

Section 4: Explaining Energy Burden Measure Data

Section Four focuses on LIHEAP Performance Measures related to **Home Energy Burden**. More specifically, this section hones in on the following questions:

- **What are you reporting and why does it matter?**
- **How will grantees and OCS use these performance measures?**

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What are we reporting? Why does it matter?

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Home Energy Burden

- Energy burden is the percentage of household income spent on home energy costs.
- High burden households are those that spend a greater share of their income on home energy costs.

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What are we reporting? Why does it matter?

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There are three measure areas that will help grantees evaluate the impact of LIHEAP on energy burden:

1. Change in Energy Burden
2. Benefit Targeting Index
3. Burden Reduction Targeting Index

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What are we reporting? Why does it matter?

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Change in Energy Burden

- **Indicator #1:** Average pre-LIHEAP energy burden
- **Indicator #2:** Average post-LIHEAP energy burden
- **Indicator #3:** Average energy burden reduction as a result of LIHEAP
- **Indicator #4:** Average energy bill offset as a result of LIHEAP

These indicators tell us how LIHEAP reduces the percentage of income households spend on their energy bills.

Why Does This Matter?

We know that low-income households have to make tough choices between paying their energy bills and other essential needs (food, prescriptions). Reducing the amount of income people spend on energy bills decreases the health and safety risks associated with these kinds of decisions.

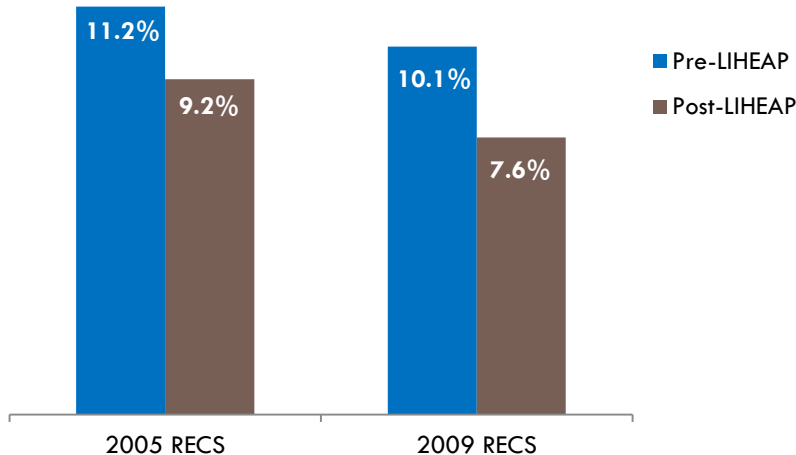
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What are we reporting? Why does it matter?

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Measure #1 Example: Pre-Post LIHEAP Energy Burden

Percent of Income Spent on Energy Bills
(before and after LIHEAP)



In 2005, LIHEAP reduced the percentage of income households paid on energy bills from 11.2% to 9.2%.

This was a reduction of 1.9 percentage points. LIHEAP paid 17% of client bills.

In 2009, LIHEAP reduced the percentage of income households paid on energy bills from 10.1% to 7.6%.

This was a reduction of 2.5 percentage points. LIHEAP paid 25% of client bills.

How much does LIHEAP reduce energy burden for low-income households?

In 2005, LIHEAP cut household energy bills and burden by 17%. In 2009, this number increased to 25%, in spite of the fact that households had higher energy bills than in 2005.

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What are we reporting? Why does it matter?

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For the “math people” to take home.

2005 and 2009 Energy Burden Data (RECS)

	2005	2009
Average Income	\$15,604	\$19,232
Average Energy Bill	\$1,742	\$1,950
Average LIHEAP Benefit	\$303	\$485
Pre-LIHEAP Burden	11.2%	10.1%
Post-LIHEAP Burden	9.2%	7.6%
Burden Reduction	2.0 percentage points	2.5 percentage points
Energy Bill Offset	17%	25%
What does this mean?	In 2005, LIHEAP reduced the percentage of income households paid on energy bills from 11.2% to 9.2%. This was a reduction of 2.0 percentage points . LIHEAP paid 17% of client energy bills (\$303/\$1,742).	In 2009, LIHEAP reduced the percentage of income households paid on energy bills from 10.1% to 7.6%. This was a reduction of 2.5 percentage points. LIHEAP paid 25% of client energy bills (\$485/\$1,950).
How we got there.	<ul style="list-style-type: none"> a. $\\$1,742/\\$15,604 = 11.2\%$ pre-LIHEAP b. $(\\$1,742-\\$303)/\\$15,604 = 9.2\%$ post-LIHEAP c. $11.2\% - 9.2\% = 2.0$ percentage points d. $\\$303/\\$1,742 = 17\%$ of bill paid (offset) 	<ul style="list-style-type: none"> a. $\\$1,950/\\$19,232 = 10.1\%$ pre-LIHEAP b. $(\\$1,950-\\$485) = 7.5\%$ post-LIHEAP c. $10.1\% - 7.6\% = 2.5$ percentage points d. $\\$485 / \\$1,950 = 25\%$ of bill paid (offset)

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What are we reporting? Why does it matter?

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Measure #2: Benefit Targeting Index

- This measure tells us whether high energy burden households receive higher LIHEAP benefits than average households.

Why Does This Matter?

- The LIHEAP Act requires grantees to provide the highest level of assistance to households with the highest energy burden (highest energy costs in relation to income and family size).

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What are we reporting? Why does it matter?

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What is an Index?

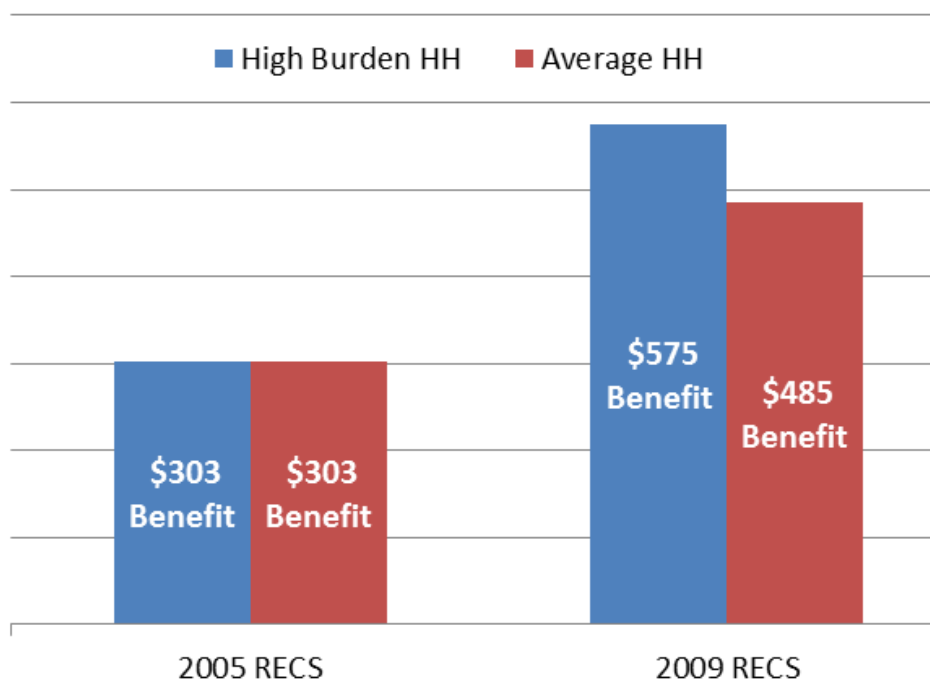
- An index is a way to measure or compare information on a scale. For example, LIHEAP currently uses an index to compare how grantees target vulnerable populations each year.
- Grantees will not need to learn how to compute index scores. Instead, they will be “automatically” calculated based on the data grantees enter into OLDC. It is helpful, however, to understand what index scores tell us. In the case of the Benefit Targeting Index:
 - = 100: High burden HH received the same benefits as average HH**
 - < 100: High burden HH received lower benefits than average HH**
 - > 100: High burden HH received higher benefits than average HH**

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What are we reporting? Why does it matter?

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Measure 2: Benefit Targeting Index Example



In 2005, high burden households received **the same** benefit as the average household.

[Index Score: 100]

In 2009, high burden households received a benefit **18.6% higher** than the average household.

[Index Score: 118.6]

Does the LIHEAP program furnish higher benefits to high burden households?

Not in 2005. But, in 2009 the program did pay higher benefits to high burden households.

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What are we reporting? Why does it matter?

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For the “math people” to take home.

2005 and 2009 Benefit Targeting Index Data (RECS)

	2005	2009
High Burden Households LIHEAP Benefit	\$303	\$575
All Households LIHEAP Benefit	\$303	\$485
Index	100.00	118.6
What does this mean?	In 2005, high burden households got the same LIHEAP benefit as the average household.	In 2009, high burden households got a benefit that was 18.6% higher than the average household
How we got there.	a. $(\$303 / \$303) * 100 = 100$ b. $100 - 100 = 0$	a. $(\$575 / \$485) * 100 = 118.6$ b. $118.6 - 100 = 18.6$

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Measure #3: Burden Reduction Targeting Index

- This measure tells us whether high energy burden households have a larger share of their energy bill paid with LIHEAP than average households.

Why Does This Matter?

- The LIHEAP Act requires grantees to provide the highest level of assistance to households with the highest energy burden. This measure goes beyond the size of the benefit to look at the share of the bill paid.

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What are we reporting? Why does it matter?

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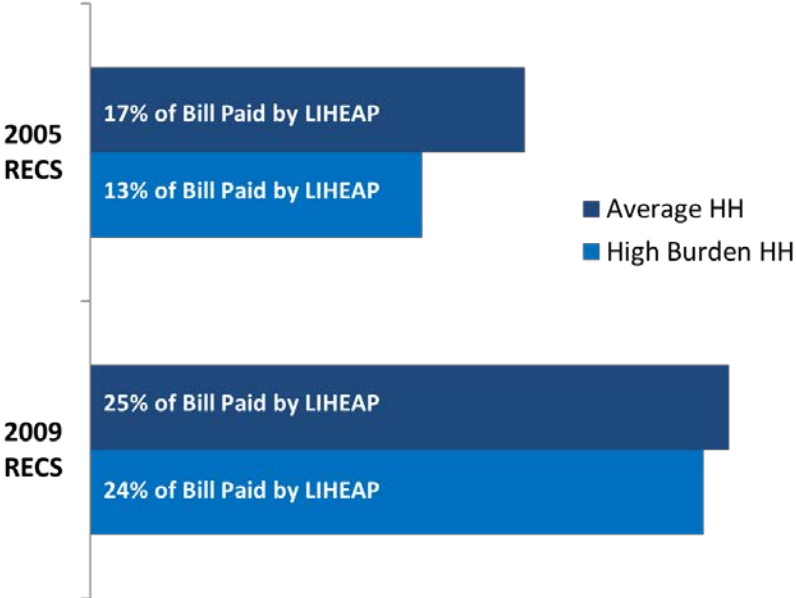
Index scores will be “automatically” calculated based on the data grantees enter into OLDC. It is helpful, however, to understand what index scores tell us. In the case of the Burden Reduction Targeting Index:

- = 100:** High burden households had the same amount of their home energy bill paid by LIHEAP than average households.
- < 100:** High burden households had a lower percentage of their home energy bill paid by LIHEAP than average households.
- > 100:** High burden households had a higher amount of their home energy bill paid by LIHEAP than average households.

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What are we reporting? Why does it matter?

Measure 3: Burden Reduction Targeting Index Example



In 2005, high burden households had 13% of their annual home energy bill paid, compared to the average of 17%.

[Index Score: 76]

In 2009, high burden households had 24% of their annual home energy bill paid, compared to the average of 25%.

[Index Score: 96]

Does LIHEAP pay a larger share of the home energy bill for high burden households?

No. In both 2005 and 2009, high burden households had a lower percentage of their home energy bill paid by the program than the average household. But, the program improved on this measure between 2005 and 2009.

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What are we reporting? Why does it matter?

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For the “math people” to take home.

2005 and 2009 Burden Reduction Targeting Index Data (RECS)

	2005	2009
High Burden Households % of Bill Paid by LIHEAP	13%	24%
All Households % of Bill Paid by LIHEAP	17%	25%
Index	76	96
What does this mean?	In 2005, high burden households 13% of their energy bill paid compared to 17% for the average household.	In 2005, high burden households had 24% of their energy bill paid compared to 25% for the average household.
How we got there.	Index: $(13\% / 17\%) * 100 = 76$	Index: $(24\% / 25\%) * 100 = 96$

Section 4: Explaining Energy Burden Measure Data *Using LIHEAP Performance Measures*

How Can Grantees Use Energy Burden Data?

- **The Benefit Matrix.** Many grantees evaluate their benefit matrix each year to decide whether to change benefit levels for households (based on income, fuel type, and other factors). Energy burden measures will show grantees whether or not their matrix is effectively targeting assistance to high burden households.
- **Moving Beyond Bill Payment Assistance.** Energy burden measures will illuminate areas where energy program coordination might be useful. For example, if fuel oil clients continually have high bills and are receiving high LIHEAP benefits—it may prove valuable to target weatherization funding or other energy efficiency efforts toward these households.

Section 5: LIHEAP Performance Measures Checklist

The purpose of **Section 5** is to review the LIHEAP Performance Measures checklist— which includes concrete steps grantees can take in order to begin preparing for Performance Measurement data collection and reporting.

Section 5: LIHEAP Performance Measures Checklist

LIHEAP Performance Measures Timeline

Forecasted Collection, Reporting Years

- FFY 2014: Changes to intake forms, vendor agreements, and systems
- FFY 2015: Begin data collection and continue systems development
- FFY 2016: Report for FFY 2015 and continue systems development

Section 5: LIHEAP Performance Measures Checklist

Client Applications

- ✓ **Add Main Fuel Type to the Client Application.** At minimum, this should include Natural Gas, Electricity, Fuel Oil, Propane, and “Other.”
- ✓ **Add or Modify Waiver (Release of Information) on Client Application.** This will assure that data exchanges can occur once vendor agreements are in place. Due to increased privacy restrictions, it is important to involve both vendors and attorneys in the development of this language.
- ✓ **Add Vendor Account Numbers to Client Application for both Main Fuel and Electricity.** Identifying account information will allow grantees to pull together lists to submit to vendors when making data requests.
- ✓ **Add Home Energy Status to Application.** Includes Disconnected, Out of Fuel, Inoperable Equipment, Past-Due or Shut-off Notice, Nearly Out of Fuel, etc.

Section 5: LIHEAP Performance Measures Checklist

Vendor Partnerships

- ✓ **Identification of Top Vendors.** Grantees will need to identify the largest 5 gas vendors, largest 5 electric vendors, largest 10 propane vendors (if applicable), largest 10 fuel oil vendors (if applicable), and largest 10 other vendors (if applicable) within your state. Grantees who need help with this should contact APPRISE or their OCS Liaison.
- ✓ **Vendor Agreements.** Work with one or more major vendors to develop language that requires vendors to provide annual bill data for LIHEAP recipients. This includes outlining expectations in terms of process and timeline. In states where subgrantees are responsible for vendor agreements, one best practice is to create a “minimum standard” template in collaboration with major vendors at the state level that all subgrantees can adopt.

Section 5: LIHEAP Performance Measures Checklist

Policy, Coordination of Program Delivery

- ✓ **Determine your state’s criteria for “imminent risk.”** Grantees should determine when a LIHEAP benefit is considered preventive. At-risk criteria should correspond with existing policy manuals, state plans.
- ✓ **Establish Equipment Repair and Replacement Criteria related to “Restoration and Prevention” with LIHEAP Weatherization Contractors.** Grantees may need to coordinate with their Weatherization partners to establish when LIHEAP funds are used to “restore home energy” versus “prevent home energy loss.”
- ✓ **Coordinate Reporting of “Restoration and Prevention” with LIHEAP Weatherization Contractors.** This could be as straightforward as asking weatherization contractors to specify on invoices, work orders, or audit reports whether equipment repair/replacement is necessary to restore home energy or prevent home energy loss.

Section 5: LIHEAP Performance Measures Checklist

Systems Development

- ✓ **Developing Data Exchange Systems.** This could start with sending a list of account numbers to utilities at the end of the year and requesting an electronic spreadsheet of data in return. Over time, capacity could increase for automated exchanges.
- ✓ **Data Reporting.** Grantees have a variation of database systems. Over time, grantees can build capacity for streamlined data collection and reporting using a centralized system.

Section 5: LIHEAP Performance Measures Checklist

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Questions