LIHEAP Data Warehouse Tutorial

OVERVIEW & CONTENTS

What is the LIHEAP Data Warehouse?

The LIHEAP Data Warehouse allows users to access historic national and state-level LIHEAP data to build instant reports, tables, and charts. The LIHEAP Data Warehouse is available on the LIHEAP Performance Management Website and is intended to help program administrators, policymakers, and the public obtain reports and information on the LIHEAP program using annual data from FY 2001 to the most recent publicly available fiscal year (currently FY 2014).

What information can I find in this tutorial?

This tutorial contains four main sections with summary information and step-by-step instructions to aid you in using the LIHEAP Data Warehouse. These sections are:

Section 1. **An Overview of the LIHEAP Data Warehouse**: Background and Purpose
Section 2. **Creating Step-by-Step Guided Reports**: How to Use the Guided Search tool
Section 3. **Designing and Creating Custom Reports**: How to Use the Advanced Data & Analytics tool
Section 4. **Using and Saving Your Reports**: How to Modify, Save, and Print Your Reports

In addition, the last page contains a list of links to additional supplements to this tutorial. These supplements contain more in-depth information on the data and how to use tools in the LIHEAP Data Warehouse.

How should I use this tutorial?

This tutorial is intended to provide an overview of the LIHEAP Data Warehouse and specific step-by-step instructions for different tools available in it. This document is intended for new users and for more experienced users that are interested in specific capabilities and tools available in the LIHEAP Data Warehouse.

The tutorial includes visual images of the LIHEAP Data Warehouse to demonstrate specific features and steps that are explained in accompanying text. Within an image, a red box will indicate where a user should click to follow each step that is described. While the images in this document are intended to be helpful for reference, it is recommended that you use this tutorial while you have access to the LIHEAP Data Warehouse so that you can directly replicate the examples and the steps that are described and shown.
Section I – An Overview of the LIHEAP Data Warehouse

Background and Purpose

Background

The LIHEAP Data Warehouse was developed to provide LIHEAP grantees, program administrators, policymakers, and the public with access to historic LIHEAP data and with web-based tools to create and save custom reports and charts using that data. The LIHEAP Data Warehouse was designed with consultation and feedback from various types of users, and it is regularly updated as new information is published and available.

What Options are Available in the LIHEAP Data Warehouse?

The LIHEAP Data Warehouse includes four different options to allow users to access data, including:

1. The Grantee Profiles tool to view 1-page snapshot profiles of each state grantee’s LIHEAP program using the most recent available data,
2. The Guided Search tool with step-by-step selection options to help users obtain data,
3. The Advanced Data & Analytics tool, which allows the user to create customized reports, and
4. The Reports by Data Source tool, which builds standard reports using specific data sources.
What can I use the LIHEAP Data Warehouse for?

You can use the LIHEAP Data Warehouse to access summary LIHEAP information about each state, to access standard charts and tables using LIHEAP program data, and to create customize tables and charts based on the criteria you select. You can examine data for individual states, compare data for multiple states, or examine national program statistics for individual years or over time. The tool also allows you to download and print these charts and to export the data to perform your own analyses.

What data is available?

The LIHEAP Data Warehouse contains data reported annually by LIHEAP grantees and developed annually by the Office of Community Services. The data sources include the annual LIHEAP Household Report, the annual LIHEAP Performance Measures Data Form - Grantee Survey, and survey data from the U.S. Census Bureau. Data are available for individual states and the District of Columbia, and aggregated national level data are also available.

The LIHEAP Data Warehouse includes data from FY 2001 to the most recent publicly available fiscal year (currently FY 2014).

The LIHEAP Data Warehouse includes the following different types of LIHEAP data:
- The amount of LIHEAP funds that come from each source of funding
- The amount of funds expended in each program component
- The number, income level, and vulnerability characteristics of income-eligible households
- The number, income level, and vulnerability characteristics of LIHEAP recipient households
- The average benefits by type of LIHEAP assistance
- The percent of income-eligible households assisted by LIHEAP

How do I access the LIHEAP Data Warehouse?

1. Visit https://liheappm.acf.hhs.gov/
2. Registered users (including LIHEAP grantees) can log in prior to using the LIHEAP Data Warehouse by clicking on “Click to Login Here”. The LIHEAP Data Warehouse is publicly available and can be accessed without registering or logging in.
3. Access the LIHEAP Data Warehouse by clicking on the “Data Warehouse” tab of the website’s menu bar.
Section II - Creating Step-by-Step Guided Reports

How to Use the Guided Search Tool

Step 1: In the Data Warehouse menu, click on Guided Search on the drop down menu.

Step 2: Your selection will expand to show a button that says “Access the Guided Search”. Click on it.
Step 3: Once you access the Guided Search, you will be presented with a menu that asks you to choose which level of data that you want to access:

- **If you want to see data for any one state**
  - **Click on the “Access Reports” button under “Single State Program Reports”**

- **If you want to compare data from two or more States**
  - **Click on the “Access Reports” button under “State Comparison Reports”**

- **If you want to see national LIHEAP data.**
  - **Click on the “Access Reports” button under “National LIHEAP Program Reports”**
Step 4: After selecting the level of data that you want to work with, you will be shown a drop-down menu. Select the question or statement that most relates to the kind of data that you are looking for.

Step 5: Your selection will expand and show all of the ready-made reports ready to be displayed. The image shown next to the title for each report indicates to type of chart that the report produces. Select the report that you want to see.
**Step 6:** If you chose to access State-level data, you will be prompted to choose which state(s) you want the data to be displayed for. **If that is the case, select the state(s) from the drop-down menu and click “Next”**.

**Step 7:** Move the selection squares in the timeline to choose the fiscal year or years for which you want information to be reported. Some reports allow you to pick a period of years, while others allow you to select only one year. After you have made your selection, click on “View Report”.

*Data for some years are not publicly available at this time and are not displayed.*
Step 8: Look at your report. The results will be displayed on the screen and will look like the image shown below. In this screen, you can download and save the results of your search. The steps to do so are outlined on Section IV of this tutorial.

The pie chart below shows a report on the uses of LIHEAP funds for FY2014 for the nation. The Guided Search charts contain a title based on the criteria selected, a legend indicating the data elements, and important notes on the sources of data and data nuances.
The results presented in the chart will also appear in a detailed table underneath the chart, which can be exported to multiple formats.

<table>
<thead>
<tr>
<th>Year</th>
<th>Grantee</th>
<th>Total Benefits - Heating</th>
<th>Total Benefits - Cooling</th>
<th>Total Benefits - All Crisis</th>
<th>Total Benefits - Weatherization</th>
<th>Funds Used for Carryover - Total</th>
<th>Funds Used for Administration - Total</th>
<th>Other Uses of Funds - Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>All grantees (summed)</td>
<td>$1,726,776,525</td>
<td>$225,994,489</td>
<td>$727,279,305</td>
<td>$306,902,004</td>
<td>$140,735,916</td>
<td>$309,009,669</td>
<td>$41,166,230</td>
</tr>
</tbody>
</table>

**Tip:** You can toggle each element of the chart on-and-off to hide or display it. To do so, click on the element name or on its key on the chart legend. For charts that show percentages of wholes (such as pie charts), the numbers in the chart will also automatically adjust to show each element as a percentage of the elements that remain toggled on.

The image below shows how the chart changes when three fields are toggled off and only fields related to LIHEAP benefits are retained.
SECTION III – Designing and Creating Custom Reports

How to Use the Advanced Data & Analytics Tool

Overview and Step-by-Step Guidance

Step 1: In the Data Warehouse menu, click on Advanced Data & Analytics on the menu.

Step 2: Your selection will expand to show a button that says “Build Reports”. Click on it.
**Step 3:** Once you access the Advanced Data & Analytics, you will be presented with a menu that gives you options to customize your report. Click on any one of the categories in the first box to display the options in that category.

**Step 4:** Click on any one of the subcategories that appeared on the second box in order to display the data fields in that subcategory. These will appear in the third box. Select the fields that you want to include in your report by checking the boxes next to their names.
Step 5: Select the states that you want included in your report in the second box of the second row. Initially, “All grantees” will be automatically selected. To select or deselect a state, click the state or its accompanying check box. To deselect all states, click “Clear all”. To select all states, click “Select all” or click “All grantees”.

Step 6: Select the fiscal years to be included in your report in the third box of the second row. Initially, all years will be automatically selected. To select or deselect a year, click the year. To deselect all years, click “Clear all”. To select all years, click “Select all”.

Step 7: In the box beneath the data selection menu, you can select the chart type to have displayed in your report. Select the desired available chart type by clicking on the button next to its name. The chart types that will be available vary depending on the type of data you selected for your report.
Step 8: Finally, before creating your report, you can add a title for your chart, a subtitle, or descriptive text by filling in the blank text boxes to the right of the box from step 7.

Step 9: Click on “Create Your Data Report” to view your report.
**Step 10:** Look at your report. The results will be displayed on the under the menus and will look like the image shown below. Just as in the Guided Search, you can toggle each element of the chart on-and-off to hide or display it. To do so, click on the element name or on its key on the chart legend.

![Graph of Households with an Elderly Member Receiving Heating Assistance - Nationally](image)

This is a graph of the number of households with an elderly member that received heating assistance each year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Grantee</th>
<th>Assisted Households - Member 60 or Over - Heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>All grantees (summed)</td>
<td>2,072,154</td>
</tr>
<tr>
<td>2012</td>
<td>All grantees (summed)</td>
<td>1,945,254</td>
</tr>
<tr>
<td>2013</td>
<td>All grantees (summed)</td>
<td>1,955,002</td>
</tr>
<tr>
<td>2014</td>
<td>All grantees (summed)</td>
<td>1,871,217</td>
</tr>
</tbody>
</table>
Example #1 – Bar Chart: *Households with an Elderly Member Receiving Heating Assistance*

**Step 1:** Click on “LIHEAP Funding” in the first box to display the options in that category.

![LIHEAP Funding selection](image)

**Step 2:** Click on “Heating Assistance” on the second box in order to display the data fields in that subcategory. These will appear in the third box. Select “Assisted Households - Member 60 or Over - Heating”.

![Heating Assistance selection](image)
**Step 3:** Check the box next to “All Grantees“ to display nationwide results.

**Step 4:** Check the boxes next to the years between FY 2011 and FY 2014 to include them in your chart.

**Step 5:** In the box beneath the data selection menu, Select “bar” to display a bar chart.
Step 6: Finally, before creating your report, you can add a title for your chart, a subtitle, or descriptive text by filling in the blank text boxes to the right of the box from step 7.

![Image of data filter and customize options]

Step 7: Click on “Create Your Data Report” to view your report.

![Image of data report with selected data and title]
**Step 8:** Look at your report. The results will be displayed on the under the menus and will look like the image shown below.

![Graph](image.png)

**Print report**

This is a graph of the number of households with an elderly member that received heating assistance each year.

<table>
<thead>
<tr>
<th>Year</th>
<th>Grantee</th>
<th>Assisted Households - Member 60 or Over - Heating</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>All grantees (summed)</td>
<td>2,072,154</td>
</tr>
<tr>
<td>2012</td>
<td>All grantees (summed)</td>
<td>1,945,254</td>
</tr>
<tr>
<td>2013</td>
<td>All grantees (summed)</td>
<td>1,955,002</td>
</tr>
<tr>
<td>2014</td>
<td>All grantees (summed)</td>
<td>1,871,217</td>
</tr>
</tbody>
</table>
Example #2 – Bar Chart with Two Data Fields: *Federally Income-Eligible Households and Households Served by Heating Assistance*

**Step 1:** Click on “Percent Served by LIHEAP” to display the options in that category.

**Step 2:** In the second box, click “Federal Guidelines” to display the data fields in that subcategory. These will appear in the third box. Select “Federally Income-Eligible Households - Total”.

[Diagram of the LIHEAP data selection process]

*Data for years marked with an asterisk are not publicly available at this time and are not displayed.*
Step 3: Click on “LIHEAP Recipients” to display the options in that category.

Step 4: Click “Heating Assistance” to display the data fields in that subcategory. These will appear in the third box. Select “Assisted Households - Total - Heating”.
Step 5: Select All Grantees by checking the boxes next to their name in the second box of the second row. This will display aggregate national results.

Step 6: Select 2010-2014 as the fiscal years for which data will be included in your report by checking the boxes next to them.

Step 7: Select the “Multiple Bars” option chart type by clicking on the button next to its name.
Step 9: Finally, before creating your report, add a title and a subtitle for your chart as shown by filling in the blank text boxes to the right of the box from step 7.

![Screen capture of data report configuration](image1)

Step 10: Click on “Create Your Data Report” to view your report.

![Screen capture of data report configuration](image2)
**Step 11:** Look at your report. The results will be displayed on the under the menus and will look like the image shown below.

![](image1)

**Tip:** The LIHEAP Data Warehouse allows you to toggle switch each element on-and-off to hide or display it. To do so, click on the element name or on its key on the chart legend. The image below shows the previous chart with ‘Assisted Households - Total - Heating’ toggled-off.

![](image2)
Example #3 – Combination Chart with Two Data Fields: Examining Households Served by Heating Assistance and Funding for Heating Assistance

Step 1: Click on “LIHEAP Recipients” to display the options in that category.

![Step 1 Diagram](image1.png)

Step 2: Click “Heating Assistance” to display the data fields in that subcategory. These will appear in the third box. Select “Assisted Households - Total - Heating”.

![Step 2 Diagram](image2.png)
**Step 3**: Click on “LIHEAP Funding” to display the options in that category.

**Step 4**: Click on “Uses of Fund” to display the data fields in that subcategory. These will appear in the third box. Select “Total Benefits - Heating”.
Step 5: Select All Grantees by checking the boxes next to their name in the second box of the second row. This will display aggregate national results.

Step 6: Select the 2010-2014 as the fiscal years for which data will be included in your report by checking the boxes next to them.

Step 7: Select the “Combo” option chart type by clicking on the button next to its name.
**Step 8:** Finally, before creating your report, add a title and a subtitle for your chart as shown by filling in the blank text boxes to the right of the box from step 7.

**Step 9:** Click on “Create Your Data Report” to view your report.
**Step 10:** Look at your report. The results will be displayed on the under the menus and will look like the image shown below.

![Graph showing Heating Assistance - Nationwide from 2010 to 2014](image1.png)

**Tip:** The LIHEAP Data Warehouse allows you to toggle switch each element on-and-off to hide or display it. To do so, click on the element name or on its key on the chart legend. The image below shows the previous chart with 'Total Benefits - Heating' toggled-off.

![Graph showing Heating Assistance - Nationwide from 2010 to 2014](image2.png)
The image below shows an example of a LIHEAP Data Warehouse Report.

As shown above, reports contain two elements that display the same information: a chart and a table.
To Print or Save the Chart into an Image File

Step 1: Click on the Button on the top right corner of the chart.

Step 2: A menu will be displayed. Click on the option that you prefer.
To Save the Table into an Excel-Readable File

**Step 1:** Click on the button beneath the table that says “Export table data into CSV/Excel file”

<table>
<thead>
<tr>
<th>Year</th>
<th>Grantee</th>
<th>Total Program Funding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009</td>
<td>All grantees (summed)</td>
<td>$5,202,576,521</td>
</tr>
<tr>
<td>2010</td>
<td>All grantees (summed)</td>
<td>$5,311,456,521</td>
</tr>
<tr>
<td>2011</td>
<td>All grantees (summed)</td>
<td>$4,969,470,502</td>
</tr>
<tr>
<td>2012</td>
<td>All grantees (summed)</td>
<td>$3,731,297,841</td>
</tr>
<tr>
<td>2013</td>
<td>All grantees (summed)</td>
<td>$3,402,926,553</td>
</tr>
<tr>
<td>2014</td>
<td>All grantees (summed)</td>
<td>$3,900,202,662</td>
</tr>
</tbody>
</table>

**Additional LIHEAP Data Warehouse Resources & Help**

<table>
<thead>
<tr>
<th>LIHEAP Performance Management Website</th>
<th>Background on LIHEAP Data Collection and Reporting</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIHEAP Glossary</td>
<td>Data Warehouse User Supplements</td>
</tr>
<tr>
<td>Data Warehouse Help Page</td>
<td>Methodology and Sources Used to Develop LIHEAP Eligible Population Estimates</td>
</tr>
</tbody>
</table>