TARGETING IMPACTS OF PROPOSED WASHINGTON STATE LIHEAP DISTRIBUTION FORMULA

By:

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The formula developed by CTED does not meet the targeting criteria of the LIHEAP statute. You should note that the statute does *not* provide simply that the highest benefits be provided to households with the lowest income. Nor does the statute say that the highest benefits go simply to the households with the highest bills. If either of these targeting principles had been the intent of Congress, Congress could easily have said precisely that. Instead, Congress said that the highest benefits should go to those with the lowest income and the highest energy bills *in relation to income*. (emphasis added). The CTED formula does not adequately consider the second half of the equation dictated by Congress.

This failure can be shown in a number of ways. First, one can look at the results of the CTED formula when considering geographic diversity. In this analysis, average heating bills, as developed by FSC for CTED in 1993, were used on a county-by-county basis. Ten percent of the federal Poverty Level was calculated for the average family size in each county. The designated percent of the heating bill (92%) was credited as a benefit and the remainder compared to the income at that level of Poverty. Comparisons between counties were then made based on data set forth in Table 1.

The Table below shows the highest and lowest 10 county heating burdens after crediting the benefit calculated by the CTED formula. As can be seen from this Table, LIHEAP benefits do not vary as the recipients' energy bill in relationship to income varies. As a result, due to differences in fuel prices, heating degree days, housing size and quality, or related factors, households in counties such as Kittitas and King bear an energy burden which is more than 70 percent greater than households who live in counties such as Grant and Douglas.

County Energy Burdens after LIHEAP Using CTED Formula				
	Highest Burdens		Lowest Burdens	
	County	Burden	County	Burden
1	Kittitas	3.9%	Grant	2.3%
2	King	3.8%	Douglas	2.5%
3	Thurston	3.6%	Cowlitz	2.5%
4	Skamania	3.5%	Okanogan	2.5%
5	Wahkiakum	3.4%	Chelan	2.6%
6	Spokane	3.4%	Franklin	2.6%
7	Lincoln	3.4%	Pend Oreille	2.7%
8	Whatcom	3.4%	Walla Walla	2.7%
9	Clallam	3.4%	Asotin	2.7%
10	Whitman	3.4%	Lewis	2.7%

In addition to a geographic diversity in energy burdens, the formula proposed by CTED operates to the detriment of high cost fuel users as well. It is axiomatic that not all fuels cost the same in dollars per million Btu ($/mmBtu). In Washington State, for example, average heating bills by county for different fuel types are set forth in Table 2. For each county, the Table then assumes that 92 percent of the heating bill is paid by LIHEAP and the resulting energy burden as a percentage of income is calculated for persons at 10 percent of Poverty.

As can be seen, Washington's proposed formula does not accomplish what the LIHEAP statute requires. Not surprisingly, electric

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energy burdens run up to 300 percent more than natural gas burdens and almost as much more for consumers of fuel oil.

One need not look at comparisons between fuels to see the inequities, however. One can use the same Table to assess the impacts of the CTED formula simply within electric consumption. As Table 2 shows, the variation from top to bottom for electric burdens is almost 60 percent. Simply within the electric consumption, in other words, the burdens after LIHEAP (using the CTED formula) range from 3.9 percent (Franklin County) to 6.2 percent (Spokane County).

The failure of the proposed CTED formula is next shown by running a set of sensitivity analyses testing the formula against changes in consumption with all else remaining equal. Energy use tends to yield a bell curve with a right-hand tail block. The shape of this bell curve, for example, is shown by the distribution of energy use for households nationally and in each Census Region. The Figure also shows national data for households with incomes at or below 100 percent of Poverty. As Figure 1 shows, it is not only "possible," but likely that there will be a distribution with many households having consumption substantially in excess of the average. Indeed, for the ranges pictured in Figure 1, the mean bills are: $34 (national); $45 (Northeast); $44 (Midwest); $34 (South); $28 (West); and $33 (Below 100% of Poverty).

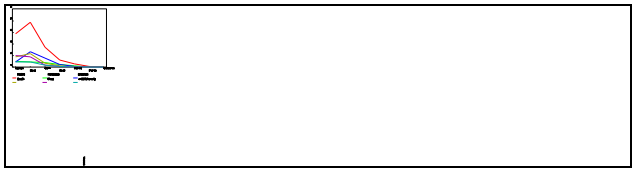

Figure 1: Natural Gas Bill Distributions

The reasons why usage would increase (and thus be above average) far outnumber the reasons why usage would decrease (and thus be below average). On the one hand, a household requires a minimum amount of energy to operate. Without specifying precisely what that minimum is, a certain amount of lighting, refrigeration, and the like is required. The minimum usage, in other words, is somewhat irreducible. On the other hand, there are innumerable reasons why consumption might increase. This may involve characteristics of the household (perhaps they have teenagers who take lots of long showers or perhaps they simply have a bigger family),[\1\] characteristics of appliance usage (perhaps there is someone home all day using electricity), characteristics of the

\1\ The size of the family is one good example. Assuming that total energy use is positively correlated with household size --this is an accurate assumption-- the average household size is likely 2+ persons. Accordingly, on the "below-average" side, you can have a one person household while

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housing unit (perhaps they have broken windows or other energy problems), or characteristics of the appliances (perhaps the refrigerator is old and inefficient). In any event, there will be lots of households who are right around the average bill, fewer households who are somewhat below average, and a relatively small number of households substantially above average.

The sensitivity runs testing the Washington LIHEAP formula assume increasing average consumption in bands of five percent up to a maximum of forty percent above the average (eight bands in all). In each case, 92 percent of the energy bill is assumed to be paid by LIHEAP and an energy burden is calculated. The results of the analysis are set forth in Table 3 below.

Assuming increases in average consumption of up to 40 percent is not inconsistent with the national and regional data that is graphically portrayed in Figure 1. The actual numbers of households at various levels of natural gas consumption are set forth in Table 4 below.[\2\]

The results occur as a matter of arithmetic. Since the proposed Washington formula does not take into consideration the size of the energy bill in relation to income, as bills increase at any particular level of Poverty, the burden of income borne by households with the higher bills increases as well. An example of the increase is shown in the Table below, assuming increases in bills for a two-person household living at 50 percent of Poverty (annual income of $4,920).

(..continued)

on the "above-average side," you can have an indefinite number of persons in larger households (3, 4, 5, 6, 7, 8, etc.). This type of analysis can work on any number of levels. Let's say that average consumption involves one refrigerator and one television. On the "below average" side, it is unlikely you would have zero refrigerators, but very possible you could have two refrigertors and a freezer. Similarly, it may be possible on the "below average" side to have zero televisions, but on the "above average" side, it is possible for households to have three or four televisions.

As can be seen, the ways in which consumption can increase outnumber the ways in which consumptoin can decrease.

\2\ Natural gas consumption was chosen because electricity consumption would extensively vary based on whether the household used electricity for heating or for non-heating consumption.

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Changes in Energy Burdens Given Changes in Bills Using CTED Formula		
Annual Income	Annual Bill	Annual Burden
$4,920	$400	8.1%
$4,920	$500	10.2%
$4,920	$600	12.2%
$4,920	$700	14.2%
$4,920	$800	16.3%

This result, of course, is in direct conflict with the LIHEAP statutory mandate. LIHEAP explicitly requires that higher benefits be targeted to households who have higher bills *in relation to income*.

Finally, the Washington formula inequitably treats households at different levels of Poverty. Table 5 sets forth the heating burdens faced by households at varying levels of Poverty, after using the proposed Washington formula to credit benefits against average heating bills found by FSC. Note the substantial penalty imposed upon households at the lowest Poverty Levels, even given just average energy bills. In Kittitas County, for example, households at 10 percent of Poverty pay nearly four percent toward heating while households at 50 - 90 percent pay only one percent. Even as burdens head back up at 110 and 120 percent of Poverty, they reach less than one-half the burden imposed upon the poorest households.

This additional burden on the lowest income households will hurt a significant number of persons. We do not have the distribution of Washington LIHEAP recipients by Poverty Levels. However, looking at the number of *persons* by county at different Poverty Levels, as set forth in Table 6, we find that each county consistently has roughly a quarter of its total number of persons at or below 125 percent of Poverty actually at or below 50 percent of Poverty. Moreover, nationally, LIHEAP has tended to serve a population with lower incomes than the low-income population generally.

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In sum, the formula proposed by CTED does not adequately fulfill the requirement that LIHEAP benefits be targeted to the households with the lowest incomes and the highest heating bills in relation to income. At least six observations can be made:

1. The Washington formula does not fulfill the Congressional mandate that the distribution of LIHEAP provide greater assistance to households with the lowest incomes and the highest energy bills *in relation to income*. The requirement that benefits must be tied to the energy/income relationship requires, as a matter of law, some consideration of percentage of income burdens.

2. Because the proposed Washington formula does not take into consideration the size of energy bills in relation to income, the formula penalizes households who live in high cost geographic areas. The differences between areas can be as much as 70 percent at any particular level of Poverty.

3. Because the proposed Washington formula does not take into consideration the size of energy bills in relation to income, the formula penalizes households who use higher cost fuels. Households using electric heat, for example, will be shortchanged in particular.

4. Because the proposed Washington formula does not take into consideration the size of energy bills in relation to income, the formula penalizes households who use higher cost energy providers. Even amongst households using electric heat, for example, some are served by electric companies who have a lower per mmBtu charge than others. The difference can be up to 40 percent.

5. Because the proposed Washington formula does not take into consideration the size of energy bills in relation to income, the formula penalizes households who vary from the average consumption. It is to be expected that a substantial number of households will fall into these higher ranges of usage. Such a distribution of consumption is true for the nation as a whole, for every Census Region in the country, and for all low-income households nationwide.

6. Because the proposed Washington formula does not take into consideration the size of energy bills in relation to income, the formula does not equitably treat people at different levels of Poverty. In particular, because of their higher bills in relation to income, households at the lowest Poverty Levels face burdens from 200 to 400 percent greater than households at higher Poverty Levels.

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Based on these observations, the proposed Washington formula would not pass muster under the requirements of the LIHEAP statute.

A BETTER FORMULA

Adoption of the Colorado approach to targeting energy assistance is an approach that is superior to the proposal Washington formula. Colorado's approach is summarized in that state's FY 1995 State Plan. According to that document, the determination of benefits occurs through a several-step process.

- First, the household's poverty level is calculated, with total income divided by the applicable poverty level index.
- Second, a household contribution is determined, with those contributions being based on the following matrix: (a) 0-20% of Poverty: 1% of income; (b) 21-60% of Poverty: 2% of income; (c) 61-100% of Poverty: 3% of income; and (d) 101-150% of Poverty: 4% of income.
- Third, a heating bill is estimated for each household. The estimate shall consist of the total actual home heating costs for the previous heating season, defined in Colorado to last from November 1st through April 30th of the prior year's heating season.
- Finally, a benefit amount is calculated by subtracting the household contribution from the household's estimated home heating costs. Payment of the benefit, however, is not made dependent on the household making the calculated household contribution toward heating costs.

In its essence, Colorado directly measures the energy burdens which each of its LIHEAP recipients bears in a particular year. The state then commits to buy down that heating burden to a uniform burden as a percentage of income. If a household, in other words, has a higher energy burden in relation to income for whatever reason -whether lower income, the use of higher cost fuel, the maintenance of a larger family, the ownership/rental of a less efficient homes-- the LIHEAP benefit is adjusted to target additional benefits to that household.

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Despite this commitment to buying down the household's heating bill to an affordable percentage of income, there is an administrative simplicity to the Colorado approach as well. At the time of the household's LIHEAP application, the LIHEAP agency obtains the household's heating bill from the preceding year from the local utility. This heating bill is then used for the calculation of the *current* year's LIHEAP benefit. If the current year happens to be warmer or colder, or if the household's consumption changes for some other reason, the heating bill used in the calculation of the LIHEAP benefit is not adjusted.

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Table 1:				
County	Avg Heating Bill	Avg Htg Bill Left After LIHEAP	10 Pct Poverty	Avg Htg Burden
Adams	$470	$37.60	$1,277	2.9%
Asotin	$384	$30.72	$1,138	2.7%
Benton	$454	$36.32	$1,163	3.1%
Chelan	$358	$28.64	$1,120	2.6%
Clallam	$461	$36.88	$1,086	3.4%
Clark	$441	$35.28	$1,145	3.1%
Columbia	$387	$30.96	$1,115	2.8%
Cowlitz	$347	$27.76	$1,115	2.5%
Douglas	$367	$29.36	$1,182	2.5%
Ferry	$454	$36.32	$1,259	2.9%
Franklin	$432	$34.56	$1,349	2.6%
Garfield	$429	$34.32	$1,039	3.3%
Grant	$354	$28.32	$1,220	2.3%
Grays Harbor	$398	$31.84	$1,108	2.9%
Island	$500	$40.00	$1,190	3.4%
Jefferson	$427	$34.16	$1,091	3.1%
King	$519	$41.52	$1,083	3.8%
Kitsap	$467	$37.36	$1,158	3.2%
Kittitas	$511	$40.88	$1,051	3.9%
Klickitat	$455	$36.40	$1,170	3.1%
Lewis	$381	$30.48	$1,110	2.7%

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Table 1:				
County	Avg Heating Bill	Avg Htg Bill Left After LIHEAP	10 Pct Poverty	Avg Htg Burden
Lincoln	$470	$37.60	$1,093	3.4%
Mason	$445	$35.60	$1,158	3.1%
Okanogan	$368	$29.44	$1,163	2.5%
Pacific	$401	$32.08	$1,068	3.0%
Pend Oreille	$388	$31.04	$1,155	2.7%
Pierce	$479	$38.32	$1,180	3.2%
San Juan	$415	$33.20	$1,078	3.1%
Skagit	$459	$36.72	$1,140	3.2%
Skamania	$445	$35.60	$1,026	3.5%
Snohomish	$482	$38.56	$1,153	3.3%
Spokane	$472	$37.76	$1,096	3.4%
Stevens	$439	$35.12	$1,148	3.1%
Thurston	$504	$40.32	$1,135	3.6%
Wahkiakum	$439	$35.12	$1,019	3.4%
Walla Walla	$401	$32.08	$1,192	2.7%
Whatcom	$479	$38.32	$1,123	3.4%
Whitman	$504	$40.32	$1,192	3.4%
Yakima	$435	$34.80	$1,264	2.8%

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Table 2: County-by-County Burden After LIHEAP Benefit
Using CTED Proposal Formula

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	Gas	Electric	Fuel Oil	Natural Gas	Electric	Fuel Oil	Natural Gas	Electric	Fuel Oil
Adams	$246	$752	$275	$19.70	$60.17	$21.96	1.5%	4.7%	1.7%
Asotin	$253	$774	$282	$20.27	$61.91	$22.60	1.8%	5.4%	2.0%
Benton	$228	$696	$254	$18.23	$55.69	$20.33	1.6%	4.8%	1.7%
Chelan	$270	$824	$301	$21.60	$65.96	$24.08	1.9%	5.9%	2.1%
Clallam	$230	$702	$256	$18.38	$56.12	$20.49	1.7%	5.2%	1.9%
Clark	$237	$723	$264	$18.94	$57.86	$21.12	1.7%	5.1%	1.8%
Columbia	$241	$736	$269	$19.28	$58.87	$21.49	1.7%	5.3%	1.9%
Cowlitz	$262	$799	$292	$20.93	$63.93	$23.34	1.9%	5.7%	2.1%
Douglas	$276	$843	$308	$22.07	$67.40	$24.60	1.9%	5.7%	2.1%
Ferry	$305	$931	$340	$24.39	$74.49	$27.19	1.9%	5.9%	2.2%
Franklin	$217	$664	$242	$17.38	$53.08	$19.38	1.3%	3.9%	1.4%
Garfield	$246	$752	$275	$19.70	$60.17	$21.96	1.9%	5.8%	2.1%
Grant	$266	$814	$297	$21.31	$65.09	$23.76	1.7%	5.3%	1.9%
Grays Harbor	$239	$729	$266	$19.09	$58.29	$21.28	1.7%	5.3%	1.9%
Island	$228	$696	$254	$18.23	$55.69	$20.33	1.5%	4.7%	1.7%
Jefferson	$224	$683	$249	$17.90	$54.67	$19.96	1.6%	5.0%	1.8%
King	$249	$761	$278	$19.94	$60.89	$22.23	1.8%	5.6%	2.1%
Kitsap	$235	$718	$262	$18.80	$57.42	$20.96	1.6%	5.0%	1.8%
Kittitas	$245	$749	$273	$19.61	$59.88	$21.86	1.9%	5.7%	2.1%

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Table 2: County-by-County Burden After LIHEAP Benefit
Using CTED Proposal Formula

County	Bill (mmBtu x $/mmBtu)			Bill Left After LIHEAP			Burden as Income Percent		
	Gas	Electric	Fuel Oil	Natural Gas	Electric	Fuel Oil	Natural Gas	Electric	Fuel Oil
Klickitat	$251	$767	$280	$20.08	$61.33	$22.39	1.7%	5.2%	1.9%
Lewis	$247	$754	$275	$19.75	$60.31	$22.02	1.8%	5.4%	2.0%
Lincoln	$265	$808	$295	$21.17	$64.65	$23.60	1.9%	5.9%	2.2%
Mason	$224	$685	$250	$17.95	$54.82	$20.01	1.6%	4.7%	1.7%
Okanogan	$277	$846	$309	$22.16	$67.69	$24.71	1.9%	5.8%	2.1%
Pacific	$220	$671	$245	$17.57	$53.66	$19.59	1.6%	5.0%	1.8%
Pend Oreille	$292	$891	$325	$23.35	$71.31	$26.03	2.0%	6.2%	2.3%
Pierce	$224	$683	$249	$17.90	$54.67	$19.96	1.5%	4.6%	1.7%
San Juan	$249	$759	$277	$19.89	$60.75	$22.18	1.8%	5.6%	2.1%
Skagit	$247	$754	$275	$19.75	$60.31	$22.02	1.7%	5.3%	1.9%
Skamania	$250	$763	$279	$19.99	$61.04	$22.28	1.9%	5.9%	2.2%
Snohomish	$257	$785	$286	$20.55	$62.77	$22.92	1.8%	5.4%	2.0%
Spokane	$280	$855	$312	$22.40	$68.41	$24.97	2.0%	6.2%	2.3%
Stevens	$282	$862	$315	$22.59	$68.99	$25.19	2.0%	6.0%	2.2%
Thurston	$247	$754	$275	$19.75	$60.31	$22.02	1.7%	5.3%	1.9%
Wahkiakum	$244	$745	$272	$19.51	$59.59	$21.75	1.9%	5.8%	2.1%
Walla Walla	$234	$716	$261	$18.75	$57.28	$20.91	1.6%	4.8%	1.8%
Whatcom	$251	$767	$280	$20.08	$61.33	$22.39	1.8%	5.5%	2.0%
Whitman	$255	$777	$284	$20.36	$62.20	$22.70	1.7%	5.2%	1.9%

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County	Bill (mmBtu x $/mmBtu)			Bill Left After LIHEAP			Burden as Income Percent		
	Gas	Electric	Fuel Oil	Natural Gas	Electric	Fuel Oil	Natural Gas	Electric	Fuel Oil
Yakima	$244	$747	$273	$19.56	$59.74	$21.81	1.5%	4.7%	1.7%

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Table 3									
	Average Heating Burden Given Different Levels of Consumption (10 percent of Poverty Level)								
County	Average	Plus 5%	Plus 10%	Plus 15%	Plus 20%	Plus 25%	Plus 30%	Plus 35%	Plus 40%
Adams	2.9%	3.1%	3.2%	3.4%	3.5%	3.7%	3.8%	4.0%	4.1%
Asotin	2.7%	2.8%	3.0%	3.1%	3.2%	3.4%	3.5%	3.6%	3.8%
Benton	3.1%	3.3%	3.4%	3.6%	3.7%	3.9%	4.1%	4.2%	4.4%
Chelan	2.6%	2.7%	2.8%	2.9%	3.1%	3.2%	3.3%	3.5%	3.6%
Clallam	3.4%	3.6%	3.7%	3.9%	4.1%	4.2%	4.4%	4.6%	4.8%
Clark	3.1%	3.2%	3.4%	3.5%	3.7%	3.9%	4.0%	4.2%	4.3%
Columbia	2.8%	2.9%	3.1%	3.2%	3.3%	3.5%	3.6%	3.7%	3.9%
Cowlitz	2.5%	2.6%	2.7%	2.9%	3.0%	3.1%	3.2%	3.4%	3.5%
Douglas	2.5%	2.6%	2.7%	2.9%	3.0%	3.1%	3.2%	3.4%	3.5%
Ferry	2.9%	3.0%	3.2%	3.3%	3.5%	3.6%	3.7%	3.9%	4.0%
Franklin	2.6%	2.7%	2.8%	2.9%	3.1%	3.2%	3.3%	3.5%	3.6%
Garfield	3.3%	3.5%	3.6%	3.8%	4.0%	4.1%	4.3%	4.5%	4.6%
Grant	2.3%	2.4%	2.6%	2.7%	2.8%	2.9%	3.0%	3.1%	3.3%
Grays Harbor	2.9%	3.0%	3.2%	3.3%	3.4%	3.6%	3.7%	3.9%	4.0%
Island	3.4%	3.5%	3.7%	3.9%	4.0%	4.2%	4.4%	4.5%	4.7%
Jefferson	3.1%	3.3%	3.4%	3.6%	3.8%	3.9%	4.1%	4.2%	4.4%
King	3.8%	4.0%	4.2%	4.4%	4.6%	4.8%	5.0%	5.2%	5.4%
Kitsap	3.2%	3.4%	3.6%	3.7%	3.9%	4.0%	4.2%	4.4%	4.5%

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Table 3									
	Average Heating Burden Given Different Levels of Consumption (10 percent of Poverty Level)								
County	Average	Plus 5%	Plus 10%	Plus 15%	Plus 20%	Plus 25%	Plus 30%	Plus 35%	Plus 40%
Kittitas	3.9%	4.1%	4.3%	4.5%	4.7%	4.9%	5.1%	5.3%	5.4%
Klickitat	3.1%	3.3%	3.4%	3.6%	3.7%	3.9%	4.0%	4.2%	4.4%
Lewis	2.7%	2.9%	3.0%	3.2%	3.3%	3.4%	3.6%	3.7%	3.8%
Lincoln	3.4%	3.6%	3.8%	4.0%	4.1%	4.3%	4.5%	4.6%	4.8%
Mason	3.1%	3.2%	3.4%	3.5%	3.7%	3.8%	4.0%	4.2%	4.3%
Okanogan	2.5%	2.7%	2.8%	2.9%	3.0%	3.2%	3.3%	3.4%	3.5%
Pacific	3.0%	3.2%	3.3%	3.5%	3.6%	3.8%	3.9%	4.1%	4.2%
Pend Oreille	2.7%	2.8%	3.0%	3.1%	3.2%	3.4%	3.5%	3.6%	3.8%
Pierce	3.2%	3.4%	3.6%	3.7%	3.9%	4.1%	4.2%	4.4%	4.5%
San Juan	3.1%	3.2%	3.4%	3.5%	3.7%	3.8%	4.0%	4.2%	4.3%
Skagit	3.2%	3.4%	3.5%	3.7%	3.9%	4.0%	4.2%	4.3%	4.5%
Skamania	3.5%	3.6%	3.8%	4.0%	4.2%	4.3%	4.5%	4.7%	4.9%
Snohomish	3.3%	3.5%	3.7%	3.8%	4.0%	4.2%	4.3%	4.5%	4.7%
Spokane	3.4%	3.6%	3.8%	4.0%	4.1%	4.3%	4.5%	4.7%	4.8%
Stevens	3.1%	3.2%	3.4%	3.5%	3.7%	3.8%	4.0%	4.1%	4.3%
Thurston	3.6%	3.7%	3.9%	4.1%	4.3%	4.4%	4.6%	4.8%	5.0%
Wahkiakum	3.4%	3.6%	3.8%	4.0%	4.1%	4.3%	4.5%	4.7%	4.8%
Walla Walla	2.7%	2.8%	3.0%	3.1%	3.2%	3.4%	3.5%	3.6%	3.8%
Whatcom	3.4%	3.6%	3.8%	3.9%	4.1%	4.3%	4.4%	4.6%	4.8%

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Table 3									
	Average Heating Burden Given Different Levels of Consumption (10 percent of Poverty Level)								
County	Average	Plus 5%	Plus 10%	Plus 15%	Plus 20%	Plus 25%	Plus 30%	Plus 35%	Plus 40%
Whitman	3.4%	3.6%	3.7%	3.9%	4.1%	4.2%	4.4%	4.6%	4.7%
Yakima	2.8%	2.9%	3.0%	3.2%	3.3%	3.4%	3.6%	3.7%	3.9%

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Table 4						
Natural Gas Bill	Numbers of Households					
	Nation	Northeast	Midwest	South	West	<100% Poverty
Below $25	14,461	2,645	2,324	4,435	5,057	2,172
$25-49	19,322	2,322	6,626	5,789	4,586	2,278
$50-74	8,743	2,038	3,857	1,849	999	839
$75-99	3,002	1,079	1,089	546	288	255
$100-149	1,460	690	488	191	92	154
$150-199	$396	$198	112	54	32	41
$200 and more	229	79	81	32	37	28
Average bill	$37	$45	$44	$34	$28	$33

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Table 5: Average Heating Burden After Receipt of LIHEAP
By County at Different Levels of Poverty

	Average Heating Burden After Receipt of LIHEAP											
County	10 pct	20 pct	30 pct	40 pct	50 pct	60 pct	70 pct	80 pct	90 pct	100 pct	110 pct	120 pct
Adams	2.9%	1.7%	1.2%	1.0%	0.9%	0.8%	0.8%	0.8%	0.8%	0.9%	1.0%	1.3%
Asotin	2.7%	1.5%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.8%	0.8%	1.0%	1.2%
Benton	3.1%	1.8%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
Chelan	2.6%	1.4%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.9%	1.1%
Clallam	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.2%	1.5%
Clark	3.1%	1.7%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
Columbia	2.8%	1.6%	1.2%	1.0%	0.8%	0.8%	0.7%	0.7%	0.8%	0.8%	1.0%	1.2%
Cowlitz	2.5%	1.4%	1.0%	0.9%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.9%	1.1%
Douglas	2.5%	1.4%	1.0%	0.9%	0.7%	0.7%	0.7%	0.7%	0.7%	0.7%	0.9%	1.1%
Ferry	2.9%	1.6%	1.2%	1.0%	0.9%	0.8%	0.8%	0.8%	0.8%	0.9%	1.0%	1.3%
Franklin	2.6%	1.4%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.9%	1.1%
Garfield	3.3%	1.9%	1.4%	1.1%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.2%	1.5%
Grant	2.3%	1.3%	1.0%	0.8%	0.7%	0.6%	0.6%	0.6%	0.6%	0.7%	0.8%	1.0%
Grays Harbor	2.9%	1.6%	1.2%	1.0%	0.9%	0.8%	0.8%	0.8%	0.8%	0.9%	1.0%	1.3%
Island	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.2%	1.5%
Jefferson	3.1%	1.8%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
King	3.8%	2.2%	1.6%	1.3%	1.1%	1.0%	1.0%	1.0%	1.1%	1.1%	1.4%	1.7%
Kitsap	3.2%	1.8%	1.3%	1.1%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.1%	1.4%
Kittitas	3.9%	2.2%	1.6%	1.3%	1.2%	1.1%	1.0%	1.0%	1.1%	1.2%	1.4%	1.7%

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Table 5: Average Heating Burden After Receipt of LIHEAP
By County at Different Levels of Poverty

	Average Heating Burden After Receipt of LIHEAP											
County	10 pct	20 pct	30 pct	40 pct	50 pct	60 pct	70 pct	80 pct	90 pct	100 pct	110 pct	120 pct
Klickitat	3.1%	1.8%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
Lewis	2.7%	1.5%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.8%	0.8%	1.0%	1.2%
Lincoln	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	1.0%	1.0%	1.2%	1.5%
Mason	3.1%	1.7%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
Okanogan	2.5%	1.4%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.9%	1.1%
Pacific	3.0%	1.7%	1.3%	1.0%	0.9%	0.8%	0.8%	0.8%	0.8%	0.9%	1.1%	1.3%
Pend Oreille	2.7%	1.5%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.9%	1.2%
Pierce	3.2%	1.8%	1.4%	1.1%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.1%	1.5%
San Juan	3.1%	1.7%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
Skagit	3.2%	1.8%	1.3%	1.1%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.1%	1.4%
Skamania	3.5%	2.0%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	1.0%	1.0%	1.2%	1.6%
Snohomish	3.3%	1.9%	1.4%	1.1%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.2%	1.5%
Spokane	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	1.0%	1.0%	1.2%	1.5%
Stevens	3.1%	1.7%	1.3%	1.1%	0.9%	0.8%	0.8%	0.8%	0.9%	0.9%	1.1%	1.4%
Thurston	3.6%	2.0%	1.5%	1.2%	1.1%	1.0%	1.0%	0.9%	1.0%	1.1%	1.3%	1.6%
Wahkiakum	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	1.0%	1.0%	1.2%	1.5%
Walla Walla	2.7%	1.5%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.7%	0.8%	0.9%	1.2%
Whatcom	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.2%	1.5%
Whitman	3.4%	1.9%	1.4%	1.2%	1.0%	0.9%	0.9%	0.9%	0.9%	1.0%	1.2%	1.5%

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By County at Different Levels of Poverty

	Average Heating Burden After Receipt of LIHEAP											
County	10 pct	20 pct	30 pct	40 pct	50 pct	60 pct	70 pct	80 pct	90 pct	100 pct	110 pct	120 pct
Yakima	2.8%	1.5%	1.1%	0.9%	0.8%	0.7%	0.7%	0.7%	0.8%	0.8%	1.0%	1.2%

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Table 6: Number of Persons at Various Levels of Poverty By County--Washington State					
County	Percentage of Poverty				
	0-50	51-74	75-99	100-124	Total
Adams	920	625	815	922	3,282
Asotin	1,017	1,388	926	971	4,302
Benton	3,908	4,495	3,999	4,597	16,999
Chelan	2,493	2,397	2,954	2,583	10,427
Clallam	2,311	2,126	2,415	2,942	9,794
Clark	8,032	7,075	6,803	8,754	30,664
Columbia	238	211	308	237	994
Cowlitz	3,806	3,662	3,279	3,180	13,927
Douglas	973	1,059	1,138	1,291	4,461
Ferry	617	336	531	275	1,759
Franklin	3,389	2,734	2,368	2,166	10,657
Garfield	82	71	78	105	336
Grant	3,697	2,702	4,232	3,664	14,295
Grays Harbor	3,744	3,400	3,162	3,912	14,218
Island	1,543	1,233	1,380	2,088	6,244
Jefferson	809	926	949	1,172	3,856
King	45,979	32,595	39,015	39,929	157,518
Kitsap	6,861	4,821	5,437	5,922	23,041

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Table 6: Number of Persons at Various Levels of Poverty By County--Washington State					
County	Percentage of Poverty				
	0-50	51-74	75-99	100-124	Total
Kittitas	1,833	1,537	1,543	1,340	6,253
Klickitat	961	982	843	1,195	3,981
Lewis	2,682	2,735	2,968	3,040	11,425
Lincoln	352	357	362	478	1,549
Mason	1,648	1,753	1,416	1,694	6,511
Okanogan	2,453	2,163	2,461	2,541	9,618
Pacific	853	1,212	1,101	1,246	4,412
Pend Oreille	609	623	544	496	2,272
Pierce	23,073	19,434	21,561	23,152	87,220
San Juan	276	122	330	433	1,161
Skagit	3,385	2,707	2,920	3,048	12,060
Skamania	273	220	281	403	1,177
Snohomish	11,278	8,364	10,531	12,285	42,458
Spokane	15,911	14,490	17,626	17,954	65,981
Stevens	1,689	1,875	1,685	1,630	6,879
Thurston	5,533	5,083	5,291	6,089	21,996
Wahkiakum	105	112	124	99	440
Walla Walla	2,271	2,155	2,718	2,684	9,828
Whatcom	5,662	4,557	4,923	5,359	20,501

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Table 6: Number of Persons at Various Levels of Poverty By County--Washington State					
County	Percentage of Poverty				
	0-50	51-74	75-99	100-124	Total
Whitman	3,856	2,018	1,953	1,689	9,516
Yakima	14,640	10,203	12,643	12,713	50,199
State	175,122	144,355	160,970	171,565	652,012

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