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OFFICE OF POLICY DEVELOPMENT  
AND RESEARCH

**FOR:** Indian Housing Block Grant Formula Negotiated Rulemaking Committee

**FROM:** U.S. Department of Housing and Urban Development,  
Policy Development and Research

**SUBJECT:** Response to TA Request 12

**DATE:** 6/6/2014

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This memo responds to Technical Assistance (TA) Request 12, submitted by Carol Gore:

*Categorize the list of needs that the Needs Work Group generated on 4/25/2014.*

1. *Are there variables already in the formula that measure these needs?*
2. *If the variables are not in the formula, what other data sources would measure these needs?*

This memo organizes the work group's initial brainstorming list by topical area and provides suggested data sources and/or ideas on variable construction to address these needs. Note, this should be considered a live, draft document that will change as the work group continues its discussion.

*I. NEED GROUPING 1: Quality of Housing Stock / Substandard Housing*

*Brainstorm Items:*

- Lack of running water/plumbing
- Age of Housing
- Formula Current Assisted Stock (FCAS) loss moving to the Needs portion of the formula

*How the current formula addresses quality of housing?*

- Currently, the Need portion of the formula allocates funding based on each grantee's share of total American Indian and Alaska Native (AIAN) households that have one of the following housing need problems: over-crowded (more than 1.01 people per room), without kitchen or without plumbing facilities. This factor has the largest weight of all the need variables— 25%.
- During the brainstorm, one workgroup member suggested that the loss of FCAS units should be addressed in the Need portion of the formula. Presumably, this suggestion stems from the idea that as units move away from the FCAS, its rehabilitation need grows at a faster rate because its residents cannot afford to upkeep their home. The current formula already targets this need (to some extent) through the shortage variable, which is the number of low-mod AIAN households minus Current Assisted Stock (CAS). Thus, as units leave CAS, this Need variable increases.

What are other ways to address housing quality needs in the formula?

- The primary data source for this information would be the **American Community Survey (ACS) 5 year data.**
- The Committee could consider adding a variable from the ACS to target places with an old, dilapidated housing stock in need of significant rehab investment. For example, the Community Development Block Grant (CDBG) formula allocates funding based on a grantee's proportional share of housing built before 1940. However, research shows that allocating solely on pre-1940 housing tends to over-fund low-need communities because the variable does not capture recent building improvements in old housing stock. An alternative measure that tends to capture rehabilitation need is **housing units built before 1960 and inhabited by a poor AIAN household.**<sup>1</sup> The Committee could experiment with this indicator by providing an additional weight for **RV and mobile homes that are inhabited by poor AIAN household.** Since these homes are likely less durable than other homes, the age indicator can be adjusted to a more recent year.
- Research also suggests an alternative variable independent of age that can target funds to communities that have dilapidated housing caused from long term population loss—**number of poor AIAN households in areas with high vacancy.**<sup>2</sup>
- The Committee could also experiment with increasing the weight for households that experience *all* three substandard conditions instead of just one of the three.

*II. NEED GROUPING 2: High Construction / Regulatory Compliance Costs*

Brainstorm Items:

- Cost to build to code
- Cost of local barriers to government compliance
- The relationship between family income and the cost to build to code

How the current formula addresses construction cost?

- Both the Needs and FCAS sections of the Indian Housing Block Grant (IHBG) formula incorporate a cost adjustment factor to reflect different **Total Development Costs (TDC)** across the country. This factor is a simple ratio applied to grantees' Need allocations.
- To some extent, the **severe housing cost burden** variable may reflect high construction costs insomuch as higher construction costs are often passed to the consumer, which may increase the severe housing cost burden variable.

What are other ways to address construction costs in the formula?

- These brainstorm items are not explicitly addressing high construction costs, but HUD's TDC factor does reflect the total cost to develop / rehabilitate housing, which includes building to code and government compliance. Any additional factors to reflect these unique development costs would be duplicative in what already exists in the formula.

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<sup>1</sup> Robert A. Collinson (2014) Assessing the Allocation of CDBG to Community Development Need, *Housing Policy Debate*, 24:1, 91-118, DOI: [10.1080/10511482.2013.854945](https://doi.org/10.1080/10511482.2013.854945)

<sup>2</sup> *Ibid.*

- The Committee could also consider eliminating the TDC factor in the Need portion of the formula and replacing it with a more robust housing shortage variable discussed later in this memo. The rationale for making this change is that high construction costs and a restrictive regulatory compliance environment would be reflected in places with very high rent burdens and affordable housing shortages.

### *III. NEED GROUPING 3: Housing Affordability / Availability*

*Brainstorm Items:*

- Over-crowding measured by families per home/bathrooms per person, nuanced definition, maybe include size of unit
- Delinking over-crowding from substandard housing
- Clarification of rooms with Census – how to describe the number of rooms in census taking
- How to capture need for elderly and disabled
- Housing shortage, how to measure temporary Federal Emergency Management Agency (FEMA) housing Transitional housing need/replacement needs for housing that was destroyed for infrastructure projects
- “Couch surfing” homeless and “houseless” homeless not counted
- Energy cost

*How the current formula addresses availability / affordability issues?*

- **Over-crowding** is included in the “housing quality” variable group described above in the housing quality section. As currently structured, a unit is counted toward this need variable if an AIAN household is either over-crowded (more than 1.01 persons per room) or has incomplete plumbing or kitchen facilities.
- Housing need for **elderly and disabled** is somewhat addressed in the formula insomuch as any of these households that are severely cost burdened are included in the cost burden variable.
- **Housing shortage**, or lack of affordable housing, is somewhat captured in the formula by the severe cost burden variable and the shortage variable.
- The additional need in places with high **energy costs** is somewhat addressed in the existing formula through the severe rent burden variable. This variable is constructed from the *total* cost of housing, which includes utility costs.

*What are other ways to address availability / affordability issues in the formula?*

- One simple way to explicitly target more funds to **elderly and disabled** is to split the severe cost burden variable into two distinct variables, which is derived from the ACS. One variable could be the number of **non-elderly, non-disabled AIAN households** that are severely cost burdened. The second would be the number of **elderly, disabled AIAN households that are cost burdened**. Currently, the cost burden weight is set at 22%. The Committee could split that weight between the two new variables based on the distribution of cost-burdened households that are elderly/disabled. Then, the Committee could adjust the split weights to give more emphasis on the elderly/disabled population.

The method described above targets funding to areas with a shortage of affordable housing to seniors. It may not, however, target funds to address the high cost of serving elderly and disabled in *existing* assistance programs. One way to target funds for both unassisted *and* assisted renters is to employ the same technique described above to the household income variables of the needs formula. For instance, the Committee could split the 30% household indicator into two variables, depending on elderly/disabled status, and adjust weights accordingly.

- The current **housing shortage** variable in the formula was originally designed to address the legacy issues of funding inequity between tribes. In other words, this variable was meant to compensate tribes that were poorly served by the distribution of funds before the Native American Housing Assistance and Self-Determination Act (NAHASDA). However, the shortage variable currently used in the formula does not fully target areas that actually have a shortage of affordable housing after taking into consideration the availability of affordable unassisted stock.

The Committee could consider creating a new shortage variable to replace the current severe cost burden and shortage variables. We suggest modeling the variable off HUD's annual *Worst Case Housing Needs* report to Congress. This new variable would be created from special tabulations of the **ACS** so that:

**AFFORDABLE HOUSING SHORTAGE =**

*AIAN low income (LI) households (aka, less than 50% of Area Median Income (AMI)) MINUS  
AIAN LI households that pay less than 50% of income on housing MINUS  
Vacant housing units that are affordable at less than 50% of AMI PLUS  
Not-severely burdened AIAN LI households that are severely overcrowded (more than 1.5 persons per room) PLUS  
Not-severely burdened AIAN LI households that are living without complete plumbing or kitchen facilities*

- The workgroup suggested different ways of measuring **over-crowding**. All of these suggestions would have to be constructed from the **ACS**. The Committee could consider running the formula with the following tweaks, which would better target funds to places with the most severe over-crowding.
  - Define over-crowding in the variable grouping indicator as more than 1.5 persons per room, which is the standard definition for “severe over-crowding.”
  - Only count the housing quality variables (overcrowding AND insufficient kitchen/plumbing facilities) if it houses a low-income AIAN household.
  - Define over-crowding in the variable grouping indicator as more than 2 persons per *bedroom*. (Note, we are offering this indicator as an alternative to the brainstorm item “number of families per rooms.” Since families are not consistent in their size, this indicator would not produce a variable that could be easily comparable.)
  - Delink the over-crowding variable from the variable grouping and split the current 25% weight.

Note, the ACS does not collect information on number of bathrooms. The American Housing Survey (AHS) does collect this information, but it only produces national

and some metropolitan area estimates. No available data set exists that we could use to construct a variable to meet this need.

- Unfortunately, the Census does not collect data on **homelessness or “houselessness.”** However, some of the existing formula elements *correlate* with this need. That is, places with high rates of severe rent burden and over-crowding also generally have high rates of homelessness and doubling up.

However, the Committee could consider creating a new homeless factor for the IHBG formula from HUD’s Point in Time (PIT) counts. These data are an annual point-in-time count of homeless people in shelters and on the streets. The data are provided at the Continuum of Care (CoC) geographies, which are the service areas of homeless service providers. Depending on the provider, the geography can be a state, county, group of counties, or a city. With the PIT, we could create a ratio of homeless counts to extremely low income (ELI) households (aka, 30% of AMI) by CoC geographies. This factor could be applied to each tribe’s count of ELI households to estimate the extra number of homeless families that aren’t surveyed by the Census in the ACS.

Of course, the disadvantages of this method is that CoC geographies are very different from IHBG Formula Areas and may better reflect homeless conditions in major population centers in the CoC, instead of more rural and/or tribal areas. This method also would not capture the “couch surfer” population raised in the workgroup.

- The biggest correlation to homelessness is poverty and an “extremely low income” (ELI) *rate*. Currently, the formula only allocates funds based off each grantee’s proportional share of low income households or inadequate housing. In general the formula has no recognition of problems related to concentration or high rates of poverty. Thus, the Committee could think of ways to “double count” or increase weights for low-income households in areas with high poverty rates.

#### IV. NEED GROUPING 4: *Infrastructure / Remoteness*

##### Brainstorm Items:

- Remoteness of families/lack of infrastructure connectivity
- Distance from nearest highway

##### How the current formula addresses isolation and remoteness?

- The current formula does not address this issue except possibility through the TDC adjustments and other local cost differences.

##### What are other ways to address remoteness in the formula?

- The Committee could request that HUD create a “remoteness index” for the IHBG formula using similar models developed abroad. For instance, the Australian Department of Health and Aged Care developed an Accessibility/Remoteness Index for Australia (ARIA) that measures how accessible a region is to a range of “goods, services

and opportunities for social interaction.”<sup>3</sup> This index is created by calculating distance traveled by road from populated areas to population centers of at least 5,000 inhabitants.

With considerable resources and time for development, HUD could create a simple remoteness index using GIS technology that could be applied to the IHBG formula much like the TDC factor. For instance, we could create an index from 1 to 1.1 that could be multiplied to each grantee’s final needs calculation from the formula. So if the Needs formula produces \$100,000 for a particular grantee with a remoteness index of 1.05, the index would adjust the grant to \$105,000. If the remoteness index was 1.1, the grant would be adjusted to \$110,000.

## V. NEED GROUPING 5: Other Needs

### Brainstorm Items:

- Need to account need of families, as opposed to just households
  - The current formula allocates all need variables at the household level. If the Committee would like to allocate based off the needs of *families*, we suggest changing the three household income variables in the formula (AIAN HH 30% AMI, 50% AMI, and 80% AMI) to a family denomination using special tabulations of the **ACS**. For instance, let’s say a housing unit contains a single mother with two children that earns \$20,000 a year. They can’t pay their rent with this income so the mother rents a bedroom to a single person that earns \$75,000 a year. Together, the household income is \$85,000, which doesn’t meet the 80% threshold under current tabulations of the data. A family denomination would split that aggregation into two units—one that qualifies under the 30% AMI threshold, and one that falls above the 80% threshold.
  - The Committee could also consider adding a poverty factor to the formula that could offset the concerns of those who don’t like the median income cutoffs to tie to local data (30% of a low area median is very low) rather than national data.
- Environmental remediation needs
  - The US Environmental Protection Agency (EPA) maintains a national database of hazardous waste cleanup locations.<sup>4</sup> With considerable resources and time for development, HUD could aggregate these sites by IHBG formula area and introduce a new variable in the IHBG formula that allocates funding based on each grantee’s share of hazardous sites. The drawback to this indicator is that we may not have good data on intensity of the hazards. So an abandoned dry cleaning store would have the same gravitas as a large abandoned steel factory. However, after further investigation into this database we may find ways to adjust the weight of each site based on the scale of cleanup efforts needed.

### Other brainstorm items that need more clarification and/or consideration:

<sup>3</sup>[http://www.health.gov.au/internet/main/publishing.nsf/Content/E2EE19FE831F26BFCA257BF0001F3DFA/\\$File/oceanew14.pdf](http://www.health.gov.au/internet/main/publishing.nsf/Content/E2EE19FE831F26BFCA257BF0001F3DFA/$File/oceanew14.pdf)

<sup>4</sup> <http://www2.epa.gov/cleanups/cleanups-my-community>

- Administrative capacity of a recipient
- Indian Health Services Sanitarians Health Systems
- Reference NAHASDA need