

**Reforming the Low Income Home Energy Assistance
Program's State Block Grant Formula
Assessing Need, Defining Equity, and Ensuring Political Feasibility**

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May, 2006**

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Executive Summary

The Low Income Home Energy Assistance Program (LIHEAP) is a federally funded program that provides bill assistance, emergency crisis assistance, and weatherization and energy-related home repairs to low-income households. A discretionary program, LIHEAP's funding level is determined each year by Congress and its distribution mechanism is dependent upon which one of three tier requirements its allotment meets. Since the program's inception, funding for LIHEAP has almost exclusively been distributed according to an inequitable and antiquated formula that favors the needs of cold Northeastern and Midwestern states over those of warm Southern and Southwestern States.

However, in spite of the flaws inherent in LIHEAP's current distribution mechanism, any attempt to reform the formula is complicated both by the task of defining equity and by the challenge of ensuring political feasibility, as a number of states would stand to lose funding if changes were made. This paper provides an analysis of the LIHEAP's current distribution mechanism, a discussion of the criteria used to assess reform proposals, and suggestions for altering LIHEAP's state block formula in ways that both increase equity and encourage political feasibility.

While no perfect reform solution exists, an examination of several proposals reveals that the best solution may be to retain a formula tier system, including a trigger level after which money would be distributed according to a measure of energy burden. Because this formula would both increase the equitable distribution of funding and ensure relative gains for a majority of states, such a change would encourage congressional support for formula revision as well as for future funding increases for LIHEAP.

Introduction

The Low Income Home Energy Assistance Program (LIHEAP) is a federally funded program that provides bill assistance, emergency crisis assistance, and weatherization and energy-related home repairs to low-income households. The program is administered through the Department of Health and Human Services' (HHS) Administration for Children and Families (ACF) via the Office of Community Services' (OCS) Department of Energy Assistance (DEA). LIHEAP is a discretionary program and funding levels are determined annually by Congress (Low Income 2006).

Since its inception in 1981, LIHEAP's block grant allotments have been distributed according to an antiquated and inequitable formula that favors the needs of cold Northeastern and Midwestern states over those of warm Southern and Southwestern states. However, any attempt to reformulate LIHEAP's allocation formula is complicated both by the task of defining equity and by the challenge of ensuring political feasibility.

Is it possible to find a politically feasible revision of LIHEAP's state block grant formula that will increase the equity of allocation? This paper was prepared for Economic Opportunity Studies, a nonprofit organization that provides "support for Community Action Agencies, community-based organizations, and the private and government organizations that are their partners (Economic 2006)," as an effort to answer this question. This effort was informed by extensive qualitative research, including a comprehensive literature review and a series of interviews with key political players, as well as the use of relevant data to model potential reform proposals. It provides a comprehensive discussion of LIHEAP's current state block grant formula, criteria by

which to assess various revision proposals, potential impacts of a range of formula changes, and strategies for approaching reform.

This paper does not provide the final word on formula change. Due to data limitations, some reform proposal models provide estimates, rather than conclusive predictions about the impacts of various changes. In addition, because political forces are extremely dynamic and inherently difficult to predict, attempts to describe and address political factors in this paper represent an informed effort, rather than a concrete guide, to the political considerations and strategies surrounding LIHEAP formula revision. However, this paper does provide a comprehensive discussion of relevant factors, as well as a solid framework for assessing and pursuing formula change.

Background

Formula Structure

The LIHEAP program consists of several components including block grant funds, emergency contingency funds, leveraging incentive funds, Residential Energy Assistance Challenge Option (REACH) program funds, and Training and Technical Assistance Funds. Regular block grant funds and emergency contingency funds constitute the majority of LIHEAP program funding, and will serve as the focus of this paper.

Emergency funds are authorized and distributed on behalf of the President by HHS in the case of a natural disaster or other emergency. An “emergency” is broadly defined and includes a significant home energy shortage or increase in the cost of home energy, home energy disconnection, unemployment, or participation in public benefit

programs. Emergency funds may be allocated using the state block grant formula, or distributed according to HHS' determination of state need (Stoltzfus 2005).

The block grant formula determines how funding is distributed among the states. The formula varies depending on which of three funding level tiers the annual LIHEAP appropriation falls into.

Tier I: Below \$1.975 Billion

Should funding levels be equal to or below \$1.975 billion, (as has been the case almost exclusively since the program's inception), states receive funding based on a formula developed in 1981.

Tier II: From \$1.975 Billion to \$2.25 Billion

Should Congress' LIHEAP appropriation fall into Tier II, funding is distributed by a mechanism developed in 1984 that accounts for low-income households' home energy expenditures by state. However, Tier II incorporates a hold-harmless *level* so that no state can be allocated a lower *dollar amount* than it would have under the Tier I formula if funding were equal to \$1.975 billion¹. In order to make this adjustment, money is taken from those states with the greatest proportional gains and allocated to states receiving less than they would have under the Tier I formula until those states have been brought to Tier I funding levels.

Tier III: At or Above \$2.25 Billion

At this funding level, all provisions contained in the Tier II formula, including the hold-harmless level, remain in place. In addition, a hold-harmless *rate* is applied so that any state that would have received less than 1% of a total \$2.25 billion appropriation

¹ Because approximately \$25 million of regular LIHEAP funding goes to Leveraging Incentive Grants and the Residential Energy Assistance Challenge Option, in fact, the level of regular LIHEAP funding needed to trigger the Tier II formula is actually approximately \$2.0028 billion (Whittaker & Perl 2006).

must now be allocated the percentage they would have received at a \$2.14 billion appropriation level (should this percentage be higher). Again, money is taken away from states with the greatest proportional funding until this goal is met (Whittaker & Perl 2006).

Formula Differences

The 1981 Formula

LIHEAP emerged as the successor of the Low Income Energy Assistance Program (LIEAP). This program came about in the late 1970s in light of concerns about home energy costs, especially home heating fuel costs. In 1980, LIEAP was authorized for one year and was set to be distributed under a formula which considered the greatest of:

1. payments to Aid to Families with Dependent Children (AFDC) recipients
2. payments to selected public assistance recipients
3. transfer of funds to Community Services Administration programs, or
4. state-designed programs to assist low-income households

as a percentage of the national expenditure total in each category (Stoltzfus 2005).

However, before funding could be allocated, Congress introduced an alternative method for computing state need. This method consisted of a combination of two alternative measures. Under the first alternative, half of the allocation was based on the increase in home heating expenditures from 1978 to 1980. The other half was based on the number of heating degree days squared times the population with income less than or equal to 125 percent of poverty. Under the second alternative, one quarter of the allocation was based on total residential energy expenditures in 1980. The remaining

three quarters was based on heating degree days square multiplied by the number of low-income households in a given state (Whittaker & Perl 2006).

The percentage each state would receive under each of these two alternatives was determined, and the greater of the two percentages was assigned to each state. Then, state allotments were adjusted proportionately so that the total allocation was equal to 100 percent. Lastly, \$50 million was reserved to make up any difference between the amount of each state's allotment and 75 percent of the allotment made under the 1980 formula.

When LIHEAP was enacted in 1981, replacing LIEAP, this formula was retained. For several reasons, the formula favored cold Northeastern and Midwestern states over warm Southern and Western states. First, by squaring heating degree days, the formula ensured that heating costs would have more weight than either population factors or other energy expenditures. Second, including a provision that accounted for the increase in home heating expenditures from 1978 to 1980 favored Northeastern states, where heating oil prices had increased substantially over that period. (In contrast, between 1981 and 1983, the price of natural gas rose 33 percent, while heating oil prices remained relatively stable (Whittaker & Perl 2006)).

Today this formula favors Northern states even more substantially. First, because the formula is static, it does not take into account changes in energy costs or population trends in the United States. Since LIHEAP's inception, Southern and Western states have seen an influx in population (demonstrated by a 3 percent increase in congressional seats in the West and a 2 percent increase in the South). In addition, the South is the only region to have seen an increase in both the number and percentage of poor residents. (In

2003, Southern states were home to 39.8 percent of poor Americans.) For these reasons, a formula based on low-income (and total) population figures from 1980 fails to correctly account for current conditions (Drake 2003).

Thus, the 1981 formula is not only unfair, it is also inaccurate. Because the formula does not account for recent measures of population, poverty, energy costs, or weather trends, it fails to target services effectively to eligible populations or to address changing needs over time. In addition, because it arbitrarily squares heating degree days, it perpetually gives more weight to heating costs than to other energy expenditures.

Table 1. Formula Impact by State (Kaiser & Pulsipher 2003b)

Benefit from 1981		Benefit from 1984	
27 States		23 States	
State	Region	State	Region
Connecticut	Northeast	Kansas	North Central
Maine	Northeast	Missouri	North Central
Massachusetts	Northeast	Alabama	South
New Hampshire	Northeast	Arkansas	South
New Jersey	Northeast	Delaware	South
New York	Northeast	Florida	South
Pennsylvania	Northeast	Georgia	South
Rhode Island	Northeast	Kentucky	South
Vermont	Northeast	Louisiana	South
Illinois	North Central	Maryland	South
Indiana	North Central	Mississippi	South
Iowa	North Central	North Carolina	South
Michigan	North Central	Oklahoma	South
Minnesota	North Central	South Carolina	South
Nebraska	North Central	Tennessee	South
North Dakota	North Central	Texas	South
Ohio	North Central	Virginia	South
South Dakota	North Central	West Virginia	South
Wisconsin	North Central	Arizona	West
D.C.	South	California	West
Alaska	West	Hawaii	West
Colorado	West	Nevada	West
Idaho	West	New Mexico	West
Montana	West		
Oregon	West		

Utah	West		
Washington	West		
Wyoming	West		

The 1984 Formula

In 1983, Congress began to consider reauthorization of LIHEAP. It was during this reauthorization process that the 1981 formula first came under congressional scrutiny. However, while Congress recognized the inequities inherent in the 1981 formula, a House amendment to the Emergency Immigration Education Act to adjust the formula would have resulted in a lower allocation percentage for 23 states, mostly in the Northeast and Midwest, and was eventually dropped in conference with the Senate. In the end, the House and Senate passed P.L. 98-558 on October 30, 1984. The new bill included the hold-harmless provision and trigger level, as well as an updated formula that addressed many of the inequities embedded in the 1981 formula (Whittaker & Perl 2006).

The 1984 formula used in Tier II and III takes into account five factors: annual heating and cooling degree days by state; residential sector energy price projections by fuel type; residential energy consumption by fuel source; number of heating and cooling units by fuel source; and number of low-income households by fuel source. Its state-level allotments are updated annually to account for changes in temperature, energy costs, and low-income population changes. As a result, the formula is not only more equitable today, but it also ensures accuracy over time by linking funding distribution to recent trend data (Whittaker & Perl 2006). However, while the 1984 formula distributes funding much more equitably than the 1981 formula, because of the hold-harmless provision and trigger level, it almost never determines the distribution of funding used for LIHEAP.

Table 2. Percentage of Total Appropriation by Census Region
(Kaiser & Pulsipher 2003b)

Region	1981 Allotment %	1984 Allotment %	Difference %
Northeast	33.2	23.2	-10.2
North Central	34.1	26.5	-7.5
South	19.0	36.6	17.6
West	13.7	13.7	---

Criteria

In assessing potential reforms to the LIHEAP state block grant formula, three main criteria will be used. First, successful solutions must increase equity as compared to the current distribution system. Second, good proposals must retain accuracy over time. Third, reform proposals must be structured so that they have a reasonable chance of being passed into law by Congress.

Dimensions of Equity

In defining equity for the purposes of distributing LIHEAP funding, one must consider program statute and congressional interpretation as well as the impacts of the program on its recipients. This section outlines three main criteria that will be used to assess the fairness of potential reform options. These criteria assert that benefits should be targeted on the basis of risk of weather-related death or illness, average low-income energy burden, and poverty level.

Extreme Temperatures

By statute, LIHEAP is a program aimed at preventing mortality and morbidity associated with extreme heat or cold. In fact, Congress included a stipulation in its 2005 Energy Bill requiring HHS to “report to Congress on how the Low Income Home Energy

Assistance Program (LIHEAP) could be used more effectively to prevent loss of life from extreme temperatures (Energy Policy 2005)”.

However, while assessing need based on temperature may seem straightforward, it is actually quite complex. In 2005, Kaiser and Pulsipher concluded on the basis of Center for Disease Control and Prevention (CDC) data that “approximately 600 people die each year from exposure to cold and 400 people die each year from exposure to heat (Kaiser & Pulsipher 2006). In 2003, Carolyn C. Drake testified before the House Subcommittee on Education Reform that between 1998 and 2000, heat resulted in almost 20 times more deaths than extreme cold (Drake 2003).

These conflicting assessments are not uncommon. Differences in measurements of temperature-related deaths are closely associated with the data sources and conceptual categories used to construct mortality databases, as well as the way these data are interpreted and presented by advocates. For instance, while the Center for Disease Control and Prevention’s (CDC) Compressed Mortality Index indicates that between 1979 and 1999, cold-related deaths outnumbered heat-related deaths by a margin of almost 2 to 1, the National Climatic Data Center’s (NCDC) Storm Data indicates that Americans are almost 3 times more likely to die from heat than from cold (Dixon, Brommer, Hedquist, Kalkstein, Goorich, Walter, Dickerson, Penny, & Cervený 2005).

These differences can be attributed largely to the fact that Storm Data is based on media reports that are more likely to capture “group kills” (most commonly associated with heat waves) than individual deaths. On the other hand, CDC’s Compressed Mortality Database is based on a tabulation of death certificates. Because exposure to extreme weather is most often a contributing factor to a stroke, heart attack, or accident,

rather than a primary cause of death, it may or may not be included on a given death certificate depending upon the individual judgment of the medical professional present and the format of the relevant state's certificate. Thus, death certificates also fail to provide a clear picture of weather-related mortality rates.

Importantly, the most relevant information for LIHEAP funding is the number of weather-related deaths caused by extreme *indoor* temperatures, a category which neither Storm Data nor the Compressed Mortality Database measures separately (Dixon et. al 2005). Thus, these databases offer information that is both inconsistently tabulated and only marginally relevant in assessing need for LIHEAP assistance, yet is often referenced by LIHEAP formula advocates seeking to defend conflicting arguments.

While temperature-related deaths are difficult to measure, LIHEAP proponents agree that both heat and cold present a risk for low-income households unable to meet home energy costs. A good formula then, should target benefits such that low-income households that risk exposure to extreme temperatures, whether heat or cold, have access to energy bill assistance.

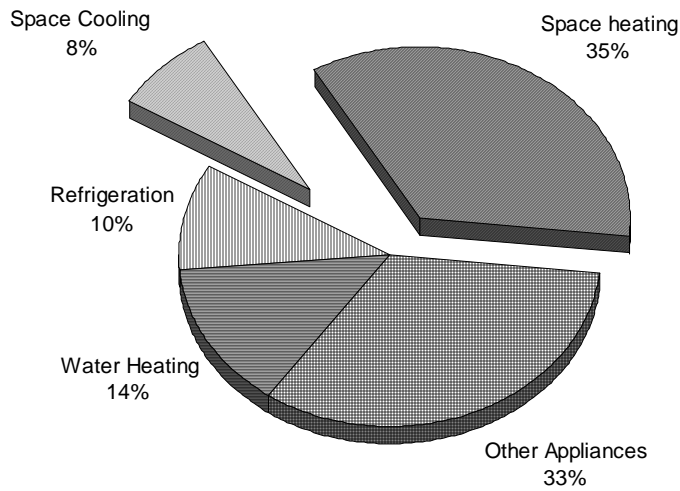
Energy Burden

Arguably, weather-related mortality rates fail to capture the true value of LIHEAP assistance to low-income families. In 1994, Congress amended the purpose of the program to clarify that LIHEAP is "to assist low income households, particularly those with the lowest income, that pay a high proportion of household income for home energy, primarily in meeting their immediate home energy needs (Litow 2005)." In fact, while only a tiny percentage of households are killed by extreme weather each year, millions face the possibility of being unable to pay energy bills, or having to sacrifice other

necessities in order to keep utilities turned on. In 2001, 9.6 million customers failed to pay at least one month's energy bill because they could not afford it. Seventy-seven percent of these households also delayed rent or mortgage payments, skipped medical or dental care, or experienced hunger (Power 2005).

Energy burden is the relationship between a household's energy bill and its income. According to DEA, high energy burden for low-income households is defined as a heating or cooling costs greater than or equal to 4.3 percent of income. High total residential energy burden, including water heating and appliance costs, is defined as energy burden greater than or equal to 10.9 percent of income. In FY 2001, more than 12 million households were categorized as having high energy burdens. Households with incomes of less than \$20,000 per year represented more than 95 percent of these households. Almost 40 percent of low-income households with high home energy burdens lived in the South Census Region and only 62 percent of LIHEAP recipient households had high home energy burdens (LIHEAP Energy 2005).

Figure 1. Percent of U.S. Residential Energy Expenditures by Low-Income Households FY 2003 (LIHEAP Home 2003)



Heating and cooling costs alone do not capture the total energy burden faced by a given household. On average, heating and cooling costs represent about 43 percent of residential energy expenditures, while spending on refrigerators and freezers, water heating, and other appliances account for the remaining 57 percent. In 2003, the average low-income household had home heating expenditures of \$463 (5.1 percent of income), and home cooling expenditures of \$123 (1.3 percent of income), but spent \$1,304 on total energy costs (13.6 percent of income) (LIHEAP Home 2003).

Furthermore, because a majority of households in the United States both heat and cool their homes, (about 81.5 percent of low-income households cooled their homes in 2002), average heating and cooling expenditures are not accurate indicators of regional differences in residential energy burden (LIHEAP Home 2003). In fact, as shown in Table 3, LIHEAP eligibles in Southern regions face similar total energy burdens to their

Northern counterparts, in spite of the fact that average spending on cooling is significantly lower (Power 2005).

Table 3. LIHEAP Eligibles' Energy Burden and Energy Bills Forecast (Power 2005)

Region	Energy Burden FY 2006	Energy Bills FY 2006
New England	21%	\$2,116
Middle Atlantic	19%	\$1,797
East North Central	18%	\$2,173
West North Central	18%	\$2,012
South Atlantic	17%	\$1,922
East South Central	19%	\$1,920
West South Central	18%	\$1,928
Mountain	14%	\$2,001
Pacific	8%	\$1,739

Thus, because heating and cooling costs alone do not capture the relative need for energy assistance experienced by low-income households, in addition to targeting benefits on the basis of extreme heat and cold, LIHEAP should be directed to those households that face the highest energy costs in relation to income. In this way, the program can best target benefits to those families at greatest risk for bill nonpayment and other hardships.

Poverty Level

Federal law limits eligibility for LIHEAP to households with incomes up to 150 percent of the federal poverty level (FPL), or, if greater, 60 percent of state median income. States have the authority to adopt lower income limits, but no household with an income below 110 percent of FPL may be considered ineligible (Stoltzfus 2005).

Currently, state capacity to serve low-income populations varies by region. Appendix I illustrates the substantial differences in income eligibility from state to state. For instance, Northeastern states such as New Hampshire and Connecticut serve

households with incomes greater than 200 percent of FPL, while most Southern states limit eligibility to populations with incomes of less than 150 FPL (Energy Notebook 2003). While these variations are the result of variety of factors, they, in part, are reflective of biases in LIHEAP's current distribution mechanism.

While targeting on the basis of energy burden would help to direct funding to those with the greatest need, income measures are needed to complete this task. For instance, two households may each have an energy burden of 10 percent, but while the first has an annual income of \$2,000, the second earns \$20,000 each year. While each household has the same total burden, the household making \$2,000 will have a more difficult time coping with its energy costs (Targeting LIHEAP 2002). Thus, a good LIHEAP formula should not only direct funding on the basis of mortality risks and energy burden, it should target benefits on the basis of income.

Long-Term Accuracy

The 1981 formula currently used to distribute Tier I LIHEAP funding is based on data reflecting conditions more than 20 years ago. As a result, the formula fails to accurately target benefits on the basis of current state needs. In 2004, the House Energy Committee asserted in a committee report regarding LIHEAP that any formula used to distribute funding in the future “should use the best statistical data and models now available; be a simple easy-to-understand science-based mechanism that considers state-level expenditures for low-income home heating and cooling needs; and include annually updated state level heating and cooling degree day and fuel price information (Stoltzfus 2005)”.

As emphasized by this congressional assertion, a successful LIHEAP formula solution should be dynamic. Such a formula should require that the best and most current scientific data available inform LIHEAP's allocation and that states' relative funding levels change over time to reflect population shifts, weather anomalies, and changes in energy costs. It is this responsiveness to change that will ensure sustained accuracy through the lifespan of the program. Thus, long-term accuracy constitutes the second major category of criteria that will be used to assess reform proposals.

Political Feasibility

Lastly, no reform proposal, however equitable and accurate, constitutes a reasonable option unless that proposal has the potential to be passed into law by Congress. While the political conditions surrounding LIHEAP are complex and subject to change, this section outlines guidelines that can be used to assess the political feasibility of potential revisions to the LIHEAP state block grant formula.

The President

In FY2003, President Bush included the following language in his budget request:

The legislatively established formula currently used to distribute LIHEAP block grant funds to states is based on a 20-year-old population and winter heating cost data. The Administration is interested in options that would make block grant allocations more equitable by basing the formula on current home energy expenditures paid by low-income households (Kaiser & Pulsipher 2002).

While his successive budgets have not explicitly mentioned the formula again, the program performance rating accompanying the President's FY2005 budget included several critiques of LIHEAP including that its "effectiveness or efficiency" is hampered by its current formula (Stoltzfus 2005).

More recently, the President has expressed interest in dismantling LIHEAP and merging government provision of energy assistance with another low-income grant

program. Such a policy change would have the unspoken goal of preventing LIHEAP from becoming an entitlement program in the future, and reducing funding for energy assistance over time (Program Manager 2006). In addition, targeting energy assistance benefits to households eligible for TANF, for instance, would exclude applicants (such as single men) that may qualify for LIHEAP, but fail to meet the eligibility requirements for other social service programs.

In the end, while the President has the capacity to encourage revision of LIHEAP's block grant formula, for the most part, state allocation formula issues fall into the realm of Congress, as members have a greater stake in the outcome of reform measures (Legal Counsel 2006). Thus, the President is unlikely to play a significant role in future attempts at revision.

Congress

Congressional attitudes about LIHEAP are relatively complex. Northeastern and Midwestern Congress members are the greatest advocates of the program, but these members also have a vested interest in funding the program just below the Tier II trigger level, at around \$1.9 billion, in order to receive the greatest return on each dollar invested. At the same time, Southern Congress members that stand to gain from additional funding are reluctant to call for increases to any social service program, especially one that has limited political salience in the region (Senior Analyst 2006).

Recent Events

Recent congressional debate over LIHEAP's funding level and distribution mechanism are illustrative in assessing underlying political factors. When LIHEAP was reauthorized for FY2005 through FY2007, proponents of the program braced themselves

for a contentious debate over the state block grant formula. In fact, Representatives Pickering (R-MS) and Gene Green (D-TX) proposed a formula change amendment to the FY2005 Energy Bill in the Committee on Energy and Commerce. However, a bipartisan group of Northeastern and Midwestern Congress members threatened to derail the entire energy bill if the amendment were included. Under pressure from Speaker of the House Hastert (D-IL) Green and Pickering agreed to withdraw their amendment, on the condition that language was included in the bill that, if adopted by the full Congress, would require HHS to conduct a study of the existing formula. (Such language was included in the final version of the bill.) They also negotiated for LIHEAP's authorized funding level to be set at \$5.1 billion through FY2007 (Low-Income 2003).

In effect, a formula fight was narrowly avoided by an effort, first spearheaded by Representatives Pickering and Markey (D-MA) in 2003, and then continued in committee by Green and Pickering, to increase funding for LIHEAP rather than revise its allocation formula. It was thought that with bipartisan cooperation, increased funding for LIHEAP could benefit all regions, while avoiding a potentially contentious argument regarding funding distribution. However, in the end, this effort did not result in a substantial increase in LIHEAP's appropriation levels, nor did it lead to sustained bipartisan or multi-regional cooperation (Executive Director 2006).

While LIHEAP's \$5.1 billion authorization level was significantly higher than it had been in the past, in FY2005, just \$1.85 billion was appropriated for the program and in FY2006, after a one percent rescission across all programs, Congress appropriated only \$1.949 billion for the state block program. These funding levels did not represent a significant increase over past appropriations. While subsequent amendments were

offered in both the House and Senate to increase funding for LIHEAP, votes tended to fall across party lines, with Democrats favoring increased funding, and Republicans opposing it (Congressional 2005).

Table 4. LIHEAP Funding: FY1982-FY2005 (\$ in thousands) (Stoltzfus 2005)

Fiscal Year	Regular Funds President's Request	Regular Funds Authorization Level	Regular Funds Appropriation	Contingency Funds Appropriated	Contingency Funds Dispersed
1982	\$1,400,000	\$1,875,000	\$1,875,000	---	---
1983	1,300,000	1,875,000	1,975,000	---	---
1984	1,300,000	1,875,000	2,075,000	---	---
1985	1,875,000	2,140,000	2,100,000	---	---
1986	2,097,765	2,275,000	2,100,000	---	---
1987	2,097,642	2,050,000	1,825,000	---	---
1988	1,237,000	2,132,000	1,531,840	---	---
1989	1,187,000	2,218,000	1,383,200	---	---
1990	1,100,000	2,307,000	1,443,000	---	---
1991	1,050,000	2,150,000	1,415,055	195,180	195,180
1992	1,025,000	2,230,000	1,500,000	300,000	0
1993	1,065,000	As necessary	1,346,030	595,200	0
1994	1,507,408	As necessary	1,437,402	600,000	300,000
1995	1,475,000	2,000,000	1,319,202	600,000	100,000
1996	1,319,204	2,000,000	900,000	180,000	180,000
1997	1,000,000	2,000,000	1,000,000	420,000	215,000
1998	1,000,000	2,000,000	1,100,000	300,000	160,000
1999	1,300,000	2,000,000	1,100,000	300,000	175,299
2000	1,400,000	As necessary	1,100,000	900,000	744,350
2001	1,400,000	As necessary	1,400,000	600,000	455,650
2002	1,400,000	2,000,000	1,700,000	300,000	100,000
2003	1,400,000	2,000,000	1,788,300	0	200,000
2004	1,700,000	2,000,000	1,789,380	99,410	99,410
2005	1,800,500	5,100,000	1,850,000	300,000	250,000

However, while appropriations failed to provide a substantial funding increase for LIHEAP, the Deficit Reduction Act of 2005 included \$1 billion for the program for FY2007, fully offset elsewhere in Labor/HHS/Education programming. On February 16th of 2006, Senator Snowe (R-ME) introduced a bill (S.2320) to shift this funding from

FY2007 to FY2006 (Congressional 2006). Technically, this amendment was budget neutral. Because the funding had already been obligated for FY2007, shifting the allotment to FY2006 did not constitute a spending increase that would need to be offset with additional cuts. The maneuver allowed Snowe to gain enough support from Republican fiscal conservatives to allow her bill to pass.

Snowe originally proposed that 75 percent of her FY2006 funding increase should be allocated through the emergency contingency fund, and the remaining 25 percent should be filtered through the regular formula. Because LIHEAP's appropriation level previous to the supplement rested near the trigger point for the more equitable 1984 formula, funding filtered through the regular formula would heavily favor warmer Southern and Western states. On the other hand, emergency funding would most likely favor colder Northeastern and Midwestern states (Executive Director 2006). Thus, Senator Snowe's bill ensured that colder states would continue to receive the largest percentage of energy assistance funding.

On March 2nd, Senators Kyl (R-AZ), Coburn (R-OK), and Ensign (R-NV) offered an amendment (No. 2899) to Senator Snowe's bill that would have distributed 100 percent of the emergency funding via the formula. Under pressure from Southern Republicans, Snowe offered a compromise amendment (No. 2913) to Kyl's amendment which allocated 50 percent of the funding increase through the emergency fund and 50 percent through the state block grant formula. The amendment passed by a margin of 68 to 31 and her bill passed by a voice vote soon after (Congressional 2006).

At the time the Senate passed S.2320, the House was considering its own Emergency Supplemental Appropriations Act for Defense, which included a provision

that would have moved \$750 million in emergency contingency funding from FY2007 to FY2006. The funding increase would have been distributed exclusively as emergency funding. This bill was likely to pass, creating an unusual parliamentary procedure. If the House passed only its supplemental bill, it would have had to enter conference discussions with the Senate to determine which level of funding and distribution mechanism would be adopted. However, if it passed S.2320 with no amendments, the bill would go straight to the President for his signature and be enacted into law.

Representatives Green (D-TX) and Barton (R-TX) were instrumental in urging the unaltered passage of the Senate bill in order to avoid conference with the Senate and risk a less favorable distribution of funding. On March 16, the House passed the Senate's bill, unaltered and by a margin of 287 to 128. Four days later, it was signed into law by the President (Congressional 2006).

Political Factors and Implications

These recent events illustrate several of the key issues that will shape any congressional effort to reform the state block grant formula. First, Congress members from the Northeast and Midwest have a vested interest in passing LIHEAP funding increases in the form of emergency funding, as this allows them to continue to receive a substantial proportion of funding above the \$1.975 billion trigger level. Second, any concessions made by Northern states will come only if Southern and Western Congress members pursue it. Recent events suggest that Congress members from warm states have the capacity to negotiate for compromise measures in exchange for their support for LIHEAP. However, as further illustrated by these events, these Congress members tend

to pursue such compromises only in the face of inevitable funding increases, rather than pursuing a comprehensive strategy each year.

In the end, a delicate balance must be struck. While Northeastern and Midwestern Congress members are the program's biggest supporters, they are extremely unlikely to support any formula change that reduces their funding share (Legislative Director 2006). On the other hand, in order for any favorable formula reform measure to pass, Southern Republicans' desire for a proportional LIHEAP funding increase must outweigh their preferences for lean social programming. Such an attitude shift could be inspired by rising energy costs, greater political salience in the region, lobbying from energy providers that stand to gain from LIHEAP subsidies, or, in light of Senator Snowe's amendment, the effects of a temporary funding increase. In order for any reform proposal to be successful, Southern and Western Congress members must come to see interstate equity for LIHEAP funding levels as a dire issue. At the same time, their Northeastern and Midwestern counterparts must view inter-regional cooperation as essential to the future of the program (Kaiser & Pulsipher 2004).

It should also be noted in assessing the political feasibility of any formula change that there are subtle differences between the House and the Senate. At this time, a formula change has a much better chance of passing in the House, which for the most part, is under Southern Republican control. If these House actors banded together, they may be able to force through a reform bill, especially with some support from sympathetic Northern Republicans. The Senate is another matter. Gaining agreement from 60 Senate members, and ensuring the absence of a filibuster, constitutes the greatest challenge for any state block grant formula reform proposal. While some Senators might

be persuaded to consider the bigger picture, most will base their vote for any reform proposal solely on the basis of direct gains and losses for their state (Legal Counsel 2006). Thus, LIHEAP reform must attempt to establish a delicate balance between gains for warm states with an absence of losses for cold states.

In either House, support from party leadership is essential to the viability of any reform proposal. Importantly, Senate Majority Leader Bill Frist (R-TN) promised Senator Snowe a vote on her supplemental bill, making its passage possible. Any reform proposal will benefit greatly from Republican sponsorship, and will require some bipartisan cooperation in order to pass. In addition, sustained political support for LIHEAP may depend on cooperation from certain key states including Maine and New York, where Congress members have been particularly active in their support for LIHEAP. A proposal that significantly reduces funding for one of these states would not only face limitations in its capacity to pass, it might also result in reduced appropriation levels should one of its advocates be alienated (Executive Director 2006).

Of course, each of these political factors is also subject to a series of conditions that could change in unpredictable ways. For instance, Democratic control of the executive or legislative branch could easily mean a fundamental change in energy policy, including an increased emphasis on energy assistance for low-income households. In addition, while this winter happened to be relatively mild in the Northeast and Midwest, should a future year combine high energy prices with extreme temperatures, LIHEAP could benefit from increased access to the political spotlight (Senior Analyst 2006).

Conclusions

A formula fight is likely to break out when LIHEAP's reauthorization expires in FY2007. Reauthorization debates are expected to heavily reference the current state block grant formula, and LIHEAP's viability may hinge on the ability of Congress to settle on a politically tenable compromise (Executive Director 2006). While political "rules" are difficult to specify, several loose guidelines can be used to assess the political feasibility of potential reform efforts.

First, a successful proposal will probably need to benefit a majority of states, and more specifically may need to hold Northeastern and Midwestern states harmless in order to ensure enough congressional support to pass. Second, a feasible proposal must create large enough gains for warm states to ensure interest and advocacy from the South. Third, losses for a few key congressional advocates of the program should be avoided. Fourth, support from Republican leadership will greatly influence viability, and thus should be cultivated.

Criteria Summary

With these considerations in mind, the following criteria will be used to evaluate reform proposals.

1. Equity
 - a. Extreme Temperatures
 - b. Energy Burden
 - c. Poverty Level
2. Long-Term Accuracy
3. Political Feasibility

- a. Benefits for a majority of states (holding cold states harmless)
- b. Significant gains for warm states
- c. Support from key advocate states
- d. Support from Republican leadership

The best formula solution may not address each criterion. For instance, a formula that is well-targeted on the basis of heating and cooling needs may be unable to account for energy burden as well. However, these criteria represent a method of evaluating the strengths and weaknesses of each suggestion and serve as a general framework for comparison between various reform proposals.

Formula Options

Formula Change Trends

In evaluating the potential for any reform proposal to succeed, it is important to note that, in general, distribution formulae are extremely averse to change. In fact, while critics have raised concerns about the state block grant formulae used to fund everything from domestic security to mental health services, few of these formulae have undergone reform once established.

The Community Development Block Grant (CDBG) formula is one example of a formula that has been subject to considerable congressional consideration. The Department of Housing and Urban Development was tasked with preparing a series of reform proposals, and congressional hearings were held in April of 2005 to discuss methods by which funding could be redistributed to better target low- and moderate-income households. However, in spite of criticism of the existing formula by the President's Office of Management and Budget and favorable testimony from key

program advocates, reform to the CDBG program was never enacted, primarily because regional redistribution created too many “losers” (House 2005).

On the other hand, the Highway Trust Fund represents a formula revision “success story”. Congress reformed the program in 1998 to increase equity between donor and recipient states via the Transportation Equity Act for the 21st Century. A set of unique circumstances made this possible. First, a majority of states were perpetual donors to the program, making it possible for program reform to yield benefits for most Congress members. Second, donor states were highly motivated and took the initiative to organize an advocacy group for formula change called STEP-21. Lastly, to some extent, the reform’s success was ensured by Congress’ effort to increase the overall funding level for the program, so that no state would suffer substantial dollar losses.

However, in spite of the successes of 1998, the Highway Trust Fund is still the subject of contentious debate. Many argue that donor states continue to contribute too much compared to recipients and additional reforms have been proposed regularly over the past several years (Utt 2003). Thus, while the Highway Trust Fund provides some clues to successful formula change, it also illustrates the limitations of reform efforts.

In the end, state block grant formulae tend to become permanent fixtures once established. At the same time, formulae that are vastly inequitable can be considered “unstable” in terms of long-term viability. It is for this reason that Congress tends to create benefits programs that distribute funding relatively evenly across states (Arnold 1981). In the case of LIHEAP, the instability of an inequitable formula may be able to overcome the inertia of well-established distribution mechanisms if enough political feasibility guidelines are met.

In the end, “congressional logrolling, party discipline and ideology, or other forms of accommodation can overcome simple tabulations of votes in the legislative process (Kaiser & Pulsipher 2004)”. However, LIHEAP’s current distribution mechanism has gained legitimacy over its 20-year lifespan. Whether or not its formula will survive a congressional debate depends on whether support for the program can outweigh the divisiveness of an interstate distribution discussion (Kaiser & Pulsipher 2004).

Enable the 1984 Formula

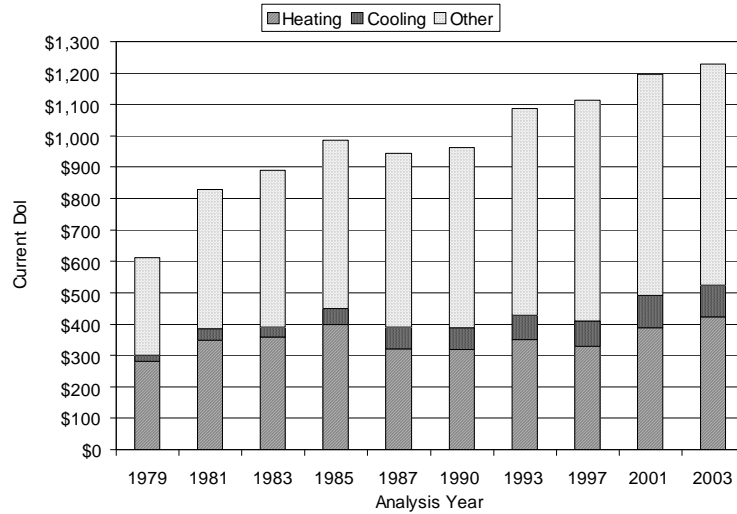
The 1984 Tier II formula is considered by many to be the best mechanism for distributing funding to low-income households in need of energy assistance. The formula is reasonably equitable, dynamic, and accurate (Kaiser & Pulsipher 2002). However, because funding levels have almost exclusively remained below its trigger level, the formula is rarely used. Adjusting LIHEAP’s funding structure so that the Tier II formula can play a larger role in determining the allocation of LIHEAP funding constitutes the first major category of reform suggestions.

Increase Funding

Formula Change

Increasing funding for LIHEAP has several compelling advantages. First, doing so is justified by a growing need for energy assistance. From 1981 to FY2002, the number of federally eligible LIHEAP households has risen 66 percent, while federal fuel assistance has risen by only 44 percent. Thus, while 36 percent of eligible households were served in 1981, only 13 percent were served in 2002 (LIHEAP Home 2003).

Figure 2. Mean Residential Energy Expenditures for Low Income Households (LIHEAP Home 2003)



In addition, simply increasing annual LIHEAP funding levels (for instance, to the program’s authorized level of \$5.1 billion) would both trigger the more equitable 1984 formula and overcome the inequities perpetuated by the hold-harmless provision, without necessitating a contentious political battle over formula reform.

Equity and Political Feasibility

The main barrier to this reform proposal is political feasibility. In a Republican-controlled Congress with a large budget deficit, increasing funding for social service programming is politically difficult. Exacerbating this is the reality that LIHEAP competes with other programs included within the HHS/Labor/Education appropriations bill for a limited amount of funding. Any spending increases for LIHEAP mean cuts to other poverty alleviation and educational programming, many of which play more important roles in Southern states than does federal energy assistance (Research Director 2006).

There is some speculation that the 50-50 funding split amendment to Senator Snowe's bill may help to inspire greater attention to LIHEAP's funding mechanism by both warm and cold states. This funding distribution represents only the second time since 1984 that Southern states have had the opportunity to benefit from the Tier II formula. Not only might this higher funding level raise the baseline for spending on LIHEAP and encourage more generous congressional appropriations in the future, it may also increase program salience in the South and West as Congress members receive positive feedback from constituents and Community Action Agencies (Federal Liaison 2006).

On the other hand, Senator Snowe's bill benefited from a unique set of circumstances that are unlikely to be replicated in the future. First, Senators Snowe, Collins (R-ME), and Coleman (R-MN) voted in favor of drilling in Alaska's Arctic Wildlife Refuge, and it was likely in exchange for these votes that Senate Majority Leader Frist (R-TN) agreed to schedule a vote on supplemental spending for LIHEAP (Executive Director 2006). Without this assistance from Republican Party leadership, as well as her work behind the scenes to secure Republican support, Snowe's bill would have had little chance of passing.

In addition, Hurricanes Katrina and Rita brought increased attention to the issue of energy assistance, especially in the South. Coupled with Snowe's unique opportunity to pursue a budget neutral funding increase, these factors helped to create circumstances that made congressional support for LIHEAP possible. Such a confluence of events in future years is highly unlikely. In fact, because the Administration released contingency funds for use through FY2007, it is possible that appropriations committees will deem

FY2006 funding sufficient for two years and reduce funding for FY2007. Equally likely, appropriators may resent congressional “tinkering” with LIHEAP’s funding levels and reduce spending on LIHEAP as an unspoken admonishment (Executive Director 2006).

As a formula reform proposal, increasing funding for LIHEAP fails to meet an additional criterion: sustainability. LIHEAP appropriation levels are renegotiated each year. While increased funding levels in one year may help to encourage higher spending in the future, there is no assurance that the 1984 funding mechanism will be activated on a sustained basis. Thus, while a funding increase for LIHEAP would compliment other reform efforts well, it is unlikely to produce substantial gains in equity on its own.

Eliminate Trigger

Formula Change

The level of regular funding appropriated for LIHEAP over the past 15 years has not exceeded the \$1.975 billion trigger level that would allow the 1984 formula to determine the distribution of funding. Eliminating the trigger level and removing the hold-harmless provision is both one of the most radical and one of the most equitable changes that might be made to the LIHEAP state block grant formula. It was also the change advocated by President Bush in his FY 2003 Budget Request (Kaiser & Pulsipher 2003b).

Equity and Political Feasibility

While this option is relatively equitable, eliminating the Tier II trigger level and hold-harmless provision is politically unfeasible. Should this change be made, 27 states and the District of Columbia will see a reduction in their allocation percentage, including

every member of the Northeast-Midwest Coalition. As a result, congressional support for the change would be a virtual impossibility.

Reduce Trigger

Formula

A less extreme alteration to the formula would be to reduce the trigger point to a level that would be met on a regular basis. In fact, when the 1984 trigger level was developed, it was on the premise that funding would regularly exceed this level. In 1984, the trigger level was originally set at \$2.075 billion. In 1986, when the appropriation level fell below this trigger level, Congress reduced it to the 1983 funding level of \$1.975 billion in an effort to ensure that the trigger level would be activated in future years (Kaiser & Pulsipher 2003b). Partially as a result of this change, FY 1986 represented the last year in which program appropriations exceeded \$1.975 billion.

Equity and Political Feasibility

While this formula, again, scores well on most measures of equity, readjusting the trigger level inevitably influences the level of funding supported by legislators in the North and Midwest, who have few returns to scale once the trigger is exceeded (Kaiser & Pulsipher 2004). Thus, reducing the trigger level is both politically infeasible, as a majority of states would stand to lose funding as the trigger level was lowered, and fundamentally harmful to LIHEAP's long-term viability, as it threatens future spending on the program.

Combine the Two Formulae

Formula

One “compromise option” would be to combine the 1981 and 1984 formulae. That is, a percentage of the funding would be consistently distributed according to the 1981 formula and the rest would be allocated according to the 1984 formula. Appendix II shows the impact of such a combination of formulae. Of course, the impact of this formula depends on LIHEAP’s funding level. As long as appropriations for LIHEAP’s state block grant formula remain below the Tier II trigger level, a majority of states will stand to lose from any combination of the two formulae. It is only as funding levels for LIHEAP rise that a combination of formulae becomes potentially rewarding for a majority of states.

Equity and Political Feasibility

The political feasibility of this option is somewhat tied to Congress’ members perceptions of future LIHEAP funding levels. It has several political advantages, including the fact that there is some precedent for a combination of the two formulae in Senator Snowe’s recent bill. However, in order to ensure the passage of such a reform, a graduated combination of the two formulae would probably be necessary. For instance, funding might be split 90-10 in favor of the 1981 formula at lower funding levels and then slowly progress to a 50-50 split. Congressional uncertainty about its exact effects might help such a proposal, as clear lines between winners and losers would be difficult to draw.

In terms of equity, this formula has both benefits and liabilities. It would prevent funding from being artificially deflated in order to avoid a trigger level. However, it

would also make permanent the 1981 formula as an aspect of the revised formula, perpetuating the inequities inherent in the antiquated distribution mechanism (Kaiser & Pulsipher 2003b).

Alter Formula Components

While the 1984 formula has many advantages, it also incorporates limitations that might be better addressed by new formula options. Unprecedented formula changes leave more room for creativity and compromise. Thus, the second main category of formula proposals represents deviations from the 1984 formula.

Treat as a Heating Program

Formula

In 2006, Kaiser and Pulsipher suggested that LIHEAP be amended so that each state's allotment would be based on its percentage of low-income household spending on heating energy out of the national total. In fact, because the 1981 formula is so heavily biased towards cold states, a heating-only formula would actually increase the South's funding allotment by almost 10 percent. The only Southern states that would stand to lose money would be Florida and Hawaii. Twenty-four states would see an increase in funding, while twenty-six states and the District of Columbia would see a decrease (including all of the states in the Northeast) (Kaiser & Pulsipher 2006).

Equity and Political Feasibility

This solution is more complex, both in terms of equity, and in terms of political feasibility. While such a reform would increase benefits for Southern and Western states, it would also represent a concession on the part of warm regions that LIHEAP is first and foremost a heating assistance program. While this is consistent with the origins of the

program, it may serve to further alienate key Southern Republicans and threaten LIHEAP's long-term viability.

In addition, this proposal results in funding decreases for most Northeastern and Midwestern states. While, to some extent, Congress members may be enticed to vote for such a change on the basis of its underlying assertion that LIHEAP is a heating assistance program, no formula change that substantially decreases funding for the North and Midwest is likely to prevail (Legal Counsel 2006).

Lastly, while the formula change would technically mean funding gains for Southern and Southwestern states, it would fail to distribute funding equitably either on the basis of heating and cooling needs or on the basis of total residential energy burden, making its designation as an equitable reform proposal highly questionable.

Redefine Degree Days

Formula

If LIHEAP is conceptualized as a program to prevent morbidity and mortality on the basis of extreme temperatures, states that regularly endure either extreme heat or extreme cold should be the recipients of a majority of its funding. Because residents of those regions with the most extreme temperatures also tend to suffer under the largest energy burdens, such a funding structure would address multiple dimensions of equity (Power 2005).

Both the 1981 and 1984 formulae base allocations on heating and cooling degree days. Degree days are calculated by comparing the average daily temperature to a base temperature of 65 degrees. The total number of degrees by which the average daily temperature either exceeds or falls short of this baseline is calculated for each day, then

added to create monthly and annual totals of heating and cooling degree days (Lackey 2006).

Because expenditures on home heating and cooling are not necessary unless average daily temperatures become uncomfortable or dangerous, some LIHEAP advocates have criticized the 65-degree baseline as an improper measure of home heating and cooling needs (Aron-Dine & Coven 2005). One method of better matching funding levels to heating and cooling needs would be to base allocations on “extreme degree days”. Extreme heating degree days might be considered days during which the average temperature falls below a level that would necessitate heating expenditures, perhaps 60 or even 55 degrees. Along the same lines, extreme cooling degree days might be considered those days during which average temperatures exceed 70, 75, or even 80 degrees.

Because daily degree days are difficult to access, simplified calculations were used to explore this formula option². Appendix III shows how defining extreme degree days in one of three ways and substituting this new definition into the 1984 formula would alter LIHEAP’s funding distribution. If extreme degree days were defined as those days in which the average temperature fell outside of the 65-75 degree range, 23 states would stand to gain, while 26 states would lose funding, and the District of Columbia would receive the same percentage as compared to the 1981 formula distribution. If extreme degree days were defined as those with temperatures outside of the 60-70 degree range, 22 states would gain, while 28 states and the District of Columbia would see losses. Lastly, if extreme degree days were defined as those days

² Because only monthly degree day tallies were available, extreme degree days were estimated using the assumption that each day during a given month was the average temperature necessary to warrant the monthly total.

with temperatures outside of the 55-80 degree range, 25 states and the District of Columbia would see funding increases, while 25 states would see decreases.

Equity and Political Feasibility

A comparison of the fate of individual states under the 1981 formula, the 1984 formula and one of the three formulae based on extreme degree days reveals that these three formulae, for most states, represent a compromise between the amount received under the 1981 formula and that amount received under the 1984 formula. A gain in equity is made over the Tier I formula, but not to the extent that the Tier II formula enables.

However, while it constitutes a compromise, the formula is not well-founded in scientific evidence. Notably, degree days are based on average daily temperatures. When one considers the high and low temperatures that might be reached during a day with an average temperature of 55 or 80 degrees, these numbers seem unnecessarily extreme. In addition, because calculations were based on the author's estimates, they may represent inaccurate assessments of the impacts of such a formula change.

In the end, while considering extreme degree days may have the potential to play a role in an aggregate formula solution, on its own, it does not result in a politically feasible formula change. Even if the most extreme degree day measure were used, too few states stand to gain from the formula to warrant its passage in the Senate.

Energy Burden

Formula

While the Tier II formula provides a framework for allocating benefits on the basis of low-income heating and cooling cost burden, an argument can be made that this

formulation does not properly assess the needs of LIHEAP eligible households. Instead, LIHEAP should be targeted in order to assist those populations enduring the largest total residential energy burden. Because heating and cooling costs are a poor proxy for total residential energy burden, this goal is not accomplished by a formula that considers only temperature-related energy expenditures.

However, a formula that accounts for total energy burden must also take into consideration the fact that those households with the lowest incomes also suffer the greatest consequences when their energy burdens are high. In 2005, Fisher, Sheehan & Colton estimated total residential energy burdens for those households living below 50 percent of the FPL in each state and the District of Columbia (Home Energy 2005).

Appendix IV shows the effect of a formula that bases state funding levels purely on this burden percentage. Interestingly, this formula change benefits 37 states and the District of Columbia compared to the 1981 formula, primarily because energy burdens across regions are similar enough that states tend to receive about the same percentage of total funding.

However, in order to constitute a valid formula option, energy burden must be weighted by the number of low-income households in a given state in order to link allocation methodology to the distribution of eligible households. When this factor is incorporated into the formula, 35 states and the District of Columbia gain funding over the 1981 formula, while 15 lose funding.

Equity and Political Feasibility

Based on the number of states that would see gains from this formula, it is very politically feasible. Because low-income energy burden across states tends to fall within

a 20 percentage point range, basing funding allocations on this factor has the impact of equalizing funding across states, so that most receive around 2 percent. As funding levels under the 1981 and 1984 formulae are highly disparate, this means gains for a majority of states. While the formula would result in a two-thirds funding reduction for New York, potentially threatening its viability, Maine would see funding increases, and the sizeable majority of winners is probably significant enough to overcome disadvantages for key states.

Technically, this formula is also highly equitable. It accounts for total residential energy burden and the distribution of low-income residents and could easily be adjusted annually to reflect changes in energy costs or population trends. While the formula could be improved by considering the energy burden of those eligible for LIHEAP (the program's minimum, 110 percent of FPL, might be used in order to control for variations across states) rather than those earning 50 percent of FPL or less, the concept could potentially be very successful.

Recommendations

Meeting Criteria

Reform proposals to the LIHEAP state block grant formula constitute six main options. Table 5 summarizes how each of these options targets benefits on the basis of extreme temperature, energy burden, poverty level, and long-term accuracy. As the table shows, each reform proposal directs benefits on the basis of poverty level and has the capacity to be updated annually to reflect changing conditions, but no formula attempts to target benefits both on the basis of extreme weather and total energy burden. Because it

targets benefits on the basis of heating costs only, the heating only formula meets the fewest number of criteria.

Table 5. Reform Proposals and Measures of Equity

	Increase Funding	Alter Trigger	Combine 1981-1984	Heating Only	Degree Days	Energy Burden
Temperature	X	X	X		X	
Energy Burden						X
Poverty Level	X	X	X	X	X	X
Endurance	X	X	X	X	X	X

While this table provides a useful overview, it should not be understood as a straightforward guide to formula winners and losers. For instance, while the energy burden formula fails to directly target benefits on the basis of temperature, cost estimates that inform energy burden calculations are linked to temperature, and thus extreme weather is not explicitly excluded from the formula either.

Table 6 attempts a more in depth look at political feasibility by summarizing the number of states that would stand to gain at least 10 percent over their 1981 allotment, the number of states that would stand to lose at least 10 percent, and states that would see relatively little change. Because the exact effects of a funding increase, a trigger level adjustment, or a combination of the 1981 and 1984 formulae vary depending on the specifics of each proposal, “Enable 1984” simply shows the impact of the 1984 formula on states’ percentages. Again, steadfast conclusions cannot be drawn on the basis of this table. A formula change that also inspires consistently higher funding levels, for instance, may have the effect of increasing dollar amounts for states that see a decreased funding *percentage*, and thus remain politically tenable.

**Table 6. Reform Proposals Versus 1981 Distribution
(# of states)**

	Enable 1984	Heating Only	Degree Days 60-70	Degree Days 55-75	Degree Days 55-80	Energy Burden
Gain ≥10%	19	20	19	20	21	34
Unaffected	6	10	9	7	6	3
Lose ≤10%	26	21	23	24	24	14

Formula Options

No formula option constitutes a “perfect” allocation mechanism. In fact, congressional compromise will probably require that a combination of formula changes be made in order to satisfy as many criteria as possible. For instance, almost any formula will be improved by a funding increase for LIHEAP. Likewise, the use of extreme degree days or energy burden measures might help several of the reform proposals better target benefits. The formula revisions discussed in this paper, then, provide a framework for creating a distribution mechanism that is as accurate, equitable and political palatable as possible, rather than easy answers to a difficult problem.

That being said, there are two formulae that best address equity and political feasibility. First, the energy burden formula meets most measures of equity and long-term accuracy, and also benefits the greatest number of states. However, it is commonly asserted that no formula reform proposal can achieve political feasibility without a hold-harmless provision for Northeastern and Midwestern states (Executive Director 2006). In fact, in order to pass, the energy burden formula may need to be enabled by a trigger point, rather than instituted as the sole distribution mechanism for LIHEAP.

Fortunately, unlike the current Tier II formula, the energy burden formula would warrant allotment increases for a majority of states. For this reason, it could be expected that congressional appropriations for the program would regularly exceed the trigger level in order to enable this more beneficial formula. At the same time, maintaining the 1981 formula as an aspect of the distribution mechanism would help secure votes from Northeastern and Midwestern Congress members resistant to substantial formula change, especially in light of the fact that several Midwestern states stand to lose funding percentages under the energy burden formula (Executive Director 2006).

The second distribution mechanism that addresses both equity and political feasibility well is the combination of the 1981 and 1984 formulae. While this option would retain the inequitable 1981 formula as an aspect of the distribution mechanism at any funding level, it would increase equity over the current mechanism. If a graduated ratio strikes the right balance between the 1981 and 1984 formulae, it also has the potential to be politically feasible.

Strategies for Reform

In order for any reform proposal to pass, a process of political organizing and coalition building must first take place. Without significant levels of motivation and cooperation on the part of warm states, favorable formula revision, no matter what its form, will not have the political backing necessary to warrant serious consideration by Congress.

In fact, there are currently several ongoing efforts to create a favorable political climate for LIHEAP formula reform. The Southern Governors' Association has recently begun the process of developing a holistic coalition that will gather to study LIHEAP,

make realistic recommendations for program reform, and work with Congress to raise awareness about the program (Program Manager 2006).

Likewise, members of the Western Region National Energy Assistance Director's Association have begun an effort to "reinforce the importance of LIHEAP to western state residents...[and] gain the support of Western Governors' Association members in seeking adequate Congressional appropriations (LIHEAP Manager 2006)". In addition, utility companies, most prominently Entergy, a company engaged in electric power production and retail distribution operations in the South, have been increasingly active in lobbying efforts to increase LIHEAP funding levels and encourage a more favorable funding distribution for the South (LIHEAP Consultant 2006).

Noteably, capacity and attention to a given social service at the state or local level has been linked to that state's ability to secure funding for a given program (Rich 1989). This may bode poorly for Southern states that, in the absence of a steady stream of administrative funding, do not have the institutional capacity to cope with significant funding increases. Thus, it may also be necessary to strengthen Southern and Southwestern states' program offices in order to foster cooperation with energy companies, reform localized distribution mechanisms to adapt to potential funding increases, and mobilize Community Action Agencies and nonprofit organizations to advocate for change.

These efforts, coupled with ongoing advocacy for the formula in Congress, will be essential in shaping the debate surrounding LIHEAP formula reform. Representatives Barton (R-TX) and Pickering (R-MS) currently serve as Chairman and Vice-Chairman of the House Committee on Energy and Commerce. Both have shown some propensity

towards supporting funding increases or distribution adjustments for LIHEAP and may be key allies of formula change efforts. Representative Green (D-TX) has been one of the most active members of Congress in his support for LIHEAP formula revision. His LIHEAP Equity Act of 2005 proposed that no more than 50 percent of funding distributed under the 1981 formula should be directed to heating costs (Green 2005). While such a proposal is too extreme to be politically feasible, Green will likely play a key role in any effort to reform LIHEAP.

Conclusions

LIHEAP provides home energy assistance services for approximately 5 million American households each year. However, under the current state block grant formula, residents of cold Northeastern and Midwestern states are far more likely to receive assistance than their Southern and Southwestern counterparts.

In spite of the fact that the current distribution mechanism has many prominent flaws, any attempt to reform the LIHEAP state block grant formula is complicated both by the task of defining equity and by the challenge of ensuring political feasibility. This paper provides a discussion of LIHEAP's current formula, criteria that might be used to evaluate reform proposals to the formula, potential reformulations, and strategies for bringing change about. While it is by no means an exhaustive discussion of the potential solutions to LIHEAP's state block grant formula, it aims to provide a framework through which change might be approached and accomplished.

Appendix I: Poverty and Eligibility by State (LIHEAP Home 2003)

State	% of poverty eligible	# of LIHEAP eligible households	≤ 100% poverty	> 100% - 125% poverty	> 125% - 150% poverty	> 150 % poverty
AR	125	331,541	54	18	22	6
MS	154	381,164	53	19	21	7
NM	150	196,936	53	18	22	7
WV	130	229,541	50	20	22	7
AL	125	566,360	47	17	16	19
LA	154	566,642	47	19	19	15
DC	150	82,809	46	13	12	29
OK	110	394,664	46	19	20	15
SC	150	461,616	45	15	16	24
TN	128	731,687	45	17	16	21
KY	113	469,566	44	17	20	20
TX	125	2,277,084	43	17	17	23
MT	150	105,044	42	21	23	15
HI	150	120,337	41	14	17	28
NC	113	1,008,179	41	16	17	26
NY	203	2,419,342	40	13	15	32
ND	173	76,164	40	17	17	26
AK	150	57,857	39	17	18	26
GA	150	895,205	38	16	16	31
ID	150	122,546	38	20	21	20
ME	150	171,627	38	18	17	27
AZ	150	522,988	37	17	22	24
FL	150	1,983,048	37	17	18	28
UT	128	181,240	37	16	18	29
SD	160	83,024	36	17	20	26
OH	150	1,265,130	35	13	17	35
OR	183	370,846	35	17	17	32
VT	125	70,012	35	16	16	33
NE	112	172,107	34	13	17	36
CA	215	3,636,518	33	17	17	33
KS	130	296,898	33	16	20	31
MO	150	577,725	33	13	17	37
RI	220	143,659	33	14	14	39
IL	150	1,492,120	32	12	14	43
VA	133	740,479	32	12	13	42
WY	154	54,439	32	17	20	32
MI	110	1,249,438	31	12	14	43
CO	185	465,120	30	12	14	44
IN	125	732,774	30	15	18	37
PA	135	1,471,754	30	15	14	41
IA	150	304,587	29	18	19	35
MA	200	867,073	29	12	13	46
WA	121	703,431	29	13	15	42
WI	150	552,232	29	12	14	45
NV	150	193,767	27	17	17	38
DE	200	81,335	25	14	14	48
MD	150	606,449	25	12	10	53
MN	189	493,043	25	13	13	49
NJ	175	1,056,018	24	13	12	52
CT	257	425,218	22	12	12	55
NH	224	129,836	22	11	15	52
All States	N/A	32,588,222	36	15	16	33

Appendix II: 1981/1984 Combination Formulae

State	1981 Formula (%)	1984 Formula (%)	50-50 Formula (%)	75-25 Formula (%)	25-75 Formula (%)
AL	0.86	1.68	1.27	1.07	1.48
AK	0.55	0.36	0.46	0.50	0.41
AZ	0.42	1.25	0.84	0.63	1.04
AR	0.66	1.21	0.94	0.80	1.07
CA	4.61	6.00	5.31	4.96	5.65
CO	1.61	1.15	1.38	1.50	1.27
CT	2.10	1.40	1.75	1.93	1.58
DE	0.28	0.37	0.33	0.30	0.35
DC	0.33	0.27	0.30	0.32	0.29
FL	1.36	4.16	2.76	2.06	3.46
GA	1.08	2.68	1.88	1.48	2.28
HI	0.11	0.12	0.12	0.11	0.12
ID	0.63	0.28	0.46	0.54	0.37
IL	5.81	5.30	5.56	5.68	5.43
IN	2.63	2.21	2.42	2.53	2.32
IA	1.86	1.22	1.54	1.70	1.38
KS	0.86	1.07	0.97	0.91	1.02
KY	1.37	1.73	1.55	1.46	1.64
LA	0.88	1.79	1.34	1.11	1.56
ME	1.36	0.55	0.96	1.16	0.75
MD	1.61	2.26	1.94	1.77	2.10
MA	4.20	2.91	3.56	3.88	3.23
MI	5.51	4.82	5.17	5.34	4.99
MN	3.97	1.68	2.83	3.40	2.25
MS	0.74	1.87	1.31	1.02	1.59
MO	2.32	2.41	2.37	2.34	2.39
MT	0.74	0.35	0.55	0.64	0.45
NE	0.92	0.55	0.74	0.83	0.64
NV	0.20	0.51	0.36	0.28	0.43
NH	0.79	0.45	0.62	0.71	0.54
NJ	3.90	3.28	3.59	3.75	3.44
NM	0.52	0.54	0.53	0.53	0.54
NY	12.72	8.68	10.70	11.71	9.69
NC	1.90	3.14	2.52	2.21	2.83
ND	0.80	0.21	0.51	0.65	0.36
OH	5.14	4.86	5.00	5.07	4.93
OK	0.79	1.31	1.05	0.92	1.18
OR	1.25	0.95	1.10	1.18	1.03
PA	6.84	5.15	6.00	6.42	5.57
RI	0.69	0.47	0.58	0.64	0.53
SC	0.68	1.44	1.06	0.87	1.25
SD	0.65	0.29	0.47	0.56	0.38
TN	1.39	2.08	1.74	1.56	1.91
TX	2.26	6.60	4.43	3.35	5.52
UT	0.75	0.54	0.65	0.70	0.59
VT	0.60	0.23	0.42	0.51	0.32
VA	1.96	3.05	2.51	2.23	2.78
WA	2.05	1.50	1.78	1.91	1.64
WV	0.91	0.96	0.94	0.92	0.95
WI	3.58	1.93	2.76	3.17	2.34
WY	0.30	0.18	0.24	0.27	0.21

Appendix III: Heating Only Formula (Kaiser & Pulsipher 2006)

State	Statutory Floor (\$M)	1981 Formula (%)	1984 Formula (%)	Heating Only Formula (%)
AL	16.99	0.86	1.68	1.27
AK	10.84	0.55	0.36	0.45
AZ	8.21	0.42	1.25	0.49
AR	12.96	0.66	1.21	1.04
CA	91.12	4.61	6.00	6.34
CO	31.77	1.61	1.15	1.41
CT	41.45	2.10	1.40	1.67
DE	5.50	0.28	0.37	0.41
DC	6.44	0.33	0.27	0.30
FL	26.88	1.36	4.16	1.09
GA	21.25	1.08	2.68	2.12
HI	2.14	0.11	0.12	0.00
ID	12.39	0.63	0.28	0.33
IL	114.72	5.81	5.30	5.89
IN	51.94	2.63	2.21	2.44
IA	36.81	1.86	1.22	1.37
KS	16.91	0.86	1.07	1.07
KY	27.03	1.37	1.73	1.82
LA	17.37	0.88	1.79	1.01
ME	26.85	1.36	0.55	0.77
MD	31.74	1.61	2.26	2.50
MA	82.91	4.20	2.91	3.52
MI	108.92	5.51	4.82	5.70
MN	78.47	3.97	1.68	1.97
MS	14.56	0.74	1.87	1.67
MO	45.82	2.32	2.41	2.43
MT	14.54	0.74	0.35	0.43
NE	18.21	0.92	0.55	0.58
NV	3.86	0.20	0.51	0.56
NH	15.69	0.79	0.45	0.56
NJ	76.97	3.90	3.28	3.78
NM	10.28	0.52	0.54	0.63
NY	251.34	12.72	8.68	10.30
NC	37.45	1.90	3.14	2.94
ND	15.79	0.80	0.21	0.24
OH	101.49	5.14	4.86	5.47
OK	15.61	0.79	1.31	1.10
OR	24.62	1.25	0.95	1.17
PA	134.99	6.84	5.15	6.07
RI	13.65	0.69	0.47	0.56
SC	13.49	0.68	1.44	1.09
SD	12.83	0.65	0.29	0.32
TN	27.38	1.39	2.08	1.95
TX	44.71	2.26	6.60	3.52
UT	14.76	0.75	0.54	0.69
VT	11.76	0.60	0.23	0.28
VA	38.66	1.96	3.05	3.26
WA	40.50	2.05	1.50	1.85
WV	17.89	0.91	0.96	1.08
WI	70.63	3.58	1.93	2.28
WY	5.91	0.30	0.18	0.22

Appendix IV: Degree Day Formulae

State	1981 Formula (%)	1984 Formula (%)	60-70 Degree Day Formula (%)	55-75 Degree Day Formula (%)	55-80 Degree Day Formula (%)
AL	0.86	1.68	1.72	1.73	1.28
AK	0.55	0.36	0.37	0.41	0.43
AZ	0.42	1.25	0.84	0.79	0.84
AR	0.66	1.21	0.93	0.97	0.96
CA	4.61	6.00	6.25	5.41	5.74
CO	1.61	1.15	1.15	1.27	1.34
CT	2.10	1.40	1.95	2.01	2.13
DE	0.28	0.37	0.43	0.42	0.43
DC	0.33	0.27	0.32	0.33	0.34
FL	1.36	4.16	3.58	2.89	2.30
GA	1.08	2.68	2.45	2.50	1.94
HI	0.11	0.12	0.10	0.07	0.00
ID	0.63	0.28	0.33	0.36	0.38
IL	5.81	5.30	5.96	6.11	6.49
IN	2.63	2.21	2.20	2.15	2.28
IA	1.86	1.22	1.20	1.20	1.27
KS	0.86	1.07	1.09	1.17	1.10
KY	1.37	1.73	1.81	1.86	1.87
LA	0.88	1.79	1.68	1.57	1.36
ME	1.36	0.55	0.93	1.05	1.11
MD	1.61	2.26	2.70	2.70	2.73
MA	4.20	2.91	3.12	3.27	3.47
MI	5.51	4.82	3.94	4.12	4.37
MN	3.97	1.68	1.78	1.89	2.00
MS	0.74	1.87	1.54	1.53	1.42
MO	2.32	2.41	2.43	2.57	2.42
MT	0.74	0.35	0.39	0.45	0.47
NE	0.92	0.55	0.54	0.56	0.55
NV	0.20	0.51	0.46	0.46	0.46
NH	0.79	0.45	0.54	0.59	0.63
NJ	3.90	3.28	3.17	3.20	3.40
NM	0.52	0.54	0.49	0.50	0.53
NY	12.72	8.68	9.31	9.49	10.08
NC	1.90	3.14	3.25	3.20	2.85
ND	0.80	0.21	0.21	0.22	0.24
OH	5.14	4.86	4.99	4.95	5.25
OK	0.79	1.31	1.28	1.34	1.34
OR	1.25	0.95	0.84	0.90	0.95
PA	6.84	5.15	5.38	5.53	5.87
RI	0.69	0.47	0.61	0.64	0.68
SC	0.68	1.44	1.42	1.43	1.06
SD	0.65	0.29	0.27	0.28	0.29
TN	1.39	2.08	1.89	1.86	1.63
TX	2.26	6.60	5.75	5.36	4.63
UT	0.75	0.54	0.55	0.62	0.65
VT	0.60	0.23	0.36	0.40	0.43
VA	1.96	3.05	2.96	2.94	2.94
WA	2.05	1.50	1.26	1.37	1.45
WV	0.91	0.96	0.97	0.98	1.04
WI	3.58	1.93	2.08	2.19	2.33
WY	0.30	0.18	0.20	0.23	0.24

Appendix V: Energy Burden Formulae (Home Energy 2005)

State	1981 Formula (%)	1984 Formula (%)	Energy Burden Formula (%)	Energy Burden/Poverty Formula (%)
AL	0.86	1.68	1.96	1.96
AK	0.55	0.36	1.69	0.93
AZ	0.42	1.25	1.74	1.65
AR	0.66	1.21	2.06	1.52
CA	4.61	6.00	1.45	6.22
CO	1.61	1.15	1.66	1.53
CT	2.10	1.40	2.38	1.84
DE	0.28	0.37	2.44	1.36
DC	0.33	0.27	1.99	1.13
FL	1.36	4.16	1.74	3.73
GA	1.08	2.68	1.88	2.34
HI	0.11	0.12	2.13	1.25
ID	0.63	0.28	1.50	0.95
IL	5.81	5.30	1.86	3.02
IN	2.63	2.21	1.77	1.91
IA	1.86	1.22	2.02	1.50
KS	0.86	1.07	1.78	1.36
KY	1.37	1.73	1.77	1.73
LA	0.88	1.79	1.87	1.90
ME	1.36	0.55	2.50	1.48
MD	1.61	2.26	2.14	1.95
MA	4.20	2.91	2.37	2.38
MI	5.51	4.82	1.79	2.63
MN	3.97	1.68	2.02	1.82
MS	0.74	1.87	2.02	1.60
MO	2.32	2.41	1.70	1.92
MT	0.74	0.35	1.90	1.11
NE	0.92	0.55	1.78	1.19
NV	0.20	0.51	1.87	1.24
NH	0.79	0.45	2.61	1.49
NJ	3.90	3.28	2.02	2.42
NM	0.52	0.54	1.71	1.18
NY	12.72	8.68	2.21	4.77
NC	1.90	3.14	2.00	2.52
ND	0.80	0.21	2.09	1.16
OH	5.14	4.86	1.94	3.10
OK	0.79	1.31	2.08	1.70
OR	1.25	0.95	1.44	1.34
PA	6.84	5.15	1.99	3.40
RI	0.69	0.47	2.33	1.40
SC	0.68	1.44	1.82	1.69
SD	0.65	0.29	1.99	1.12
TN	1.39	2.08	1.83	2.02
TX	2.26	6.60	2.26	4.67
UT	0.75	0.54	1.58	1.06
VT	0.60	0.23	2.76	1.48
VA	1.96	3.05	2.09	2.22
WA	2.05	1.50	1.39	1.68
WV	0.91	0.96	2.09	1.46
WI	3.58	1.93	2.11	1.95
WY	0.30	0.18	1.89	1.03

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