnation or decline. They are often the places HUD funding is intended to benefit, and they have little prospect of rapid growth. They may have in place the same land use restrictions as high-priced, no-growth suburbs on the coast, but with so little demand the restrictions have little effect on housing market outcomes.

In these locales, data-driven analysis is much less enlightening. The challenge of affirmatively furthering fair housing while managing a shrinking tax base does not show up in high house prices or regulatory constraints on new housing construction.

Our preference would be to exclude from the ranking places with low and falling demand: grantees with low housing prices, falling population, and long-term job loss. Just as the ranking does not reflect every aspect of HUD's mission, it is not informative about the policies of every grantee.

However, in the following analysis we have not excluded any grantees except a few for which our data were too sparse. Encouragingly, few low-demand places appear at the extremes of the list.

PRINCIPLES BEHIND THE FORMULA

Ranking a diverse group of over 1,100 cities and counties is challenging. The following principles should guide HUD's choices in designing a ranking formula:

- The key metrics should align with the aspects of AFFH that local policy can most directly influence, such as the following:
  - High-demand places should be judged primarily by whether their rules on the books allow the creation of new housing.
  - Low-demand places should be judged primarily on their institutional ability to allow new housing construction at a modest price.
  - All jurisdictions should be held strictly accountable for fair housing violations.
- To some extent, grantee circumstances should be taken into account.
- The formula should avoid "cliffs," so that very similar places are judged on very similar criteria.
- The formula should be robust to all phases of the business cycle.
- The formula should be structured so that any individual aspect can be changed without requiring a complete rebuild.
- Where data quality, incomplete coverage, and measurement error are major concerns, the formula should average together multiple data sources.

Next, we show one way to operationalize these principles.

STRUCTURE

[Relevant to Questions for Comment 7, 8, 14, 16, 17, and 18]

We recommend a structured ranking concept that is, to our knowledge, novel and consists of three types of variables measured at the grantee level:

1. Ranking variables
2. Weight-determining variable(s)
3. Peer-identifying variable(s)

In addition to these, there are two sets of weights: one for high-demand places and one for low-demand places.

The *ranking variables* are the outcomes that best indicate the aspects of the housing market within the grantee's control. We use the five-year growth rate of the housing stock (from HUD-USPS data for 2014–2019) and the price of newly constructed homes.[20]

For high-demand jurisdictions, housing creation is the proof of the pudding: without adding new units, these grantees can only welcome new residents by displacing others. No housing policy in a high-cost city can reasonably affirmatively further fair housing without allowing growth. As extensive research has shown, these jurisdictions themselves are the primary barrier to affordability and thus fairness: they implement and enforce housing-creation limits that result in artificial scarcity.

New home price data indicate the general affordability level of whatever construction takes place. Even in places with moderate demand, grantees can influence the price of newly constructed homes through construction requirements, regulatory delays, or large lot requirements. (Moderate-demand jurisdictions have much less influence over rents or prices of existing homes than do high-demand jurisdictions).

The price of newly constructed homes has two advantages over other price metrics:

1. It obviously controls for age, which is correlated with quality and thus price.
2. It covers the homes that current policies are affecting.

The *weight-determining variable(s)* identifies the level of housing demand in each grantee. We use 2020 Small Area Fair Market Rents (SAFMR). We think that it would be a mistake to use recent price changes to identify demand: prices fluctuate for many reasons, and we would not agree that Muskegon, Michigan (where inflation-adjusted rent grew 9 percent from 2012 to 2018), is a high-demand metro area while Washington, DC (where inflation-adjusted rent fell 1 percent), is a low-demand metro. The fluctuations are less indicative than the levels.

There are many plausible ways to measure demand, and some combination of them may be the best choice. Ultimately, since the level of demand determines only weights on the ranking variables, small adjustments in measured demand matter little.

We set weights for high-demand grantees and for low-demand grantees and linearly interpolate for the intermediate cases. Thus, very different grantees may be judged by very different criteria, but very similar grantees are always judged by very similar criteria. No cliffs.

The assigned weights are subjective and depend on the choice of ranking variables. There must obviously be as many weights as ranking variables.

---

20. See the data appendix for details on our use of these and other data.

We do not expect low-demand places to grow much, so we put very little weight on growth rate in these areas. High-demand places have less influence over their own price levels, since increasing demand will cause rising prices unless housing supply is perfectly elastic, so we place less weight on price level. We set the weights at [20 percent growth, 80 percent price] below the 25th percentile of demand and at [70 percent growth, 30 percent price] above the 75th percentile of demand. Across the middle of the demand distribution, we linearly interpolate the weights.

For each grantee, we then calculate *SCORE = GROWTH_WEIGHT × z(GROWTH) + PRICE_WEIGHT × z(PRICE)*, where the weights depend on the weight-determining variable and *z()* indicates the z-value of the variable.[21]

The *peer-identifying variable(s)* connects each grantee with a set of natural peers. Rather than splitting the sample into several fixed categories, which would result in judging very similar grantees just above and just below each cutoff by the standards of different peer groups, we identify the peers of each jurisdiction uniquely.

There are many potential ways to identify peers. This adjustment is important only for aspects of a grantee's circumstances that are systematically correlated with the *SCORE* calculated above and where the circumstance is one that makes it much easier or harder to achieve the measured objectives.

We use density as the peer-identifying variable. More densely built places have fewer opportunities to grow and may need to use more expensive types of housing construction. Both Washington, DC, and Edmond, Oklahoma, added 10 percent to their housing stocks from 2014 to 2019, but the accomplishment stands out far more in DC's case, because its peers grew far less than Edmond's.

The final parameter in this structured ranking is the number of peers against which each grantee is ranked. We chose to use 112 peers, representing 10 percent of the sample. Each grantee's *SCORE* is compared to its 112 nearest-ranked peers and ranked between 1 and 113. Our intuition is that the number of peers should generally be between one-twelfth and one-fifth of the full distribution. This approach means that the peer group for each grantee is unique,[22] with the result that there is some randomness in exactly how many grantees receive each rank. That does not pose any problem for further use of the ranking.

Although this ranking system is slightly complex, it has the virtue of avoiding "cliffs" in comparison groups. Two almost-identical grantees will always be ranked against almost-identical peer groups and receive almost-identical final rankings.

INCORPORATING FAIR HOUSING VIOLATIONS

We do not have data on fair housing complaints, lawsuits, adjudications, or settlements and are thus unable to incorporate that portion of the formula into this exercise. Our view is that they should be incorporated in a separate, final stage: no amount of growth or affordability will make a city a model of AFFH if it is violating fair housing law.

---

21. A z-value is computed by subtracting the mean and dividing by the standard deviation of a variable.
22. The peer groups for the 57 densest and 57 least dense grantees are not unique; they are ranked among the 113 most and least dense grantees, respectively.

OUTCOME

We have data sufficient to rank 1,126 of HUD's 1,147 CDBG entitlement communities. Most missing ones are in small metros; we believe HUD will be able to find data on almost all jurisdictions.

Although the very best-ranked jurisdictions are all western places with strong demand and, other than Milpitas, mid-range prices, the top 10 percent of jurisdictions are as diverse as Charleston, College Station, Fargo, Syracuse, and Washington, DC.

Some grantees, such as Lebanon, Pennsylvania, are highly ranked primarily owing to very low new home prices. We find it difficult to evaluate whether low-priced grantees are exemplars of AFFH. At a minimum, though, these are places where federal dollars go far and are particularly welcome.

The worst-ranked jurisdictions are much less diverse. Almost all of them are the exclusive suburbs of high-demand cities and all are within a few miles of salt water. They vary in density owing to the peer-based ranking system. All of them made the list through high prices; none added more than 3 percent to their housing stocks over five years.

Ranked #1:
   Frisco, TX (best score in the country)
   Williamson County, TX
   Broomfield City/County, CO
   Chino, CA
   Milpitas City, CA
   Hillsboro, OR
   Denver, CO

Ranked #113:
   Monterey County, CA
   Sonoma County, CA
   Middletown, NJ
   Wayne Township, NJ
   Marin County, CA
   Weston City, FL
   Cupertino City, CA
   Greenwich, CT
   Palo Alto, CA (worst score in the country)

CATEGORIES

[Relevant to Questions for Comment 21 and 22]

We recommend using five categories to summarize the results of the ranking: two small groups at each extreme and a large middle group. Our intuition is that outside the top and bottom tenths of the distribution, the differences among jurisdictions are relatively small.

In the structure we've suggested, the ranking groups (1 to 113) cannot be split, so each category may contain a slightly different number of grantees.

With 1,127 grantees, and based on the data we have from 2012 to 2018, we recommend putting grantees into the following groups:

- Ranked 1–5: Reward group (46 grantees)
- Ranked 6–11: Commendation group (62 grantees)
- Ranked 12–102: Pass group (909 grantees)
- Ranked 103–108: Warning group (56 grantees)
- Ranked 109–113: Penalty group (53 grantees)

The group names suggest the results: the very top group receives whatever financial rewards are possible given HUD's statutory strictures, and only the penalty group is placed at a heightened risk of losing funding. The commendation and warning groups receive feedback from HUD as their names suggest. In addition, the commendation group could be granted additional regulatory relief and the warning group could be subjected to greater scrutiny or a more-detailed examination of their fair housing record.

Those in the pass group, which comprises by far the majority of grantees, would continue as normal program participants without any substantive changes. Under the previous AFFH rule and the analysis of impediments process, HUD implicitly placed all grantees into the pass group, offering neither incentives nor penalties for grantees who failed to affirmatively further fair housing.

ALTERNATIVES

[Relevant to Question for Comment 18]

We have intentionally written the formula in a way that different metrics can be added or substituted in at any point in time. Here, we note some alternatives for immediate or future consideration.

- HUD could rank grantees based on the efficiency with which they choose to use their CDBG funds. Many high-priced jurisdictions use CDBG in ways likely to raise prices even higher: fixing up some of their (few) run-down houses, providing public amenities to a high-income public, and attracting jobs. Although these are statutorily approved CDBG activities, they are not appropriate in Cupertino (which built sidewalks) or Southampton (which improved signs and facades in its extremely affluent business district). In jurisdictions of all types, CDBG funds are often directed to specific local businesses, a practice that ought, in our view, to automatically trigger a corruption inquiry (or, better yet, be banned by statute). It would be very reasonable for HUD to rank some uses of CDBG as "AFFH-enhancing" and others as "AFFH-detracting," at least for high-priced jurisdictions.
- In addition to fair-housing violations, HUD could add administrative violations related to the use of HUD grants as a potentially disqualifying factor.
- HUD could calculate demand using a multifaceted approach rather than the simple SAFMR-based approach we used. Average wages at local jobs, unemployment rates, and housing vacancy rates are all reasonable demand metrics. It would, however, be unwise to use changes in such variables: changes are more likely than levels to reflect short-term economic fluctuations or, worse, measurement error. Change-based demand metrics would give very weird results during recessions and recoveries.

- If data become available, HUD should certainly average rents on newly constructed multifamily units with new home prices to measure the cost of new housing.[23] However, we do not believe any reliable measure of new-construction multifamily rents currently exists.
- If high-quality, high-coverage data become available, HUD could use published regulatory restrictions to rank jurisdictions. However, the existing measures have major shortcomings in terms of quality and no existing measure comes close to covering the universe of HUD grantees.

APPEALS, SUSPENSIONS, AND REVIEW
[Relevant to Question for Comment 9]

Data are not perfect. Housing stock can be destroyed in natural disasters. College dorms and military bases can shut down. All data—administrative or survey—are subject to measurement error. It is vital that HUD provide a simple appeal process for jurisdictions that believe they have been unfairly ranked, particularly those that rank in the lowest-performing group. Simplicity is key. Grantees succeeding on appeal should simply be relisted as "unranked" and treated as though they are in the middle of the ranking, with neither rewards nor penalties.

The housing crisis of recent memory also prompts us to recommend that, in similarly severe and prolonged disruptions of the housing market, HUD consider suspending the ranking temporarily. One way to do so would be to use slightly older data; in 2009, for example, HUD could have safely relied on 2007 data. If a major market crisis lasts beyond a few years, HUD can simply leave all jurisdictions unranked and focus its scrutiny on places with adverse fair housing judgments.

The rule should be reviewed periodically and revised to take into account insufficiencies observed during that time. Reviews of the formula should include answers to the following questions, among others:

- Is the time window used in the formula proving to be reasonable?
- Do data errors result in a large number of annual appeals?
- Do grantees identified as high-performing tend, on deeper inspection, to have higher-quality institutions, or does "high performance" appear to be merely circumstantial?
- Has the housing market changed enough that a supply shortage is plausibly no longer the most widespread national barrier to fair housing?

We now turn to a selection of HUD's questions for comment that are not directly related to the formula that we proposed earlier.

Question 1: Is three the appropriate number of goals a jurisdiction should submit? If not, what would be a more suitable number? Would a higher number more appropriately hold jurisdictions accountable to AFFH without imposing an undue burden?

In requiring grantees to identify goals for AFFH in their jurisdictions, HUD should not set a specific number of goals that jurisdictions must submit. In some jurisdictions, the primary barrier to safe housing that's affordable to residents or would-be residents is clear. For example, in Palo Alto, California, an entitlement community, the median house is valued at over $2.75 million.[24] Less than

---

23. Obviously, both variables must be standardized before averaging.
24. Zillow Research, "ZHVI Single-Family Homes Time Series ($)" (dataset), accessed January 17, 2020, https://www.zillow.com/research/data/.

3 percent of its land is zoned for multifamily housing.[25] It's clear that the best way Palo Alto policymakers can affirmatively further fair housing is by allowing more housing to be built. It may be able to best affirmatively further fair housing by adopting a single goal: increase its rate of permitting housing (net of demolitions) over the five years of its first cycle. This goal is specific and measurable through the metrics that HUD will track.

Other jurisdictions may have acute problems in housing quality that stand in the way of safe housing, particularly for low-income housing, disproportionately harming protected classes. In St. Joseph, Missouri, at least 15 percent of children in seven Census tracts have been diagnosed with elevated lead levels.[26] Abating lead hazards is likely the single goal that this entitlement jurisdiction should pursue.

Encouraging grantees to pursue more than three goals, or any specific number of goals, would not hold jurisdictions accountable to AFFH. As the proposed rule states, "if everything is a priority, nothing is a priority." Rather than focusing on jurisdictions establishing a specific number of goals, HUD should require that at least one of the goals directly address the principal impediment to fair housing identified by the data-driven assessment.

Question 2: How should HUD balance requiring overly prescriptive standards with ensuring integrity for data sources that support such goals?

HUD should identify a variety of high-quality data sources that grantees may rely on, including both public and private sector data products. However, jurisdictions may rightly pursue goals that can only be quantified by data sources other than those that HUD identifies. In this case, jurisdictions should be required to provide documentation of not only progress toward their goal, but also documentation that the data they're using to measure this progress is a reliable source. If HUD confirms that the data jurisdictions are using are an important AFFH metric, it should consider adding these data to its list of approved data sources to help facilitate learning across jurisdictions.

In some cases, it may be impossible to avoid an instance of a grantee measuring its own success. If this occurs, HUD should retain the right to audit the measurement process.

Question 3: What, if any, aspects of the proposed rule and other policies not in the proposed rule, would motivate jurisdictions to more meaningfully engage in the AFFH planning process and make progress on the goals of the local AFFH plan?

HUD is limited in its ability to encourage grantees to affirmatively further fair housing by statute, which limits its authority to deviate from the CDBG formula. Simply withholding CDBG funding from some of the most exclusionary grantees in HUD's ranking would be a more effective incentive for AFFH reform at the local level than the process outlined in the proposed rule.[27]

Using CDBG to better encourage AFFH reform would require statutory change from Congress. Senator Cory Booker proposed a bill that would have been a step in this direction in 2019.[28] However, even the legal authority to withhold federal funds from jurisdictions that are

---

25. City of Palo Alto, *City of Palo Alto Comprehensive Plan 2030*, 2017.
26. M. B. Pell and Joshua Schneyer, "The Thousands of U.S. Locales Where Lead Poisoning Is Worse Than in Flint," *Reuters*, December 19, 2016.
27. Salim Furth and Emily Hamilton, "Conditioning HUD Grants on Housing Market Outcomes Furthers Fair Housing" (Public Interest Comment, Mercatus Center at George Mason University, Arlington, VA, October 3, 2018).
28. Housing, Opportunity, Mobility, and Equity Act of 2018, S. 3342, 115th Cong. (2018).

exclusionary based on their house prices and housing construction data would not be a panacea for AFFH. The most exclusionary jurisdictions are also wealthy jurisdictions that could provide for public services with their own tax bases should they choose to, forgoing CDBG funds, rather than reforming their housing policy.

Further, in many cases CDBG grantees are not permitting jurisdictions that have direct control over land use regulations and many permitting jurisdictions are not CDBG grantees. In some cases, cities and towns with particularly exclusionary land use regulations receive CDBG funding from their counties. Those counties may not themselves show up as among the most exclusionary jurisdictions if they are also home to more affordable jurisdictions that allow more homebuilding. However, we are not overly concerned with where jurisdictions fall within the middle of the ranking formula that we've created. We're confident that our formula is identifying the most exclusionary jurisdictions, including Marin County, Monterey County, and Sonoma County, which all handle zoning for their unincorporated areas.

The most effective reforms toward AFFH will likely come from states setting limits on local restrictions on housing or localities reforming their own policies. HUD creating a ranking of jurisdictions based on how well they succeed or fail at AFFH may encourage this reform at the state and local level.

Question 4: Are there other factors, in addition to the ones listed in proposed regulations, which are generally considered to be inherent barriers to fair housing?

The list includes "high rates of housing-related lead poisoning in housing." While lead is certainly one of the most important toxins in housing to monitor, additional environmental hazards should be added to the list of inherent barriers to fair housing, including other heavy metals, fungal toxins, and airborne asbestos.

The list of inherent barriers ought to include local and state land use regulations, including the aspects of zoning and building codes unrelated to health and safety. These regulations restrict housing construction, particularly of relatively low-cost types of new housing, and are the primary cause of housing shortages and high prices that shut people out of their preferred communities based on their income or race.

Specific barriers that should be listed include minimum-lot-size requirements, floor-area ratios, parking requirements, rules against manufactured housing, and bans on multifamily housing.[29] Additionally, historic preservation rules deserve extra scrutiny under efforts to affirmatively further fair housing. Not only does historic preservation restrict housing supply and contribute to housing unaffordability, but also favoring an old housing stock creates accessibility and environmental barriers to affirmatively further fair housing.[30]

Question 5: Should any of the factors listed as inherent barriers to fair housing be revised or removed? Should there be different inherent barriers for States than for other jurisdictions?

29. Greg Brooks et al., "How to Build Affordable, Thriving Neighborhoods: A State and Local Zoning Reform Toolkit" (Arlington, VA: State Policy Network, 2019).
30. For evidence on the effect of historic preservation rules on housing affordability, see Vicki Been et al., "Preserving History or Hindering Growth? The Heterogeneous Effects of Historic Districts on Local Housing Markets in New York City" (NBER Working Paper No. 20446, National Bureau of Economic Research, Cambridge, MA, September 2014).

All of the factors listed as inherent barriers are reasonable obstacles to AFFH. Elsewhere, however, the proposed rule indicates that HUD may use a lack of kitchen facilities in housing units as an indicator that a grantee is failing to meet AFFH quality standards. In fact, permitting single-room occupancy housing to be built, in which residents may not have a kitchen and may share a bathroom, is an indication that a jurisdiction is AFFH. In some markets, single-room occupancy housing is an important lower rung on the housing ladder, and some scholars have linked the declining availability of single-room occupancy units in the United States today to increasing rent burdens and homelessness.[31] Single-room occupancy housing is one of the lowest-cost types of housing that can be built, and it's an indication that a grantee allows housing to be built that serves all income levels.

States play a key role in AFFH. Localities receive their authority to regulate land use from their states, and state policymakers may set limits on the extent to which localities may restrict housing construction in general and low-cost housing types in particular. In some cases, states implement their own rules that are contrary to the goals of AFFH.[32]

Applying the municipal criteria for identifying inherent barriers to fair housing to the states makes sense. However, it probably does not make sense for HUD to reject the AFFH certification of states, regardless of their performance in HUD's ranking and ability to demonstrate policies that affirmatively further fair housing. Withholding CDBG funds from states would harm all of the municipalities that benefit from these state funds, whether or not they affirmatively further fair housing.

Question 6: What process should HUD undertake for updating the list of regulations, and how frequently should these updates occur?

HUD should update its list of inherent barriers to AFFH every five years, once all of its grantees have completed a cycle of reviewing their AFFH performance and goals. When grantees submit their own goals to better affirmatively further fair housing, and once they demonstrate empirically that they have furthered fair housing in their communities, HUD should consider updating its list of inherent barriers to fair housing accordingly. In this way, HUD may facilitate the sharing of best practices across grantees.

Question 10: Should HUD also rank non-CDBG jurisdictions that still submit consolidated plans? What are the potential obstacles or problems with those rankings?

The ranking that HUD creates may be the best tool the agency has to encourage jurisdictions where policymakers want to affirmatively further fair housing to reform their land use regulations to make their communities more open to residents of all income levels. It makes sense to make jurisdictions' positions in the ranking available to all policymakers who may use it to affirmatively further fair housing. The data to rank non-CDBG jurisdictions that submit consolidated plans will generally be available.

---

31. Paul Groth, *Living Downtown: The History of Residential Hotels in the United States* (Berkeley and Los Angeles, CA: University of California Press, 1994).
32. Gerrit J. Knaap, "The Price Effects of Urban Growth Boundaries in Metropolitan Portland, Oregon," *Land Economics* 61, no. 1 (1985): 26–35; Keith R. Ihlanfeldt, "The Effect of Land Use Regulation on Housing and Land Prices," *Journal of Urban Economics* 61, no. 3 (2007): 420–35.

In our response to question 7, we suggest a ranking system that would give a nonexclusive ranking to each jurisdiction, so that there are several jurisdictions ranked #1, several more ranked #2, and so on. Non-CDBG jurisdictions can easily be evaluated against the same criteria and given a ranking without forcing any other jurisdiction to be reranked.

Question 15: What data sources may enable HUD to measure the extent to which residents are living in neighborhoods of their choice, consistent with their means?

No data are currently available to measure the extent to which residents are living in neighborhoods of their choice, consistent with their means. However, identifying nonprice barriers to residents living in the neighborhood of their choice could point to important barriers to AFFH in either the public or private sector. HUD could survey residents in grantee jurisdictions or a subset of these jurisdictions to identify places where residents are not living in the neighborhood of their choice even though housing is available in the neighborhood of their choice at the price they are currently paying for rent or a mortgage. Jurisdictions where the survey identifies a low rate of residents living in the neighborhood of their choice consistent with their means could be flagged for additional scrutiny and Fair Housing Act enforcement efforts from HUD and the Department of Justice.

Question 23: Should HUD reward improvement in a jurisdiction before the first 5-year cycle is complete? If so, how should HUD determine progress between consolidated plan submissions, and what possible benefits should be available?

No, it's appropriate for HUD to wait until the end of each jurisdiction's five-year cycle before rewarding grantees for their AFFH performance. Reforms in land use regulations often take a long time to be implemented and a longer time to have an effect on the housing market, so attempting to reward short-term progress would be prone to error. In addition, the administrative time savings of the proposed rule would be lost if HUD were forced to consider annual requests to certify improvement.

Question 24: Are there other rewards that HUD should consider for outstanding AFFH performers? Are there statutory or regulatory changes that HUD should pursue to increase the availability of such rewards?

Several statutory reforms could improve the federal government's ability to encourage localities to affirmatively further fair housing. As we point out in our response to question 3, statutory reform to the CDBG formula that would limit these funds to jurisdictions that allow housing to be built, including low-cost types of housing, would improve the grant program as a tool to encourage AFFH. Senator Elizabeth Warren has also introduced legislation for a new grant program that would be similar to the CDBG program but would be specifically designed as a race-to-the-top program that would reward localities that affirmatively further fair housing.[33]

In 2019, Representative Scott Peters introduced a bill called the Build More Housing Near Transit Act. The bill would require the Federal Transit Authority to consider local land use regulations when determining which jurisdictions will receive funding for public transit projects.

---

33. American Housing and Economic Mobility Act of 2018, S. 3505, 115th Cong. (2018).

This makes sense because transit only attracts riders when it serves a high density of residences and destinations. Local policymakers who wish to receive transit funding should be required to demonstrate that their land use policy allows homes to be built near proposed stations, and transit dollars should be spent only in locations where enough people live to support transit use.

Economists Ed Glaeser and Joseph Gyourko have written on several proposals for federal policymakers to encourage reform of local land use regulations.[34] One potential reform that they identify is to lower the cap for the mortgage interest tax deduction for homeowners in counties that permit a housing stock growth rate lower than 1 percent. They point out that this proposal has the advantage of targeting homeowners in exclusionary jurisdictions who are the beneficiaries of exclusionary zoning and the primary interest group that successfully maintains the status quo. If homeowners began supporting a greater rate of homebuilding, local policymakers would likely support pro-growth land use policy as well. Following the increase in the standard deduction and the reduced cap for the mortgage-interest tax deduction that the Tax Cuts and Jobs Act implemented, a mortgage interest deduction cap is now a less effective tool to encourage land use reform than it would have been before 2018, but it's still one incentive the federal government could employ.

Finally, the Low-Income Housing Tax Credit (LIHTC) could be reformed to provide preference for the grantees that perform best at AFFH, in addition to the existing preference for Qualified Census Tracts. The top grantees are locations where LIHTC resources will be especially effective because their prices are low, their land use policies and entitlement processes present few barriers to homebuilding, or both.

Question 25: Are there specific forms of regulatory relief that HUD should consider for outstanding AFFH performers?

Outstanding AFFH performers have demonstrated that they have created policy environments where housing construction is permitted in response to demand increases, providing opportunities for households at a range of incomes to move into these jurisdictions. To reward these jurisdictions for their success at AFFH and to indicate the agency's confidence in their approach to housing policy, HUD could allow these jurisdictions to move to a 10-year cycle. They could receive any annual benefits that HUD grants to top performers for the full 10 years and would not be required to be reevaluated until the end of that 10-year period.

Question 26: Are there other remedies HUD should consider requiring of jurisdictions who are not improving in their comparison metrics?

Withholding CDBG funds from jurisdictions that are the worst performers in HUD's ranking is the strongest tool the agency has to encourage reform at the local level to promote AFFH. HUD should not withhold funds other than CDBG from jurisdictions that are failing to affirmatively further fair housing because HUD's other grant funds support housing for low- and moderate-income residents directly. Withholding them would harm residents who are already suffering from high housing costs in jurisdictions that are failing to affirmatively further fair housing.

---

34. Edward L. Glaeser and Joseph Gyourko, *Rethinking Federal Housing Policy* (Washington, DC: AEI Press, 2008).

When jurisdictions fall in the bottom of HUD's ranking, in order to demonstrate that they are AFFH in spite of their low ranking, HUD should require jurisdictions to demonstrate that they have already implemented policies that will improve the availability and affordability of housing in their jurisdiction. These policies could include upzoning to allow more, relatively low-cost types of housing to be built, process reform to allow housing to be built more quickly at lower cost, or other policies that have been demonstrated to increase housing supply and lower prices relative to the status quo. Simply creating plans to identify opportunities to affirmatively further fair housing should not qualify the jurisdiction to maintain its AFFH certification.

As explained in our response to question 3, while even withholding CDBG funds entirely from the most exclusionary jurisdictions may be insufficient incentive to bring out local reforms toward AFFH, this is the best tool HUD has to encourage reform. Therefore, when the agency identifies grantees that fall in the bottom of its ranking and have not clearly demonstrated that they have implemented policies to allow more housing to be built at lower prices, the agency should not hesitate to withhold CDBG funding until the grantee demonstrates that it has made substantial reforms to affirmatively further fair housing .

DATA APPENDIX

Housing Supply

To measure housing supply growth, we use the HUD Aggregated USPS Administrative Data on Address Vacancies, measured between 2014q2 and 2019q2. To our knowledge, only one paper—Salim Furth's—has previously used this dataset as a measure of housing supply.[35] However, we believe that it is the highest-quality dataset available on housing supply over varying time windows; it also has the shortest availability lag. (The decennial census is better, but only available decennially.) HUD will be able to make better use of these data than we can because HUD's Policy Research and Development team has the full microdata available. Thus, where we have had to split census tracts between jurisdictions, HUD can internally create (and publicly release!) housing unit counts at the jurisdiction level.

The HUD-USPS data also give us our density measure: we add residential and addresses from the "other" category, plus five times the number of business addresses, and divide by census tract land area.[36] Superior density data could be created using satellite imagery or tax records. However, we doubt that the slight changes in measured density would substantially change the outcomes.

The HUD-USPS data do require cleaning, however. Some addresses are listed as "no-stat," which means that the postal service cannot assign them a "vacant" or "occupied" status. This includes units under construction. There are concentrations of no-stat addresses in census tracts that contain a post office, and those addresses appear to be "footloose," jumping from one post office to another. Vacation towns also contain large concentrations of no-stat addresses. Thus, we exclude no-stat addresses from our calculations.

---

35. Salim Furth, "Housing Supply in the 2010s" (Mercatus Working Paper, Mercatus Center at George Mason University, Arlington, VA, February 2019).
36. The inflation of business addresses accounts for the physically larger size of places of business. Without the inflation factor, some downtown census tracts would appear to be of moderate density.

More refined data cleaning is needed to account for administrative changes that show up in the data. In some cases, large numbers of addresses jump from one tract to a neighboring tract. For example, the Heritage Hills condo community in Westchester County, New York, straddles two census tracts and its addresses appear to jump from one of those tracts to the other. Another troubling pattern is that some census tracts can lose a large number of addresses for a few quarters and then get them back. This occurs in several tracts in Washington County, Oregon, for example, where a large number of units disappeared from 2014q2 to 2015q1. The worst administrative problem appeared during 2018 in the Northeast and Chicago, where census tracts that have large concentrations of small multifamily houses (such as triple-deckers) suddenly lost a large number of addresses. We exclude those recent quarters. Finally, some institutional addresses can suddenly appear or disappear in the data without corresponding physical changes. For example, the MetroWest Detention Center in Miami-Dade County, Florida, appears to come in and out of the data as residential addresses. (We exclude that census tract). Our full data-cleaning routine is available upon request.

To measure housing supply and other geographic data, HUD will have to make a choice about how to treat municipal annexations. It does not matter whether HUD uses the most recent municipal boundaries, the boundaries at the last decennial census, or the boundaries at some other point in time, but whatever choice is made must be consistently used.

We suggest that, as part of the data-disseminating exercise necessary to administer this rule, HUD take the opportunity to clean and present its extremely valuable USPS administrative data in ways that localities and researchers will find useful and reliable. Few researchers and fewer city planners feel confident that they can clean and aggregate data in the correct ways. HUD, with the microdata available, is the only entity positioned to make these data valuable and reliable. The Census Bureau is the likeliest source of expertise in properly cleaning and vetting the data.

An alternative source of housing supply growth data is the Building Permits Survey (BPS). The quality of the survey is quite low: it drastically undercounts the number of units built in some jurisdictions; other jurisdictions entirely fail to respond to the survey. However, if AFFH status were tied to BPS responses, perhaps the data quality would increase quickly.

Whatever source is used, HUD must decide how long a period it wishes to analyze. We use a period of 5 years, but it would be reasonable to use one of 7 or 10. There is no particular reason the period analyzed must correspond with the duration of AFFH certification.

New Construction Prices

We use new home construction data provided by the AEI Housing Center, which are based on public records data collected and published by counties.[37] For a detailed methodology, see a January 31, 2020, comment letter by the creators of the dataset.[38]

We use all seven available years of data (2012–2018), adjusting for personal consumption expenditures (PCE) inflation and weighting 2012 sales at 0.5, weighting 2018 sales at 1.0, and linearly interpolating weights. We use only jurisdictions with at least 10 observations.

---

37. Tobias Peter and Edward Pinto compiled these data. They intend to release this dataset, along with other metrics, to the public in 2020 through the AEI Housing Center.
38. Pinto and Peter, *Comment Letter*.

In 33 jurisdictions, we had insufficient AEI data and instead use new home sales data from Redfin (covering 2011–2019). Redfin draws its information from sales listed by realtors.[39] The Redfin data are available at the county level; we proceeded under the assumption that the county-locality price ratio is the same for new construction as it is for existing homes, measuring those prices using the Zillow Home Value Index. We also normalized the Redfin prices to match the AEI prices across a large area for which both data sources were available. This procedure is substantially less precise, and we suggest that HUD instead give no ranking to jurisdictions with too few new home sales to measure.

Rent

We use SAFMR, which are calculated at the zip code level, to measure the cost of existing housing. We average together the SAFMR for all five home sizes (zero- to four-bedroom homes), which helps abstract from the composition of the local housing stock.[40] Although there is a robust correlation between SAFMR and new home prices, each describes very different market segments. As we have argued in this comment, new home prices better reflect the choices of recent local governments; existing-unit rents better reflect the broad cost of housing, which arises from an equilibrium between housing stock (i.e., supply) and demand.

Geography

HUD does not appear to publish geographic crosswalks between CDBG-space (which includes various county remainders and is related to Summary Level 070) and common geographic levels such as ZIP Code Tabulation Areas and census tract. That would be nice. Instead, we use an implicit block-group correspondence file published by HUD to provide estimates of the number of low- and moderate-income individuals by block group.[41] HUD can obviously improve on this makeshift crosswalk, both in its own uses and in what it makes available for researchers.[42] However, given that most CDBG grantees are large, the errors at the edges of crosswalks are likely to make little difference.

All our data work and analytic choices are available upon request.

---

39. We thank Taylor Marr of Redfin for helpfully providing and explaining the data. For more details, see "Data Center," Redfin, accessed February 17, 2020, https://www.redfin.com/blog/data-center/.
40. A peer reviewer noted that HUD could slightly improve this average by weighting according to the national share of units in each size category.
41. US Department of Housing and Urban Development, "ACS 2011-2015 Low-Mod All Local Governments" (dataset), accessed January 23, 2020, https://www.hudexchange.info/programs/acs-low-mod-summary-data/acs-low-mod-summary -data-local-government/.
42. We emailed and asked for a better crosswalk but did not receive a response.