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# The Economic Impact of House Bill 0124: Low-Income Energy Assistance Program (LIEAP)

A Regional Economic Models, Inc. (REMI) Policy Insight Analysis

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August 28, 2006

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## Introduction

Thanks to the current energy boom, the State of Wyoming has been enjoying record-high revenue from taxation on natural resource extraction. A large portion, approximately two-thirds, of the State's income comes from mineral production; revenue derived from mineral production is comprised of yields from severance taxes, federal mineral royalties, mineral property taxes, and coal lease bonuses. As a result of significant increases in energy prices and production levels, the State has accrued higher than anticipated government revenue. Wyoming residents benefit from the ensuing provision of additional public facilities and services, but there are both costs and benefits associated with heightened energy prices. High energy prices result in higher consumer costs for gasoline and utility bills. All households face financial strain due to the high price of energy commodities, but these costs are even more problematic for low-income residents, as a larger proportion of their income must be devoted to covering the affected living expenses. This report, prepared by the State of Wyoming's Department of Administration and Information Economic Analysis Division, explores the economic impacts created by higher household fuel costs (excluding gasoline purchases), and examines the effectiveness of providing energy assistance to low-income households.

In general, energy prices have risen significantly faster than prices for most other commodities. Fuel and utility prices have increased twice as quickly, on average, as the national inflation rate over the last ten years. Between 2004 and 2005, energy commodities experienced a 22.5% increase in price level, while national inflation increased by only 3.4%.<sup>1</sup> The current trends present a serious concern for low-income families because a larger proportion of their disposable income will be needed to meet household energy demands. If no assistance is provided, these households may be forced to sacrifice basic necessities in order to meet their home heating needs. These sacrifices can come in the form of delayed rent or mortgage payments, skipped medical and dental care, or more frequent instances of hunger and malnutrition. Consequently, in many cases, low-income families will experience genuine hardship during the colder winter months. In 2004, the Wyoming State Legislature took the initiative to appropriate accrued revenue to help low-income families struggling to pay for home heating.

Using Regional Economic Models, Inc. (REMI) Policy Insight®, an economic forecasting and policy analysis model, this report examines the economic impact of high household utility costs on Wyoming's economy. Further, this report analyzes the mitigating effects of providing energy assistance to low-income households. REMI, which works by maintaining a baseline forecast of Wyoming's economy, is able to evaluate the direct and indirect effects produced by an economic shock, such as a natural catastrophe or commodity supply shortage. This report includes a two-step analysis of economic impacts to Wyoming's economy due to high home heating costs:

### Scenario 1:

To assess the initial cost burdens associated with heightened energy prices, REMI's baseline is modified to incorporate the average expected expenditure increases in home heating costs. Two estimations are made in regard to future home heating costs, and provide the framework for the scenarios explored in this report:

- ▶ Conservative estimate (10% increase in home heating costs)
- ▶ Moderate estimate (20% increase in home heating costs)

### Scenario 2:

The adjusted baselines are then used to analyze the effects of House Bill 0124, which provided a \$3 million injection of state funds into Wyoming's Low-Income Energy Assistance Program (LIEAP):

- ▶ Conservative estimate + \$3 million injection to consumer spending
- ▶ Moderate estimate + \$3 million injection to consumer spending

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<sup>1</sup> Information obtained from the U.S. Bureau of Labor Statistics, Consumer Price Index

**Background**

In an effort to reduce consumer burdens on low-income families, the federal government established the Low-Income Home Energy Assistance Program (LIHEAP) in 1981. Created to alleviate some of the financial constraints accompanying high energy prices, LIHEAP provides home heating assistance to qualifying low-income households. A household, in this case, is defined to be any individual or group of individuals living together as one economic unit, and that purchases residential energy in common. The program is funded through the U.S. Department of Health and Human Services (HHS), and individual states are allotted federal funding in the form of block grants. The distribution of those funds is up to the discretion of individual states.<sup>2</sup>

Wyoming’s program is entitled the “Low-Income Energy Assistance Program,” and the acronym has been shortened to LIEAP. While the federal government has provided heating assistance to low-income families for the past two decades, Wyoming just recently began contributing state funds to the program. Starting with the 2004-2005 biennium, the Legislature allocated state general funds of \$750,000 per annum to the program. Initially, Wyoming eligibility was based on an income level of 185% of the Federal Poverty Level (FPL) or 60% of the State Median Income (SMI), whichever figure was larger. In March of 2006, Governor Dave Freudenthal signed legislation, House Bill 0124, appropriating \$3 million to the Wyoming LIEAP program<sup>3</sup>. As well as providing supplementary funding, this act increased the State’s eligibility criteria to include all households at or below 215% of federal poverty guidelines. This broadened the range of qualifying households, enabling more families to receive needed heating assistance. According to the Department of Family Services, the newly expanded criteria would allow the State to service an additional 8,427 households.<sup>4</sup> The State’s contribution of funds provides assistance for those households who do not meet the federal income threshold, but who still face extreme financial pressures. The 2005-2006 income requirements (based on 185% FPL) for Wyoming are presented below in Table 1.

**Table 1**

<b>LIEAP Season 2005-2006 Poverty Income Guidelines</b>						
<b>(Effective October 1, 2005 through September 30, 2006)</b>						
Size of Family Unit	Annual Income Levels			Monthly Income Levels		
	Threshold	185% FPL	60% SMI	Threshold	185% FPL	60% SMI
1.....	\$9,570	\$17,705	\$17,492	\$798	\$1,475	\$1,458
2.....	\$12,830	\$23,736	\$22,875	\$1,069	\$1,978	\$1,906
3.....	\$16,090	\$29,767	\$28,257	\$1,341	\$2,481	\$2,355
4.....	\$19,350	\$35,798	\$33,639	\$1,613	\$2,983	\$2,803
5.....	\$22,610	\$41,829	\$39,021	\$1,884	\$3,486	\$3,252
6.....	\$25,870	\$47,860	\$44,403	\$2,156	\$3,988	\$3,700
7.....	\$29,130	\$53,891	\$45,413	\$2,428	\$4,491	\$3,784
8.....	\$32,390	\$59,922	\$46,422	\$2,699	\$4,993	\$3,868
For each additional member add.....	\$3,260	\$6,031	(1)	\$272	\$503	(1)
Notes: FPL - Federal Poverty Level; SMI - State Median Income. (1) 60% SMI Levels: For each additional family member above 6 persons, add 3% to the percentage for a 6-person family (132%) & multiply the new percentage by the State’s estimated median income for a 4-person family.						

Source: Wyoming Department of Family Services, LIEAP/Weatherization Program

Wyoming’s LIEAP program is administered through the Department of Family Services (DFS). Applicants may apply for the assistance between October 1<sup>st</sup> and February 28<sup>th</sup> of each winter. Benefits are based on a sliding scale, and paid directly to the fuel company based on the household’s current monthly bill. The amount of assistance available for qualifying families varies according to combined monthly income, family size, and primary heat source used in the home. For Fiscal Year 2006 (FY06), LIEAP eligible families’ energy assistance fell somewhere in the

<sup>2</sup> LIHEAP Home Energy Notebook for Fiscal Year 2003  
<sup>3</sup> HB0124, Fifty-Eighth Legislature of the State of Wyoming 2006 Budget Session  
<sup>4</sup> Department of Family Services, 2005-2006 Biennium Expense Organization Narrative

ranges listed in Table 2. The minimum amount a household could receive was \$58 annually, while the maximum benefit available was \$1,030 per year. Benefit amounts are proportional to income level. For example, a household with an income level of 75% the FPL would receive a benefit that is greater than a household at 125% of the FPL.

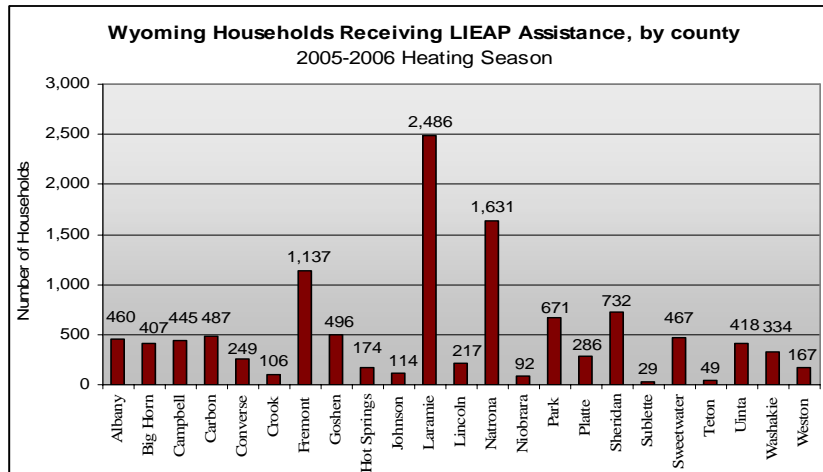
**Table 2**

Benefits Scale – Minimum & Maximum Amounts Available Annually, by primary heat source						
FY2006	Coal	Diesel	Electric	Gas	Propane	Wood
Maximum Benefit	\$442	\$615	\$978	\$742	\$1,030	\$620
Minimum Benefit	\$58	\$82	\$130	\$99	\$138	\$83

Source: Legislative Service Office; November 29, 2005<sup>5</sup>

During the 2005-2006 winter heating season, the average household benefit received was \$566 annually<sup>6</sup>. In addition to the primary function of providing monthly heating assistance, LIEAP contains a weatherization program element directed towards improving home insulation, thereby reducing heating costs indirectly for long-term savings. Wyoming’s emergency funding allots a one-time amount of up to \$400 per household to pay for a fuel hook-up or to avoid a utility shut-off. For 2005-2006, the average crisis benefit received was a sum of \$388. Service priority is given to the elderly, handicapped and children under six years of age. For the 2005-2006 winter heating season, Wyoming’s LIEAP served approximately 11,654 families, an increase of about 22% from the number of recipients a year earlier. Figure 1, below, illustrates the statewide distribution of qualifying households on a per county basis. Laramie and Natrona counties reported the largest number of active recipients, due primarily to the large populations in these areas, while Sublette County reported the fewest.

**Figure 1**



Source: Department of Family Services - LIEAP/Weatherization Program

### Economic Assumptions

For the purpose of this analysis, several basic assumptions need to be clarified. The first assumption concerns the severity of expected weather conditions. While weather patterns are often unpredictable, normal weather conditions are assumed. The rationale behind this is the notion that increased utility costs are mainly a consequence of increased usage (i.e. in response to an exceptionally cold winter), or higher energy costs. Since the objective is to measure the impacts created by higher energy prices, the effects of acute cold episodes and the like are

<sup>5</sup> LSO: Fact Sheet on Low Income Energy Assistance Program (LIEAP) and Matrix of Property Tax Relief Programs. Prepared by Don Richards; November 29, 2005.

<sup>6</sup> Department of Family Services, LIEAP/Weatherization Program

controlled. Additional assumptions conclude that a mix of appliances and lighting are used within the home, that homeowners will heat their homes to roughly the same temperature as during previous heating seasons, and that there is no change in household heating source from previous years. The last inference is based upon an understanding of household consumers' likelihood to retain the same heat provider for successive years.

There are several economic factors that could potentially influence energy costs during the coming winter. Many of these factors have been bolstering the price of energy commodities over the last few years, and simply represent the continuation of previously occurring trends. Primarily, strong international demand has been a major factor in the price of oil and other energy commodities. Moreover, tight crude oil supplies and geopolitical uncertainty, particularly the political turmoil of the Middle East, will likely be a persistent driving force in energy prices. As experienced last year with Hurricane Katrina, catastrophe-related supply disruptions could further affect prices. While the United States possesses sufficient domestic reserves of oil, the temporary closure of BP Oil's Prudhoe Bay field in Alaska, which accounts for roughly 8% of the United State's domestic crude production, could further tighten supplies, adding upward price pressure. Likewise, natural gas prices have risen steadily in recent years. Almost a quarter of the nation's energy is derived from natural gas, and in most areas of the U.S., production has been declining despite rising demand.<sup>7</sup> The U.S. is relying more on the Rocky Mountain region to meet this demand. Regarding the average price paid by consumers for home heating, the principal assumption is that price levels will be consistent with previous years, if not higher. This is because the same supply and demand factors continue to affect the U.S. and world as during preceding years, and the status of international affairs is uncertain. High demand for crude oil and gasoline is the major impetus, while increased electricity demands have also raised the price of natural gas and coal.

### Methodology

For the initial step of the analysis, Wyoming's economic baseline has been modified to account for the expected household fuel cost increases. To obtain the necessary forecast information, the U.S. Bureau of Labor Statistics' Consumer Price Index (CPI) has been employed to gather trend information on home heating costs. The CPI is a measure of the average change over time in the prices paid by consumers for a market basket of goods and services. Individual items included in the "basket" are classified into 200 different categories, which are arranged into eight groups. For this report, the concern is with the price of home heating, which is a category entitled 'Fuel Oil & Other Fuels,' contained within the Housing component of the CPI. This category gauges the yearly price increases in home heating, and is an aggregated representation of all fuel types used expressly for purposes of home heating. As of 2000, the CPI began reporting a succession of considerable increases in the Fuel Oil & Other Fuels category. Table 3 illustrates the percentage growth in household fuel costs, including a breakdown of the category.

**Table 3**

<b>Household Fuel Costs Component of the Consumer Price Index</b>						
CPI Item:	Fuel Oil & Other Fuels		Fuel Oil Only		Other Household Fuels	
Year	Index Value	% Change	Index Value	% Change	Index Value	% Change
1999	91.4	--	86.6	--	127.4	--
2000	129.7	41.9%	130.3	50.5%	155.5	22.1%
2001	129.3	-0.3%	125.8	-3.5%	168.7	8.5%
2002	115.5	-10.7%	111.5	-11.4%	154.8	-8.2%
2003	139.5	20.8%	136.6	22.5%	181.9	17.5%
2004	160.5	15.1%	160.0	17.1%	202.1	11.1%
2005	208.6	30.0%	216.4	35.3%	240.6	19.0%

Note: Index Values are based on a baseline where 1982-84=100. The 'Fuel Oil Only' & 'Other Household Fuels' items represent a breakdown of the 'Fuel Oil & Other Fuels' component.

Source: U.S. Bureau of Labor Statistics, CPI

<sup>7</sup> "Natural Gas Economy Flickers," Casper Star Tribune

A large part of the increases in household fuel costs can be attributed to rising demand for oil. As can be seen in Table 3, the average percentage growth in Fuel Oil Only over the last three years was 25.0%, while Other Household Fuels' average price growth for the same period was 15.9%. The combined Fuel Oil & Other Fuels category averaged 22.0% growth during this time. While predicting the market is a complicated matter, it can generally be assumed that fuel prices will continue to rise, particularly because oil supplies are tightening, and energy demands are far from diminishing.

**Scenario 1: Increase in Home Heating Costs**

In order to change Wyoming's baseline to reflect heightened energy prices, an assumption must be made as to what household fuel prices will be in the future. For this report, two estimates have been made; both estimations maintain that the Fuel Oil & Other Fuels category will see an increase, but differ in regards to how much fuel prices will actually rise. The first simulation represents the more conservative estimate, a 10% increase in home heating costs, and asserts that while energy prices may increase, they will not grow as rampantly as before. This assertion is strengthened by the year-to-date increase recorded for the CPI's Fuel Oil & Other Fuels category, which was 4.2% for the first half of 2006<sup>8</sup>. The second estimation encompasses the more moderate estimate of 20%, which is a number closer to the average growth in fuel prices seen over the past three years.

REMI maintains a baseline forecast and when a shock is introduced into the economy it is able to estimate the changes that occur in the forecast for each year that the shock is inputted. For this analysis, two separate increases (10% and 20%) in consumer prices for home heating costs were initiated for scenario 1. The change to Wyoming's baseline is expressed as a share (percentage) increase in home heating costs, inputted over the next ten years. After ten years, the economy should begin adjusting to higher energy prices, either through product substitution (alternative energy sources) or technological advancement (more efficient energy usage).

► **Conservative estimate:** The changes to Wyoming's economy resulting from a 10% increase in household fuel costs are presented in Table 4.

**Table 4**

<b>Economic Impact of 10% increase in Home Heating Costs</b>			
<b>Year</b>	<b>Change in Employment</b>	<b>Change in Output (sales) (2006\$)</b>	<b>Total Personal Income (TPI) (2006\$)</b>
2006	-30	-2,014,662	-3,940,703
2007	-33	-2,242,715	-4,329,456
2008	-37	-2,454,225	-4,657,946
2009	-39	-2,603,109	-4,949,806
2010	-41	-2,709,455	-5,215,671
2011	-42	-2,801,621	-5,459,084
2012	-44	-2,893,787	-5,688,319
2013	-45	-2,945,779	-5,898,647
2014	-46	-2,988,317	-6,105,431
2015	-47	-3,052,124	-6,319,304
2016	-48	-3,112,387	-6,542,630

Note: Results reflect the change in baseline forecast for that particular year. The effects are not additive over time.

Source: REMI simulation

A price increase, such as an increase in household fuel prices, typically results in two effects. The substitution effect will cause the consumer to substitute away from a good that is becoming more expensive. In the case of home heating, higher utility bills will cause households to lower the thermostat or invest in better insulation. The income effect means that households will have less discretionary income because they are paying more in home heating costs, and as

<sup>8</sup> U.S. Bureau of Labor Statistics, CPI

a result, will spend less money on other consumer products. For example, employment impacts occur because consumers have less income to spend in the economy due to the increase in home heating costs. They have less money to spend on goods in other sectors, such as the Retail Trade sector. Consequently, businesses have lower output or sales, thus needing fewer employees. According to the results of the REMI simulation in Table 4, a 10% increase in the cost of home heating, *ceteris paribus*, results in a slight Employment loss. In 2006, the difference below that year's baseline is 30 jobs. Employment losses continue to grow until 2016, when a loss of approximately 48 jobs from that year's employment forecast is experienced.

Wyoming's Output or sales also declines, beginning with an initial drop in sales of \$2.0 million for 2006. The trend continues in each of the following years listed. Total Personal Income (TPI), which is defined as the measure of current, before-tax income received by all residents of a particular area less personal contributions to Social Security, decreases by \$3.9 million from the original baseline in 2006. The decrease in TPI from the 2016 baseline value is almost twice the loss experienced in 2006 from that year's baseline. It is important to note that the results indicate changes from the baseline values for each year. The effects are not additive over time.

► Moderate estimate: The changes to Wyoming's baseline economy resulting from a 20% increase in home heating costs are shown in Table 5.

**Table 5**

<b>Economic Impact of 20% increase in Home Heating Costs</b>			
Year	Change in Employment	Change in Output (sales) (2006\$)	Total Personal Income (TPI) (2006\$)
2006	-55	-3,758,733	-7,509,195
2007	-62	-4,198,296	-8,237,073
2008	-69	-4,607,136	-8,866,876
2009	-73	-4,878,909	-9,413,967
2010	-77	-5,082,148	-9,920,882
2011	-80	-5,251,119	-10,397,074
2012	-82	-5,422,454	-10,836,637
2013	-84	-5,514,621	-11,234,843
2014	-86	-5,600,879	-11,614,143
2015	-88	-5,724,949	-12,028,892
2016	-90	-5,830,113	-12,430,642

Note: Results reflect the change in baseline forecast for that particular year. The effects are not additive over time.

Source: REMI simulation

As might be expected, the moderate estimate produces effects that are essentially twice that of the conservative estimate. Wyoming's Employment is expected to fall by 55 jobs from the forecasted baseline value in 2006. The job losses for the next 9 years are larger changes over the baseline values than in 2006. This may indicate the presence of other indirect effects to Wyoming's economy due to increases in the prices consumers pay for home heating. By 2016, the anticipated employment change would be 90 jobs less than the initial baseline forecast. The 20% increase in home fuel costs causes Output (sales) to fall by \$3.8 million in 2006. Total output continues to decline until 2016, when the loss in sales for that year is \$5.8 million below the baseline value. Finally, TPI for Wyoming drops by \$7.5 million in the first year, and losses over the annual baseline values continue to rise for the duration of the trial. By 2016, TPI is reduced to \$12.4 million under the original 2016 baseline.

**Scenario 2: Net impact of higher home heating costs and \$3 million injection of state funds**

For the second part of the analysis, \$3 million of state funds has been inputted into the REMI model. The purpose of HB0124 was to contribute monies to the already federally-funded LIEAP program to help relieve some of the financial burdens placed on Wyoming's low-income households from increasingly high utility bills. The primary economic assumption here is that the \$3 million of additional State funding will 'free up' an equivalent amount of consumer spending

that would have otherwise been directed towards utility payments. The energy assistance provided by LIEAP will enable low-income households to use the money initially designated for utility costs to purchase other consumer goods. Low-income consumers typically have low marginal propensities to save, and more often than not fall into dissavings. Therefore, the assumption is that the savings individual households incur as a result of the energy assistance will be completely reallocated to help afford other living expenses, such as food or medical expenses. Since future amounts of state funding allocated for Wyoming's Low-Income Energy Assistance Program are uncertain, this report assumes that there will be \$3 million of legislatively appropriated monies for each of the years in the analysis.

Two economic factors (higher household fuel costs and \$3 million in additional funding) are introduced simultaneously into the REMI model to derive the results for the second scenario. By infusing \$3 million in the consumer spending portion of Wyoming's economy, some of the initial impacts created by high energy costs are mitigated.

► Conservative estimate: The net changes to Wyoming's baseline resulting from a 10% increase in home heating costs plus the injection of \$3 million in state funding (inputted to consumer spending) are displayed in Table 6.

**Table 6**

<b>Net Economic Impact of 10% Increase in Home Heating Costs and \$3 Million Injection of State Funds</b>						
Year	Initial Change in Employment	Net Change in Employment	Initial Change in Output (2006\$)	Net Change in Output (2006\$)	Initial Change in TPI (2006\$)	Net Change in TPI (2006\$)
2006	-30	-4	-2,014,662	-473,239	-3,940,703	-3,431,424
2007	-33	-7	-2,242,715	-658,044	-4,329,456	-3,720,921
2008	-37	-11	-2,454,225	-856,438	-4,657,946	-3,989,149
2009	-39	-14	-2,603,109	-1,005,204	-4,949,806	-4,237,289
2010	-41	-16	-2,709,455	-1,124,666	-5,215,671	-4,458,252
2011	-42	-18	-2,801,621	-1,248,972	-5,459,084	-4,676,852
2012	-44	-20	-2,893,787	-1,361,226	-5,688,319	-4,895,452
2013	-45	-22	-2,945,779	-1,462,846	-5,898,647	-5,104,598
2014	-46	-24	-2,988,317	-1,552,649	-6,105,431	-5,318,472
2015	-47	-26	-3,052,124	-1,656,631	-6,319,304	-5,526,437
2016	-48	-27	-3,112,387	-1,775,975	-6,542,630	-5,758,034

Note: Results reflect the change in baseline forecast for that particular year. The effects are not additive over time.

Source: REMI simulation

For the conservative estimate, a 10% increase in household fuel costs, incorporating \$3 million dollars of state funding to Wyoming's LIEAP, which has been inputted as an increase to the consumer spending portion of Wyoming's economy, reduces employment losses by 86% in 2006, yielding a net reduction of only 4 jobs from the original baseline forecast. Originally, when a 10% increase in household fuel costs was initiated into Wyoming's economy, 30 jobs were lost from the 2006 baseline. The monies redirected towards consumer spending result in significantly reduced employment impacts to Wyoming's economy, but the decline in lost jobs wanes with each year of the trial. In 2016, the net savings to employment is approximately 44%, which amounts to a net loss of 27 jobs from that year's baseline value.

The supplementary funding reduces the loss to Output (sales) as well. For 2006, Wyoming's Output (sales) net loss is \$473,239 below the original baseline. This is about 77% less than the loss to sales would have been otherwise in 2006 (assuming only the 10% increase in home heating costs, and no additional funding). Again, there is ultimately a loss to Output experienced during each year of the trial, but the net loss to sales has been drastically reduced now that \$3 million of funding has been inputted into the model. The same sort of effect can be noted for Total Personal Income (TPI), but the impacts to this area are not nearly as significant.



For TPI, the initial loss of \$3.9 million (from the 2006 baseline in the conservative estimate for scenario 1) is lessened to \$3.4 million lost from the baseline value in 2006, which means that the loss has only been diminished by 13% in 2006. Nevertheless, the effect on TPI with \$3 million in consumer spending is, for the most part, consistent for each year of this scenario, ranging from an 11% to 13% reduction in the TPI losses due to the 10% increase in home heating costs.

► Moderate estimate: The net changes to Wyoming’s baseline resulting from a 20% increase to home heating costs plus \$3 million in additional funding to consumer spending are presented in Table 7.

**Table 7**

<b>Net Economic Impact of 20% Increase in Home Heating Costs and \$3 Million Injection of State Funds</b>						
Year	Initial Change in Employment	Net Change in Employment	Initial Change in Output (2006\$)	Net Change in Output (2006\$)	Initial Change in TPI (2006\$)	Net Change in TPI (2006\$)
2006	-55	-29	-3,758,733	-2,213,174	-7,509,195	-6,994,009
2007	-62	-36	-4,198,296	-2,614,925	-8,237,073	-7,642,718
2008	-69	-43	-4,607,136	-3,010,768	-8,866,876	-8,208,714
2009	-73	-48	-4,878,909	-3,283,722	-9,413,967	-8,715,629
2010	-77	-52	-5,082,148	-3,504,685	-9,920,882	-9,180,006
2011	-80	-56	-5,251,119	-3,703,197	-10,397,074	-9,620,750
2012	-82	-59	-5,422,454	-3,904,072	-10,836,637	-10,062,676
2013	-84	-62	-5,514,621	-4,041,140	-11,234,843	-10,462,063
2014	-86	-65	-5,600,879	-4,180,572	-11,614,143	-10,856,725
2015	-88	-67	-5,724,949	-4,338,909	-12,028,892	-11,259,657
2016	-90	-70	-5,830,113	-4,496,064	-12,430,642	-11,672,042

Note: Results reflect the change in baseline forecast for that particular year. The effects are not additive over time.

Source: REMI simulation

After inputting the \$3 million to consumer spending using the moderate estimate, a 20% increase in home heating costs, the net economic impacts reflect the same sort of behavior seen in the results from the conservative estimate (10% increase + \$3 million) on the previous page. Employment impacts are less than before. Wyoming’s Employment losses are reduced by 47% in 2006, yielding a total net loss of 29 jobs from the baseline value. By 2016, the number of jobs lost is reduced to 70 below the baseline value, a number which is 22% lower than the decrease in employment created from the initial 20% scenario. The impacts to Output (sales) are similar to those of Employment. In 2006, the loss in sales from the baseline is reduced by 41%. This amounts to an overall net effect of -\$2.2 million in sales from that year’s baseline value. Once more, there is a reduction in Output losses over the baseline values for the duration of the trial, but that reduction becomes smaller with each subsequent year. At the end of the second scenario (20% price increase plus \$3 million funding), some Output losses have been mitigated, but the \$3 million injection only offsets the loss in sales from the 20% increase in fuel prices by 23% in 2016. TPI benefits from the supplementary State funding, but the net impacts are much smaller than for any other area. The loss to TPI for 2006 is \$7.0 million, which is only 6.9% less than it would have been without the additional \$3 million. The savings to TPI between scenario 1 (the 20% simulation) and scenario 2 (the 20% plus \$3 million simulation) remain around 6% from the baselines for the entirety of the ten-year period.

In short, the State’s contribution to Wyoming’s Low-Income Energy Assistance Program does help to mitigate a portion of the harmful economic effects brought on by increasing fuel costs, though its effectiveness will depend largely on what happens in the energy markets. In both scenarios, the loss to employment is primarily felt in the Retail Trade and Construction sectors. Output (sales) losses occur mostly in the Manufacturing, Construction and Retail Trade sectors. It would be difficult to capture all of the direct and indirect effects resulting from high energy prices, especially as energy commodities factor into a number of production facets, but

rising utility bills and gasoline prices are a good indicator of the increasing demands placed on consumers. As the cost of home heating rises, the financial burdens placed on low-income households, and the impacts to Wyoming's economy, grow larger. However, the results of this report indicate that \$3 million in legislatively appropriated funds reduces some of the negative economic impacts created by higher home heating costs. Moreover, the additional LIEAP funding provides more low-income families with the opportunity to receive crucial energy assistance.

**Note: All information and data contained within this report was based on the most current information available during the June-July 2006 time period.**

## References

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