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The Economic Development Impacts of Energy Assistance

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THE ECONOMIC DEVELOPMENT IMPACTS OF ENERGY ASSISTANCE

The delivery of low-income home energy assistance in Colorado provides a wide range of economic benefits to the state. Frequently thought of exclusively as a way to prevent unpaid utility bills, and to preserve service against termination for nonpayment, in fact, low-income energy assistance can also be viewed as a strategy to promote economic development and employment (particularly in low-income communities).

A recent FSC report for the Colorado Energy Assistance Foundation (CEAF) quantifies the financial and economic impacts that low-income energy assistance provides to the State of Colorado.

Energy Assistance in Colorado

Low-income energy assistance in Colorado is provided primarily through the federal Low-Income Home Energy Assistance Program (LIHEAP), known as LEAP in Colorado, and through the Colorado Energy Assistance Foundation (CEAF). While other sources of public and private energy assistance exist for the State of Colorado, LEAP and CEAF provide the bulk of cash assistance to help pay home energy bills.

In Fiscal Year 2002, Colorado LEAP dollars were provided through a \$26,839,585 block grant from the federal government, a \$2,500,000 grant from the Colorado Energy Assistance Foundation (CEAF), a \$339,896 "leveraging" grant from the federal

government, \$1,500,000 in TANF dollars, and \$1,856,123 in carryover funds from the previous fiscal year. In addition to the \$2.5 million it provided in supplemental LEAP funding, CEAF provided \$1,371,869 to a range of non-profit agencies to fund energy assistance grants outside the LEAP framework.

The distribution of energy assistance adds dollars of direct economic activity to the State of Colorado. In FY 2002, the combined CEAF/LEAP cash benefit distribution added more than \$23.1 million directly to the Colorado economy. In addition, these energy assistance programs added more than \$3.6 million in economic output through their administrative and outreach activities.

The *complete* economic impact of energy assistance, however, extends well beyond these direct impacts. Energy assistance benefits induce economic activity in three aspects of the Colorado economy, each of which can be separately assessed. The three areas include:

Earnings: As energy assistance recipients spend the benefits they receive, the institutions providing the goods and services being purchased will, in turn, hire employees (and thus pay wages), as well as buy goods and services (which require *those* suppliers to hire employees). The additional wages that are paid to Colorado employees as a result of these ripple effects are captured in the “earnings” component of the induced economic impact. These impacts are measured in terms of additional earnings paid to households for each dollar of output directly added to the economy. Given a hypothetical earnings multiplier of 0.72, for example – actual earnings multipliers are discussed in the FSC report-- each one million dollars (\$1,000,000) of energy

assistance would create \$720,000 in earnings in the Colorado economy.

Employment: As energy assistance increases economic activity in the State of Colorado, more workers are required to produce and deliver the goods and services comprising that activity. As with the underlying economic output, the employment impacts of energy assistance include not only those jobs that are directly created as a result of the delivery of energy assistance, but the jobs that are indirectly created as well. Indirect job creation occurs as the directly-created employees, in turn, spend their incomes and consume additional goods and services. The employment impacts are measured in terms of the number of jobs that are created per \$1.0 million in direct economic activity. Given a hypothetical employment multiplier of 12.3, for example, each one million dollars of energy assistance delivered in Colorado supports 12.3 new jobs in the Colorado economy.

Economic activity: The total activity created by the consumption of goods and services includes the complete addition to gross domestic product (GDP) resulting from energy assistance. As with earnings and employment, the total activity is captured through a “multiplier analysis” that considers not only the direct activity created, but considers the additional activity that is induced by that direct activity as well. The economic activity is measured in terms of dollars of economic output created by each dollar of direct expenditure. Given a hypothetical economic multiplier of 1.60, for example, each one dollar (\$1) of energy assistance benefits would create \$1.60 of total economic activity.

The distribution of energy assistance first creates economic activity for the State of

Colorado through the direct delivery of benefit dollars. In addition to the dollars of cash benefits, however, the delivery of energy assistance will also free up household dollars that would have been devoted to the costs arising from the payment and behavior consequences of energy bill unaffordability. These dollars, too, can then instead be spent (and circulated) in the local economy.

The full range of activity added to the Colorado economy as a result of energy assistance includes three distinct types of economic impacts:

1. The benefit impacts
2. The payment impacts
3. The behavior impacts

The Benefit Impacts

The benefit impacts of energy assistance are those impacts associated with the distribution of the energy assistance dollars themselves. These impacts arise irrespective of whether the dollars of benefits have any impact on customer payment practices or behavior patterns. This analysis separately considers those energy assistance dollars distributed as benefits to customers and those dollars used for administration and outreach.

In total, the distribution of energy assistance in Colorado (along with the attendant administrative and outreach expenditures) added \$60.3 million to the Colorado economy, created \$20.9 million in increased earnings, and supported 1,338 jobs.

The Payment Impacts

The payment impacts of energy assistance in

Colorado are those economic benefits that arise from changes in payment practices of Colorado customers attributable to the distribution of energy assistance benefits. These changes will, in turn, have dollar consequences to the customers that will ramify throughout the Colorado economy.

To the extent that Colorado provides energy assistance to Colorado residents, these benefits help residents change payment patterns and practices that cost the household money.

Two changes in payment practices were considered in the Colorado analysis: (1) reductions in the extent to which energy assistance recipients carry arrears; and (2) reductions in the extent to which energy assistance recipients are subject to service terminations.

Consideration of the economic impact of changes in payment patterns focused exclusively on customers that use natural gas or electricity as their primary heating source.

Improved payment patterns attributable to Colorado energy assistance will create economic impacts throughout the Colorado economy. These payment impacts, standing alone (without the benefit impacts described above or the behavior impacts identified below), will yield \$17.6 million in economic activity, generate \$6.7 million in increased earnings, and create 409 new jobs.

The Behavior Impacts

The behavior impacts of energy assistance in Colorado are those economic benefits that arise from a change in behavior patterns of low-income Colorado customers attributable to the distribution of energy assistance benefits. As with changes in payment

practices, these changes in behavior patterns will, in turn, have dollar consequences that ripple throughout the Colorado economy. As with payment impacts, the benefit impacts discussed above are in addition to these behavior impacts.

Three behavior patterns were considered in this analysis: (1) reduction in the extent to which low wage workers miss days of work due to the illness of the wage earner attributable to unaffordable energy; (2) reductions in the extent to which low wage workers miss days of work due to family care responsibilities attributable to unaffordable energy; and (3) reductions in the “forced mobility” of low-income households attributable to unaffordable home energy.

Unlike the payment pattern impacts discussed above, the consideration of the economic impacts of these behavior changes was not limited to customers that use electricity or natural gas as their primary heating fuels.

Changed behavior patterns attributable to Colorado energy assistance will create economic impacts throughout the Colorado economy. These payment impacts, standing alone (without the benefit or the payment impacts identified above), will yield \$25.3 million in economic activity, generate \$9.6 million in increased earnings, and create 588 new jobs.

Particular Benefits to Low-Income Communities

While the discussion above looks at economic benefits on a statewide basis, in fact, the economic impacts provide particular advantage to low-income communities.

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. Moreover, not only are low-income *households* more likely to shop locally, but the *businesses* serving low-income households are more likely to shop locally as well. Research in Oakland, California, for example, found that businesses serving low-income communities “strengthen other locally based business--even more than stores in middle-income neighborhoods.”

In sum, not only will the provision of energy assistance provide income and employment to low-income households, but the earnings and employment that are delivered to such households will likely be spent, retained and recirculated within the low-income community as well.

Summary

The delivery of energy assistance in Colorado accomplishes far more for the State than simply helping low-income residents avoid arrears on home energy bills and preventing the potential loss of home energy service due to nonpayment. The delivery of home energy assistance also serves as a substantial economic stimulant for the Colorado economy.

Energy assistance serves as an economic stimulant for the Colorado economy in three distinct ways. In total, the Fiscal Year 2002 distribution of energy assistance in Colorado:

1. Created more than \$103 million in economic activity;
2. Generated more than \$37 million in added earnings for Colorado workers; and
3. Supported more than 2,300 jobs for the

state.

A copy of the complete analysis, titled “The Economic Impacts of Home Energy Assistance In Colorado,” including all data tables, can be obtained by sending an e-mail to:

publications@fsconline.com

Fisher, Sheehan and Colton, Public Finance and General Economics (FSC) is a research and consulting firm with offices in Belmont (MA), Scappoose (OR), and Iowa City (IA).

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