

## Home Energy Affordability Gap

In an effort to quantify the gap between "affordable" home energy bills and "actual" home energy bills, Fisher, Sheehan & Colton (FSC) has developed a model that estimates the "home energy affordability gap" on a county-by-county basis for the entire country. FSC found that the annual "affordability gap" for 2002 reached roughly \$18.2 billion and that federal fuel assistance provided through the Low-Income Home Energy Assistance Program (LIHEAP) covered just a fraction of that gap.

Based on this county-specific data, FSC has prepared state-by-state Home Energy Affordability Gap Fact Sheets. The Fact Sheets available through this Affordability Gap analysis will provide you with the following state-level information:

- · Home energy burdens broken down by Poverty Level;
- Number of households broken down by Poverty Level;
- Home Energy Affordability Gap given winter 2002 heating prices (and normal weather), broken down by Poverty Level;
- Projected Home Energy Affordability Gap given estimated 2003 heating prices (and normal weather), broken down by Poverty Level;
- Low-income home energy bills, broken down by end use (heating, cooling, hot water, electricity);
- Average per-household Home Energy Affordability Gap for households below 185% of Poverty (state ranking amongst 50 states plus D.C.);
- Average total home energy burden for households below 50% of Poverty (state ranking amongst 50 states plus D.C.);
- Percentage of individuals below 100% of Poverty Level (state ranking amongst 50 states plus D.C.); and
- Combined heating/cooling affordability gap covered by federal energy assistance (state ranking amongst 50 states plus D.C.).

Simply click on the state for which you wish information.

Exhibit (Schedule) 1



The problems arising from the unaffordability of home energy in the United States are substantial. A June 2001 report by the National Fuel Funds Network, and other national organizations, found that at the end of the 2000/2001 winter heating season, at least 4.3 million low-income households were at risk of having their utility service cut off because of an inability to pay their winter home energy bills. While natural gas prices moderated after the 2001/2002 winter heating season, recent increases in natural gas and fuel oil prices are again creating crisis situations for utility customers. These households are disproportionately low-income households.

That payment-troubled customers are disproportionately low wage households is commonly accepted. National data reported by the U.S. Census Bureau indicates that the proportion of households in arrears at any given point in time is substantially higher for the low-income population than for the population as a whole. One 1995 Census study reported that while 9.8% of non-poor families could not pay their utility bills in full, 32.4% of poor families could not do so. According to the Census Bureau, while 1.8% of non-poor families had their electric and/or natural gas service disconnected for nonpayment, 8.5% of poor families suffered this same deprivation.

It is not merely the nonpayment of bills that is of concern, however. One impact, but only one impact, of the unaffordability of home energy service is the nonpayment of bills. Previous research by the lowa Department of Human Rights (DHR) found that bill nonpayment is perhaps not even the most significant of the adverse impacts of unaffordable home energy bills. A DHR study of lowa LIHEAP recipients found that:

- Over 12 percent of Iowa LIHEAP recipients went without food to pay their home heating bill.
- · More than one-in-five went without medical care to pay for heating bills. This included not

seeking medical assistance when it was needed, not filling prescriptions for medicine when a doctor had prescribed it, and/or not taking prescription medicines in the dosage ordered by the doctor.

- Almost 30 percent reported that they did not pay other bills, but did not elaborate as to which bills were not paid.
- In addition to not paying other bills, many low-income households incurred debt in order to
  pay both their home heating bills and other basic necessities. They borrowed from friends
  and/or neighbors, used credit cards to pay for food and other necessities, or did not pay the
  heating bill.

A summary presentation of the FSC Home Energy Affordability Gap, made to the June 2003 National Fuel Funds Network (NFFN) annual conference, can be obtained by clicking on this link:

NFFN Home Energy Affordability Gap presentation

A summary presentation of the uses to which FSC's Home Energy Affordability Gap can be put can be obtained by clicking on this link:

NFFN Home Energy Affordability Gap - Uses of Data

Contact us for county-specific information (available on a fee-for-service basis).

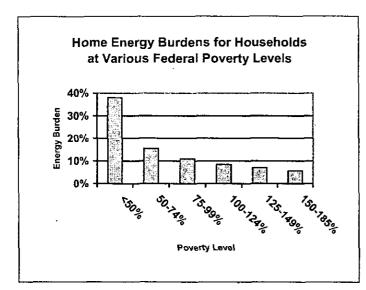
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### ON THE BRINK

The Home Energy Affordability Gap in MISSOURI

APRIL 2003

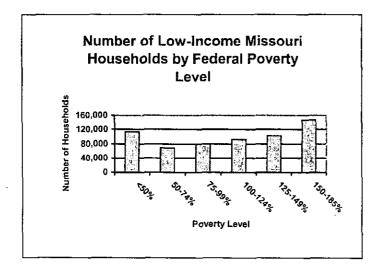
#### Finding #1



Home energy is a crippling financial burden for low-income Missouri households. Missouri households with incomes of below 50% of the Federal Poverty Level pay 38% or more of their annual income simply for their home energy bills.

Home energy unaffordability, however, is not simply the province of the very poor. Bills for households between 50% and 100% of Poverty take up 13% of income. Even Missouri households with incomes between 150% and 185% of the Federal Poverty Level often have energy bills above the percentage of income generally considered to be affordable.

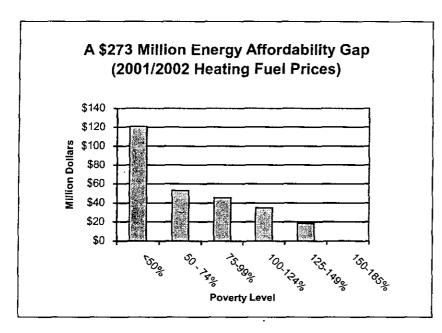
#### Finding #2



The number of households facing these energy burdens is staggering. More than 115,000 Missouri households live with income at or below 50% of the Federal Poverty Level and thus face a home energy burden of 38% of income or more.

70,000 additional Missouri households live with incomes between 50% and 74% of Poverty (home energy burden of 15%).

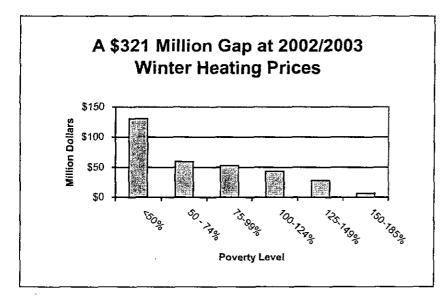
80,000 more Missouri households live with incomes between 75% and 99% of the Federal Poverty Level (home energy burden of 11%).



Existing sources of energy assistance do not adequately address the energy affordability gap in Missouri. Actual low-income energy bills exceeded affordable energy bills in Missouri by nearly \$273 million at 2001/2002 winter heating fuel prices.

In contrast, Missouri received a gross allotment of federal energy assistance funds of \$38.7 million for Fiscal Year 2003. Some of those funds will be used for administrative costs, weatherization, and other non-cash assistance.

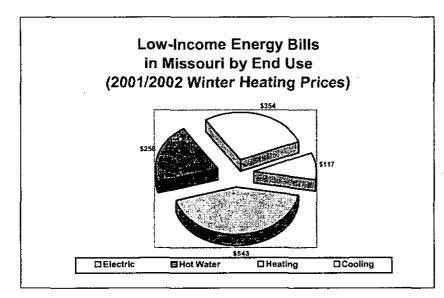
#### Finding #4



Increases in the prices of natural gas, propane and fuel oil during the 2002/2003 winter heating season drive the unaffordability gap up to more than \$321 million.

While the gap for the lowest income households (0-50% of Poverty) increases by nearly 9% (from \$121 million to \$131 million), the gap for the highest income households (150-185% of Poverty) increases by more than 1700% (from \$0.3 million to \$6.4 million).

#### Finding #5



The energy affordability gap in Missouri is not created exclusively, or even primarily, by home heating and cooling bills.

At 2001/2002 winter heating prices, while home heating bills were \$354 of a \$1,273 bill (27.8%), electric bills (other than cooling) were \$543 (42.7%). Annual cooling bills represented \$117 in expenditures (9.2% of the total bill), while domestic hot water represented \$258 in expenditures (20.2%).

#### Finding #6

The unaffordability of home energy bills frequently causes low-income households to take drastic actions that are detrimental to their health, safety and welfare. A survey of energy assistance recipients by the Iowa Department of Human Rights found that:

- > Over 12 percent of the surveyed energy assistance recipients went without food to pay their home heating bill.
- More than one-in-five went without medical care to pay for heating bills, including not seeking medical assistance when it was needed, not filling prescriptions for medicine when a doctor has prescribed it, and/or not taking prescription medicines in the dosage ordered by the doctor.
- > Almost 30 percent reported that they did not pay other bills, but did not elaborate as to which bills were not paid.
- > In addition to not paying other bills, many low-income households incurred debt in order to pay both their home heating bills and other basic necessities: borrowed from friends and/or neighbors; used credit cards to pay for food and other necessities, or did not pay the heating bill.

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# **MISSOURI** Energy Gap Rankings (scale of 1 – 51)

AVERAGE DOLLAR AMOUNT BY WHICH ACTUAL HOME ENERGY BILLS EXCEEDED AFFORDABLE HOME ENERGY BILLS FOR HOUSEHOLDS BELOW 185% OF POVERTY LEVEL.

\$453 per household

RANK: #7

AVERAGE TOTAL HOME ENERGY BURDEN FOR HOUSEHOLDS BELOW 50% OF POVERTY LEVEL.

38.0% of household income

RANK: #8

PERCENT OF INDIVIDUALS BELOW 100% OF POVERTY LEVEL.

11.7% of all individuals

RANK: #28

COMBINED HEATING/COOLING AFFORDABILITY GAP COVERED BY FEDERAL HOME ENERGY ASSISTANCE.

33.0% of gap is covered

**RANK: #13** 

#### DEFINITIONS AND EXPLANATIONS

Each state (along with the District of Columbia) has been ranked (from 1 to 51) in terms of four separate measures of the extent of the energy affordability gap facing its low-income customers:

- (1) The percent of individuals with annual incomes at or below 100% of the Federal Poverty Level. This data is obtained directly from the 2000 U.S. Census.
- (2) The average total home energy burden for households with income at or below 50% of the Federal Poverty Level shows the percentage of income which households with these incomes spend on home energy. "Total home energy" includes all energy usage, not merely heating and cooling. A home energy bill is calculated on a county-by-county basis. The statewide average is a population-weighted average of county-by-county data.
- (3) The average affordability gap (in dollars per household) for all households with income at or below 185% of Poverty is the dollar difference between actual total home energy bills and bills that are set equal to an affordable percentage of income. Affordability for total home energy bills is set at 6% of household income.
- (4) The extent to which federal energy assistance covers the combined heating/cooling affordability gap for each state. The combined heating/cooling affordability gap is the difference between actual heating/cooling bills and bills that are set equal to an affordable percentage of income. Affordability for combined heating/cooling bills is set at 2% of income. This measure thus examines the proportion of the heating/cooling gap that is covered by the gross federal Low-Income Home Energy Assistance Program (LIHEAP) allocation to the state assuming that the entire LIHEAP allocation is used for cash benefits.

In the state's rankings, a higher ranking indicates better conditions while a lower ranking indicates worse conditions relative to other states. Thus, for example:

- (1) The state with the rank of #1 has the lowest percentage of individuals living in households with income at or below 100% of the Federal Poverty Level while the state with the rank of #51 has the highest percentage.
- (2) The state with the rank of #1 has the lowest average home energy burden for households with income below 50% of the Federal Poverty Level while the state with the rank of #51 has the highest average home energy burden.
- (3) The state with the rank of #1 has the lowest average affordability gap (dollars per household) while the state with the rank of #51 has the highest dollar gap.
- (4) The state with the rank of #1 has the highest percentage of its heating/cooling affordability gap covered by federal energy assistance while the state with the rank of #51 has the lowest percentage of its heating/cooling gap covered.

All references to "states" include the District of Columbia as a "state." Low-income home energy bills are calculated using average residential revenues per unit of energy. State financial resources and utility-specific discounts are not considered.