

**NON-ENERGY BENEFITS FROM  
LOW-INCOME FUEL ASSISTANCE**

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This memo identifies some of the "external" benefits that arise as a result of increased energy assistance funding for low-income households. "Energy assistance" may come in three forms:

- o energy efficiency improvements;
- o primary cash fuel assistance; and
- o "crisis" fuel assistance.

This discussion is not intended to generate specific figures for Missouri, but rather to identify potential benefits and the interest groups to whom those benefits would flow (in addition to the low-income consumer). The intent here, also, is not to argue that these other interest groups should make contributions to low-income energy assistance since they benefit from it (although they should certainly be supportive of energy assistance funding). Rather, the purpose here is to indicate two things:

- (1) that low-income energy assistance generates substantial benefits beyond helping pay utility bills; and
- (2) that low-income energy assistance benefits the community at large in addition to the low-income households and the companies that supply those households with energy.

Some of the benefits that have been identified include:

1. **Education:** A Missouri study of Head Start families found that unaffordable home energy bills significantly contributes to the "frequent mobility" of low-income families with children. This mobility occurs even if a family is not in payment trouble, either facing the disconnection of service or facing arrears.

In turn, substantial research ties the frequent mobility of children together with poor educational attainment, including being below grade in both reading and mathematics, and being more likely to drop out of school.

In addition, the educational research finds that addressing the needs of frequently mobile students interferes with the ability of teaches and school systems to address the education of other students.

2. **School financing:** While not specifically addressed in the Missouri study, it is postulated that the frequent mobility of school-age students, particularly if between school systems, will adversely affect school finances. To the extent that individual schools receive state aid to education based on the number of "student days" of attendance, actual dollars of state support will decrease as schools lose "student days" either to non-attendance at all, or to attendance in a different school district.
3. **Health:** Loss of a household's primary heat source presents serious risks both in terms of the cold as well as the dangerous side effects such as fire and carbon monoxide poisoning resulting from using unsafe heating sources. According to the National Center for Heath Statistics, approximately 60,000 lives are lost annually by problems associated with cold weather including fires, carbon monoxide poisoning, pneumonia, influenza and other infectious diseases and of course hypothermia.<sup>\1\</sup>

Moreover, these dangerous tradeoffs between health and energy affect not only the vulnerable elderly, but young children as well. A study by Boston City Hospital of 7,367 children found that "the number of malnourished, low-weight children jumped dramatically following the coldest winter months."<sup>\2\</sup>

In addition to the very young, the aged are a vulnerable population that can be helped by low-income energy assistance.

Hypothermia, literally a drop in the body's internal temperature, is a potentially fatal cold weather hazard for older Americans. While usually associated with outdoor recreation or the homeless, most victims of hypothermia are the elderly who die in their own homes in seemingly normal temperatures.<sup>\3\</sup>

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\1\ Select Committee on Aging, House of Representatives, *Deadly Cold: Health Hazards Due to Cold Weather*, at 2 (1984).

\2\ Diego Ribadeneira, "BCH Study Illustrates Poor's Painful Choice," *The Boston Globe*, at 1 (September 8, 1992).

\3\ Federal Council on the Aging, *Accidental Hypothermia: Facts and Myths*, at iv (Washington D.C.).

In discussing *which* elderly people are most vulnerable to death resulting from hypothermia, a Congressional Committee, the Select Committee on Aging, wrote in their report to Congress:

Low fixed incomes, poverty and the increased cost of fuel heating and cooling the home create conditions in which many of the most vulnerable members of our communities are forced to make dangerous tradeoffs between energy and health. Energy conservation programs which encourage elderly people to reduce room temperature below 70 degrees F, directly endangers the health and safety of those who are vulnerable to hypothermia.\* \* \* These individuals may try and minimize their fuel costs by keeping the temperature in the home or apartment as low as possible rather than a minimum of 65 degrees. In the worst case inability to pay for fuel energy could result in a termination of service and severe risk during a cold spell.<sup>\4\</sup>

The Select Committee found that these deaths related to cold weather are preventable. In the *Suggestions for Reform* section, the Select Committee for Aging, as one of its recommendations, advised the following: "health organizations should work closely with gas and electric companies to prevent gas and electric shutoffs to residential customers. Shutoffs during the winter time should not be allowed without adequate warning and notification of a responsible health department."

This recommendation for "health organizations" is perhaps even more astute today than it was 13 years ago when it was first made. Given a move toward competitively-provided "managed care" in a for-profit industry, health organizations (such as HMOs) that can reduce the risks of adverse health consequences flowing from unaffordable home energy should be supportive of adequate home energy assistance.

4. **Safety:** In contrast to households who have nothing to rely upon when their heat is shutoff, many consumers generate heat by using another fuel source, whether a portable heater, the kitchen stove, or a fireplace.<sup>\5\</sup> Households experiencing a loss of home heat between April and November were more likely to use a fireplace or portable electric heater. Similarly, in North Carolina, even those households who didn't lack heat altogether faced major disruptions in their ability to keep warm. Of those households losing their primary fuel last

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\4\ Select Committee on Aging, House of Representatives, *Deadly Cold: Health Hazards Due to Cold Weather*, at 2 (1984).

\5\ Michael Sheehan, *et al.* (1994). *An Assessment of Low-Income Energy Needs in Washington State*, at 108, Washington Department of Communities, Trade and Economic Development (CTED): Olympia, WA.

winter, nearly one in four (24%) used either portable kerosene heaters or portable electric heaters as their (expensive and very dangerous) replacement source of heat. A nearly equal proportion of the households losing their primary source of heat relied upon either their cooking stove or their fireplace (20%) as their primary heating source.<sup>16)</sup>

There are serious safety implications with the use of these alternative sources of home heating. Home heating equipment is the leading cause of all residential fires, although space heaters account for only a small number of them. However, fires caused by electric space heaters are five times more likely to result in a fatality than the average house fire, and ten times more likely to result in a fatality than all fires. Half the deaths and one-third the injuries from electric space heaters occur when family members are asleep and the heater is unattended.<sup>17)</sup>

These findings are consistent with work recently performed by the U.S. Department of Energy. In August, 1996, Lawrence Berkeley Laboratory (LBL) released findings from one its studies showing that energy efficiency investments in housing often lead to the correction of conditions that place buildings at risk of insurable events (such as fire).<sup>18)</sup> LBL concluded that insurance companies have a substantial interest in promoting energy efficiency generally. The same rationale would seem to apply to low-income energy assistance.

5. **Homelessness:** There is a relationship between utility disconnections and homelessness as well. The Philadelphia research found that "the relationship between terminations and homelessness is also clearly discernible." Surveys of homeless persons and emergency shelter providers across Pennsylvania, ECA/IPPS said, "have found the loss of utility service to be a minor, but consistent contributor to homelessness. Among the dominant housing-related reasons for homelessness, utility terminations were cited as the cause 7.9% of the time." High energy prices "also undoubtedly contribute to the other, more frequently cited housing related reasons for homelessness," ECA/IPPS said, "such as 'lack of housing in income range,' and 'eviction for nonpayment.'"

This Philadelphia research is confirmed by research by the Northern Kentucky Coalition for

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<sup>16)</sup> Roger Colton and Roberta Levinson (1991). *Energy and Poverty in North Carolina*, National Consumer Law Center: Boston.

<sup>17)</sup> *Efficient, Inexpensive Space Heaters Also Pose Deadly Danger*, *Washington Post*, at p. C-01 (January 20, 1989).

<sup>18)</sup> Evan Mills (1996). *Energy Efficiency: No-Regrets Climate Change Insurance for the Insurance Industry*, Lawrence Berkeley Laboratory: Berkeley, CA. Available at: <http://eande.lbl.gov/CBS/reports.html>. (this report was also published in the *Journal of the Society of Insurance Research*, pp. 21 - 58 (Fall, 1996). A review of the full complement of Lawrence Berkeley Laboratory, Center for Building Science, initiative on *Energy Efficiency as an Insurance Loss-Prevention Strategy*, can be found at: <http://eande.lbl.gov/CBS/Climate-Insurance/ci.html>.

the Homeless, which found in a recent study that the disconnection of utility service was one of the reasons consistently cited as a cause of homelessness.<sup>9\</sup> Homelessness obviously damages the quality of life of the person with no home. But it also damages the larger community to experience the presence of numbers of individuals with no regular ties to a stable residence. Homeless people have more difficulty finding and keeping work, and their presence in the community is a visible reminder of the failure of the social and economic base of the community to provide a place for all its members.

6. **Vacancy losses:** One impact of the frequent mobility of low-income consumers is the financial drain it places on local property owners. Property owners will face a loss of revenue during the time between the date on which a property is vacated and the date on which a new tenant moves in. Rarely would such a changeover in occupants happen "instantaneously." Even if there are only a few days (or a week) of lost rent, the economic impact in the aggregate could be substantial. When vacancies run for several weeks (or more), the economic impact of any given vacancy could be substantial. To the extent that low-income fuel assistance can help stabilize a low-income family in their home for sustained periods of time, the property owner benefits as well.
  
7. **Small business:** To the extent that fuel assistance allows low-income consumers to spend more on household necessities, local businesses serving the low-income communities will benefit. While no research specific to fuel assistance has been done on this issue, there has been research respecting the federal Earned Income Tax Credit (EITC). According to research by Public Service Electric and Gas (a New Jersey utility), more than 90 percent of the low-income population receiving the Earned Income Tax Credit uses the additional funds to pay for household goods and services. The money is not used for vacations, or to purchase new cars and appliances, and the like. It is instead used for basic living expenses. This use of EITC benefits is important because existing research indicates that low-income households tend to shop at local retail establishments. For food in particular, low-income households tend to shop at small, local food stores. research in Oakland, California recently found that businesses serving low-income communities "strengthen other locally based business--even more than stores in middle-income neighborhoods."<sup>10\</sup> According to this research:

Oakland's low-income area businesses have a distribution network (in-coming goods) that is 54 percent Oakland-based. Nineteen percent say their main suppliers are half inside the city and half

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<sup>9\</sup> Northern Kentucky Coalition for the Homeless (with technical assistance by Applied Information Resources), *Homelessness and Low-Cost Housing in Northern Kentucky: An Analysis and a Strategic Action Plan* (July 1990).

<sup>10\</sup> David Dante Troutt (1993). *The Thin Red Line: How the Poor Still Pay More*, at 35, Consumers Union: San Francisco.

outside, and 27 percent have suppliers outside the city borders. In stark contrast, only 19 percent of [more middle income neighborhood] stores have main suppliers in Oakland. Twenty-five percent report that half their suppliers are Oakland-based and half are not. Yet 56 percent have main suppliers from outside the city.

The research concluded that "low-income area businesses of whatever kind purchase the bulk of their goods from Oakland-based suppliers. These suppliers are themselves sources of local employment\* \* \*."<sup>11\</sup> In sum, if the income freed up by fuel assistance is spent the same way as income provided by the EITC, not only will the provision of low-income fuel assistance provide income and employment to low-income households, but the funds that are delivered to such households will likely be spent, retained and recirculated within the low-income community.

8. **State finances:** A further extension can be made based upon the discussion of economic benefits above. Again, the work has not been done with respect to federal fuel assistance specifically, but rather with respect to the earned income tax credit. There is a group in Chicago<sup>12\</sup> that has done extensive work on advocating state assistance in signing folks up for the federal Earned Income Tax Credit (EITC). According to this organization, state monies that are spent on promoting the EITC are returned more than 100 percent by, if nothing else, increased *sales tax* collections. With the exception of utilities (I will assume that natural gas and electricity, at the least, are exempt from sales tax in Missouri, as they are most places), when low-income consumers purchase more food, or milk, or clothing, and the like, they will be paying some amount of money for sales tax on those items.

But the sales tax implications involve more than the direct purchase of consumer items by low-income consumers. As is discussed above, one impact of spending money in the local economy is that it generates a "multiplier" effect. Household A spends money in a local grocery store. The grocery store pays an employee to take care of customers. The employee takes his/her paycheck and, in turn, spends those wages on household goods and services (for example, on child care). That child care provider takes his/her money and spends it on other household goods and services. Through this process of spending and respending money in the economy, the expenditure "multiplies" to many times its size in economic activity.

Consumer expenditures in the "retail trade" sector of the economy have a particularly high multiplier effect.<sup>13\</sup> What the Chicago research concludes is that the state more than recoups

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<sup>11\</sup> *Id.*, at 36.

<sup>12\</sup> Michael O'Connor, Center for Law and Human Services, 53 West Jackson Street, Suite 1401, Chicago, IL 60604.

<sup>13\</sup> There was an evaluation performed about two years ago about the economic impacts in

its funding through increased sales tax collections on these increased consumer expenditures across-the-board.

(..continued)

Philadelphia of LIHEAP expenditures. While I know I have a copy, for the life of me, I cannot find it. I will continue to look for it --I'm positive it is in one of my Philadelphia files-- and will modify this footnote and add the appropriate language if I can do it in the next few days.