

Impact

A regulatory impact analysis must accompany every economically significant federal rule or regulation. The Office of Policy Development and Research performs this analysis for all economically significant rules of the U.S. Department of Housing and Urban Development. An impact analysis is a forecast of the annual benefits and costs accruing to all parties, including the taxpayers, from a given regulation. Modeling these benefits and costs involves use of past research findings, application of economic principles, empirical investigation, and professional judgment.

The Impact of Formula Allocation Discretion in the Housing Trust Fund

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This article reflects the views of the authors and does not necessarily reflect the views of the U.S. Department of Housing and Urban Development.

Abstract

The federal Housing Trust Fund (HTF) was created through the Housing and Economic Recovery Act of 2008, which also required the U.S. Department of Housing and Urban Development (HUD) to establish a formula for allocating housing subsidies to states and Insular Areas (American Samoa, Guam, the Northern Marianas Islands, and the Virgin Islands) on the basis of need. HUD's Office of Policy Development and Research conducted a regulatory impact analysis of the Department's proposed formula rule, assuming a hypothetical congressional appropriation of \$1 billion for the HTF. The analysis summarized the Department's approach to weighting various statutory factors of housing need and recognized distributional implications for states. The primary impact was determined to be a transfer from the federal government to states in an amount equal to the appropriation. A number of economic factors are not considered in this determination, but it is not clear that the data or capacity exists to examine such factors. This article updates the impact analysis using recent data and incorporates several corrections.

Summary of the Housing Trust Fund

The Housing and Economic Recovery Act (HERA) of 2008 authorized the Housing Trust Fund (HTF) by adding Section 1338 to the Federal Housing Enterprises Financial Safety and Soundness Act of 1992 (12 U.S.C. 4501 et seq.) (FHEFSSA). The law provides that the purpose of the HTF is to provide grants to states for two uses: (1) to increase and preserve the supply of rental housing for extremely low-income (ELI) and very low-income (VLI) families, including homeless families; and (2) to increase homeownership for ELI and VLI families. A beneficial feature of the HTF program comes from the attention its authors paid to a common critique of construction subsidy programs—that the subsidies merely crowd out unsubsidized affordable housing and thus fail in some measure to reduce housing need (see Khadduri, Burnett, and Rodda, 2003, for literature review).

One way to read the legislation is that the law effectively directs the Department of Housing and Urban Development (HUD) to target the HTF to those places where crowding out is least likely to occur. Section 1338(c) directs HUD to establish by regulation a formula for allocating affordable housing funds by state to ELI and VLI households.

The statute provides that the HTF primarily should assist ELI households; that is, households with incomes that do not exceed 30 percent of the Area Median Income (AMI), with adjustments for family size. The law states that not less than 75 percent of the funds must be used to increase or preserve rental housing for ELI households or those living below the poverty line. The remaining 25 percent must serve VLI households; that is, households with incomes that do not exceed 50 percent of the AMI. No more than 10 percent of the funds may be used to increase homeownership and up to 10 percent of the funds may be used to pay for administrative costs.

Although Congress has not appropriated funds for the HTF to date, FHEFSSA requires HUD to issue regulations for allocating the funds according to the statutory formula within 12 months of its enactment, which occurred on July 30, 2008. HUD published the proposed regulations for formula allocation in the *Federal Register* on December 4, 2009.¹

The economic impact of the HTF consists of a transfer from the taxpayer, through state governments, to ELI and VLI families. By expanding and preserving the supply of housing and lowering financial barriers to homeownership, the HTF will reduce the housing costs of ELI and VLI families and thus raise the consumer surplus of the program's beneficiaries.

Proposed Allocation Formula of the Housing Trust Fund

The HTF formula is based on Sec. 1338(c)(3) of FHEFSSA, as amended by HERA. The law provides that allocations for the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, and the Insular Areas are to be based on four housing needs factors and a construction cost adjustment factor. The data from readily available standardized data sources for the Insular Areas,

¹ <http://www.thefederalregister.com/d.p/2009-12-04-E9-28984> (accessed January 27, 2010).

however, differ from those available from those sources for the 50 states, the Commonwealth of Puerto Rico, and the District of Columbia. Therefore, a separate allocation process for Insular Areas had to be proposed and is explained below. Except for the Insular Areas, each of the four factors is expressed as a ratio of the state relative to the nation. A statutory minimum of \$3,000,000 is allocated to each of the 50 states and the District of Columbia.

HUD announced that it would allocate HTF moneys using the following process.

- (i) Determine allocations to Insular Areas based on the proportion of renters who reside in those areas relative to the sum of all renters in Insular Areas, the United States, and the Commonwealth of Puerto Rico.
- (ii) Determine allocations to the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico, using the statutory formula, with these steps:
 - (1) Estimate the relative level of housing needs using the statutory housing needs factors as interpreted by HUD:

Factor 1: Shortage of ELI rental units. The ratio of the shortage of standard rental units that are both affordable and available to ELI renter households in each state compared with the aggregate shortage of standard rental units that are both affordable and available to ELI renter households in all the states.

HUD measured the shortage as the mathematical difference between the number of ELI renter households and the number of ELI-affordable rental units that either are currently occupied by ELI households or are vacant and available at affordable rents.² (*Affordable rent* refers to rent that is not in excess of 30 percent of household income.)

Factor 2: Shortage of VLI rental units. The ratio of the shortage of standard rental units that are both affordable and available to VLI renter households in each state to the aggregate shortage of standard rental units that are both affordable and available to VLI renter households in all the states.

For this factor as well, HUD calculated the shortage as the mathematical difference between the number of renter households with the specified income and the number of affordable rental units that either are currently occupied by households in this income range or are vacant and available at rents affordable at this income range. To avoid double counting the ELI shortages measured by Factor 1, HUD restricted the households covered by this factor to those with incomes of 30 to 50 percent of AMI, the upper end of the VLI range.³

² Note that HUD conceivably could have interpreted “shortage” as the ratio, rather than the difference, between the estimated numbers of households and of units. No evidence exists indicating that this was Congress’s intent. Factors 1 and 2 would have become ratios of ratios under this method.

³ Factor 2 also excludes vacant units that are offered at rents affordable to ELI households, even though such units are available and would be affordable to those with incomes within 30 to 50 percent of AMI. The exclusion prevents these units from being double-counted toward reducing shortages both for the ELI in Factor 1 and the VLI in Factor 2.

Factor 3: Housing problems of ELI renters. The ratio of the ELI renter households in the state living with any of these three problems: (1) having an incomplete kitchen or plumbing facilities, (2) having more than one person per room, or (3) paying more than 50 percent of income for housing costs, to the aggregate number of ELI renter households having those respective characteristics in the United States.

Factor 4: Severe cost burdens of VLI renters. The ratio of the VLI renter households in the state paying more than 50 percent of income on rent relative to the aggregate number of VLI renter households paying more than 50 percent of income on rent in all states.

- (2) Weight the four housing needs factors, assigning a weight of 50.0 percent to Factor 1, 12.5 percent to Factor 2, 25.0 percent to Factor 3, and 12.5 percent to Factor 4. The two factors addressing needs of ELI households, Factors 1 and 3, thus have a combined weight of 75 percent in keeping with statutory targeting of funds.
 - (3) Determine initial allocations by multiplying the amount of appropriation remaining after the Insular Areas' allocation by the weighted factors.
 - (4) Determine cost-adjusted initial allocations by multiplying initial allocations by a construction cost adjustment factor that is developed as follows:
 - (a) Use RSMeans Reed Construction Data[®], which are available for selected cities in each state.
 - (b) Calculate a weighted average construction cost for each state, where the weight for each sampled city is proportional to the city's share of the state's population.
 - (c) Calculate relative construction cost estimates for each state by dividing the state's average cost by the overall average of state average costs.⁴
- (iii) Determine final state allocations by increasing cost-adjusted initial allocations to a statutory minimum of \$3,000,000, where necessary, and reallocating the remaining funds in proportion to cost-adjusted initial allocations.

We have used a special tabulation of American Community Survey (ACS) data⁵ to develop sample HTF allocations for states and Insular Areas, based on the above method and assuming a hypothetical \$1 billion appropriation (exhibit 1). In addition to using more current data, the estimates

⁴ Construction cost adjustments in this article are calculated relative to the mean of the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico. Puerto Rico was excluded in the official impact analysis.

⁵ The special tabulation is called the Comprehensive Housing Affordability Strategy (CHAS) data; it was created to help HUD's community development grantees comply with the analytical requirements of creating their Consolidated Plans. The new CHAS uses ACS data averaged across 2005-through-2007 surveys. See <http://www.huduser.org/portal/datasets/cp.html> (accessed January 29, 2010).

in this article vary from the preliminary estimates in HUD's formally submitted impact analysis because of both changes in measured housing needs and corrections in procedures.^{6,7}

Exhibit 1

Sample Housing Trust Fund Allocations for States and Insular Areas Under a Hypothetical \$1 Billion Appropriation

State	HTF Allocation (\$)	State	HTF Allocation (\$)
Alabama	9,950,004	Nevada	9,282,184
Alaska	3,000,000	New Hampshire	3,248,241
Arizona	15,626,837	New Jersey	34,396,197
Arkansas	6,434,774	New Mexico	4,739,355
California	183,026,963	New York	121,739,879
Colorado	14,446,312	North Carolina	21,852,307
Connecticut	12,084,937	North Dakota	3,000,000
Delaware	3,000,000	Ohio	32,440,617
District of Columbia	3,838,659	Oklahoma	7,535,120
Florida	51,313,186	Oregon	15,234,816
Georgia	22,083,671	Pennsylvania	36,206,487
Hawaii	5,455,946	Rhode Island	4,454,100
Idaho	3,105,977	South Carolina	9,199,909
Illinois	45,913,332	South Dakota	3,000,000
Indiana	15,081,777	Tennessee	13,003,854
Iowa	6,326,828	Texas	57,483,952
Kansas	5,839,164	Utah	4,239,213
Kentucky	9,264,851	Vermont	3,000,000
Louisiana	11,911,344	Virginia	19,727,831
Maine	3,288,198	Washington	23,575,177
Maryland	13,514,007	West Virginia	4,089,213
Massachusetts	26,477,040	Wisconsin	16,405,257
Michigan	27,563,834	Wyoming	3,000,000
Minnesota	13,991,926	Puerto Rico	6,784,995
Mississippi	6,557,272	American Samoa	59,069
Missouri	15,039,196	Guam	555,248
Montana	3,000,000	Northern Marianas	263,620
Nebraska	3,738,054	Virgin Islands	609,270

HTF = Housing Trust Fund.

Source: Authors' estimates for states are based on housing needs factors in Comprehensive Housing Affordability Strategy tabulations of American Community Survey data for 2005 through 2007; estimates for Insular Areas are based on the proportion of renters residing in those areas based on the 2000 Census

⁶ The regulatory impact analysis that HUD originally submitted to the Office of Management and Budget used a CHAS tabulation of 2000 Census data. In the course of updating the analysis with the new CHAS data, the authors discovered that several components of housing need were inadvertently omitted from Factor 2 in the official submission. The omission (variables a10c19r, a10c20r, a10c21r) caused the estimated state shortages of very low-income units to be biased upward because VLI renter households were counted toward the shortage even if their rents were affordable to households with incomes of 30 to 50 percent of AML.

⁷ In addition, the updated estimates in this article incorporate a correction in the calculation process, whereby estimates of affordable housing shortages are reset to zero if states have negative values (that is, have available units exceeding renters). The authors judged that this adjustment would comply with the statute's rules of construction (subsections (f)(3)(b), (f)(4)(b)), which provide that negative shortages imply "no shortage." The adjustment had a small effect on Factor 2 values, as it applied to two states when using the 2000 CHAS data and one state when using the new CHAS data.

Data Inadequacy and Insular Areas Allocations

HERA provides that the HTF will provide allocations to the Insular Areas: American Samoa, Guam, the Northern Marianas Islands, and the Virgin Islands. HUD determined, however, that the data needed to make allocations to these areas using the four formula factors do not exist in detail comparable to the 50 states, the District of Columbia, and the Commonwealth of Puerto Rico. In particular, neither the long-form decennial census nor the American Community Survey data would enable HUD to determine the number of households in ELI and VLI categories and the number of housing units affordable to these households in these income categories.⁸

HUD resolved the data limitation by adopting a more basic assessment of housing need in Insular Areas compared with the entire country: the percentage of renters residing in Insular Areas relative to the sum of all renters in Insular Areas, the United States, and the Commonwealth of Puerto Rico.

The small shares of renters residing in Insular Areas (0.01 percent in American Samoa, 0.06 percent in Guam, 0.03 percent in the Northern Marianas, and 0.06 percent in the Virgin Islands) make the Insular Area allocations insignificant for the purposes of this rule. Aggregate allocations for Insular Areas total \$1.487 million for a hypothetical \$1.0 billion appropriation. For comparison purposes, the Insular Areas receive \$3.65 million out of the \$1.825 billion fiscal year (FY) 2009 HOME Investment Partnerships Program appropriation.

Assessing Effects of HUD's Discretionary Choices in Defining the Allocation Formula

In developing the HTF allocation formula, HUD tested several alternatives to determine to what extent the resulting economic outcomes are sensitive to modest discretionary choices. None of the discretionary choices have any effect on Insular Areas.

We showed previously that HUD gave 50 percent of the total weight to shortage of ELI rental units, and a 25-percent weight to housing problems of ELI renters, corresponding with the law's requirement for targeting 75 percent of rental housing funds to ELI households. HUD then gave equal weights of 12.5 percent for shortage of VLI units and for severe cost burdens of VLI renters.

To examine the importance of this weighting for allocation outcomes, HUD also ran the allocation formula with alternative weight structures. The first alternative was to retain the 50-percent priority weight for Factor 1 but remove the overweighting of Factor 3 so that it equals Factors 2 and 4, resulting in a 50-16.7-16.7-16.7 structure. HUD also tested two additional levels of preference for Factor 1, one applying a weight 10 percentage points below and the other 10 points above the proposed 50-percent value. Both alternatives provide equal weights for the other factors.

⁸ The Government Accountability Office (GAO) recently examined the adequacy of the two major data sources that potentially could address Insular Areas—the Current Population Survey (CPS) and the American Community Survey (ACS)—in a review of data adequacy for the Medicaid program. GAO concluded that CPS and ACS data are not available for the Insular Areas, except for the Commonwealth of Puerto Rico. Like HERA, the Medicaid statute defines states to include insular Areas, of which Puerto Rico is one. HUD's decision to treat Puerto Rico like the 50 states and District of Columbia in allocating HTF therefore hews more closely to HERA than other federal programs have done when faced with similar statutory definitions and data limitations. (GAO, 2009).

Alternative 1: 50-16.7-16.7-16.7 weights.⁹ Relative to the proposed formula's 50-12.5-25-12.5 weighting, removing the additional preference for Factor 3 has distributional effects. Under a \$1 billion total appropriation and using 2005-to-2007 ACS data, the alternative 50-16.7-16.7-16.7 formula structure would provide additional benefits exceeding \$500,000 to the states of California, Florida, Nevada, New Jersey, and New York. Reductions of \$500,000 or more would occur for Illinois, Indiana, Kentucky, Michigan, Minnesota, Missouri, Ohio, Pennsylvania, Texas, and Wisconsin. Relative to the proposed allocation formula, 10 states would receive more under this option and 35 would receive less, although, for 20 states, the change would be less than 1 percent from the proposed allocation.

Alternative 2: 40-20-20-20 weights. Without the overweighting of Factor 3, the two weighting alternatives for Factor 1—10 points higher or 10 points lower—do not produce the roughly symmetrical gains or losses that might be anticipated for any given state. Notably, California and Florida would benefit relative to the proposed rule whether the Factor 1 prioritization were stronger or weaker. Overall, reducing the weight of Factor 1 through the 40-20-20-20 structure has a result similar to that of eliminating the Factor 3 overweight, but with slightly more concentrated effects. The number of gainers (11) and losers (34) relative to the proposed allocation is similar, but the average gain and average loss both are greater, primarily because of large gains by California and Florida and larger losses by the same states affected by alternative 1.

Alternative 3: 60-13.3-13.3-13.3 weights. Compared with the first and second alternatives, increasing the weight of Factor 1 to 60 percent in the 60-13.3-13.3-13.3 structure produces smaller changes in allocations relative to the proposed formula. The 14 states that gain would receive an average of \$312,000 more in their allocations, while the 31 states that lose would average \$141,000 less. A significant gain by California makes it the single major outlier under this alternative.

Selection of Alternative for Proposed Rule

In eliminating the alternatives discussed previously, HUD's decision is complicated by the fact that increasing the weight on the VLI factors (2 and 4) might have the effect of shifting funding from states with relatively softer rental housing markets, such as Alabama, Ohio, Pennsylvania, and Michigan, to housing markets that in the 2005-to-2007 period had very high rental costs relative to income, such as California, Florida, Nevada, and New York. It is worth noting that the appropriate use of HTF funds might vary by the type of housing shortage. State and local housing markets that have the highest shortages of housing for both ELI households and VLI households might have the greatest need for new units. Those markets with a shortage primarily in ELI units have a greater need for funds to reduce operating costs and renovate affordable housing so that decent affordable housing will be available to ELI renters.

HUD's analysis of the sensitivity of state allocations to various prioritizations of the needs of ELI renters under Factor 1 and Factor 3 revealed that approximately one-half of the states are not

⁹ Although the weights are rounded to facilitate presentation, those in the calculation process use repeating decimals so as to sum to 100 percent.

affected greatly by any of the weighting alternatives, because 20 to 29 states experienced changes of less than 1 percent. For larger states, effects tend to be more pronounced, yet only rarely exceed 3 percent relative to HUD's proposed formula. HUD concluded that providing priority weighting for both ELI factors in the proposed 50-12.5-25-12.5 structure accommodates states for which ELI needs take different forms, while responding as closely as feasible to the statutory requirement that 75 percent of rental assistance funds provided by the HTF should serve ELI households.

Summary of Impacts

As noted previously, the statute is very specific about the factors to be used in the formula and different weighting schemes have only a modest effect on allocation grants. The largest effect on allocation grants is the amount made available for the program. Under current statute, the HTF would be funded through profits from the government-sponsored enterprises Fannie Mae and Freddie Mac. Because those agencies currently do not have profits, for the FY 2010 HUD budget request to Congress, President Obama requested that \$1 billion be appropriated for the program as a transfer from the federal government to state governments. The direct federal cost of the program will be the amount eventually provided by Congress.

HTF grants will be used to support the development of primarily rental housing affordable to ELI households. Under the formula described here, this program provides funding to add affordable housing supply to markets in which strong evidence indicates an inadequate supply. This program represents a strong complement to HUD's demand-side program, the Housing Choice Voucher Program (HCVP), which provides a tenant-based subsidy for primarily ELI households to afford existing privately owned rental housing. A limitation of the HCVP is that tenants are less likely to use their vouchers successfully in tight markets (Finkel and Buron, 2001), a problem that the careful targeting of HTF dollars in this rule to markets with inadequate supply is intended to address.

The primary benefits of the HTF are expected to be similar to the HCVP. The large-scale random assignment evaluation of the voucher program by Mills et al. (2006) reports that a primary benefit of housing assistance programs is reducing homelessness and the doubling up tendency among ELI families.¹⁰ Thus, the primary benefit of the program against no funding or funding without targeting will be to reduce the number of homeless families and individuals in relatively tight housing markets.

The economic effect of the HTF formula rule was classified in HUD's submission to the Office of Management and Budget as a transfer from the federal government to states in the amount of the appropriation. More explicitly, and perhaps more accurately, the transfer is from taxpayers to direct beneficiaries of housing assistance, thus increasing the beneficiaries' consumer surplus.

Despite the simple transactional implication of a transfer, the economic costs and benefits are in reality far more complex. Even ignoring the state-level distributional effects of the discretionary design of a formula, the evaluations cited previously hint at the indirect benefits and effects of the

¹⁰ Mills et al. (2006) also report various other effects of relatively modest size, both positive (for example, deconcentration of poverty) and negative (for example, lower earnings).

housing subsidy. Increasing the supply of affordable housing would mitigate the severe shortage of affordable housing units and the current crowding out of households with greater needs.¹¹ Greater affordable housing supply would produce external benefits arising from reduction of homelessness and improved housing consumption by low-income households.

HUD is not in a position to assess a number of economic effects. An incomplete list of such factors might include the deadweight losses that result from higher federal taxes and borrowing, the discount value that HTF beneficiaries place on housing subsidies compared with cash grants—offset by possible increases in their labor supply compared with cash grants, and increases in resources used by developers or program applicants in competing for HTF grants. The current lack of data and analytic capacity has prevented HUD from addressing these issues, although such analysis would be of great interest.

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¹¹ In 2005, only 39.9 affordable rental units were available for every 100 ELI households and 76.8 units for every 100 VLI households (HUD, 2007). Further, about 2.76 million households with incomes above the ELI threshold were occupying ELI-affordable units in 2005 (HUD, 2007).