



Maryland Low-Income Market Characterization Report

2022 Report Update

— **OPC** —
OFFICE OF PEOPLE'S COUNSEL
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Report prepared for the Maryland Office of People’s Counsel by Applied Public Policy Research Institute for Study and Evaluation (APPRISE), a nonprofit research institute dedicated to collecting and analyzing data and information to assess and improve public programs.

1. INTRODUCTION

The Maryland Office of People’s Counsel (OPC) is an independent state agency that advocates for the interests of residential utility customers. OPC participates in Public Service Commission and federal agency proceedings, court cases, and legislative bill hearings. OPC also provides information and assistance to customers and the public.

In 2018, OPC published the [Maryland Low-Income Market Characterization Study](#). The purpose of the study is to furnish data that can be used to understand the energy affordability issues faced by Maryland’s low-income population and to inform the design of existing and future programs. By providing baseline data to OPC, state agencies, utilities, and other interested parties, the study informs the discussion of how to best meet the energy needs of low-income households.

This 2022 Report Update makes current one key analysis conducted in 2018—the energy burden for low-income households by county areas. It focuses primarily on the energy burden faced by Maryland’s low-income households. Energy burden refers to the percentage of a household’s gross income that is spent on energy costs.¹ High energy burdens disproportionately affect low-income households and divert resources from other essential household needs.² For purposes of this report, we characterize low-income households as those earning 200% or less of the Federal Poverty Level (FPL).

1.1. Research Objectives

The research objectives for this update to the Maryland Low-Income Market Characterization Study were as follows.

1. Update the county area energy burden analysis for Maryland Energy Assistance Program (MEAP) and Electric Universal Service Program (EUSP) recipients. To be eligible, recipients cannot have income above 175 percent of the Federal Poverty Level.
2. Analyze how energy burden differs for households between 175 and 200 percent of the FPL.
3. Analyze energy burden for households up to 200 percent of the FPL.

1.2. Data Sources

The study used two types of information to characterize the low-income market and the programs that serve them: public use data sets from surveys conducted by the U.S. Bureau of the Census, and summary program data furnished by the Maryland Department of Human Services, Office of Home Energy Programs (OHEP). The specific data used are listed below.

¹ U.S. Department of Energy, *Low-Income Community Energy Solutions*, Office of Energy Efficiency & Renewable Energy, <https://www.energy.gov/eere/slsc/low-income-community-energy-solutions#:~:text=Energy%20burden%20is%20defined%20as,which%20is%20estimated%20at%203%25>. (last visited August 15, 2022).

² Ariel Drehobl, Lauren Ross & Roxana Ayala, *How High are Household Energy Burdens?*, American Council for an Energy-Efficient Economy, vi (September 2020) <https://www.aceee.org/sites/default/files/pdfs/u2006.pdf>

- The 2016-2020 American Community Survey (ACS)³.
- The Electric Universal Service Program (EUSP) Annual Report to the Maryland Public Service Commission for Fiscal Year 2020⁴.
- MEAP Annual Intake and Approved Applications by County FY2020 from the Maryland Department of Human Services, Office of Home Energy Programs.

OHEP program benefit data were used to assess the impact of the programs on net energy burden.

The remainder of this report is divided into two sections:

- Energy Burden
- Findings and Recommendations

2. ENERGY BURDEN

This section provides an updated and expanded analysis of one table presented in the 2018 Market Characterization Report.

While this study does not advocate for a specific energy affordability target, OPC has advocated for adoption of an energy affordability standard proposed by Fisher, Sheehan, and Colton of six percent based on the idea that a household can afford to spend 30 percent of income on shelter costs, and that 20 percent of shelter costs are used for energy bills. This is consistent with the standard used in OHEP's proposed Supplemental Targeted Energy Program (STEP) and bill assistance programs in other states such as New Jersey and New York. Using this standard, the data suggest that on average, current OHEP funding is insufficient to bring households to an affordable energy burden.

Table 2.1 displays the gross energy burden for all low-income households in Maryland, defined by this study as households at or below 200 percent of the FPL. These are the households that are income eligible for DHCD's single-family weatherization program. The table shows that the two regions which constitute the Eastern Shore have the highest average annual energy bill with a mean of \$3,096. These two regions also have the highest gross energy burden, alongside Baltimore City, at 15 percent. The average statewide gross energy burden is 12 percent for all low-income households shown in this table, compared to 14 percent for OHEP-eligible households (shown in Table 2.2).

³ Files available here, at the "csv_pmd.zip" and "csv_hmd.zip" links: <https://www2.census.gov/programs-surveys/acs/data/pums/2020/5-Year/>

⁴ See Appendix A, Attachment A here: <https://www.psc.state.md.us/wp-content/uploads/2020-EUSP-Annual-Report.pdf>

Table 2.1. 2020 Gross Energy Burden by County Area, Households up to 200 Percent of the Federal Poverty Level

County Areas	Average Annual Energy Bill	Average Annual Income	Average Gross Energy Burden
Allegany & Garrett	\$ 2,456	\$ 20,366	12%
Anne Arundel	\$ 2,687	\$ 21,543	12%
Baltimore City	\$ 2,710	\$ 17,768	15%
Baltimore County	\$ 2,558	\$ 20,900	12%
Carroll	\$ 2,642	\$ 21,980	12%
Cecil	\$ 2,907	\$ 23,142	13%
Charles	\$ 2,938	\$ 22,612	13%
Frederick	\$ 2,293	\$ 22,309	10%
Harford	\$ 2,547	\$ 20,118	13%
Howard	\$ 2,417	\$ 20,869	12%
Montgomery	\$ 2,530	\$ 21,749	12%
Prince George's	\$ 2,838	\$ 22,547	13%
Queen Anne's, Talbot, Caroline, Dorchester, & Kent	\$ 3,096	\$ 21,221	15%
St. Mary's & Calvert	\$ 2,744	\$ 23,028	12%
Washington	\$ 2,155	\$ 20,783	10%
Wicomico, Worcester, & Somerset	\$ 3,119	\$ 21,351	15%
State Total	\$ 2,647	\$ 21,218	12%

Source: ACS (2016 – 2020) / FY 2020 OHEP Data File

Table 2.2 analyzes the impact of MEAP and EUSP benefits on home energy burden by county area. This table includes households up to 175 percent of the Federal Poverty Level, the households that are eligible for OHEP assistance.

Statewide, income-eligible households pay an average of 14 percent of their income toward home energy costs prior to receipt of OHEP. When accounting for average combined MEAP and EUSP benefits in each county, net energy burden is reduced to an average of nine percent statewide. Energy burden is highest in Baltimore City (11 percent net burden), primarily due to low average income. Energy burden is next highest in the two regions that constitute the Eastern Shore⁵ (ten percent net burden).

⁵ The two regions that constitute the Eastern Shore are the county area containing Queen Anne's County, as well as the county area containing Wicomico County.

Table 2.2. 2020 Gross and Net Energy Burden by County Area, OHEP Recipients Receiving MEAP and EUSP Benefits, Households up to 175 Percent of the Federal Poverty Level

County Areas	Average Annual Energy Bill	Average Annual Income	Average Gross Energy Burden	Average Combined MEAP and EUSP Benefit	Average Net Energy Burden
Allegany & Garrett	\$2,416	\$17,972	13%	\$1,216	7%
Anne Arundel	\$2,670	\$18,657	14%	\$1,067	9%
Baltimore City	\$2,673	\$15,569	17%	\$989	11%
Baltimore County	\$2,574	\$17,829	14%	\$941	9%
Carroll	\$2,603	\$17,708	15%	\$1,046	9%
Cecil	\$2,848	\$19,729	14%	\$1,260	8%
Charles	\$2,999	\$19,119	16%	\$1,299	9%
Frederick	\$2,261	\$19,032	12%	\$925	7%
Harford	\$2,543	\$17,186	15%	\$1,114	8%
Howard	\$2,400	\$18,690	13%	\$898	8%
Montgomery	\$2,527	\$18,810	13%	\$785	9%
Prince George's	\$2,801	\$19,175	15%	\$1,071	9%
Queen Anne's, Talbot, Caroline, Dorchester, & Kent	\$3,060	\$18,899	16%	\$1,250	10%
St. Mary's & Calvert	\$2,814	\$19,921	14%	\$1,406	7%
Washington	\$2,189	\$18,439	12%	\$958	7%
Wicomico, Worcester, & Somerset	\$3,043	\$18,326	17%	\$1,285	10%
State Total	\$2,633	\$18,285	14%	\$1,063	9%

Source: ACS (2016 – 2020) / FY 2020 OHEP Data Files

Table 2.3 displays the gross energy burden for households between 176 and 200 percent of the FPL. These households are defined as low-income but do not qualify for OHEP benefits. The average statewide gross energy burden for these households is seven percent, compared to 14 percent for OHEP-eligible households. The Mid/Upper Shore area⁶ has the highest gross energy burden at ten percent, while Washington and St. Mary's & Calvert counties have the lowest at six percent.

Table 2.3. 2020 Gross Energy Burden by County Area, Households from 176 Percent to 200 Percent of the Federal Poverty Level

County Areas	Average Annual Energy Bill	Average Annual Income	Average Gross Energy Burden
Allegany & Garrett	\$ 2,663	\$ 33,920	8%
Anne Arundel	\$ 2,780	\$ 37,398	7%
Baltimore City	\$ 2,993	\$ 35,543	8%
Baltimore County	\$ 2,476	\$ 34,506	7%
Carroll	\$ 2,764	\$ 35,746	8%
Cecil	\$ 3,142	\$ 37,011	8%
Charles	\$ 2,701	\$ 37,669	7%
Frederick	\$ 2,427	\$ 35,862	7%
Harford	\$ 2,562	\$ 35,174	7%
Howard	\$ 2,508	\$ 33,751	7%
Montgomery	\$ 2,546	\$ 37,414	7%
Prince George's	\$ 3,023	\$ 39,603	8%
Queen Anne's, Talbot, Caroline, Dorchester, & Kent	\$ 3,280	\$ 32,901	10%
St. Mary's & Calvert	\$ 2,409	\$ 39,315	6%
Washington	\$ 1,985	\$ 33,492	6%
Wicomico, Worcester, & Somerset	\$ 3,462	\$ 35,958	10%
State Total	\$ 2,725	\$ 36,355	7%

Source: ACS (2016 – 2020) / FY 2020 OHEP Data File

⁶ Due to limitations in ACS data, Queen Anne's, Talbot, Caroline, Dorchester, and Kent counties are combined into a single county area of analysis. This area is referred to as the "Mid/Upper Shore area" in the present analysis.

3. FINDINGS AND RECOMMENDATIONS

This report used ACS data from 2016-2020 and OHEP benefit data from FY2020 to compute energy burden statistics for low-income households across Maryland. This analysis compared energy burden statistics at the county level for three groups: households eligible for OHEP, all low-income households, and low-income households not eligible for OHEP. Key findings are summarized below.

- OHEP-eligible households (up to 175 percent of the FPL) had an average gross energy burden of 14 percent. After accounting for MEAP and EUSP benefits, the statewide net energy burden was nine percent. Baltimore City had the highest net energy burden at 11 percent. The two regions in the Eastern Shore had the second highest net energy burden at ten percent.
- Low-income households (up to 200 percent of the FPL) had an average gross energy burden of 12 percent. The distribution of gross energy burden by county area was similar to the distribution for OHEP-eligible households; in particular, Baltimore City and the Eastern Shore were again the regions with the highest energy burdens.
- Households with incomes between 176 and 200 percent of the FPL had an average gross energy burden of seven percent. All but two of the regions had energy burdens exceeding six percent, and Baltimore City and the Eastern Shore regions had gross energy burdens of eight to ten percent.

Based on these findings, we offer the following recommendations.

- OHEP-recipient households did not receive sufficient assistance to reach an affordable energy bill on average. Every county area had a net energy burden above six percent. OHEP benefits need to be increased to reduce the average net energy burden to six percent.
- Households with income between 176 and 200 percent of the FPL also require bill payment assistance to reach a six percent energy burden. Currently, St. Mary's & Calvert counties and Washington County are the only areas where these households have an average gross energy burden of six percent.
- Low-income households in the Eastern Shore and in Baltimore City require the most assistance. For the OHEP-eligible population, as well as for the 176 to 200 percent of FPL population, these geographic areas had the highest average energy burdens.