

Field-by-Field Guide to the LIHEAP Performance Measures

OVERVIEW

VERSION 1.0

The purpose of this Field-by-Field Guide is to provide grantees with a resource that defines how the Performance Measures and other fields in **Section V. Energy Burden Targeting** of the **LIHEAP Performance Data Form (LPDF)** are calculated in the Online Data Collection (OLDC) system. It serves as a reference point for grantees interested in visualizing how the fields are interrelated, and it provides examples to demonstrate the calculations that are performed. Grantees can use this guide as a companion source when reviewing and interpreting their Performance Measures results.

How to use this guide:

The table on page 2 lists the fields from **Section V of the LPDF**, in the order they appear on the form. Fields that are auto-calculated in OLDC are defined in this guide. Users can navigate to these definitions using the table on page 2 and clicking the hyperlinks for “auto-calculated” fields. Users can return to the table on page 2 clicking the “Back to Performance Data Form” hyperlink at the top of each page with field definitions.

For each auto-calculated field in **Section V of the LPDF**, this guide contains the field definition, the formula used in its calculation, and an example to illustrate how the formula is used.

Quick Definitions

- **Energy Burden:** Energy Burden is the share of a household’s income that is spent on energy bills. It is expressed in terms of percentages.
- **High Burden Households:** High Burden Households are the top 25 percent of LIHEAP recipient households with the highest Energy Burden. The calculations for fields in Section V, Subsection C, are for High Energy Burden Households exclusively.
- **Unduplicated Number:** The concept of unduplicated counts means that an item, such as a household, is counted only once for a specific data item. For example, an unduplicated count of households would count only once a household that received heating assistance benefits, winter crisis assistance benefits, and cooling assistance benefits.

LIHEAP Performance Data Form

LIHEAP Performance Measures

V. Energy Burden Targeting

A. Unduplicated Number of LIHEAP Bill Payment-Assisted Households	Calculated by grantee
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B. All Households with 12 Consecutive Months of Bill Data (Main Fuel and Electric)

1. Unduplicated Number of Households with 12 Consecutive Months of Bill Data (Main Fuel and Electric)	Calculated by grantee
2. Average Annual Household Income	Calculated by grantee
3. Average Annual Total LIHEAP Benefit per Household (including Heating, Cooling, Crisis, Supplemental Benefits)	Calculated by grantee
4. Average Annual Main Heating Fuel Bill	Calculated by grantee
5. Average Annual Electricity Bill	Calculated by grantee
6. Average Annual Total Residential Energy Bill	Auto-Calculated
7. Average Annual Burden Before Receiving LIHEAP	Auto-Calculated
8. Average Annual Burden After Receiving LIHEAP	Auto-Calculated
9. Average Percentage Point Change in Energy Burden	Auto-Calculated
10. Average Percentage Reduction in Energy Burden	Auto-Calculated

C. High Burden Households with 12 Consecutive Months of Bill Data (Main Fuel and Electric)

1. Unduplicated Number of High Burden Households (Top 25%) with 12 Consecutive Months of Bill Data	Calculated by grantee
2. Average Annual Household Income for High Burden Households	Calculated by grantee
3. Average Annual Total LIHEAP Benefit per High Burden Household (including Heating, Cooling, Crisis, Supplemental Benefits)	Calculated by grantee
4. Average Annual Main Heating Fuel Bill for High Burden Households	Calculated by grantee
5. Average Annual Electricity Bill for High Burden Households	Calculated by grantee
6. Average Annual Total Residential Energy Bill for High Burden Households	Auto-Calculated
7. Average Annual Burden Before Receiving LIHEAP for High Burden Households	Auto-Calculated
8. Average Annual Burden After Receiving LIHEAP for High Burden Households	Auto-Calculated
9. Average Percentage Point Change in Energy Burden for High Burden Households	Auto-Calculated
10. Average Percentage Reduction in Energy Burden for High Burden Households	Auto-Calculated

D. Benefit Targeting Index for High Burden Households:	Auto-Calculated
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E. Burden Reduction Targeting Index for High Burden Households:	Auto-Calculated
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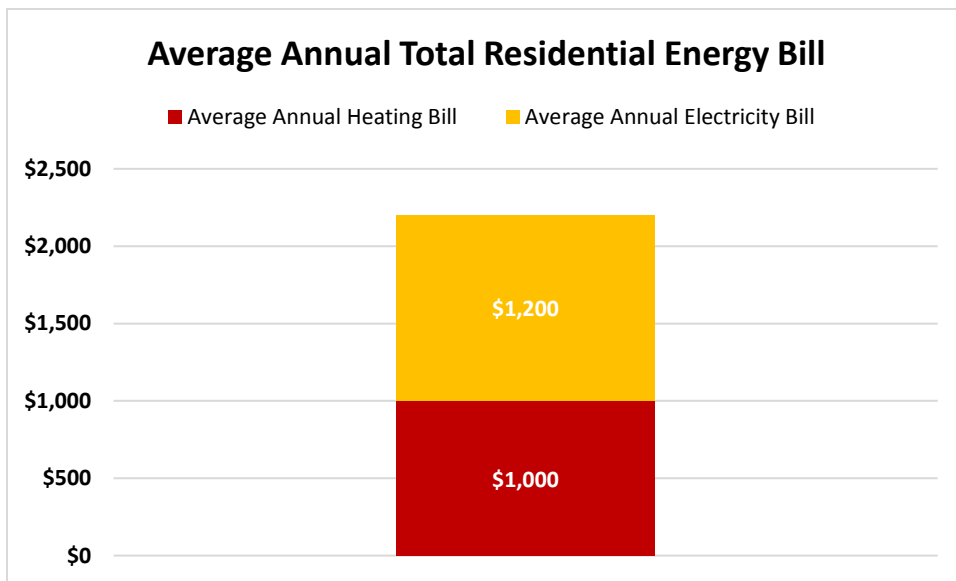
B6. Average Annual Total Residential Energy Bill

Definition: The sum of the *Average Annual Main Heating Fuel Bill* (Line B4) and the *Average Annual Electricity Bill* (Line B5).

Formula: *Average Annual Main Heating Fuel Bill* (Line B4) + *Average Annual Electricity Bill* (Line B5)

Example: *Average Annual Main Heating Fuel Bill* (Line B4) = \$1,000
Average Annual Electricity Bill (Line B5) = \$1,200

Average Annual Total Residential Energy Bill (Line B6) = \$1,000 + \$1,200 = \$2,200



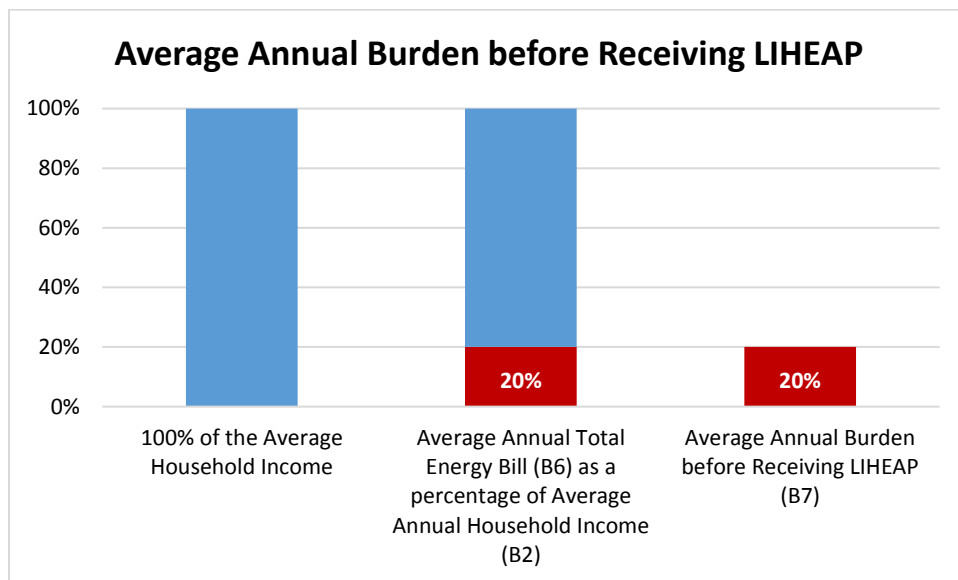
B7. Average Annual Burden before Receiving LIHEAP

Definition: The share of household income spent on energy bills, before deducting the amount of LIHEAP assistance from the energy bill.

Formula: $\frac{\text{Average Annual Total Residential Energy Bill (Line B6)}}{\text{Average Annual Household Income (Line B2)}} \times 100$

Example: Average Annual Total Residential Energy Bill (Line B6) = \$2,200
 Average Annual Household Income (Line B2) = \$11,000

$$\text{Average Annual Burden before Receiving LIHEAP (Line B7)} = \frac{\$2,200}{\$11,000} \times 100 = 20\%$$



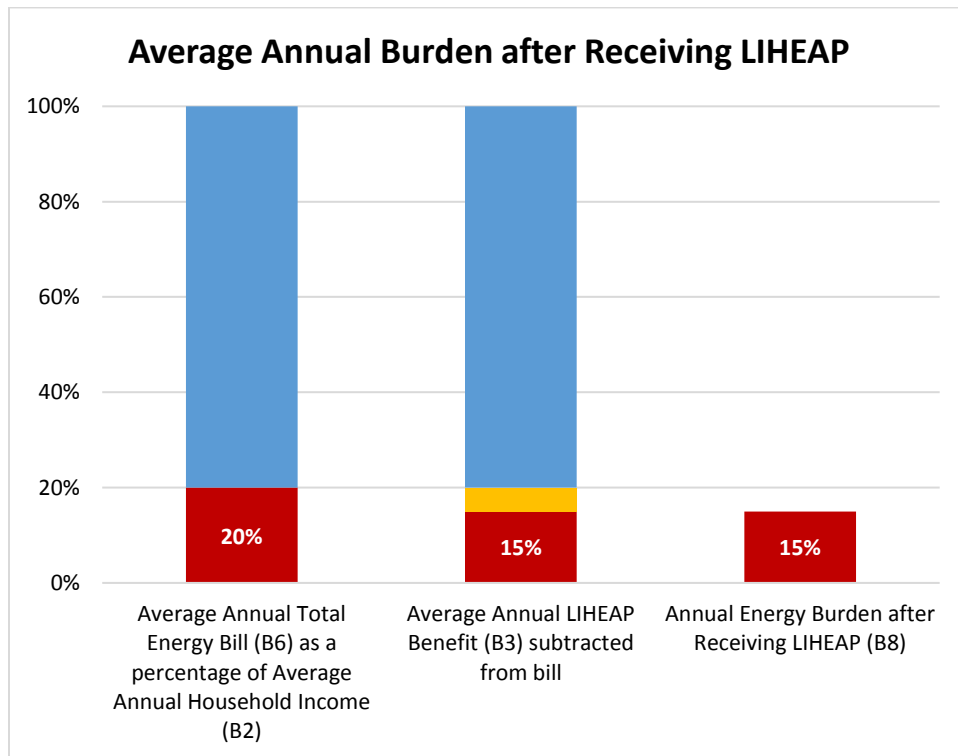
B8. Average Annual Burden after Receiving LIHEAP

Definition: The share of household income spent on energy bills, after deducting the amount of LIHEAP assistance from the energy bill.

Formula:
$$\frac{\text{Average Annual Total Residential Energy Bill (Line B6)} - \text{Average Annual LIHEAP Benefit (Line B3)}}{\text{Average Annual Household Income (Line B2)}} \times 100$$

Example: Average Annual Total Residential Energy Bill (Line B6) = \$2,200
 Average Annual LIHEAP Benefit (Line B3) = \$550
 Average Annual Household Income (Line B2) = \$11,000

$$\text{Average Annual Burden after Receiving LIHEAP (Line B8)} = \frac{\$2,200 - \$550}{\$11,000} \times 100 = 15\%$$



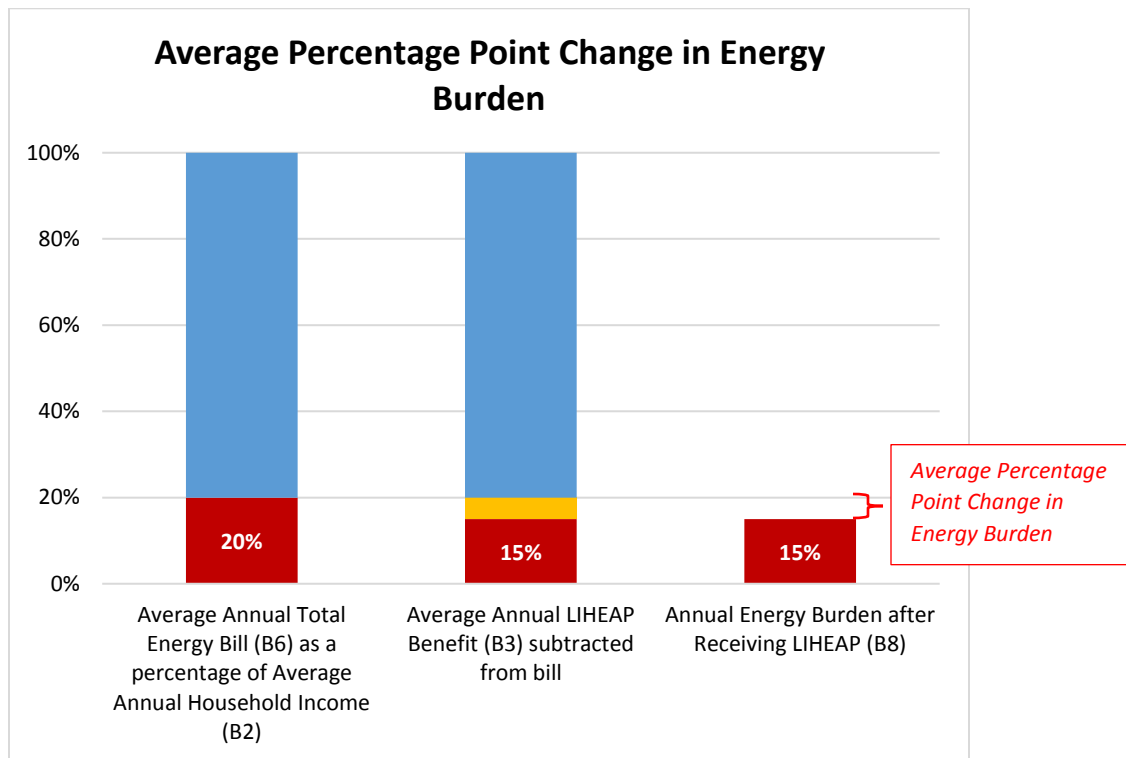
B9. Average Percentage Point Change in Energy Burden

Definition: The average percentage point reduction, due to LIHEAP assistance, in the share of household income spent on energy bills.

Formula: *Average Annual Burden before LIHEAP (Line B7) – Average Annual Burden after LIHEAP (Line B8)*

Example: *Average Annual Burden before LIHEAP (Line B7) = 20%*
Average Annual Burden after LIHEAP (Line B8) = 15%

Average Percentage Point Change in Energy Burden (Line B9) = 20% – 15% = 5%



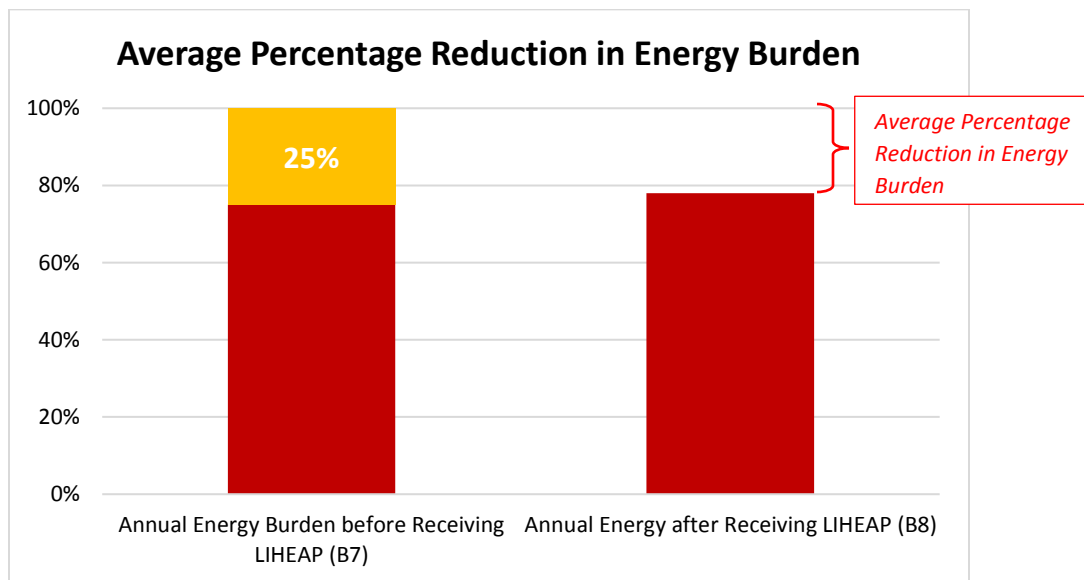
B10. Average Percentage Reduction in Energy Burden

Definition: The average percent reduction, due to LIHEAP assistance, in the share of household income spent on energy bills.

Formula:
$$\frac{\text{Average Annual Burden before LIHEAP (Line B7)} - \text{Average Annual Burden after LIHEAP (Line B8)}}{\text{Average Annual Burden before LIHEAP (Line B7)}} \times 100$$

Example: Average Annual Burden before LIHEAP (Line B7) = 20%
Average Annual Burden after LIHEAP (Line B8) = 15%

$$\text{Average Percentage Reduction in Energy Burden (Line B10)} = \frac{20\% - 15\%}{20\%} \times 100 = 25\%$$



C6. Average Annual Total Residential Energy Bill for High Burden Households

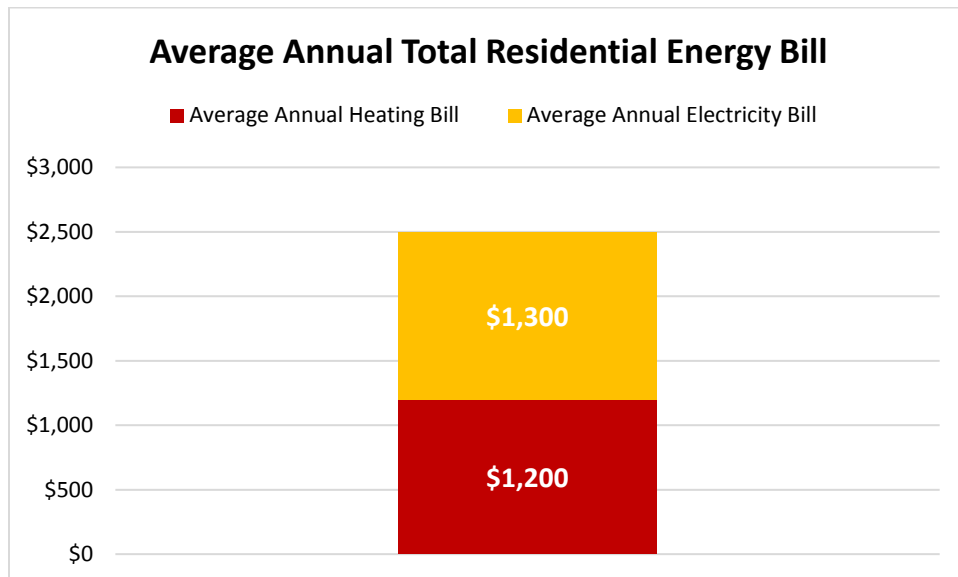
Definition: The sum of the *Average Annual Main Heating Fuel Bill for High Burden Households* (Line C4) and the *Average Annual Electricity Bill for High Burden Households* (Line C5). The formula for this field is the same as Line B6, except that this field (Line C6) is calculated for **High Burden Households**.

Formula: *Average Annual Main Heating Fuel Bill for High Burden Households* (Line C4) + *Average Annual Electricity Bill for High Burden Households* (Line C5)

Example: *Average Annual Main Heating Fuel Bill for High Burden Households* (Line C4) = \$1,200
Average Annual Electricity Bill for High Burden Households (Line C5) = \$1,300

Average Annual Total Residential Energy Bill for High Burden Households (Line C6) =

$$\$1,200 + \$1,300 = \$2,500$$



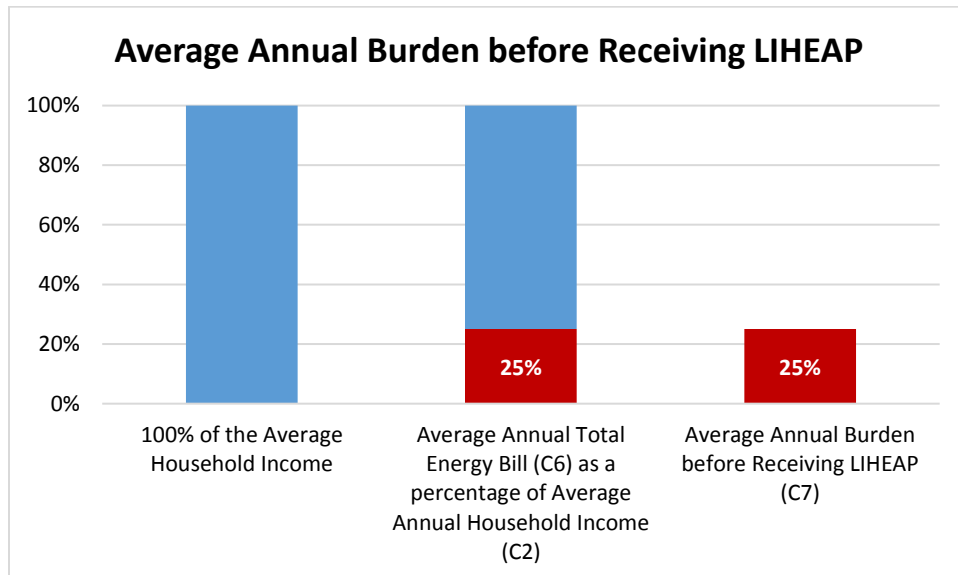
C7. Average Annual Burden before Receiving LIHEAP for High Burden Households

Definition: The share of the household income that high-burden households spent on energy bills, before deducting the amount of LIHEAP assistance from the energy bill. The formula for this field is the same as Line B7, except that this field (Line C7) is calculated for High Burden Households.

Formula:
$$\frac{\text{Average Annual Total Residential Energy Bill for High Burden Households (Line C6)}}{\text{Average Annual Household Income for High Burden Households (Line C2)}} \times 100$$

Example: Average Annual Total Residential Energy Bill for High Burden Households (Line C6) = \$2,500
 Average Annual Household Income for High Burden Households (Line C2) = \$10,000

$$\text{Average Annual Burden before Receiving LIHEAP (Line C7)} = \frac{\$2,500}{\$10,000} \times 100 = 25\%$$



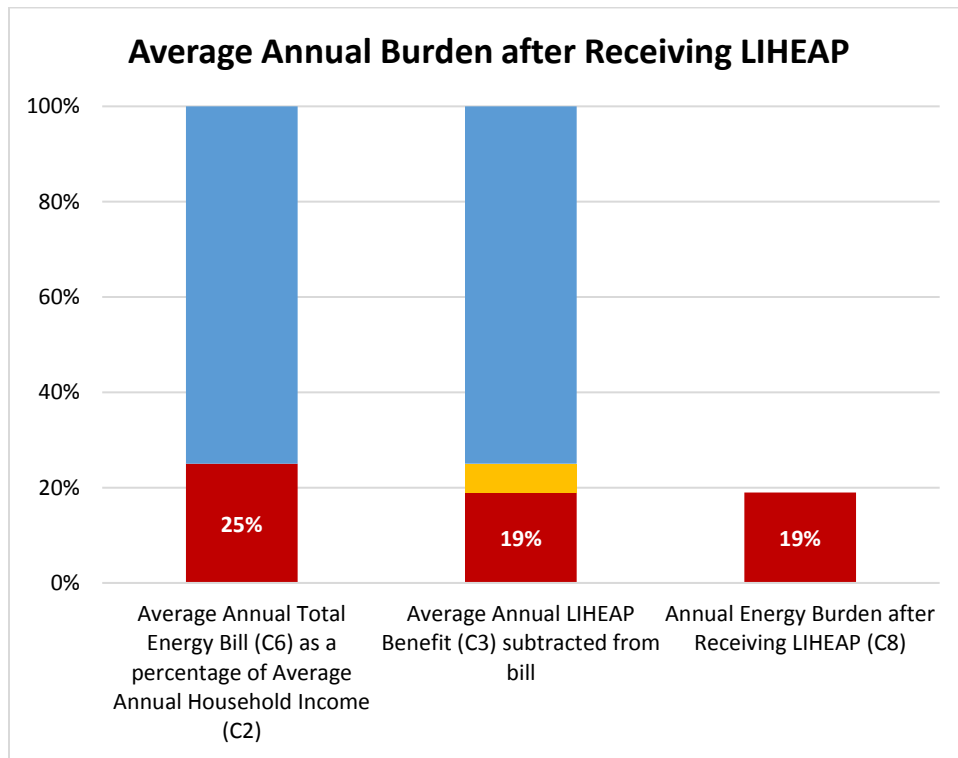
C8. Average Annual Burden after Receiving LIHEAP for High Burden Households

Definition: The share of the household income that high-burden households spent on energy bills, after deducting the amount of LIHEAP assistance from the energy bill. The formula for this field is the same as Line B8, except that this field (Line C8) is calculated for **High Burden Households**.

Formula:
$$\frac{\text{Average Total Bill for HB Households (Line C6)} - \text{Average Benefit for HB Households (Line C3)}}{\text{Average Annual Household Income for High Burden Households (Line C2)}} \times 100$$

Example: Average Annual Total Residential Energy Bill for High Burden Households (Line C6) = \$2,500
 Average Annual LIHEAP Benefit for High Burden Households (Line C3) = \$600
 Average Annual Household Income (Line C2) = \$10,000

$$\text{Average Annual Burden after Receiving LIHEAP (Line B8)} = \frac{\$2,500 - \$600}{\$10,000} \times 100 = 19\%$$



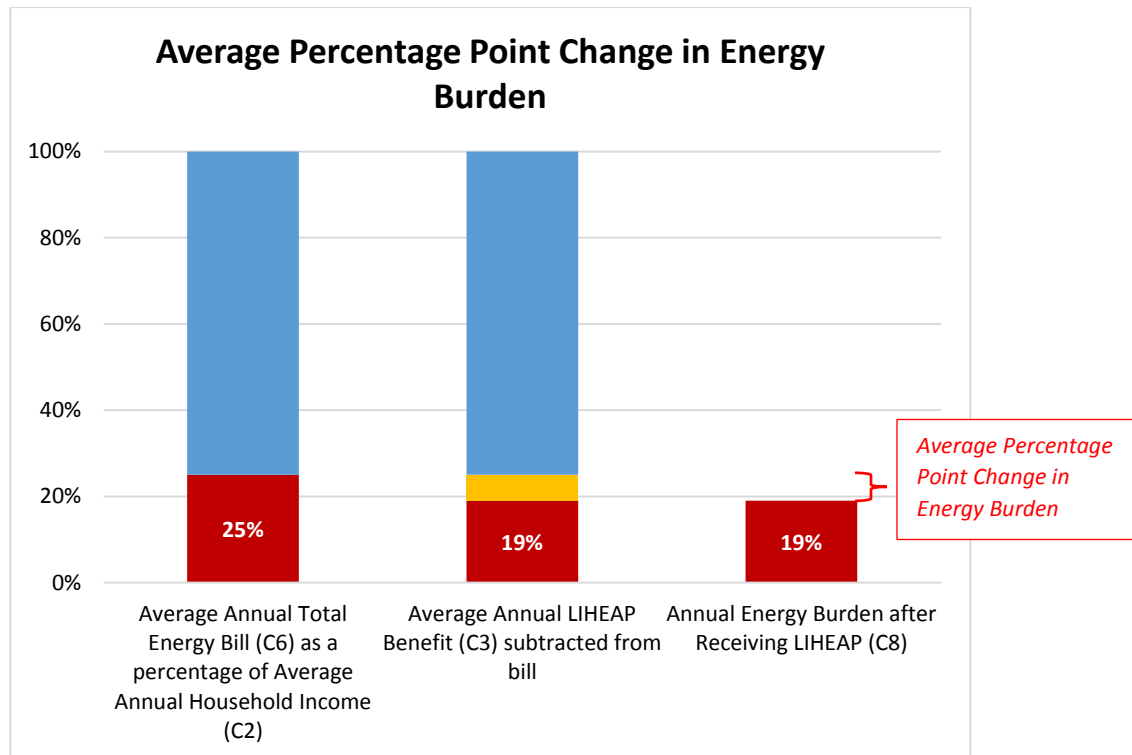
C9. Average Percentage Point Change in Energy Burden for High Burden Households

Definition: The average percentage point reduction, due to LIHEAP assistance, in the share of household income that high-burden households spent on energy bills. The formula for this field is the same as Line B9, except that this field (Line C9) is calculated for **High Burden Households**.

Formula: *Average Annual Burden before LIHEAP for High Burden Households (Line C7) - Average Annual Burden after LIHEAP for High Burden Households (Line C8)*

Example: *Average Annual Burden before LIHEAP for High Burden Households (Line C7) = 25%*
Average Annual Burden after LIHEAP for High Burden Households (Line C8) = 19%

Average Percentage Point Change in Energy Burden (Line C9) = 25% – 19% = 6%



C10. Average Percentage Reduction in Energy Burden for High Burden Households

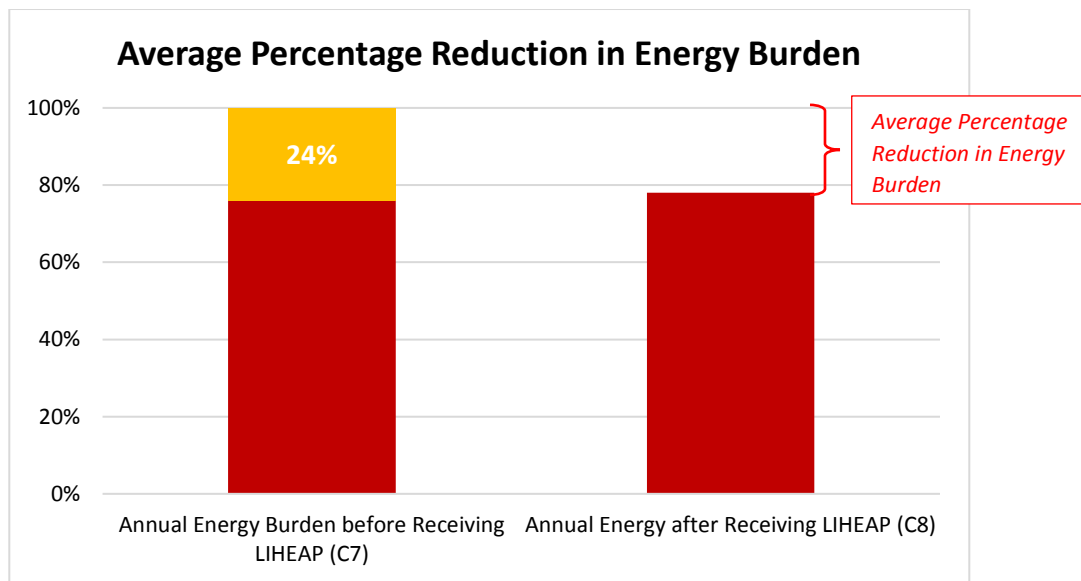
Definition: The average percent reduction, due to LIHEAP assistance, in the share of household income that high-burden households spent on energy bills. The formula for this field is the same as Line B10, except that this field (Line C10) is calculated for **High Burden Households**.

Formula:
$$\frac{\text{Average Annual Burden before LIHEAP (Line C7)} - \text{Average Annual Burden after LIHEAP (Line C8)}}{\text{Average Annual Burden before LIHEAP (Line C7)}} \times 100$$

Example: Average Annual Burden before LIHEAP for High Burden Households (Line C7) = 25%
 Average Annual Burden after LIHEAP for High Burden Households (Line C8) = 19%

Average Percentage Reduction in Energy Burden for High Burden Households (Line C10) =

$$\frac{25\% - 19\%}{25\%} \times 100 = 24\%$$



D. Benefit Targeting Index for High Burden Households

Definition: The Benefit Targeting Index (BTI) measures the size of the average LIHEAP benefit awarded to high-burden households, as compared to the size of the average benefit awarded to all households.

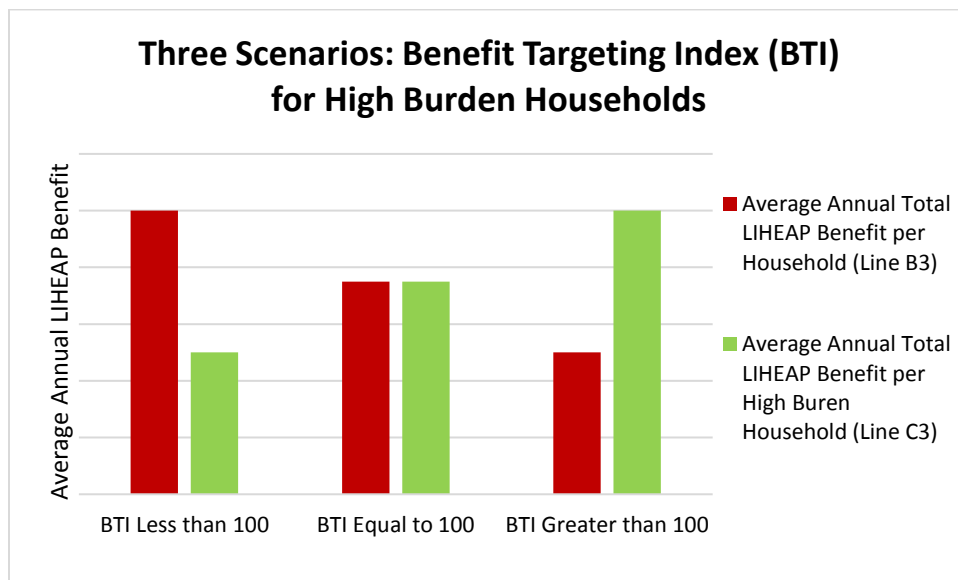
- A Benefit Targeting Index score less than 100 means that high-burden households receive less average benefits than the average LIHEAP recipient household.
- A Benefit Targeting Index score greater than 100 means that high-burden households receive higher average benefits than the average LIHEAP recipient household.

Formula:
$$\frac{\text{Average Annual Total LIHEAP Benefit per High Burden Household (Line C3)}}{\text{Average Annual Total LIHEAP Benefit (Line B3)}} \times 100$$

Example: Average Annual Total LIHEAP Benefit per High Burden Households (Line C3) = \$600
 Average Annual Total LIHEAP Benefit for All Households (Line B3) = \$550

$$\text{Benefit Targeting Index for High Burden Households (Line D)} = \frac{\$600}{\$550} \times 100 = 109$$

In this case, the Benefit Targeting Index is telling us that on average, high-burden households receive higher LIHEAP benefits than the average LIHEAP recipient household (9 percent higher benefits = 109 – 100 = 9 percent).



Our example fits into the third scenario, as the amount in Line C3 was greater than the amount in Line B3.

E. Burden Reduction Targeting Index for High Burden Households

Definition: The Burden Reduction Targeting Index (BRTI) measures whether high-burden households have a larger share of their energy bill paid with LIHEAP than the average LIHEAP recipient household.

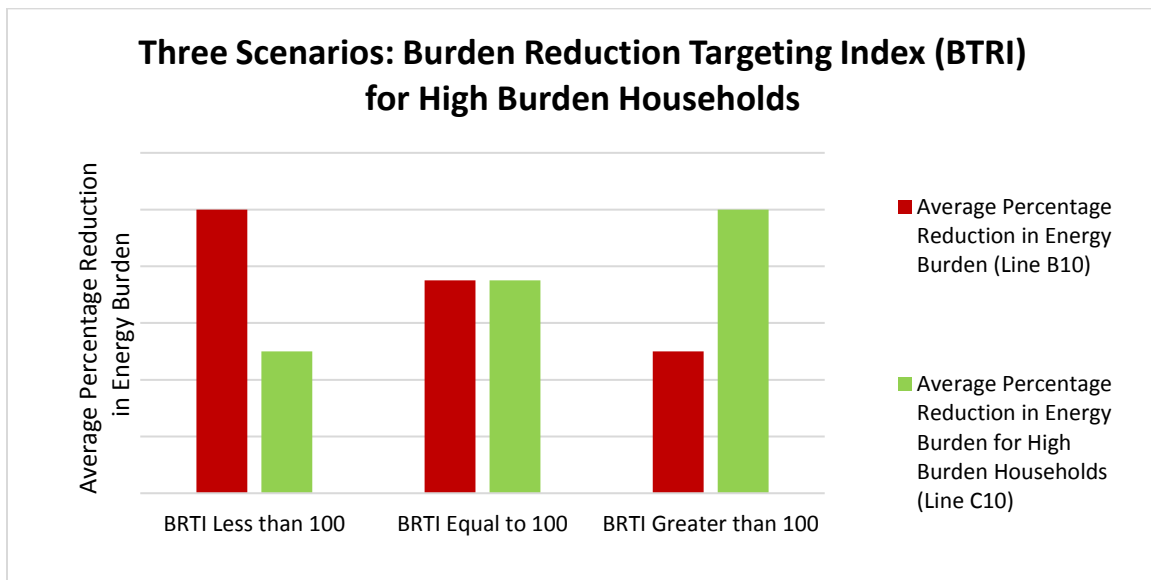
- A Burden Reduction Targeting Index score less than 100 means that high-burden households have a smaller share of their bill paid than the average LIHEAP recipient household.
- A Burden Reduction Targeting Index score greater than 100 means that high-burden households have a larger share of their bill paid than the average LIHEAP recipient household.

Formula:
$$\frac{\text{Average Percentage Reduction in Energy Burden for High Burden Houesholds (Line C10)}}{\text{Average Percentage Reduction in Energy Burden (Line B10)}} \times 100$$

Example: Average Percentage Reduction in Energy Burden for High-Burden Households (Line C10) = 24%
Average Percentage Reduction in Energy Burden for All Households (Line B10) = 25%

$$\text{Burden Reduction Targeting Index for High Burden Households (Line E)} = \frac{24\%}{25\%} \times 100 = 96$$

In this example, the Burden Reduction Targeting Index score is telling us that on average, high-burden households have a smaller of their energy bill paid that the average LIHEAP recipient household (4 percent more of the bill is paid = 100 – 96 = 4 percent).



Our example fits into the first scenario, as the amount in Line C10 is less than the amount in Line B10.