



Energy Poverty in Arizona

Summary

Prepared for NLIEC

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APPRISE prepared this summary and full report from which it was derived at the request of NLIEC. Any errors or omissions in these documents are the responsibility of APPRISE. Furthermore, the statements, findings, conclusions, and recommendations are solely those of analysts from APPRISE and do not necessarily reflect the views of NLIEC.

Summary

Since its founding, the National Low Income Energy Consortium (NLIEC) has furthered its mission of reducing home energy poverty through information development and dissemination, partnership building, training and technical assistance, and the promotion of effective solutions to energy hardships, using its annual conferences as the hub. However, more recently, NLIEC has also produced information that enhances knowledge and casts public attention upon the low-income residential energy issues and hardships facing the particular region in which the annual conference is held.

In 2005, NLIEC asked APPRISE, a nonprofit policy research firm in Princeton New Jersey, to conduct an analysis of energy poverty throughout Arizona, in the Phoenix Metropolitan Area, and in specific Phoenix-area neighborhoods. This document represents a summary of the final "Energy Poverty In Arizona" report. The full report can be obtained from NLIEC, at www.nliec.org, or from APPRISE, at www.appriseinc.org.

Report Goals

We developed this report with the following goals:

- Assess the energy needs of low-income households in Arizona and furnish state and area-specific statistics to Arizona decision makers and program managers.
- Provide all interested parties with information regarding publicly available data, how the data can be used to produce valuable information, and where to find the data.

This report presents some examples of the broad array of information that can be developed related to the energy needs of low-income households using publicly available data sources. Moreover, the analyses presented here provide constructive information about the needs and characteristics of low-income households in the United States, Arizona, the Phoenix Metropolitan Area, and the Phoenix-area neighborhoods of Guadalupe and Westwood.

State-Level Findings

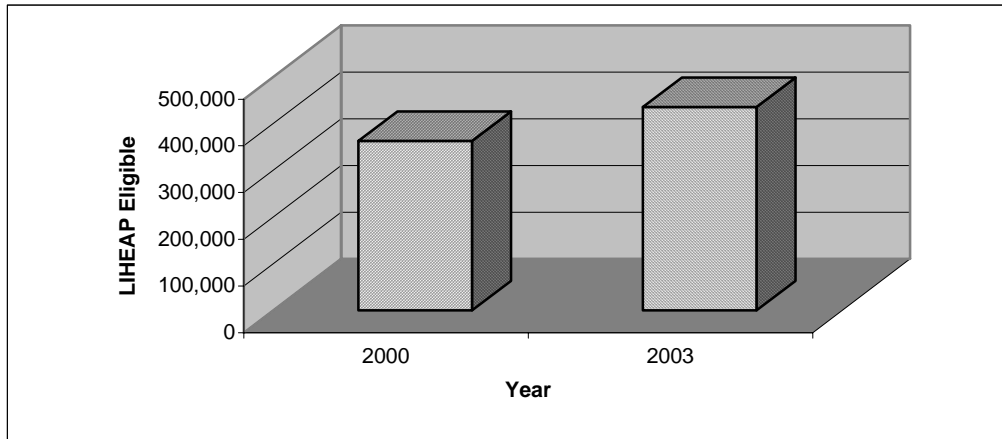
Key findings from the state-level analysis of Arizona data are presented below:

- The number of households eligible¹ for the Low Income Home Energy Assistance Program (LIHEAP) in Arizona grew substantially between 2000 and 2003.
- Low-income households pay a large share of their income for residential energy costs.
- Current funding for LIHEAP and other energy assistance programs in Arizona is not sufficient to meet the substantial energy needs of Arizona's growing low-income population.

¹ Throughout this report, LIHEAP-eligible households refers to LIHEAP income-eligible households.

As shown in Figure ES-1, the state-level findings demonstrate that the number of LIHEAP-eligible households in Arizona (those with income at or below 150 percent of the Federal Poverty Level) rose by 73,000 households – from 362,800 in 2000 to 436,000 in 2003.

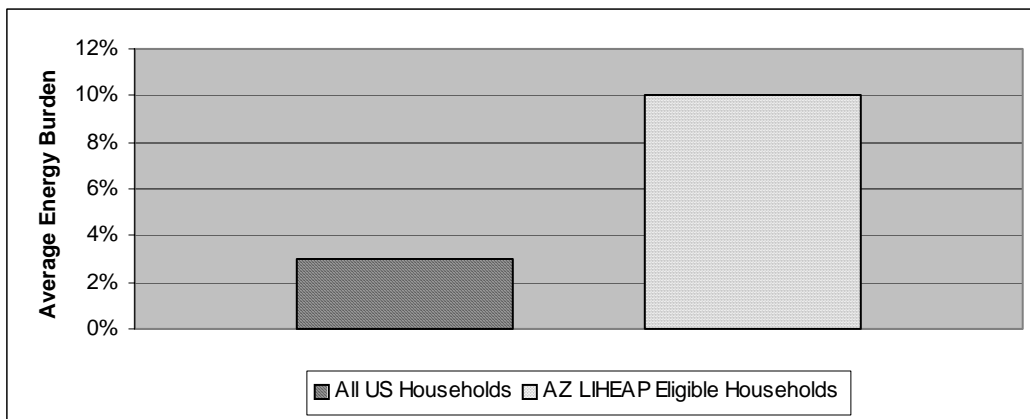
Figure ES-1
Growth in LIHEAP-Eligible Households, 2000 to 2003



Source: 2000 Decennial Census PUMS 5 Percent Sample.
 Source: Three-Year Average of the CPS ASEC 2002-2004.

Arizona LIHEAP-eligible households spend, on average, 10 percent of their income on residential energy, which is significantly higher than the 3 percent median energy burden for all United States households.

Figure ES-2
Average Energy Burden for All U.S. Households and Arizona LIHEAP-Eligible Households, 2000

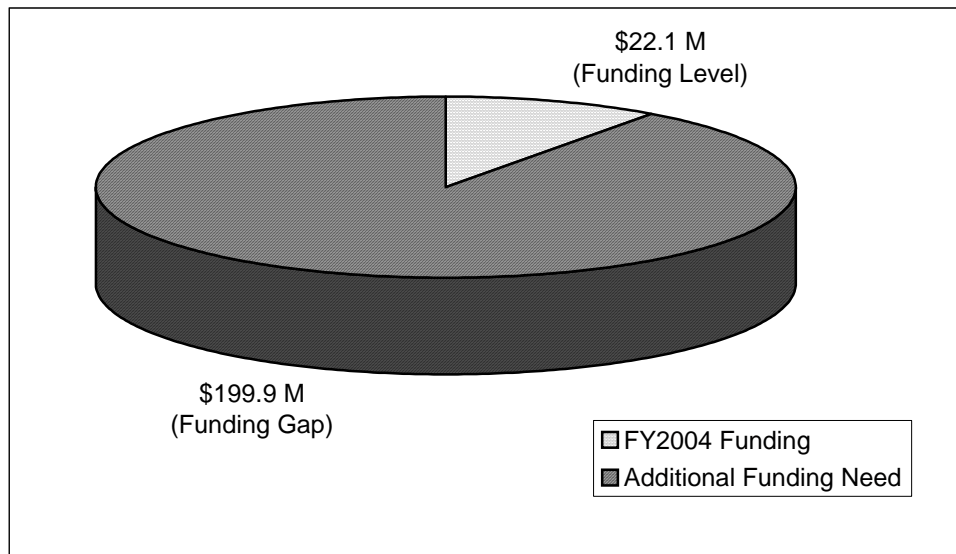


Source: United States. Administration for Children and Families, Office of Community Services, Division of Energy Assistance. "Table A-2c." LIHEAP Home Energy Notebook For Fiscal Year 2003; Washington, DC: U.S. Department of Health and Human Services, March 2005. Page 27.

Source: 2000 Decennial Census PUMS 5 Percent Sample.

In addition, the financial commitment to reduce energy bills to 5 percent of income for low-income Arizona households would require over \$222 million in energy assistance funding each year. However, in FY 2004, Arizona residents received just over \$22 million in energy assistance benefits from various sources. LIHEAP provided \$5.7 million in benefits to 18,600 households and an additional \$16.4 million was spent for supplemental energy assistance and energy efficiency programs for low-income Arizona households.²

Figure ES-3
Total Energy Assistance Funding and Additional Energy Assistance Funding Needed to Reduce Energy Burden for All Arizona Households to 5 Percent of Income



Source: "2004 State-by-State Supplements to Energy Assistance and Energy Efficiency." [LIHEAP Clearinghouse](#).

Source: 2000 Decennial Census PUMS 5 Percent Sample.

APPRISE developed these state-level statistics for Arizona using the Census 2000 Public Use Microdata (PUMS) Five Percent Sample and the 2002-2004 Current Population Survey (CPS) Annual Social and Economic Supplement (ASEC).

City-Level Findings

Key findings from the city-level analysis of the Phoenix Metropolitan Area data are presented below:

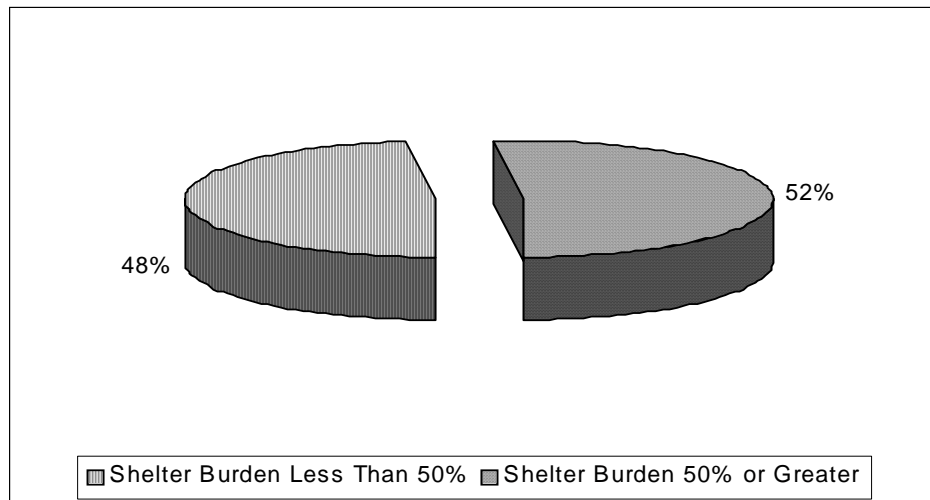
- Low-income households in the Phoenix Metropolitan Area spend a large portion of their annual income on housing costs, including energy costs.

² <http://www.liheap.ncat.org/Supplements/2004/supplement04.htm> (Source Date: May 17, 2005; Download Date: June 9, 2005)

- High shelter burden (i.e. housing costs of at least 50 percent of income) is highly correlated with high energy burden for low-income households in Phoenix. High energy bills contribute significantly to the problem of housing affordability for these households.

Our city-level analysis revealed that the energy burden for LIHEAP-eligible households in the Phoenix Metropolitan Area is similar to that of LIHEAP-eligible households throughout Arizona. American Housing Survey (AHS) data provided valuable information on the relationship between energy poverty and housing. Using AHS, we learned that 52 percent of LIHEAP-eligible households in Phoenix spend more than 50 percent of their income on housing, including utilities.

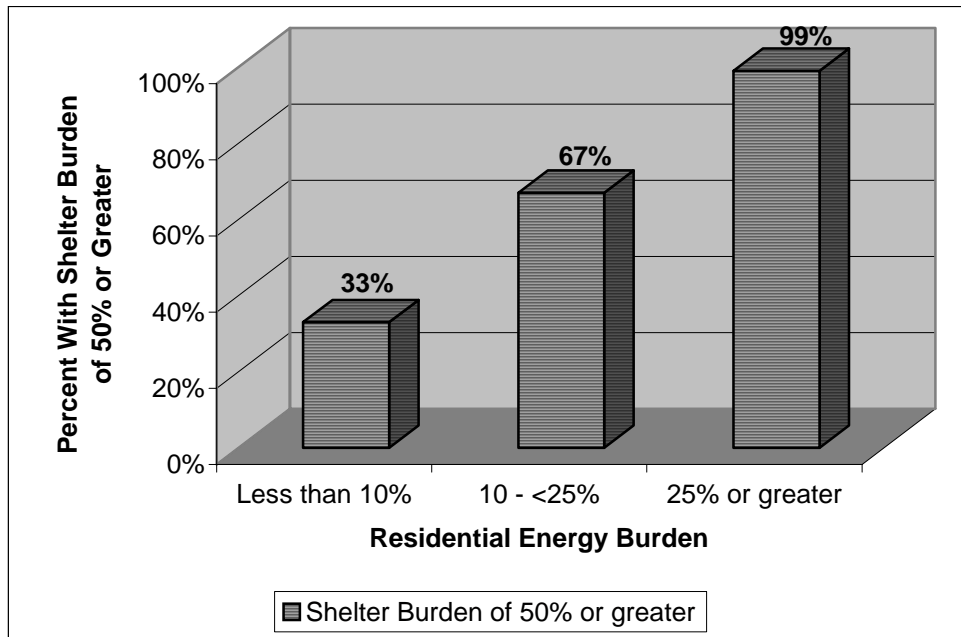
Figure ES-4
Shelter Burden for Low-Income Households in Phoenix, 2002



Source: 2002 American Housing Survey, Phoenix Metropolitan Area Sample.

Moreover, the statistics demonstrated that energy burden is positively correlated with shelter burden (i.e., percent of income spent on housing and energy costs). Nearly all households with an energy burden of 25 percent of income or greater also had a severe shelter burden of 50 percent or greater, compared to one third of households with an energy burden less than 10 percent. This finding serves as a reminder that high energy costs can make housing unaffordable for low-income households.

Figure ES-5
Percent of LIHEAP-Eligible Households in Phoenix with Shelter Burden Greater Than 50%, 2002



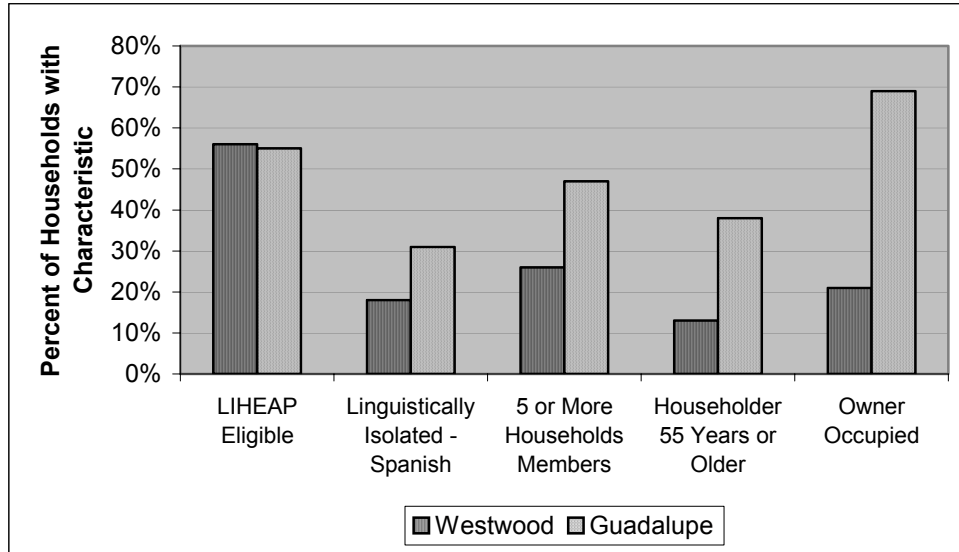
Source: 2002 American Housing Survey, Phoenix Metropolitan Area Sample.

APPRISE developed these statistics for the Phoenix Metropolitan Area using the 2002 AHS Phoenix Metropolitan Area Sample.

Neighborhood-Level Findings

At the local level, we found that two neighborhoods with very similar poverty and LIHEAP eligibility rates, within ten miles of each other, can have significantly different demographic and housing characteristics. Approximately 55 percent of both the Guadalupe and Westwood communities are LIHEAP-eligible. Large multi-generational single-family homeowner households dominate the neighborhood of Guadalupe and 32 percent of Guadalupe households self-report that no adult household members speak English “very well.” In contrast, Westwood is comprised of mostly renter households of more typical family size, with significantly less language isolation, and who reside in multiple-unit (i.e., five or more units) structures. Despite the superficial neighborhood similarities in geography and LIHEAP eligibility, the differences in characteristics support the need for different program design and outreach efforts to achieve program success.

Figure ES-6
Differences in Household Characteristics for Households in Guadalupe and Westwood



Source: 2000 Decennial Census Summary File 3.

APPRISE developed statistics for the Phoenix-area neighborhoods of Guadalupe and Westwood using the Census 2000 Summary File 3 (SF3).

Conclusion

Policymakers and program managers can use information developed from existing data sources for program design, operations, and evaluation at the national, state, city, and neighborhood levels. The analyses presented in this report are illustrations of how these data can be used to develop findings that can inform effective decision making. While the data furnished and analyzed in this report were developed with Arizona policymakers and program administrators in mind, the existing and publicly available data sources described can provide valuable information for decision makers, advocates, stakeholders, and scholars in any state.

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