

State Report – Wisconsin

This Appendix furnishes detailed information for Wisconsin, including:

- Statistical Overview – Key characteristics for Wisconsin households and housing units.
- Needs Assessment – Statistics for Wisconsin low-income households and estimates of the need for energy affordability and energy efficiency programs.
- Legal and Regulatory Framework – A description of the legal and regulatory framework for low-income programs and identification of any legal or regulatory barriers to program design enhancements.
- Low-Income Affordability Programs – Information on Wisconsin’s publicly funded affordability programs, the ratepayer-funded affordability programs targeted by this study, and an assessment of the share of need currently being met.
- Affordability Program Evaluation – A summary of the available evaluation findings regarding the performance of Wisconsin’s affordability programs.
- Energy Efficiency Programs – Information on Wisconsin’s publicly funded energy efficiency programs and the ratepayer-funded energy efficiency programs targeted by this study.
- Energy Efficiency Program Evaluation – A summary of the available evaluation findings regarding the performance of Wisconsin’s energy efficiency programs.

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I. Statistical Overview

Wisconsin is the 20th largest state in terms of population. It has higher than average income (17th in median family income in 2005) and lower than average poverty rate (42nd in individuals below poverty). In 2005, the median housing value was \$152,600 and the median rent was \$643.

Most housing units (78%) in Wisconsin are heated with regulated fuels, predominantly natural gas (65%). Energy prices are moderate, with electric 2% above the national average and natural gas 7% below the national average. The weather is very cold in the winter (7,791 heating degree days compared to the national average of 4,524) and relatively cool in the summer (500 cooling degree days compared to the national average of 1,242). Households are most at risk from the cold during the months of October through April, and are most at risk from the heat during the month of July.

The following population and housing statistics were developed using data from the 2005 American Community Survey (ACS).

Population Profile

Total Population.....	5.4 million
Individuals 65 and Over.....	0.7 million (13%)
Individuals Under 18.....	1.3 million (24%)
Individuals 5 & Over Who Speak a Language Other than English at Home.....	0.4 million (7%)
Individuals Below Poverty.....	10% (42 nd nationally)

Household Profile

Total Households.....	2.2 million
Median Household Income.....	\$47,1052 (20 th nationally)
<i>Homeowners</i>	
Total Homeowners.....	1.6 million (70%)
Median Value.....	\$152,600 (25 th nationally)
Median Housing Burden.....	22%
<i>Renters</i>	
Total Renters.....	0.7 million (30%)
Median Rent.....	\$643
Median Rental Burden.....	26%

The following energy statistics were derived from a number of sources, including the 2005 American Community Survey (ACS), the Energy Information Administration's (EIA) supplier data collection, and NOAA's National Climatic Data Center (NCDC).

Energy Profile

Home Heating Fuel (Source: 2005 ACS)

Utility gas.....	65%
Electricity.....	13%
Fuel Oil.....	6%
Other.....	16%

2005 Energy Prices (Source: EIA)

Natural gas, per ccf.....	\$1.193
Electricity, per kWh.....	\$0.0966
Fuel oil, per gallon.....	\$1.940

Weather (Source: NCDC)

Heating Degree Days.....	7,791
Months of Winter (i.e., average temperature below 50°).....	7
Cooling Degree Days.....	500
Months of Summer (i.e., average temperature above 70°).....	1
Days with Temperatures Over 90°.....	10

[Note: Updates are available for energy prices and weather for 2006. Population statistics updates for 2006 will be available in August 2007.]

II. Profile of Low Income Households

Wisconsin policymakers have chosen to target the publicly funded and ratepayer-funded low income programs at households with incomes at or below 150% of the HHS Poverty Guideline. For 2005, the income standard for a one-person household was about \$14,355 and the income standard for a four-person household was \$29,025. For the analysis of low-income households in Wisconsin, we will focus on households with incomes at or below 150% of the HHS Poverty Guideline.

Table 1 furnishes information on the number of Wisconsin households with incomes that qualify them for the LIHEAP program and the ratepayer-funded programs. About 18% of Wisconsin households are income-eligible for these programs.

Table 1
Eligibility for Ratepayer Programs (2005)

Poverty Group	Number of Households	Percent of Households
Income at or below 150%	393,128	18%
Income above 150%	1,829,605	82%
ALL HOUSEHOLDS	2,222,733	100%

Source: 2005 ACS

Tables 2A and 2B furnish information on main heating fuels and housing unit type for Wisconsin low-income households. Table 2A shows that about 58% of low-income households use natural gas as their main heating fuel, somewhat less than the 65% for all Wisconsin households. Low-income households are more likely to heat with electricity than the Wisconsin average. Table 2B shows that one of the reasons for the higher rate of electric main heat is that 30% of low-income households are in buildings with 5 or more units. Many multiunit buildings use electric space heating rather than natural gas or fuel oil. About 47% of low-income households live in single family homes, while 18% live in buildings with 2-4 units. Very few households (4%) live in mobile homes.

Table 2A
Main Heating Fuel for Low-Income Households (2005)

Main Heating Fuel	Number of Households	Percent of Households
Electricity	89,083	23%
Fuel Oil	20,491	5%
No fuel used	2,579	1%
Other Fuels	54,608	14%
Utility Gas	226,367	58%
ALL LOW INCOME	393,128	100%

Source: 2005 ACS

**Table 2B
Housing Unit Type for Low-Income Households (2005)**

Housing Unit Type	Number of Households	Percent of Households
Boat, RV, Van, etc	54	0%
Building with 2-4 units	72,649	18%
Building with 5+	119,042	30%
Mobile Home	17,311	4%
Single Family	184,072	47%
ALL LOW INCOME	393,128	100%

Source: 2005 ACS

About 393,000 Wisconsin households are categorized as low-income. However, only those households that directly pay an electric bill or a gas bill are eligible for the Wisconsin ratepayer-funded programs. Table 2C shows that about 89% of low-income households directly pay an electric bill and that about 51% of low-income households directly pay a gas bill.

**Table 2C
Low-Income Households
Direct Payment for Electric and/or Gas Bill (2005)**

Poverty Group	Number of Households	Percent of Households
Electric Bill - Direct Payment	348,343	89%
Gas Bill - Direct Payment	200,352	51%
ALL INCOME ELIGIBLE	393,128	100%

Source: 2005 ACS

Tables 3A and 3B show the distribution of electric bills and burden for low-income households that do not heat with electricity and reported electric expenditures separately from gas expenditures.¹ Table 3A shows the distribution of electric expenditures for households that do not have electricity as their main heating fuel and Table 3B shows the electric energy burden.² Among these households, about 67% have electric bill that is less than \$1,000 per year while about 15% have an annual electric bill of \$1,500 or more. Electric energy burden is less than 5% of income for about 35% of these households, while it is greater than 15% of income for 19% of households.³

¹The ACS allows respondents who have a combined electric and gas bill from one utility to report the total for both fuels. Those households are not included in these tables.

² Electric energy burden is defined as the household's annual electric bill divided by the household's annual income.

³ About 13% of households have their electric usage included in their rent. These households have a nonzero electric energy burden, since part of their rent is used to pay the electric bill. However, since there is no way to measure the share of rent that is used to pay the electric bill, electric energy burden is unknown for these households.

Table 3A
Electric Bills for Low-Income Households without Electric Heat (2005)

Electric Bill	Number of Households	Percent of Households
\$1 to less than \$500	67,106	28%
\$500 to less than \$1,000	92,329	39%
\$1,000 to less than \$1,500	40,499	17%
\$1,500 or more	36,140	15%
TOTAL	236,074	100%

Source: 2005 ACS

Table 3B
Electric Burden for Low-Income Households without Electric Heat (2005)

Electric Burden	Number of Households	Percent of Households
0% to less than 5%	82,349	35%
5% to less than 10%	82,763	35%
10% to less than 15%	26,405	11%
15% or more	44,557	19%
TOTAL	236,074	100%

Source: 2005 ACS

Tables 4A and 4B show the distribution of electric bills and burden for low-income households that heat with electricity. Table 4A shows the distribution of electric expenditures and Table 4B shows the electric energy burden. Among these households, about 66% have an electric bill that is less than \$1,000 per year while about 18% have an annual electric bill of \$1,500 or more. Electric energy burden is less than 5% of income for about 35% of these households, while it is greater than 15% of income for 22%.

Table 4A
Electric Bills for Low-Income Households with Electric Heat (2005)

Electric Bill	Number of Households	Percent of Households
\$1 to less than \$500	21,809	33%
\$500 to less than \$1,000	21,767	33%
\$1,000 to less than \$1,500	10,855	16%
\$1,500 or more	11,906	18%
TOTAL	66,337	100%

Source: 2005 ACS

Table 4B
Electric Burden for Low-Income Households with Electric Heat (2005)

Electric Burden	Number of Households	Percent of Households
0% to less than 5%	22,948	35%
5% to less than 10%	19,615	30%
10% to less than 15%	9,259	14%
15% or more	14,515	22%
TOTAL	66,337	100%

Source: 2005 ACS

Tables 5A and 5B show the distribution of gas bills and burden for low-income households that heat with gas and report their gas bills separately from their electric bills. Table 5A shows the distribution of gas expenditures and Table 5B shows the gas energy burden. Among these households, about 55% have a gas bill that is less than \$1,000 per year while about 23% have an annual gas bill of \$1,500 or more. Gas energy burden is less than 5% of income for about 35% of these households, while it is greater than 15% of income for 25%.

Table 5A
Gas Bills for Low-Income Households (2005)

Gas Bill	Number of Households	Percent of Households
\$1 to less than \$500	44,557	29%
\$500 to less than \$1,000	40,310	26%
\$1,000 to less than \$1,500	33,390	22%
\$1,500 or more	36,163	23%
TOTAL	154,420	100%

Source: 2005 ACS

Table 5B
Gas Burden for Low-Income Households (2005)

Gas Burden	Number of Households	Percent of Households
0% to less than 5%	53,649	35%
5% to less than 10%	40,952	27%
10% to less than 15%	21,419	14%
15% or more	38,400	25%
TOTAL	154,420	100%

Source: 2005 ACS

Tables 6A and 6B show the distribution of total electric and gas expenditures for low-income households that pay bills directly to a utility company. Table 6A shows the distribution of electric and gas expenditures and Table 6B shows the electric and gas energy burden. About 89% of households have an electric bill, a gas bill, or both. Over one-third of low-income households have a total electric and gas bill that is less than \$1,000 per year while 15% have an annual bill of \$2,500 or more. Electric and gas energy burden is less than 5% of income for 16% of low-income households, while it is greater than 25% of income for 17% of low-income households.

Table 6A
Electric and Gas Bills for Low-Income Households (2005)

Electric and Gas Bill	Number of Households	Percent of Households
\$1 to less than \$500	58,233	15%
\$500 to less than \$1,000	81,558	21%
\$1,000 to less than \$1,500	65,150	17%
\$1,500 to less than \$2,000	52,350	13%
\$2,000 to less than \$2,500	34,733	9%
\$2,500 or more	58,379	15%
No Bill	42,725	11%
ALL INCOME ELIGIBLE	393,128	100%

Source: 2005 ACS

Table 6B
Electric and Gas Burden for Low-Income Households (2005)

Electric and Gas Burden	Number of Households	Percent of Households
0% to less than 5%	64,238	16%
5% to less than 10%	100,872	26%
10% to less than 15%	59,646	15%
15% to less than 20%	34,758	9%
20% to less than 25%	23,288	6%
more than 25%	67,601	17%
No Bill	42,725	11%
ALL INCOME ELIGIBLE	393,128	100%

Source: 2005 ACS

We have developed a series of demographic tables for households that pay an electric or gas bill. Table 7 furnishes information on the presence of vulnerable members in the household and illustrates what share of the population might be particularly susceptible to energy-related health risks. Table 8 shows the household structure for these households, and Table 9 presents statistics on the language spoken at home by these households.

Almost one-third of the low-income households with utility bills are elderly; 29% do not have any vulnerable household members. Some programs choose to target vulnerable households with outreach procedures and may offer priority to these households.

Table 7
Vulnerability Status for Low-Income Households with Utility Bills (2005)

Vulnerability Type	Number of Households	Percent of Households
Disabled	69,985	20%
Elderly	110,126	31%
No Vulnerable Members	102,630	29%
Young Child	67,662	19%
Total	350,403	100%

Source: 2005 ACS

About one-third of the low-income households have children, almost one-third are headed by a person 65 or older, and over one third are other household types. Single parent families with children represent just over one-fifth of low-income households with utility bills.

Table 8
Household Type for Low-Income Households with Utility Bills (2005)

Household Type	Number of Households	Percent of Households
Married with Children	40,438	12%
Other	127,186	36%
Senior Head of Household	108,309	31%
Single with Children	74,470	21%
TOTAL	350,403	100%

Source: 2005 ACS

Eight percent of low income households speak Spanish and about 4% speak an Indo-European language (e.g., Russian, Polish). In total, program managers might find that about one out of seven eligible households speak a language other than English at home.

Table 9
Language Spoken at Home by Low-Income Households with Utility Bills (2005)

Language Spoken	Number of Households	Percent of Households
English	302,828	86%
Spanish	27,198	8%
Indo-European	13,244	4%
Other	7,133	2%
TOTAL	350,403	100%

Source: 2005 ACS

III. Legal and Regulatory Framework

Wisconsin's home energy affordability program is a creature of statute. Mandated by Act 9 of the 1999 Wisconsin General Assembly,⁴ the Wisconsin public benefits fund supports two affordability initiatives:⁵ (1) low-income energy assistance,⁶ and (2) low-income energy efficiency.⁷

The objective of the low-income components of the Wisconsin public benefits program "is to deliver services in a manner that contributes to making households energy self-sufficient within the constraints of state and federal limits for eligibility."⁸ To this extent, the energy efficiency component of the low-income assistance programs funded by the public benefits fund differs from the other efficiency components supported by the public benefits fund. The other efficiency programs, rather than focusing on improving affordability, "revolve around market development of energy efficient products and services and energy savings."⁹

The long-term goal of the low-income assistance programs supported by the public benefits fund is improve the "energy sustainability" of households. "In this context, "sustainability" is defined as the ability of a household to make full and timely payments of energy bills over an extended period of time without resorting to actions that cannot be maintained or are otherwise undesirable."¹⁰

A. The Statutory Framework

The Wisconsin public benefits fund is unique in that it aggregates the various streams of dollars spent on low-income energy initiatives into a single fund, for distribution and targeting in an integrated fashion. The public benefits fund is funded through five sources of money: (1) funds from investor-owned utilities through the public benefits charge established each year by the state utility commission; (2) a fee added to the electric bills starting in October 2000 that participating utilities collect and remit to the state; (3) funds contributed by participating electric cooperatives and municipal electric utilities;¹¹ (4) federal funds provided through the Low-Income Home Energy Assistance Program (LIHEAP) and Weatherization Assistance Program (WAP) programs; and (5) voluntary contributions.¹²

The uses of the state public benefits funds, and the programs to be offered through such funds, are not dictated by statute. Instead, the state Department of Administration, in consultation with the state Council on Utility Public Benefits,¹³ annually determines the "new or continued

⁴ 1999 Act 9, Section 109 (effective October 29, 1999).

⁵ The Wisconsin Home Energy Plus program also has a lead abatement component. This lead hazard reduction program is funded with dollars provided by the U.S. Department of Housing and Urban Development (HUD). It is not considered further below. See generally, Steven Tryon, Wisconsin Home Energy Plus Program: Overview for Public Benefits Council (January 20, 2005).

⁶ Wisconsin's energy assistance program is called the Home Energy Plus program.

⁷ The Wisconsin low-income energy efficiency program is part of the state's broader efficiency program called Focus on Energy.

⁸ Bobbi Tannebaum (December 2000). Wisconsin LIHEAP Performance Measures: Working Group Report, Energy Center of Wisconsin: Madison (WI). (hereafter LIHEAP Performance Measures).

⁹ Wisconsin Department of Administration, Division of Energy, Focus on Energy Public Benefits Evaluation: Quarterly Summary Report, Contract Year 3, First Quarter, Final Submission, at 16 (December 2, 2003).

¹⁰ Lark Lee, et al, Low-Income Public Benefits Evaluation: Year 2 Low-Income Program Evaluation, Volume 1, Final Report, at 1-1, Wisconsin Department of Administration, Division of Energy: Madison (WI), citing LIHEAP Performance Measures.

¹¹ Cooperatives and municipal electric utilities may, but are not required to, participate in the public benefits fund. If they do not, they must operate their own "community to community" programs. See Wisc. Stat. §16.957(1)(c) (2007).

¹² Wisc. Stat. §16.957 (2007); see also, Wisconsin Public Benefits Programs Annual Reports, Submitted by the Department of Administration, Division of Energy (2003/2004; 2004/2005; 2005/2006).

¹³ Wisc. Stat. §15.107(17) (2007).

programs” that will provide “low-income assistance” each year.¹⁴ In exercising that discretion, the Department has determined that the public benefits funds collected in Wisconsin will be used to supplement federal LIHEAP funds to allow the state to provide an electric benefit in addition to providing a home heating benefit. According to the state Department of Administration (DOA),¹⁵

heating assistance is provided entirely with federal funds. . . The Public Benefits funds have enabled the program to expand services to assist with non-heating electric costs. This assistance is intended to help pay a portion of the electric costs of a household, not to cover the entire annual cost of electricity for the household.¹⁶

Public benefits funds are also used to provide crisis assistance to a limited number of low-income households.¹⁷ In Fiscal Year 2006, the Public Benefits fund energy assistance program provided an average electric benefit of \$159 to 137,502 households; the program distributed an average crisis assistance benefit of \$220 to 8,220 households.¹⁸

B. The Non-Federal Funding

The state of Wisconsin generates two streams of non-federal funding (in addition to whatever voluntary contributions are contributed to the fund under the statute. The first source involves those low-income assistance funds currently embedded in rates. The second source involves a state low-income assistance fee in an amount determined by the administrator of the state public benefits fund.¹⁹

Low-Income Assistance Embedded in Rates

The Wisconsin statute creating the public benefits fund provided that the state’s investor-owned utilities transfer to the fund an amount equal to what each utility spent for public benefits programs in 1998.²⁰ The state utility commission was charged with determining the amount that each utility spent.²¹ Included within the definition of low-income assistance were funds spent on low-income weatherization and “writing off uncollectibles and arrearages.”²²

The intent of the Wisconsin statute was to transfer the financial support for the state’s low-income assistance programs from each utility to the state public benefits fund. For 2001 through 2002, the commission was charged with requiring each utility to spend “a decreasing portion of the amount determined” to have been previously used for low-income assistance with the remaining portion of the determined assistance to be transferred to the public benefits fund. After 2002, each utility was required to transfer the entire amount of low-income assistance.

¹⁴ Wisconsin Administrative Code, § 45.06 (2007).

¹⁵ DOA is the agency charged with administering the state public benefits fund programs. Xxx cite xxx

¹⁶ 2003/2004 Public Benefits Fund Annual Report, at 30.

¹⁷ Id., at 31. In Fiscal Year 2004, LIHEAP provided an average crisis assistance payment of \$301 to more than 34,000 households, while the public benefits fund provided an average crisis assistance payment of \$168 to 6,34 households. Id.

¹⁸ 2005/2006 Public Benefits Fund Annual Report, at 18.

¹⁹ That administrator is the Department of Administration (DOA), which administers the federal LIHEAP funds.

²⁰ Wisc. Stat. §196.374(3) (2007).

²¹ Wisc. Stat. §196.384(2) (2007). Public benefits programs included not only low-income assistance, but also energy conservation and efficiency, environmental research and development, and renewable resources. Wisc. Stat. §196.374(2)(a) – (d) (2007).

²² Wisc. Stat. §196.374(2)(a) (2007).

The state utility commission developed an inventory and valuation of the dollars expended by Wisconsin utilities for low-income energy assistance in a 2000 proceeding.²³ According to the commission, Wisconsin utilities provided \$21.3 million on low-income assistance, including “low-income weatherization, low-income uncollectibles and arrearages, and low-income Early Identification Programs (EIP).”²⁴ In making this determination, the commission found that “the historical assumption that 50 percent of total uncollectibles is attributable to low income households is not determinative.” In addition, the commission found, “it is not reasonable to base an estimate of low-income uncollectibles solely on participation in the federal Low-Income Home Energy Assistance Program.”²⁵ According to the commission, “a LIHEAP participation rate of 28 percent in 1998 is too low to fairly represent all low-income households that may be in arrearage or incur bad debt expense with the utility.”²⁶

The commission ultimately determined that some issues relating to uncollectibles and arrearages may need to be resolved by a working group process. It left to the state Department of Administration (DOA), which administers the public benefits funds, the discretion to determine whether a work group would be helpful to address issues which include who benefits from the use of the uncollectibles/arrearages dollars transferred to the public benefits fund; which programs should be financially supported by those funds, and how could programs be designed “to be most effective in reducing arrearages and uncollectibles.”²⁷

In its 2000 Act 9 proceeding, the commission decided that some programs operated by Wisconsin’s utilities in 1998 would continue to be operated by the utilities even after the advent of the public benefits funds. Rather than transferring the dollars used on those programs to the fund, the commission said, those dollars would be left with the utilities to continue the program. The Early Identification Program (EIP) was one such program. “Utilities will continue to be the first point of contact for their customers and the utilities will have to continue to assist these customers through EIP services.”²⁸ Until ordered by the commission to do otherwise, “each utility shall continue to spend annually, at a minimum, a level of funding equivalent to the retained portion of its 1998 EIP expenditures.”²⁹ If funds were not spent on “appropriate EIP-related activities,” the commission said, those dollars should be transferred to the commission for deposit in the utility public benefits fund.³⁰

In addition, the Commission found that “voluntary customer and corporate contributions to utility-sponsored customer assistance programs are not considered utility public benefits expenditures for purposes of establishing 1998 utility expenditures levels.”³¹ Finally, the commission determined that “customer service activities are distinct from utility public benefits programs.”³²

²³ Investigation on the Commission’s Own Motion of Appropriate Measures to Maintain or Enhance the Existing Levels of Energy Efficiency, Services to Low-Income Customers, Renewable Resources and Research and Development (“Public Benefits”) in Restructured Electric and Natural Gas Industries, Docket No. 05-BU-100, Decision (August 17, 2000). (hereafter, Act 109 Order).

²⁴ Act 9 Order, at 3.

²⁵ Act 9 Order, at 4.

²⁶ Act 9 Order, at 10. Having said what it would *not* use in making its determination, the commission did not explain the basis for the final determination it *did* make in its final decision. One commissioner (Mettner) “dissented on the method for identifying uncollectible accounts receivable associated with low-income customers, contending that the approved method exceeded the plain meaning of the statute.” Act 109 Order, at 16. That “method,” however, was never identified or discussed, let alone rationalized, in a commission order.

²⁷ Investigation on the Commission’s Own Motion of Appropriate Measures to Maintain or Enhance the Existing Levels of Energy Efficiency, Services to Low-income Customers, Renewable Resources, and Research and Development (“Public Benefits”) in Restructured Electric and Natural Gas Industries, Docket 05-BU-100, Final Order, at 7 – 8 (January 4, 2001). (January 2001 Act 9 Order).

²⁸ Act 9 Order, at 11.

²⁹ *Id.*

³⁰ Act 9 Order, at 15.

³¹ Act 9 Order, at 8.

³² Act 9 Order, at 5.

Cost recovery for the dollars each utility transfers to the public benefits fund is accomplished in Wisconsin through base rate case proceedings.³³ According to the commission “if a utility requests rate recovery for public benefits-related costs that they are required to transfer to DOA, the utility will need to justify the need for rate recovery in its rate case proceeding.”³⁴

The Monthly Low-Income Assistance Fee

The Wisconsin public benefits fund is also to be supported by a “low-income assistance fee” to be imposed on all customer bills.³⁵ While the amount of the charge is to be determined by the Department of Administration each year, the statute provides that the charge is to be a fixed charge,³⁶ and that customers shall be given an annual summary of the money they have paid through the charge and the programs supported by the charge.³⁷ The statute provides that all customer classes must pay the fee, with 70% of the total revenue being collected from the residential customer class and 30% being collected from non-residential customers.³⁸

The amount of the low-income assistance fee is to be established such that, when combined with the other low-income resources (identified above), the sum equals the “low-income need” in the state of Wisconsin.³⁹ “Low-income need” is defined to mean the “amount obtained by subtracting from the total low-income energy bills in a fiscal year the product of 2.2% of the estimated average annual income of low-income households in this state in that fiscal year multiplied by the estimated number of low-income households in this state in that fiscal year.”⁴⁰ Estimates of low-income home energy bills are based on data obtained from the state energy agency.⁴¹

C. Summary and Conclusions

The Wisconsin public benefits fund aggregates all sources of low-income home energy affordability funding into a single trust fund and places those funds under a single administrator. The fund incorporates the multiple streams of revenue for the benefit of low-income households, including federal dollars, private contributions, utility dollars generated from pre-existing low-income initiatives, and ratepayer dollars generated by a statutorily-imposed low-income assistance charge.

The amount of funding varies by year, with the aggregated revenue streams compared to an annual determination of “low-income need.” That determination of low-income need takes into account home energy bills and the number of low-income households living in Wisconsin.

The distribution of the aggregated funding streams is determined by the state LIHEAP agency, after consultation with the state’s Public Benefits Council. An annual program proposal is developed and released, articulating the division of the funding between fuel assistance, energy efficiency, and crisis assistance. The objective of the combined program is to improve “energy sustainability” within the low-income community.

³³ January 2001 Act 9 Order, at 12.

³⁴ January 2001 Act 9 Order, at 13 (“it is reasonable to address the specific rate recovery issues identified by the utilities and any others yet to be identified in future rate case proceedings”). *Id.*

³⁵ Wisc. Stat. §16.95(4)(a) (2007).

³⁶ Wisc. Stat., §16.957(4)(b) (2007). The fees shall be established by DOA regulation and shall not be imposed on a per kilowatt-hour basis. Wisc. Stat. §16.958(4)(b) (2007).

³⁷ Wisc. Stat. §16.957(4)(am) (2007).

³⁸ Wisc. Stat. §16.957(4)(b)(2) (2007).

³⁹ Wisc. Stat. §16.957(4)(c) (2007).

⁴⁰ Wisc. Stat. §16.957(1)(n) (2007). In turn, “low-income energy bills” “Total low-income energy bills” means the total estimated amount that all low-income households are billed for residential electricity, natural gas and heating fuel in a fiscal year. Wisc. Stat. §16.957(1)(u) (2007).

⁴¹ Wisc. Admin. Code, Admin. §43.04(1) (2007).

IV. Low-Income Affordability Programs

The two major affordability programs available to low-income households in Wisconsin are the LIHEAP Program and the Wisconsin Home Energy Assistance Program.

- LIHEAP Program – In 2005, the Wisconsin LIHEAP program received about \$75.3 million in funding from the Federal government.⁴² Since about 81% of low-income households use natural gas or electricity for their home heating fuel, we will estimate that about \$61.0 million was made available to gas and electric customers for LIHEAP benefits.
- Wisconsin Home Energy Assistance Program – In 2005, the Wisconsin Home Energy Assistance Program furnished about \$25.4 million in electric and gas benefits to eligible households.⁴³

In total, about \$86 million was available to help pay the electric and gas bills for low-income households. Using the ACS data, we estimated the following statistics regarding the aggregate electric and gas bills for low-income households in Wisconsin.

- Aggregate Electric and Gas Bill – The total electric and gas bill paid directly by low-income households is estimated to be about \$524 million. The available funding of \$86 million in benefits would cover about 16% of the total bill for low-income households.
- 5% Need Standard – Some analysts suggest that 5% of income is an affordable amount for low-income households to pay for the energy needs. The aggregate value of electric and gas bills that exceeds 5% of income is estimated to be about \$338 million. The available funding of \$86 million in benefits could cover about 25% of the unaffordable amount for low-income households. [Note: If benefits from either of these two programs are allocated to households with an energy burden less than 5% of income, the program would not cover 25% of the estimated need.]
- 15% Need Standard – Some analysts suggest that 15% of income is an affordable amount for low-income households to pay for the energy needs. The aggregate value of electric and gas bills that exceeds 15% of income is estimated to be about \$142 million. The available funding of \$86 million in benefits could cover about 61% of the unaffordable amount for low-income households if it were targeted to only those households with energy bills greater than 15% of income.
- 25% Need Standard – Many low-income households pay more than 25% of income for energy service. Among the ratepayer-funded low-income programs that have used a percent-of-income guideline in their benefit determination process, none have been as high as 25% of income for combined use of electric and gas. The aggregate value of electric and gas bills that exceeds 25% of income is estimated to be about \$82 million. The available funding of \$86 million in benefits could cover all of the unaffordable amount for low-income households if it were targeted to households with energy bills greater than 25% of income.

These statistics demonstrate that the Wisconsin programs cover a significant share of the total low-income need, and the Wisconsin is one of the few states that has funded programs at a level that is sufficient to meet the entire estimated need for households at the 25% of income standard. Moreover, we often find that programs achieve only a 50% participation rate. Since funding for programs in Wisconsin is sufficient to meet the needs of about 61% of the need

⁴² Source: LIHEAP Clearinghouse

⁴³ Source: LIHEAP Clearinghouse

estimated at the 15% need standard level, it is possible for the Wisconsin programs to serve all participating customers with energy burdens that exceed 15% of income.

The ratepayer-funded low-income affordability program for Wisconsin is integrated with the LIHEAP program. From that perspective, it has the following characteristics.

- Oversight – The Department of Administration’s Energy Division has oversight of the program.
- Program Operations – County social service offices operate the program through subcontracts with local community agencies.
- Program Funding/Participation – Program funding for 2006 was about \$25.4 million and served almost 156,000 clients.
- Targeting – The program is targeted in the same way as the LIHEAP program.
- Benefit Type – The program is an annual fixed credit program.

The following table furnishes detailed information on the program.

Program State	Wisconsin.
Program Name	Wisconsin Home Energy Assistance Program (WHEAP).
Utility Company (If Applicable)	n/a
Program Goals	To help assist Wisconsin households in affording their heating and electricity bills through direct payments to their fuel and electricity providers, emergency fuel assistance, energy budgeting and conversation counseling, proactive co-payment plans, targeted outreach services, and emergency furnace repair and replacement.
Funding Source (SBC or Rates)	Rates, SBC (Public Benefit Fund assessment), and federal LIHEAP and LIWAP.
Annual Program Funds – Allocated (2006)	\$129,339,319. [NOTE: \$25,400,000 of budgeted funding is from the Public Benefits Fund.]
Annual Program Funds – Expended (2006)	\$113,150,705. [NOTE: \$33,377,316 was from the Public Benefits Fund, including \$2,000,000 of crisis benefits.]
# of Households Served (2006)	155,791.
Participation Limit (Maximum # of Enrollees)	None.
Eligibility – % of Poverty Level	150% of federal poverty guidelines (PY2006-2007).
Eligibility – Other Criteria	The household must have a heating burden.
Targeted Groups	No groups are targeted, but special outreach measures are taken to increase program enrollment among the elderly and handicapped populations.
Benefit Calculation Type (% of Income, Benefit Matrix, etc.)	Formula. [NOTE: Generally speaking, lower-income, higher-burden households receive higher benefits.]
Benefit Calculation (Document Formula)	<u>NOTE</u> Electronic documentation of the Public and LIHEAP benefit calculation formulas (both in Excel and one each in Word and .PDF formats) is in the G:\Projects\NLIEC Study\Data Collection\Documentation folder under the following names: <ul style="list-style-type: none"> ▶ WI 2006 Public Benefit Calculation.xls ▶ WI 2006 Public Benefit Calculation.doc ▶ WI 2006 LIHEAP Benefit Calculation.xls ▶ WI 2006 LIHEAP Benefit Calculation.pdf.
Benefit Amount (Mean Subsidy)	Heating Benefit – \$439. Electric Benefit – \$159.
Benefit Limit	Heating (LIHEAP) – \$1,200.

	Electric (PBF) – \$400. Crisis Assistance – \$1,000, which can be waived by the State up to \$1,300.
% of Program Dollars Spent on Administrative Costs	State: 2.71% Subgrantees: 8.07% [NOTE: State statute requires that administrative costs not exceed \$4 million of federal program funding.]
Benefit Distribution (Fixed Payment, Fixed Payment with a Limit, Fixed Credit, Fixed Credit with Budget Billing, etc.)	Heating and Electric Assistance One-time benefit payment per heating season (October 1 through May 15), usually applied directly to the household's account with their fuel supplier. Crisis Assistance Benefits are paid directly to the household's fuel or service provider over the entire program year . Multiple crisis benefits may be paid to a single recipient.
Arrearage Forgiveness Plan – Y/N	No.
Amount Eligible for Forgiveness (Dollars, %, or Unlimited)	n/a
Forgiveness Requirement (Payments, On-Time Payments)	n/a
Forgiveness Period (One-Time, 12 months, 24 months, etc.)	n/a
Program Manager (PUC, State, Utility)	County social services offices, who can contract with nonprofit community action agencies, tribal governments, and other governmental agencies. The Department of Administration's Energy Division (ED) provides program oversight.
Data Manager (PUC, State, Utility, Other)	The ED, through a program-dedicated IT system/database accessible by the county and contracted service providers, who do all data entry.
Enrollment Responsibility (Utility, CAP, etc.)	County social service offices, tribal governments, private nonprofit organizations, and other governmental agencies.
Application Method (Mail, In-Person, Phone)	In-person, telephone, mail, home visits, and special outreach campaigns.
Joint Application	Yes. One application can be used to apply for both state and federal heating and weatherization assistance.
Recertification Required – Y/N	Yes.
Recertification Frequency	Annually.
Recertification Method (Agency, Automatic Enrollment, Self-Certification)	Reapplication must be made at any program office.
Recertification Procedures	Same as if applying for first-time benefits.
Removal Reasons	n/a
Other Communications	Electronic payment notices are mailed to program participants with detail of the benefit amount and company to which it was paid. Denial letters are mailed to applicants, when applicable. The letter includes instructions for how to appeal.
Budget Counseling	Yes. Budget counseling is frequently proactive – counseling is offered via outreach to households who are to be disconnected or about to run out of fuel.
Evaluation Frequency	Annually, but typically only for one or a few program components. The most recent evaluation was done earlier this year for the crisis component, but the report is still in draft and not available for distribution.
Coordination with LIHEAP	Some WHEAP benefits, most notably the heating benefit, are funded by federal LIHEAP dollars.
Coordination with WAP	Some federally funded weatherization services may be included in a WHEAP recipient's coordination plan at time of intake.
Coordination with Energy Efficiency Programs	Agencies are charged with developing an assistance coordination plan for customers. The plan should include the utilization of all resources available to the household based on their individual circumstances. Many customers are referred to HUD programs (e.g., Home Program and Lead Hazard Program). When a household applies for heating assistance benefits, their data are automatically exported to the WisWAP database.

Coordination with Other Energy Affordability Programs	Agencies are charged with coordinating services with utility programs that provide to low-income persons.
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NOTE

The state of Wisconsin pools all of their energy assistance program funding from three different sources – the Public Benefits Fund (which is funded through rates and a separate Public Benefits Charge), and federal LIHEAP and LIWAP. By statute, 53% of those funds must be apportioned to bill payment assistance and 47% must be allocated for weatherization assistance.

PY2006 expenditures are broken out by funding source for the energy and weatherization assistance programs below:

	Funding Source				Total
	Rates	PBF Charge	Fed LIHEAP	Fed WAP	
WI WHEAP	17,277,316	16,100,000	79,773,389		\$113,150,705
WI WAP	18,035,366	16,600,000	11,987,189	8,284,376	\$54,906,931
Total Spent	\$35,312,682	\$32,700,000	\$91,760,578	\$8,284,376	\$168,057,636

V. Affordability Program Evaluation Findings

Wisconsin’s Department of Administration, Division of Energy contracted with PA Government Services to conduct an evaluation of their Low-Income Public Benefits Programs. The three year study covered state fiscal year 2002 through state fiscal year 2004. The evaluation examines the effectiveness in the programs’ targeting of vulnerable households, interaction with other programs, impact on payment of home energy bills, and other client impacts.⁴⁴

The key findings from the evaluation are summarized below.

- Participants reported high levels of satisfaction with WHEAP.
- Approximately half of the Year 3 participants reported that they received energy education and 84 percent of these households reported that they used the information to decrease their utility bills.

VI. Low-Income Energy Efficiency Programs

The three major sources of funding for energy efficiency programs available to low-income households in Wisconsin are the DOE Weatherization Assistance Program (WAP), the LIHEAP Program, and the Wisconsin Weatherization Assistance Program.

- DOE WAP Program – In 2005, Wisconsin received about \$9.8 million in funding for the Weatherization Program. These funds were distributed to local agencies to deliver weatherization services to low-income households.⁴⁵
- LIHEAP Program – In 2005, Wisconsin elected to use \$11.2 million (15%) of its LIHEAP funding for weatherization.
- Wisconsin Weatherization Assistance Program – In 2005, the Wisconsin Weatherization Assistance Program was funded at a level of about \$34.6 million.⁴⁶

⁴⁴ Low-Income Public Benefits Evaluation, Year 3 Low-Income Program Evaluation – Volume 1. Report, PA Government Services Inc., October 13, 2004.

⁴⁵ Source: LIHEAP Clearinghouse

In total, about \$55.6 million was available to help furnish energy efficiency services to low income households in Wisconsin.

It is a little more challenging to estimate the need for energy efficiency programs. In general, we would suggest that energy efficiency programs should be used in place of affordability programs when the energy efficiency programs result in cost-effective savings to the household. The literature on energy efficiency programs demonstrates that programs that target high users achieve the highest savings levels and are the most-effective. For electric baseload, programs that target households that use 8,000 kWh or more are most cost-effective. For electric heating, programs that target households that use 16,000 or more kWh are most cost-effective. For gas heating, programs that target households that use 1,200 or more therms are most cost-effective.

Our primary state-level data source, the ACS, does not ask respondents to report on the amount of electricity or natural gas that they use. However, we can develop a proxy for usage based on the respondent's estimate of the household's electric and gas bill. [Note: kWh price = 9.66 cents, therm price = 1.193].

Using the ACS data, we developed estimates of the number of households that would be eligible for energy efficiency programs using the cost-effectiveness targets. Table 10 shows that 50% of households could be targeted for high baseload bills, 18% could be targeted for high electric heat bills, and 23% could be target for high gas usage.

Table 10
Need for Energy Efficiency Programs for Low-Income Households (2005)

Group	Number of Households with Bills	Number of Households with High Bills	Percent of Households with High Bills
Electric Baseload Services ⁴⁷	276,854	138,256	50%
Electric Heating Services	66,337	11,906	18%
Gas Heating Services	176,758	41,257	23%

Source: 2005 ACS

In general, low income weatherization programs spend about \$3,000 per unit including all costs for administration and service delivery. With the available funds, Wisconsin could serve about 18,500 low income households, or about 34% of the high usage homes needing weatherization assistance and 13% of the homes need electric baseload services.

The Wisconsin ratepayer-funded low-income energy efficiency program was jointly administered with the federal WAP program. Some important features of the program include:

- WAP Program Administration – The Wisconsin Department of Administration's Energy Division administers the program.
- Service Delivery – Services are delivered by local community based organizations.
- WAP Office Collaboration – The program is delivered by the WAP office.

⁴⁶ Source: State of Wisconsin

⁴⁷ For households that report electric and natural gas expenditures as one bill, we allocated half of the cost to electricity and half of the cost to natural gas.

- Demographic/Program Targeting – WAP targeting priorities apply.
- Usage Targeting – None.
- Funding/Service Delivery – The program was funded at the level of about \$54.9 million. It delivered weatherization services to about 8,800 clients.

The following table furnishes detailed information on the program.

Program State	Wisconsin.
Program Name	Wisconsin Weatherization Assistance Program.
Utility Company (If Applicable)	n/a
Program Goals	The Wisconsin Weatherization Assistance Program uses energy conservation techniques to reduce the cost of home energy, and correct health and safety hazards and potentially life-threatening conditions.
Funding Source (SBC or Rates)	Rates, SBC (Public Benefit Fund [PBF] assessment), and federal LIHEAP and LIWAP dollars.
Annual Program Funds – Allocated (PY2006)	\$60,900,000 (PY2006 – July 1 through June 30).
Annual Program Funds – Expended (PY2006)	\$54,906,931 (PY2006). [NOTE: \$34,635,366 was from the Public Benefits Fund.]
# of Households Served (2006)	8,833. [NOTE: The statewide goal for PY2006 was 9,174.]
Participation Limit	None.
Eligibility – % of Poverty Level	150% of federal poverty guidelines. A household may pass the income eligibility test if their income exceeds 150% of federal poverty AND . . . <ul style="list-style-type: none"> ▶ All household members received W-2/TANF cash benefits, FoodShare (food stamps), or SSI for each of the preceding three months (Home Energy Plus Categorical Eligibility Test) OR <ul style="list-style-type: none"> ▶ One household member must have received W-2/TANF or SSI during one of the preceding 12 months (Weatherization Categorical Eligibility Test).
Eligibility – Home Type	All.
Eligibility – Energy Usage	n/a
Eligibility – Participation in Energy Assistance	n/a
Eligibility – Other Criteria	The dwelling or apartment has not been weatherized before. Exceptions are made when: <ul style="list-style-type: none"> ▶ [If the job is paid for with only federal funds or a combination of federal and PBF dollars] The weatherization work was done prior to September 30, 1993, OR <ul style="list-style-type: none"> ▶ [If a weatherization project is paid for with only PBF dollars] weatherization work completed with program dollars was completed at least five years prior to current weatherization services being completed. ▶ The dwelling has been damaged by fire, flood, or natural disaster, and repair of the damage to weatherization materials is not covered by insurance.
Targeted Groups	Grantees must give priority to those households that contain elderly, handicapped person(s), or children under age 6. Optionally, grantees may give priority to a high-energy consumption household.
Measure Determination	<ul style="list-style-type: none"> ▶ Required Measures Lists ▶ Weatherization Assistant Energy Audit software (NEAT and MHEA). <p>For 1- to 4-unit buildings, auditors may use the 1- to 4-Unit Building Required Measures List or the National Energy Audit Tool (NEAT) to determine measures.</p> <p>For mobile homes, auditors use the Mobile Home Energy Audit (MHEA) to determine measures.</p> <p>For 5+ Unit Buildings, auditors may use the 5+-Unit Buildings Measure List or an engineering study of the building to determine measures.</p> <p>[NOTE: The Division has developed protocols, enabled measures, and default set-up libraries for NEAT and MHEA audit use in Wisconsin. Those must be followed when using the audits. Grantees may opt to customize the set-up libraries with their own costs or use the default set-up. Given the complexity of the set-up procedures, using the default Wisconsin set-up is recommended. A grantee's customized set-up library must initially be approved by the Division prior to use.]</p>
Mean Costs per Home (PY2006)	\$6,176.
Targeted Average Cost (PY2005)	\$5,876 statewide.

	The Wisconsin Department of Administration's Energy Division (ED) assigns individual grantees a targeted average cost, which varies across grantees.
Cost Limit	None.
Landlord Contribution	<p>In rental units where owners are responsible for paying heating costs or multifamily units that are master-metered, property owners are required to make a contribution amounting to 15% of the total cost of the weatherization work.</p> <p>Owners may contribute by means of:</p> <ul style="list-style-type: none"> ▶ Cash contribution ▶ Rebate or rent reduction (the rebate period cannot exceed one year) ▶ Work performed by the property owner to the dwelling unit to facilitate weatherization services. Labor performed by the property owners themselves may not count toward the contribution; however, cost of the materials used may be counted. <p>[NOTE: Low-income landlords who are themselves eligible for weatherization services or Wisconsin Home Energy Assistance Program (WHEAP) are not required to make contributions.]</p>
% of Program Dollars Spent on Administrative Costs	<p>State: 2.71%</p> <p>Subgrantees: 8.07%</p>
Efficiency Measures	<p>Common weatherization services include:</p> <ul style="list-style-type: none"> ▶ Conducting an energy audit ▶ Insulating attics, walls, and floors ▶ Insulating or replacing water heater ▶ Installing energy-efficient lighting ▶ Reducing air leakage ▶ Replacing inefficient freezers ▶ Repairing or replacing the furnace or boiler ▶ Testing and/or replacing refrigerator ▶ Performing a general health and safety inspection ▶ Providing information about maintenance and energy conservation.
Customer Education – Y/N	Yes.
Education as Part of Service Delivery – Y/N	Yes. Customers are instructed on the measures that are being installed and how to run the equipment (when applicable).
Education Separate from Service Delivery – Y/N	No.
Follow-Up with Customers – Y/N	Yes.
Program Manager (PUC, State, Utility)	The provider agencies (community action agencies, county housing authorities, nonprofit organizations, city government).
Data Manager (PUC, State, Utility, Other)	Wisconsin Department of Administration, Energy Division, through their WisWAP IT system/database. The service providers are responsible for completing data entry.
Enrollment Responsibility (Utility, CAP, etc.)	The provider agencies (community action agencies, county housing authorities, nonprofit organizations, city government).
Number of Provider Agencies and/or Contractors	21.
Type of Provider (For-Profit, CAA, etc.)	Nonprofits and governmental entities.
Application Method (Mail, In-Person, Telephone)	<p>In-person.</p> <p>For households that wish to apply for weatherization, grantees must:</p> <ul style="list-style-type: none"> ▶ Refer households to the local WHEAP agency to complete a Home Energy Plus Program application, or ▶ Assist households with completing the Home Energy Plus Program application, verify information as appropriate, and determine eligibility. ▶ The household must also complete the Weatherization Supplemental application.
Joint Application	<p>Yes.</p> <p>Households certified for WHEAP will have their data automatically electronically transferred to the Wisconsin Weatherization Assistance Program's database (WisWap). They will not have to fill out another Home Energy Plus application.</p> <p>However, the Weatherization Supplemental application form must be completed before the household may be certified as eligible for weatherization services.</p>
Reasons for Service Denial	<p>The building is not eligible.</p> <p>There are no energy conservation measures to complete.</p>

Type of Follow-Up	Some grantees measure customer satisfaction using brief postcard surveys.
Quality Control (Inspections?, etc.)	<p>A typical state and service provider quality control system will review:</p> <ul style="list-style-type: none"> ▶ Energy/weatherization audit or measures list accuracy and appropriateness ▶ Work order/agreement appropriateness ▶ Client understanding of the work to be performed ▶ Completeness of work performed ▶ Quality of work performed ▶ Client satisfaction with work performed ▶ Client benefits received. <p>The service providers inspect 100% of their work. The inspection is done by an individual who is not a member of the provider's production team.</p> <p>The state reinspects a minimum of 5% of all jobs.</p>
Evaluation Frequency	Annually, but typically only for one or a few program components. The last complete program evaluation was completed around 2003.
Coordination with LIHEAP	By Wisconsin statute, 15% of LIHEAP funds are allocated to the Weatherization Assistance Program.
Coordination with WAP	LIWAP dollars are pooled with PB and LIHEAP dollars to fund Wisconsin WAP projects.
Coordination with Energy Affordability Programs	<p>The Energy Division produces a WHEAP referral list for WAP grantees that includes WHEAP applicants who have met the following criteria:</p> <ul style="list-style-type: none"> ▶ The household's case has been extracted – i.e., an energy-assistance payment was made to the household's fuel supplier ▶ Household income was less than or equal to 150% of poverty or at least one member of the household was categorically eligible. <p>WAP applicants are referred to the local WHEAP agency to complete a Home Energy Plus application if they hadn't yet completed one.</p>
Coordination with Other Energy Efficiency Programs	Grantees will refer customers to whatever energy-, social-, or housing-related programs they feel the customer may qualify for, as applicable.

NOTE

The state of Wisconsin pools all of their energy assistance program funding from three different sources – the Public Benefits Fund (which is funded through rates and a separate Public Benefits Charge), and federal LIHEAP and LIWAP. By statute, 53% of those funds must be apportioned to bill payment assistance and 47% must be allocated for weatherization assistance.

PY2006 expenditures are broken out by funding source for the energy and weatherization assistance programs below:

	Funding Source				Total
	Rates	PBF Charge	Fed LIHEAP	Fed WAP	
WI WHEAP	17,277,316	16,100,000	79,773,389		\$113,150,705
WI WAP	18,035,366	16,600,000	11,987,189	8,284,376	\$54,906,931
Total Spent	\$35,312,682	\$32,700,000	\$91,760,578	\$8,284,376	\$168,057,636

VI. Energy Efficiency Program Evaluation Findings

Wisconsin's Department of Administration, Division of Energy contracted with PA Government Services to conduct an evaluation of their Low-Income Public Benefits Programs. The three year study covered state fiscal year 2002 through state fiscal year 2004. The evaluation

examines the effectiveness in the programs' targeting of vulnerable households, interaction with other programs, impact on payment of home energy bills, and other client impacts.⁴⁸

The key findings from the evaluation are summarized below.

- WAP weatherized over 8,000 units in program year 2004, with an average cost per unit of over \$5,000.
- Approximately 32 percent of these clients were renters, a significant increase over the 24 percent renters served in program year 2002.
- Participants reported improvements in home comfort and health after receiving weatherization services. These improvements persisted two years after service delivery.
- Thirty-seven percent of households said that the most important benefit of the program was the improved home comfort.

Table 11 displays the usage impact results. Single family homes saved an average of 16 percent of their pre-treatment gas usage and 11 percent of their pre-treatment electric usage. Gas savings averaged 17 percent for multi-family buildings and 7 percent for mobile homes. Electric savings averaged 16 percent for mobile homes and 12 percent for 2-4 unit buildings.

**Table 11
Usage Impact Results**

	# of Households	Usage		Gross Savings	
		Pre	Post	Amount	Percent
Gas (therms)					
Single Family	4,519	1,057	888	169	16%
Mobile Home	1,039	842	783	59	7%
2-4 Unit Building	2,311	1,059	874	185	17%
5+ Unit Building	383	568	474	94	17%
Electric (kWh)					
Single Family	7,033	8,400	7,476	924	11%
Mobile Home	1,642	7,294	6,127	1,167	16%
2-4 Unit Building	2,525	6,525	5,742	783	12%
5+ Unit Building	1,352	4,600	4,554	46	1%

⁴⁸ Low-Income Public Benefits Evaluation, Year 3 Low-Income Program Evaluation – Volume 1. Report, PA Government Services Inc., October 13, 2004.