

Office of the State Auditor

## Keeping Warm

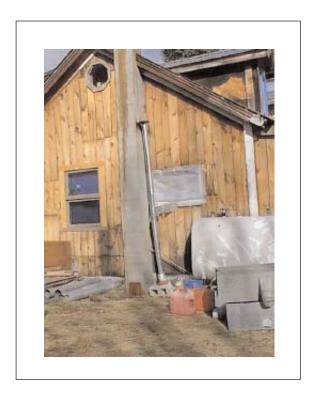


## Recommendations to Improve Performance

of the Vermont Weatherization Assistance Program

Elizabeth M. Ready Vermont State Auditor

Issue Date: December 20, 2002



## **Mission Statement**

The mission of the State Auditor's Office is to be a catalyst for good government by promoting reliable and accurate financial reporting as well as economy, efficiency and effectiveness in State government.

## **Keeping Warm**

Improving Performance of the Vermont Weatherization Assistance Program

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## Message from the Auditor

am pleased to report the results of our recent review - *Keeping Warm* - a performance evaluation of the Vermont Weatherization Program. Our Office found the program, overseen by the Office of Economic Opportunity, is of tremendous value in keeping homes from leaking heat. It also contributes to Vermont's economy by creating local jobs and purchasing a variety of goods and services.

We found that the program's financial controls are more than adequate to assure Vermonters that funds are being spent efficiently and effectively.

These findings are crucial because funding for Vermont's Weatherization Assistance Program is scheduled to sunset in July, at a time when more lower-income people are eligible for these services than ever. Also, the Bush Administration is proposing to cut a key federal program, the Low Income Home Energy Assistance Program, which helps lower-income people pay their fuel bills. Proposed cuts could mean nearly \$2 million less to help Vermont families.

According to the federal Energy Information Administration, home heating oil prices will hit \$1.35 a gallon this winter, an increase of 25 cents a gallon from last year. For a typical Vermont family that uses 500 gallons of home heating fuel a year, the increased cost will add \$125 a year to their heating bill.

Our review found that the number of lower-income Vermonters is growing and so are the challenges they face, from dwindling job security to increased costs of health care. Vermont's long, cold winters and the rising cost of fuel can add to the struggle, especially for those whose homes are drafty and poorly insulated.

#### Our Office found:

- Currently one in five Vermonters, or 44,249 households, live at or below 150 percent of the federal poverty level, an increase of 14.1 percent since 1989, according to U.S. Census data. From 1990 to 2001, 13,790 homes were weatherized;
- Lower-income Vermonters typically live in older homes. For example, 152,182 Vermont dwelling units are 30 years or older roughly 52 percent of all housing units. Older homes are more likely to leak heat and pose potential threats to the health and safety of the occupants; and,
- Lower-income people typically spend 14 percent of their annual income on energy, compared to 3.5 percent for other households. Rising energy bills can increase this burden to 20 percent or more, according to the U.S. Department of Energy.

For lower-income Vermonters, every dollar spent on rising heating costs is a dollar spent on food, prescription drugs or other necessities.

As one recipient told our Office, "This whole program is a godsend. I couldn't afford to do anything just on Social Security. God bless the state of Vermont."

Our Office found ample evidence to support this client's claim. This valuable program has weatherized more than 13,000 homes since 1990, or roughly 1,200 each year.

Our Office found that the weatherization program is a sound investment of tax dollars. For every dollar spent it produces nearly \$2 dollars in reduced energy costs for the household and more than \$5 in total benefits during the life of the installed measures. These benefits include helping to reduce the energy burden by buttoning up people's homes, and providing access to cleaner burning and more efficient furnaces and appliances, which reduces carbon monoxide leaks and fire hazards.

Every dollar spent locally on weatherization means nearly \$2 is not exported to buy foreign oil or other fuel sources.

There are more than 80 full-time workers throughout Vermont at the five regional weatherization programs. These programs circulated \$1.8 million into the Vermont economy by hiring private plumbing, heating and electrical contractors, as well as purchasing local materials, parts, furnaces and appliances.

Our Office did find some minor issues that the Office of Economic Opportunity should consider, as well as the Department of Taxes, the Department of Finance and Management, and the Office of the State Treasurer to assure that each dollar deposited into, or interest earned from, the Weatherization Assistance Trust Fund is used effectively and appropriately.

Our report recommends, in part, that:

- The Legislature remove the sunset provision on the weatherization program;
- Future evaluations should be paid for with existing State resources and staff rather than contracting out to private, out-of-state firms;

- Outreach efforts should be re-evaluated to ensure that eligible Vermonters are aware of the program and are being served; and,
- New strategies be enacted to reach out to renters and rental property owners to make sure they are taking advantage of this program.

The Office of Economic Opportunity agreed with our findings and recommendations, including using existing resources to conduct future evaluations.

"Currently, significant resources are spent on out-of-state contractors to perform an evaluation of the Weatherization Program every two years. OEO feels confident it can conduct an evaluation of the program utilizing existing resources within state government," OEO wrote in response to a draft of the report.

OEO has also agreed to begin conducting more focused attention on ensuring that Vermont's rental housing units are being weatherized effectively and that both renters and landlords are aware of the benefits of the program.

OEO will also continue to "place emphasis on reducing barriers to the weatherization of low-income rental housing. While very positive inroads have been made in multifamily rentals in partnership with affordable housing groups and Efficiency Vermont's Residential Energy Efficiency Program (REEP), OEO ... will continue to seek new and effective means to overcome these barriers."

I want to thank the many employees at the Office of Economic Opportunity, the Department of Taxes and the Treasurer's Office who contributed to this report. Many of their suggested changes were incorporated into the final report.

I urge continued funding for this program in order to keep people warm, create local jobs, reduce dependence on foreign oil, and increase savings to Vermonters.

Sincerely,

Elizabeth M. Ready

Elizabeth M. Ready

State Auditor

## Findings & Recommendations

## **Findings - Program Performance**

#### FINDING 1

State funding for weatherization services is scheduled to sunset on July 1, 2003, at a time when data shows the need is increasing.

The number of low-income Vermonters is growing, and increasingly they live in housing stock that is aging and unsafe - leaking energy and wasting important household income.

#### According to 2000 Census data:

- One in five Vermonters, or 44,249 households, live at or below 150 percent of the federal poverty level, an increase of 14.1 percent since 1989.
- 152,182 Vermont dwelling units are 30 years or older, approximately 52 percent of the total Vermont dwelling units. Older homes are typically plagued by high energy leakage and potential threats to the health and safety of the occupants.

The need to reduce energy spending in the typical low-income household budget has increased due to the rapid rise of other basic needs such as health care and rent and home ownership costs. Low-income people typically spend 14 percent of their annual income on energy compared to 3.5 percent for other households.

#### **Discussion**

#### More Low-income Vermonters

he 1990 enabling legislation authorizing the collection of a fuel gross receipts tax to fund the Vermont Weatherization Assistance Program (WAP) was originally scheduled to terminate on July 1, 1992. The Vermont General Assembly has since extended the termination date on the fuel gross tax receipts on three separate occasions. The most recent extension was Section 32 of Act No. 156 of 1998, which extended the termination of the fuel gross receipts tax from June 30, 1998 to July 1, 2003, at which time it will expire unless reauthorized by the Vermont General Assembly.

Our Office reviewed a variety of data from the U.S. Census Bureau's 2000 Census relating to Vermont's housing stock and household income in order to understand how many low-income Vermonters reside in homes that could benefit from WAP services.

Recent Census data indicates that in 1999 there were 44,249 Vermont households (of 240,744 total households) eligible for weatherization because their household income was at or below 150 percent of the poverty level (the upper limit for program eligibility). This compares to 1990 Census data that estimated there were 38,775 Vermont households with income eligible residents in 1989 - a 14.1 percent increase in the number of income eligible households in the 10-year period from 1989 to 1999.

A breakdown of income-eligible households in 1999 by county is detailed in Table 1.<sup>1</sup> Chittenden County has 18 percent of all income-eligible households statewide, however Orleans County has the highest percentage - 28.06 percent - of income eligible households of total county households.

TABLE 1

Number of Households With Income in 1999 Below 150% of Poverty Level						
			Number of	Percent of	Percent of	
			Households	Households	Households	
			in County	below 150%	Below 150%	
			with Income	of Poverty	of Poverty	
			in 1999	as a % of	as a % of	
	Number of	% of Total	Below 150% of Poverty	Total Vermont	Total Households	
	Households	Households	Level	Households	in County	
	in County	in Vermont	LOVOI	Below 150%	iii Gounty	
County	county			of Poverty		
Addison	13,077	5.43%	2,192	4.95%	16.76%	
Bennington	18,822	6.16%	2,806	6.34%	18.93%	
Caledonia	11,651	4.84%	2,702	6.11%	23.19%	
Chittenden	56,500	23.47%	8,358	18.89%	14.79%	
Essex	2,597	1.08%	723	1.63%	27.84%	
Franklin	16,767	6.96%	3,026	6.84%	18.05%	
Grand Isle	2,776	1.15%	464	1.05%	16.71%	
Lamoille	9,225	3.83%	1,752	3.96%	18.99%	
Orange	10,979	4.56%	1,990	4.50%	18.13%	
Orleans	10,475	4.35%	2,939	6.64%	28.06%	
Rutland	25,686	10.67%	5,375	12.15%	20.93%	
Washington	23,654	9.83%	4,109	9.29%	17.37%	
Windham	18,369	7.63%	3,601	8.14%	19.6%	
Windsor	24,166	10.04%	4,212	9.52%	17.43%	
Total	240,744	100%	44,249	100%		

<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau. Census 2000 Summary File (SF 3) - Sample Data, page 93. Ratio of Income in 1999 to Poverty Level by Household Type [19] - Universe: Households.

According to data maintained by OEO, 13,790 homes received WAP services from 1990 to 2001.<sup>2</sup> This figure equals fewer than 6 percent of Vermont homes.

The data from OEO and the household figures from the 2000 Census indicate that there are a significant number of income eligible households that could benefit from WAP services. The regional WAP providers typically have jobs planned 4 to 6 weeks in advance, but they often maintain waiting lists during the winter months when interest in weatherization services is high. Typically, once an application is accepted by one of the five regional WAP providers, the client may wait at least 2 to 4 weeks for an energy audit and at least 3 to 8 weeks for work crews to start when service demand is high.

#### Aging Housing Stock

ata collected from the 2000 Census reveal that 50.7 percent of the Vermonters living at or below the poverty level reside in homes built before 1960 (see Table 2). The number of Vermont dwelling units 30 years or older is 152,182, or 52 percent of the total Vermont dwelling units (see Table 3, page 10). Older homes typically feature high energy leakage and potential threats to the health and safety of the occupants.

\*\*Continued on page 10\*\*

TABLE 2

Vermont Housing Units By Year Built with Income in 1999 Below Poverty Level <sup>3</sup>							
	Owner	J	Renter		Total Occupied		
	Occupie	d	Occupied		Housing Units		
	Housing	Units	Housing	Housing Units		with Income in	
	with Inc	ome in	with In	come in	1999 Bel	ow	
	1999 Bel	ow	1999 Be	elow	Poverty Level		
	Poverty	Level	Poverty	Level	_		
	#	% of	#	% of	#	% of	
		Total		Total		Total	
<b>Built 1999 to March 2000</b>	114	1.3	86	0.1	200	0.9	
Built 1995 to 1998	415	4.9	357	2.4	772	3.3	
Built 1990 to 1994	489	5.8	572	3.8	1,061	4.5	
Built 1980 to 1989	1,488	17.5	1,757	11.7	3,245	13.8	
Built 1970 to 1979	1,522	17.9	2,373	15.9	3,895	16.5	
Built 1960 to 1969	898	10.6	1,538	10.3	2,436	10.3	
Built 1950 to 1959	546	6.4	1,065	7.2	1,611	6.9	
Built 1940 to 1949	359	4.2	911	6.2	1,270	5.4	
Built 1939 or earlier	2,661	31.4	6,373	42.4	9,034	38.4	
Total	8,492	100%	15,032	100%	23,524	100%	

<sup>&</sup>lt;sup>2</sup> Office of Economic Opportunity Website, Overview of Weatherization Services located at http://www.ahs.state.vt.us/oeo/weather.htm.

<sup>&</sup>lt;sup>3</sup> U.S. Census Bureau. Census 2000 Summary File 3 (SF 3) - Sample Data. HCT23. Tenure by Poverty Status in 1999 By Year Structure Built [43] - Universe: Occupied housing units.

#### A VICTORIAN HOME GETS NEW LIFE

aymond and Louiselle Carrier have been married for almost 24 years. In April 2001, they had their 1899 Victorian home in Newport weatherized for the first time. It was a bit like a late wedding present.

Mr. Carrier really started to feel the cold in his house after a car accident in January 2001 left him house-bound. "My accident happened on the first of January," he said. "I was hospitalized and then had the operation and I stayed indoors until late summer. Not being able to move or walk, it gets cold. Especially when there's no insulation. So this whole program is a godsend. I couldn't afford to do anything just on Social Security. God bless the state of Vermont," he declared.

Crews Northeast from the **Training Employment** & Organization (NETO) visited the Carrier's home and insulated the place in stages. First, insulation was blown into holes drilled into the outside of the house on the first and second floors. Then the windows were insulated. Finally, the workers weatherized the basement, plugging up and insulating the foundation wherever they found holes.

Louiselle Carrier said the difference is amazing - she's especially thankful for the insulation. "The heat used to go right out through the win-



"The heat used to go right out through the windows and the cold would seep inside. We shivered all the time."

- Louiselle Carrier

dows and the cold would seep inside. I couldn't even take a shower - if I took a shower the pipes froze and there was no drainage. When I got out of the shower, I could feel the air coming through the floor. We shivered all the time." she said.

"Without the State of Vermont I don't know what I would have done," said Raymond. "I almost froze to the death the first winter when I couldn't get out of the house. The difference today is like night and day."

According to the state weatherization coordinator Jules Junker, "In general, low-income homes and rentals are less energy efficient compared to the same housing type for non low-income people, due in part to deferred maintenance and other factors."

"Most of the older homes we work on have considerably higher air leakage rates than the newer homes. This usually means more fuel consumption per square foot," Junker noted. "It is our general rule of thumb: in older homes you'll find very little insulation, many air leaks, and a lot of health and safety problems. With older buildings you have older building materials and techniques. With poor residents, there's less money available for maintenance and improvements. So it's likely that an older home with low-income residents will need a lot of work."

Fourteen percent of Vermont's housing units were built in the 10-year period from 1990 to March of 2000 (see Table 3). Many relatively new homes can benefit from weatherization efforts, according to OEO, but more modern building techniques (tighter construction, higher-performing insulation, poured foundations, better storm windows, energy-efficient furnaces, etc.) reduce the need for the major investments in energy efficiency that older homes require.

TABLE 3

Vermont's Housing Stock <sup>5</sup>					
Time Period Built	Number of Housing Units	Percent of Total			
Built 1999 to Mar. 2000	5,212	2%			
Built 1995 to 1998	14,438	5%			
Built 1990 to 1994	20,546	7%			
Built 1980 to 1989	50,986	17%			
Built 1970 to 1979	51,018	17%			
Built 1960 to 1969	30,486	10%			
Built 1950 to 1959	20,207	7%			
Built 1940 to 1949	13,204	5%			
Built 1939 or before	88,285	30%			
Total	294,382	100%			

<sup>&</sup>lt;sup>4</sup> Interview, Jules Junker, State WAP Coordinator, Office of Economic Opportunity, November 26, 2002.

<sup>&</sup>lt;sup>5</sup> U.S. Census Bureau. Census 2000 Summary File (SF 3) - Sample Data. H34. Year Structure Built. [10] - Universe: Housing Units.

Chittenden County has the greatest percentage of residents and housing units and the greatest number of persons per housing unit (see Table 4). Chittenden County also has the widest gap between its percent of total population at 24.1 percent and its percent of total housing units at 20 percent, a 4.1 percent difference, which indicates generally larger household size and more per capita impact in terms of total housing units weatherized.

Fuel oil and kerosene are the primary source of heat in 58 percent of Vermont's homes (see Table 5, page 13). This is more than twice the number of housing units that use natural and propane gas (26 percent).

#### Continuing High "Energy Burden" for Poor Households

while fuel prices have increased at a relative slow rate over the past decade, Vermont's low-income households are facing steady and severe economic pressures on the costs of other basic needs such as food, shelter and medical care.

continued on page 13

TABLE 4

Vermont's Population and Housing Units By County 6						
County	Population	% of	Housing	% of	Persons per	
		Total	Units	Total	Housing	
					Unit	
Chittenden	146,571	24.1%	58,864	20%	2.49	
Rutland	63,400	10.4%	32,311	11%	1.96	
Washington	58,039	9.5%	27,644	9.4%	2.10	
Windsor	57,418	9.4%	31,621	10.7%	1.82	
Franklin	45,417	7.5%	19,191	6.5%	2.37	
Windham	44,216	7.3%	27,039	9.2%	1.64	
Bennington	36,994	6.0%	19,403	6.6%	1.91	
Addison	35,974	5.9%	15,312	5.2%	2.35	
Caledonia	29,702	4.9%	14,504	4.9%	2.05	
Orange	28,226	4.6%	13,386	4.6%	2.11	
Orleans	26,277	4.3%	14,673	5.0%	1.79	
Lamoille	23,233	3.8%	11,009	3.7%	2.11	
Grand Isle	6,901	1.1%	4,663	1.6%	1.48	
Essex	6,459	1.1%	4,762	1.6%	1.36	
Total	608,827	100%	294,382	100%	2.07	

<sup>&</sup>lt;sup>6</sup> U.S. Census Bureau. Census 2000 Summary File 1 (SF 1) - 100-Percent Data. GCT-PH1-R. Population, Housing Units, Area, and Density(geographies ranked by total population); 2000.

#### EASING THE ENERGY BURDEN

Vergennes home, mom Jane Hebert knows that hot water is an issue - for all the showers, baths and laundry.

"We had an electric water heater on the second floor, and an electric dryer, and most every month our bill was over \$200," Jane remembers.

Those electric bills, combined with a fuel oil bill of about \$1,500 each heating season, prompted Maurice and Jane Hebert to respond to a newspaper ad for free Weatherization services. The paperwork with the application "wasn't too bad," says Jane, and with five children, they were able to meet the income guidelines set by the federal government which allows for higher incomes for bigger families.

The ensuing energy audit on their 2,700-square-foot home revealed more problems than just a high electric bill. Huge air leaks and an inefficient furnace were also costing the family big bucks.

The Weatherization crew attacked the air leaks first. "We had very little insulation and so they put that into our first and second floor walls from the outside. We cleaned up the attic and they blew in insulation there, and they enclosed the hatch door in the attic," she says. The crew also removed an old second-story fireplace and sheetrocked the area tight.



In place of the money-guzzling electric water heater on the second floor, the family opted for an oil-fueled ondemand hot water system to be installed on the first floor. "That change made a big difference," Jane says. "We got a new gas dryer to replace the electric one and our electric bill has gone down to about \$50 a month."

The Weatherization crew from the Middlebury office of the Champlain Valley Office of Economic Opportunity (CVOEO) repaired windows and sealed more air leaks in the basement; technicians from a private firm tuned up the oil furnace to help it run more efficiently. The result? The family's heating season oil bill is now down about half, to \$800 last season.

"The workers were great to have around; they were good to the kids - very positive and friendly - and used good language," Jane notes. "The whole process has been a great thing for our family."

According to a Department of Public Service report, "For the 16 years between 1984 and 2000, the aggregate cost of all goods including fuel rose by 72 percent, the cost of food rose by 63 percent, the cost of medical care rose by 156 percent, and the cost of fuel rose by a little over 16 percent." According to weatherization service providers, the reductions in fuel bills for low-income families help to alleviate the increases of other basic needs, such as out-of-pocket health care costs.

"Energy burden" is defined as residential energy expenditures divided by income, which yields the percentage of expenditures to income. The resulting calculation shows the impact energy expenditures have on low-income households.

The Department of Energy (DOE) noted in May of 2002 that "for low-income families, the percentage of income spent on energy bills is four times that for more affluent families (and that) some senior citizens on fixed income ... spend 35 percent or more of their income on energy."

DOE noted in January of 2002 that:

"High energy bills create an unmanageable burden for low-income families. These households typically spend 14 percent of their annual income on energy compared to 3.5 percent for other households. Rising energy prices can increase this burden to 20 percent or more. Low -income families often cut back on other necessities to pay their energy bills."

TABLE 5

Source of Heating Fuel used in Occupied Housing Units 10					
Type of Fuel	Number of Units	Percent of Total			
Utility Gas	29,234	12.1%			
Bottled, Tank or LP Gas	34,715	14.4%			
Electricity	11,363	4.7 %			
Fuel Oil, Kerosene	141,041	58.6%			
Coal or Coke	427	0.2%			
Wood	22,616	9.4%			
Solar Energy	90	0.0%			
Other Fuel	817	0.3%			
No fuel used	331	0.1%			
Total	240,634	100%			

<sup>7 &</sup>quot;Perspectives on Fuel Price," Vermont Dept. of Public Service, November, 2000.

<sup>8 &</sup>quot;Weatherization - A National Energy Priority," DOE Weatherization Assistance Program Feature Article, May, 2002.

<sup>9 &</sup>quot;Needs Assessment," DOE Weatherization Assistance Program, January 2002.

<sup>&</sup>lt;sup>10</sup> U.S. Census Bureau. Census 2000 Summary File 3 (SF 3) - Sample Data. QT-HE. Rooms, Bedrooms, and House Heating Fuel: 2000.

# Investments in Vermont weatherization services in the past 20 years have yielded energy and non-energy savings totalling \$41,910,316.

In November, 2001, the U.S. Department of Housing and Urban Development noted that:

"Utilities impose a disproportionate burden on the poor. For single, elderly poor and disabled persons living on Social Security Income (SSI), the average energy burden was 19 percent of SSI. In selected states - Delaware, Illinois, and Vermont - it was nearly 25 percent."

It seems evident that savings derived from energy-efficiency measures are critical to the low-income person's household budget, and may also provide vital health and safety safeguards.

#### **RECOMMENDATION 1**

The Legislature should remove the sunset provision on the Weatherization Assistance Program in order to continue providing services to a growing population of income-eligible households, many who live in old, energy-wasting, and often unsafe homes.



<sup>&</sup>lt;sup>11</sup> "Utility Bills Burden the Poor and Can Cause Homelessness," Division of Homes and Communities, U.S. Department of Housing and Urban Development, Nov. 13, 2001.

#### THE SUITE OF SERVICES

#### **Energy Audit**

Energy auditors can inspect your entire home. They will check for health and safety issues, insulation levels, moisture problems, air leakage, and make recommendations to make your home energy efficient.

#### **Blower Door**

This test uses a variable speed fan that is sealed in a doorway. The fan tests the air pressure inside by making the pressure different than the outside air. This test detects air leakage that allows cold air in and heat out. Blower door testing also insures indoor air quality.

#### Infrared Camera Scan

This test detects heat loss and air leakage. It checks for areas that do not have any insulation. The scan also detects problems with insulation, wiring and moisture.

#### Heating System Efficiency Test

This test measures the oxygen, temperature and smoke levels of your furnace to determine the efficiency of your heating system.



#### CO Testing

This test detects any dangerous or potentially dangerous levels of carbon monoxide being vented into your home by appliances that are not exhausted properly.

#### Installation of Measures

Weatherization crews can perform all air-sealing, insulation (dense pack and wet spray cellulose applications) and other energy or health and safety measures appropriate for your home. Private licensed experts are used for heating system tune-ups, repairs or replacements and any required plumbing or electrical work involved in a furnace replacement.

- from Southeastern Vermont Community Action

#### FINDING 2

The Weatherization Assistance Program has been successful in producing energy savings on a cost-effective basis. The administration and monitoring of the program are more than adequate and services provided have significant financial and health benefits for low-income Vermonters.

Two separate technical studies showed that Vermont homes receiving weatherization services saw energy savings of approximately 22 percent.

The more recent evaluation indicated that when both energy and non-energy benefits are combined, the program produces \$5.26 of benefits for every dollar spent.

#### Discussion

he success of the WAP has been borne out by a number of positive evaluations during the last five years. Previous reviews conducted by this Office and by the U.S. DOE, have found a significant return on investment and sound program management.

The Boston Regional Office (BRO) of the DOE conducted an on-site assessment of the WAP in November 1998 and July 1999 and found no instances of non-compliance.

The DOE assessment team interviewed OEO staff and reviewed OEO and subgrantee files including program and fiscal records, audit reports, and grant award and monitoring procedures.

The July 1999 DOE assessment report addressed to David Tucker, OEO Director, was summarized with the following statement: "Based on our assessment and OEO's previous history, BRO wishes to congratulate you on your excellent management of the Vermont WAP. Jules Junker, Richard Germana, Dwight DeCoster, and you are knowledgeable, helpful, and personable." 12

Other specific comments contained in the assessment report included:

 A review of subgrantee files showed that "there is consistency, and uniformity in treatment of grantees, at all levels of decision making and across all programs."

<sup>&</sup>lt;sup>12</sup> July 9, 1999 letter to David Tucker, Office of Economic Opportunity, from Hugh Saussy, Jr., Director, Region I, U.S. Department of Energy, page 1.

# An independent evaluation in 2001 found that Vermont's Weatherization Services produced \$5.26 in total benefits for each dollar spent.

- "A review of monitoring procedures and review of financial reports indicates that staff of OEO are adhering to procedures and have processes in place that would identify potential problems. There are adequate procedures for the preparation, review, and approval of financial reporting to DOE."
- "The OEO generally has a good financial management system. There
  is good separation of duties for the purchasing, drawing down of
  payments, and receiving, preparing, and reviewing financial reports.
  All in all, the DOE monitoring team found the grantee to be
  knowledgeable of current rules and regulations and to be in adherence
  to both program and financial requirements."
- "There are no questioned costs nor corrective action to be taken cited in the last report."
- "Because of close monitoring procedures, there is a close review of all work done and there have been no irregularities."
- "OEO and, by extension, DOE are well served by the WAP staff and grantees."

The Office of the Vermont State Auditor, pursuant to Act No. 182 of the 1996 Legislative Session, conducted a "financial and performance review of the weatherization program with focus on performance measures for effectiveness and efficiency." A summary of the Office's January 1998 report indicated two major findings:

"Finding 1. The WAP is a cost-effective and well-administered program. Both OEO staff and staff at the community action agencies exercise more than adequate oversight over the program and consistently deliver high quality services.

<sup>&</sup>lt;sup>13</sup> July 9, 1999 letter to David Tucker, Office of Economic Opportunity, from Hugh Saussy, Jr., Director, Region I, U.S. Department of Energy, page 1.

Finding 2. WAP has met and exceeded its benchmark measures and continues to show improvement annually. In every area measured, WAP shows steady improvement, suggesting the program is a sound long-term investment of Vermont dollars."<sup>14</sup>

Two independent evaluations of the WAP were conducted in compliance with Section 32 of Act No. 156, which required the reports to be completed on or before December 31 of 1999 and 2001. The law required "an independent evaluation of the weatherization program for the prior two program years. The evaluation shall include a report on the cost effectiveness of the program, including the value of energy savings, the number of households served, reduction in air leakage rate and project benefit-to-cost ratio."

OEO conducted competitive bidding processes and contracted with independent organizations to evaluate the WAP as required by the General Assembly. The combined cost of these two independent evaluations from the Weatherization Assistance Trust Fund was approximately \$46,000.15 In conducting their evaluations, both independent contractors utilized data from OEO's Weatherization Data Management System (WDMS). The five regional service providers collect and enter client participation and energy consumption data into the WDMS system each month and send an updated Microsoft Access file to OEO as part of their reporting requirements. The data includes demographic data, building data, information about the type of weatherization services provided, and the cost and source of funds used to pay for the weatherization services.

The results of the independent evaluations are summarized below.

"An Evaluation of the Energy and Non-energy impacts of Vermont's Weatherization Assistance Program," prepared by TecMRKT Works of Arlington, Virginia in November 1999, found that an average program expenditure of \$2,259 per household for energy efficiency measures resulted in an average 23 percent energy savings, with a net present value of \$5,538. This represents a benefit-to-cost ratio of 2.45 for the efficiency measures installed. This means that for each program dollar spent for energy efficiency measures (\$2,259) in the 1996-1998 program years, \$2.45 in 1997 net present value dollars was returned to the participant in the form of reduced energy costs. When both energy and non-energy benefits are combined the program produces \$4.91 of benefits for every dollar spent.

<sup>&</sup>lt;sup>14</sup> State Auditor's Office Review of the Weatherization Assistance Program, January 26, 1998, page i.

<sup>&</sup>lt;sup>15</sup> Communication from Jules Junker, OEO Weatherization Program Coordinator, December 5, 2002.

"I appreciate this program and feel as a voter & as a disabled person on a fixed income it helped a lot. I thank you."

South Royalton client

According to the TecMRKT Works report, the savings for the period between April 1, 1996 and March 31, 1998 were equivalent to 597,712 gallons of oil or enough oil to heat 474 low-income homes at their rate of space heating fuel consumption prior to installing the weatherization measures. <sup>16</sup> The report also noted that:

- There was an average 23 percent reduction in space heating fuel use per unit.<sup>17</sup>
- Over the 20-year lifetime of the installed measures the energy savings are expected to equal about 11.95 million gallons of oil equivalent.<sup>18</sup>
- The net present value of the combined energy and non-energy benefits is \$38,682,765 over the estimated 20-year life of the program.<sup>19</sup>

"An Evaluation of the Impacts of Vermont's Weatherization Assistance Program," prepared by Dalhoff & Associates of Verona, Wisconsin in December 2001, found that an average program expenditure of \$2,027 per household for energy efficiency measures resulted in an average 21.6 percent energy savings, with a net present value of \$3,743. This represents a benefit-to-cost ratio of 1.83 for the efficiency measures installed. This means that for each program dollar spent for energy efficiency measures (\$2,027) in the 1998-2000 program years, \$1.83 in 1999 net present value dollars was returned to the participant in the form of reduced energy costs. When both energy and non-energy benefits are combined the program produces \$5.26 of benefits for every dollar spent.

According to the Dalhoff & Associates report, the savings for the period between April 1, 1998 and March 31, 2000 were equivalent to 416,200 gallons of oil or enough oil to heat 487 low-income homes for two years at their rate of space heating fuel consumption prior to installing the weatherization measures.<sup>20</sup>

<sup>16</sup> An Impact Evaluation of Vermont's Weatherization Assistance Program, TecMrkt Works, Arlington, VA, November 1999, page ES-1.

<sup>&</sup>lt;sup>17</sup> Ibid., page 9.

<sup>&</sup>lt;sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Ibid., page 35.

<sup>&</sup>lt;sup>20</sup> An Evaluation of the Impacts of Vermont's Weatherization Assistance Program, Dalhoff and Associates, Verona, WI, November 2001, page ES-1.

"The men were skilled, quick, careful, and extremely considerate. One couldn't ask for better."

- Putney client

The report also noted that:

- The average savings per unit for heating fuels was 21.6 percent, and the overall average savings for the program was 19.5 percent (including nonheating electricity savings).<sup>21</sup>
- The average reduction in air leakage rates for weatherized homes was 36 percent.<sup>22</sup>
- The net present value of the combined energy and non-energy benefits is \$41,910,316 over the life of the program. On the basis of this we conclude that the Vermont Weatherization program is cost-effectively providing weatherization services to the residents of Vermont.<sup>23</sup>

#### **RECOMMENDATION 2**

Future evaluations of the Weatherization Assistance Program should be conducted at minimal cost utilizing existing resources within state government to analyze the full range of performance data available in OEO's Weatherization Data Management System.

<sup>&</sup>lt;sup>21</sup> An Evaluation of the Impacts of Vermont's Weatherization Assistance Program, Dalhoff and Associates, Verona, WI, November 2001, page 9.

<sup>&</sup>lt;sup>22</sup> Ibid., page ES-3.

<sup>&</sup>lt;sup>23</sup> Ibid., page 35.

My home is warmer now; I don't have to run my furnace so high now. I'm sure I will be saving on fuel."

- Underhill client

#### **FINDING 3a**

Outreach efforts to interest income-eligible family, elderly, and handicapped households in weatherization services are performed at low cost by various individuals in regional offices.

Efforts appear to be sufficient to provide a steady stream of completed applications throughout the year to efficiently run the program, avoiding both "downtime" with no homes to weatherize as well as lengthy backlog of projects.

#### FINDING 3b

OEO collects and tracks a substantial amount of data related to the program through its Weatherization Data Management System (WDMS).

However, very little information related to the demographic makeup of the households receiving weatherization services is reviewed and disseminated by OEO for reporting, tracking and targeting of outreach efforts.

#### **Discussion**

he five regional weatherization service providers contract with the State to offer a range of energy-saving services to well more than 200 low-income housing units each year.

Publicizing the program to potential participants and scheduling energy audits and follow-up weatherization services on a year-round basis is an important task in the WAP. It is highly desirable that applications arrive in a steady stream throughout the year, and not all in one avalanche when the weather gets cold. (Delays past six months require the applicant to re-apply for services.) It is also important to reach priority individuals such as income-eligible elderly and handicapped persons, along with families with children ages five and under.

Though outreach is an important effort, it is a part-time activity in all regional offices, with volunteers often providing support. Several people in an office may take on parts of the outreach effort in addition to their regular job duties. We observed different outreach tasks handled by office directors, an office manager, an intake specialist, a weatherization coordinator, and a volunteer.

It is a general rule of thumb: in older homes you'll find very little insulation, many air leaks, and a lot of health and safety problems.

All five regional weatherization directors indicated in interviews that the primary source of names for outreach efforts comes from the federal Low-Income Home Energy Assistance Program (LIHEAP), which is managed by Vermont's Office of Home Heating Fuel Assistance, a division of the Department of Prevention, Assistance, Transition, and Health Access (PATH) in the Agency of Human Services.

LIHEAP is a federally-funded program which helps eligible low-income house-holds meet their home heating and/or cooling needs. The U.S. Administration of Children and Families' Division of Energy Assistance in the Office of Community Services administers LIHEAP at the federal level. The Federal Government began providing energy assistance beginning in Federal Fiscal Year (FFY) 1974.

The state program accepts applications from July 15 until the last day in February. Each applicant must agree to receive state weatherization services if they receive LIHEAP benefits. On the application the clause reads, "To get fuel assistance, you must agree to accept services from the local Weatherization office to help lower your heating costs."

For clients who pay for heating fuel themselves, benefits are paid directly to fuel suppliers certified with the program. Clients living in heated rentals receive a benefit check paid to them. The annual fuel benefit is typically issued in a single payment, followed by a bonus benefit if LIHEAP contingency funds are released. Approximately 18,500 households received assistance during the 2000-2001 heating season.

Since 1997, the Office of Home Heating Fuel Assistance has forwarded a confidential list of LIHEAP recipients, broken out by weatherization service area, to the five regional providers each spring. The LIHEAP data offers information about the home of the applicant and his or her home heating fuel type.

In 2002, a total of approximately 11,000 names were sent to regional areas. The list included information only about those LIHEAP participants who are "fuel liability clients," or who, in other words, pay for their own heat, whether homeowners or renters. Other LIHEAP recipients such as boarders, elderly in public housing, or people whose heat is included in their rent, were not included. The five regional weatherization offices typically get the names of 2,000 to 3,000 LIHEAP clients in their service area each spring. Past weatherization recipients are usually removed from the list, and each office then organizes periodic mailings to attract income-eligible applicants.

## **Non-Energy Benefits of Weatherization**



n addition to reducing the energy bills of low-income families and increasing the energy efficiency and safety of their homes, weatherization has other benefits to participating households, utility ratepayers, the economy and the environment.

According to a recent study by the Oak Ridge National Laboratory, those benefits are:

- For participating households, there are reduced water consumption bills and accompanying sewer fees, and an increase in property values;
- For utility ratepayers, there are reduced costs for bill collection and service shut-offs. And because weatherization addresses the safety of major appliances, the utility has fewer emergency calls.

- For the local economy, weatherization investments support a range of local home services industries and solidify the local tax base. Weatherization also reduces the burden of unemployment for taxpayers and local businesses.
- national security,
  weatherization decreases
  United States energy
  use by the equivalent of 15
  million barrels of oil every
  year. Weatherization also
  reduces the need for
  combustion of fossil fuels
  and the resulting emissions
  into the atmosphere.

For the environment and

"Before my trailer was weatherized I often arose to find the temp at between 30 & 40 degrees. Since weatherization, it never gets below 60 degrees."

- Orleans client

At the Champlain Valley Office of Economic Opportunity (CVOEO), for example, letters and brochures in batches of 200 are mailed out at bulk rate every few weeks. Interested people can call, write or stop in at the office to get a full application. At the Bennington Rutland Opportunity Council (BROC) the director will follow up mailings with a telephone call to discuss the benefits of weatherization and the application process.

Even though the LIHEAP names yield most of the weatherization applicants, the five regional offices undertake a variety of additional low-cost outreach efforts, putting up posters around town, sending news releases or running small ads in local newspapers, giving brochures to other agencies working with low-income people, conducting "Weatherization Day" events, and doing public service announcements of various types.

Only one of three regional offices we visited, however, has a place on their application to record how the applicant learned about the program.

Better use of its computerized database could help OEO and the five providers do a better job of outreach. Our review of information and documents provided by OEO during the course of our audit yielded little information regarding the makeup of the recipients of WAP services. The program information included as part of the Fiscal Year (FY) 2003 Budget Recommendation to the Legislature detailed a number of impact evaluation results and performance measures. All of these variables related to cost and efficiency savings such as cost-benefit ratios, the number of gallons of oil saved, and the percent of air infiltration reduction.

OEO electronically stores a substantial variety of data in what is known as the Weatherization Data Management System (WDMS). The five regional service providers collect and enter client participation and energy consumption data into the WDMS system each month and send an updated Microsoft Access file to OEO as part of their reporting requirements.

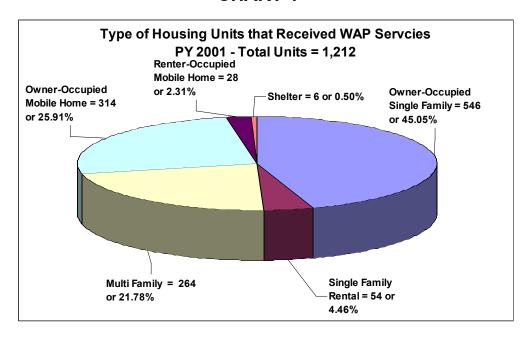
The data includes demographic data, building data, information about the type of weatherization services provided, and the cost and source of funds used to pay for the weatherization services.

The system is rich with information about client households, but more effort could be made to query the database for recipient information to help with outreach and program evaluation.

The only source of information we found that contained demographic information related to the make-up of the households served was the federal Department of Energy quarterly program reports that contained aggregate information for the state. These reports require the collection of specific data for each household unit that receives WAP services. This data includes the type of housing unit such as owner- or renter-occupied, single or multi-family, and mobile home or shelter. Information regarding the number of persons residing in each housing unit is also collected, and further categorized to identify the number of elderly, disabled, Native Americans and children. All of this data is entered into the WDMS database at the regional level and reported to OEO who then reports the information to DOE.

Information contained on the DOE program report for Program Year (PY) 2001 identified a total of 1,212 housing units that received WAP services from April 1, 2001 through March 31, 2002. Chart 1 (*below*) summarizes the types of housing units that received services.<sup>24</sup> Approximately 70 percent of these housing units were owner-occupied housing units and 30 percent were renter occupied. Seventy-eight percent of the homes weatherized in PY 2001 were single-family housing units.

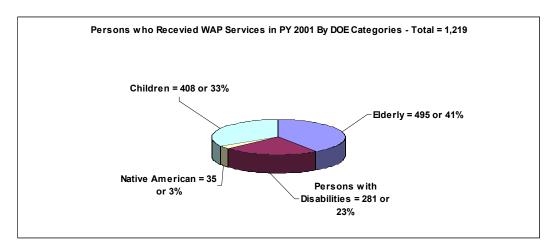
#### CHART 1



Department of Energy, Weatherization Assistance Program, Quarterly Program Report, Vermont, Budget Period 4/1/2001 - 3/31/2002, Grant Number: R130635, page 2.

The DOE information can be used to identify the number of housing units served by occupancy categories such as elderly, disabled, Native American, and households with children under the age five and the number of persons assisted by each category. In PY 2001 WAP services were provided to 495 elderly individuals and 408 children under the age of five statewide (see Chart 2).

#### CHART 2



At the time of our audit the demographic information summarized above was not readily available by OEO for each of the five geographic service areas. Additionally, this type of information was not being reviewed by OEO in concert with Census data for each geographic service area to determine if populations targeted for prioritization were being adequately served in proportion to their respective representation in each area served.

#### **RECOMMENDATION 3 a**

To improve local outreach efforts, applications should record how applicants learned about the Weatherization Assistance Program and outreach coordinators should adjust their strategies accordingly.

#### **RECOMMENDATION 3 b**

OEO should better utilize and report on the demographic data related to recipients of Weatherization Assistance Program services that are collected and entered into the WDMS data collection system. OEO should organize and report the demographic information by geographic service area and should ensure that regional service providers are earmarking services to the population subgroups that are targeted for prioritization of services.

#### FINDING 4

OEO's formula to distribute Weatherization Assistance Program funds to the five regional service providers is based on population data that is up to 10 years old with little attention to two variables important to the program: families with children under 5 and LIHEAP recipients below 125 percent of poverty.

#### Discussion

EO administers the weatherization program on a statewide level and provides annual grants to the five regional WAP service providers who manage the program at the local level. For PY 2002, which began April 1, 2002, a total of \$5.4 million (83 percent from the state collected gross receipts fuel tax and 17 percent federal funds) will be distributed.

OEO distributes the base funds to the regional providers according to a weighted funding formula.<sup>25</sup> This formula allocates the funds as follows:

- 26 percent of the total funds available are divided equally among the five regions;
- 29.6 percent of the total funds available are distributed based upon a region's percentage of the total Annual Degree Day Heating Units in Vermont (Bennington, Rutland 7,574 Degree Day Units; Orange, Lamoille, Washington 8,743; Caledonia, Orleans, Essex 8,919; Chittenden, Franklin, Grand Isle, Addison 7,900; Windham/Windsor 7,948); and,
- 44.4 percent of the total funds available are distributed based on the region's percentage of an "occupancy" variable. The variable is made up of each region's number of eligible housing units and the number of persons who are elderly, of Native American descent, or are persons with a disability.

We reviewed the source data used in the formula to distribute funds to the regions for FY 2002 and found it has not been updated since the early 1990s. We also found that 55.6 percent of the formula is dedicated to variables that equalize the allocation of funds and a smaller percent is based on the actual number of eligible households in each region. The geographic service areas generally follow county boundaries with the exception of several towns that are more geographically aligned with an adjoining service area.<sup>26</sup>

November 20, 2002 telephone conversation between Jules Junker of OEO and Michael Clasen of the State Auditor's Office. Mr. Junker stated that the State Plan for Weatherization services does not prescribe a specific funding formula for distributing WAP funds and that it is up to each state to determine the formula.

<sup>&</sup>lt;sup>26</sup> October 31, 2002 communication from Richard Germana, OEO Business Manager, to the State Auditor's Office. For example, the towns of Granville and Hancock in Addison County, the town of Pittsfield in Rutland County, and the towns of Barnard, Bethel, Rochester, Royalton, Sharon, and Stockbridge in Windsor County are considered part of Central Vermont Community Action Council's service area.

In Finding 1 we noted that there has been a 14.1 percent increase in the number of income-eligible households from 1989 to 1999. Data from the 2000 Census show that CVOEO's service area, comprising Addison, Chittenden, Franklin and Grand Isle counties, has almost 32 percent of the income-eligible households statewide (see *Table 6*). However, because of the structure of the funding formula, this weatherization provider does not receive 32 percent of the funding.

TABLE 6

Number of Eligible Housing Units						
By Service	e Region Ac	cording to				
200	2000 Census Data					
Region # of Units Percent						
BROC	8,181	18.49%				
CVCAC	7,851	17.74%				
CVOEO	14,040	31.73%				
NETO 6,364 14.38%						
SEVCA	7,813	17.66%				
Totals	44,249	100%				

We also note that the variables used in the "occupancy" component of the funding formula do not take into account specific population subgroups that are targeted for prioritization of services in the State Plan. These population subgroups include households with children age 5 or younger and LIHEAP recipients at or below 125 percent of poverty followed by all "others" at or below 125 percent of poverty. The U.S. Census Bureau has updated information on the number of housing units with children age 5 or younger with household incomes at or below 125 percent of poverty and LIHEAP recipient information is available from PATH.

#### **RECOMMENDATION 4**

The Office of Economic Opportunity, with input from the regional service providers, should consider a phased-in revision to the funding formula that places greater weight on the number of income-eligible households in each service area.

Any revised formula should factor in available data on the populations targeted for prioritization of services.

The population data utilized in the formula should be periodically updated as the information becomes available to reflect shifts in demographics. OEO should routinely consult with the Agency of Human Services Central Office Planning Division and the University of Vermont's Center for Rural Studies for updates to the population data.

#### IS THIS YOUR HOUSE?

rom years of experience working on Vermont homes, the Vermont Weatherization Program knows the features of common Vermont dwelling units and what typically is done to improve their energy efficiency.

#### **VERMONT RANCH HOUSE**

Typical Characteristics
960 square feet
Built 1970
Space Heat Fuel: 500 - 1,000 gallons of oil
BTU/Square Feet/HDD: 9 - 19
Relatively low air leakage rate

Typical Weatherization Measures\*
Insulate attic (edge blow soffit/wall top area & open blow remainder)
Rebuild existing attic hatch (reframe, stressskin panel & qlon)
Insulate walls (densepack cellulose)
Insulate sill (Kraft-faced fiberglass)
Sweep & strip doors; sashlock windows
Seal plumbing & electrical penetrations
Install mechanical controlled ventilation as needed

Seal all returns and large supply ducts

#### **VERMONT MOBILE HOME**

### Typical Characteristics

840 square feet Manufactured 1980

Space Heat Fuel: 600 gallons of

kerosene

BTU/Square Feet/HDD: 13

#### **Typical Weatherization Measures\***

Blow additional fiberglass in belly Install mechanical controlled ventilation as needed

Air leakage rates vary widely depending on building condition

Seal all supply connections to floor into furnace as possible



#### **VERMONT FARMHOUSE**

#### **Typical Characteristics**

2300 square feet Built 1900 or before

Space Heat Fuel: 1200-2000 gallons of

oil

BTU/Square Feet/HDD: 10 -16
Usually major air leakage problems

#### **Typical Weatherization Measures\***

Insulate (densepack cellulose) slants & kneewalls

Insulate attic (open blow)
Insulate ceiling behind kneewall
Rebuild existing attic hatch (reframe,
stressskin panel & glon)

Airseal second floor rim from kneewall Insulate walls (densepack cellulose) Insulate rim (densepack cellulose), if possible

Insulate sill (Kraft-faced fiberglass)

Major air sealing

Sweep & strip doors; sashlock windows Seal plumbing & electrical penetrations Seal walls open to attic

Install mechanical controlled ventilation as needed

Seal returns and large supply ducts

\*All measures screened for cost-effectiveness based on actual energy consumption.

#### FINDING 5

Low-income renters are underserved by the Weatherization Assistance Program despite strong efforts by the five regional weatherization providers to recruit and approve renting households for services.

#### Discussion

roviding low-income renters with weatherization services is a constant struggle for the WAP. Comparing statistics from the program with Census findings, we found that low-income renters do not get a "fair share" of the weatherization services. But there are compelling reasons why this is so.

It's necessary first to understand the demographics of renting households in Vermont. Statewide, there are approximately 240,000 households, with 29.5 percent of them renting households, and 70.5 percent owner-occupied.

In PY 2001, WAP provided services to 1,212 households, 28.5 percent of which were renting households, either in a multi-family building, a rented single-family home, or a rented mobile home.

The percentage of rental housing in the program is about equal to the statewide percentage of rental units. However, rental units form a much higher percentage of the number of total Vermont households that are income-eligible for weatherization.

Census figures show that 64 percent of the households at or below the federal poverty level are renting households (15,032 renting households out of a total of 23,522 households at or below the poverty level.)

The percentage of renter households is lower when households up to 150 percent of poverty are included, dipping to what we estimate to be 50-55 percent of eligible households. Thus, renters typically make up about 25-30 percent of weatherization clients each year, while they make up an estimated 50-55 percent of the target population for weatherization services.

There are important reasons why WAP providers are unable to provide a fairer share of resources to renters.

First is the relatively rapid turnover of rental households. Census data from 2000 indicate that one-third to nearly one-half of renting households had moved into their home within the past 12 months. According to program directors, one effect of the rapid turnover rate is that many renters are not interested in weatherization services because they may move after a short stay, or because the process of applying for and receiving services can take up to several months.

In addition, rental property owners must give their permission for work to be done on the property even though they are not charged for weatherization services. Property owners must agree to not raise the rent for one year, and to repay the WAP provider for on-site labor and materials if the building is sold within three years.

Also, some property owners are reluctant to give permission, directors note, because local city or town inspectors could visit the building and perhaps find housing code violations that the owner would have to pay to get fixed.

Additionally, in the case of multi-family rentals, 50 percent of the units must be "qualified" through the formal application process, tenant by tenant, until half the units are deemed "qualified."

These are the principal reasons why, despite their best efforts, WAP providers have difficulty increasing the percentage of rental units that could benefit from weatherization services.

#### **RECOMMENDATION 5**

OEO and WAP providers should develop new ways to educate rental property owners about the benefits of weatherization and the process of getting assistance.

Administrators should also consider changes in the program guidelines to achieve this goal, such as a process to "qualify" a multi-family rental building rather than 50 percent of households in the building.



"When you told me that all the weatherizing should cut my heating bills in half, I was very skeptical. But you were exactly right. Thanks to the insulation under the floors, it was much warmer for the little ones to crawl on."

- Burlington client

#### **TECHNOLOGY "SEES" AIR LEAKS**

o Dwight DeCoster, the Weatherization Technical Monitor at OEO, the single greatest technology advance in recent years that the WAP has seen can be summed up in two words: Blower Door.

"The advent of the blower door and its ability to 'see' air leakage problems helped us to re-direct our air sealing efforts from minor air sealing effects to finding the truly large air bypass problems in a home," says DeCoster

Originally introduced to the program in 1989, the program really began to hit stride with it between 1993 and 1995, says DeCoster.

It has enabled the WAP to become much more effective in:

- Multi-family blower door testing;
- Advanced pressure diagnostics;
- Multi-family pressure diagnostics;
- Single family residential pressure diagnostics;
- Duct work testing, balancing and sealing;
- Combustion appliance health and safety; and,
- Bypass location and sealing.

The blower door technology has also helped the WAP to better evaluate health and safety measures that need to be addressed in homes, DeCoster adds.

"With advanced pressure diagnostics came the ability to determine if combustion appliance zone depressuriza-



tion was occurring and whether or not a particular piece of equipment has the potential to backdraft under a worse case scenario," says DeCoster. With a backdraft, dangerous, and sometimes deadly, fumes emitted by appliances could circulate in the house.

WAP auditors perform many health and safety checks such as carbon monoxide testing on all combustion appliances, backdraft testing, combustion appliance zone pressure testing, worst case scenario testing (which means turning on all appliances that move air through the house to ensure that a backdraft situation does not occur), says DeCoster.

"The blower door has enabled us to significantly tighten the majority of homes we service, but it has also increased the need for more health and safety testing because of more air-tight houses," DeCoster says.

## <u>Findings - Business Processes</u>

#### FINDING 6

The financial controls over the weatherization program are functioning properly. However, our testing revealed that one of the three grantees reviewed was filing its monthly expenditure reports on a work-in-progress basis and not on a project-completion basis as required by OEO.

#### **Discussion**

he actual work of weatherizing more than 1,200 Vermont homes each year is done by the five regional providers, four of them being arms of the local community action agency.

All five weatherization program grantees follow the same expense reimbursement process to get the money from OEO to perform the weatherization services.

Just prior to the beginning of a program year, grantees send a Request for Cash Advance to Vermont's OEO. The amount of the request is based on the grantee's expenditure plan filed with the OEO at the beginning of each program year (April 1 - March 31) and typically covers two months of operating expenses.

Federal program monitoring rules (A-133) require the OEO to review grantee invoices that were paid by the cash advances. The review of grantee invoices is also performed in the compliance portion of the grantee's annual financial statement audit conducted by an outside CPA firm.

There are significant financial controls exercised over each of the five grantees which participate in the weatherization program, in part because of federal reporting guidelines required as a condition of accepting Department of Energy weatherization funds. These include:

- An annual financial statement audit according to generally accepted auditing standards (GAAS) conducted by outside CPA firm(s);
- Extensive monthly reports sent by each grantee to OEO; and,
- An annual administrative monitoring program conducted by the OEO. This administrative monitoring program, also known as the Grantee Monitoring Instrument, assesses the financial controls of the grantee. Pages 14 through 20 of the Grantee Monitoring Instrument are devoted to weatherization.

The monitoring addresses the following questions:

- Is the program generating program income and is it reported properly?
- Was program income used in accordance with grant agreement(s)?
- Is inventory properly secured and accounted for?
- Is the process of soliciting subcontractors properly controlled and documented?
- Are the files for weatherization clients properly maintained, secured, and documented?
- Are the costs (material and labor) reported on a given job substantiated to the point of purchase?

In order to assess the internal controls over the financial management of the weatherization program, three grantees were selected for testing:

- Champlain Valley Office of Economic Opportunity, Inc. (CVOEO);
- Central Vermont Community Action Council, Inc. (CVCAC); and,
- Southeastern Vermont Community Action, Inc. (SEVCA).

The testing consisted of substantiating to original source documentation the following four line items from each of the three selected grantee's February 2002 Weatherization Monthly Expense Report submitted to OEO:

- Direct Materials;
- Off-site Support Labor;
- · On-site Support Labor; and,
- Subcontract Labor.

It was noted that SEVCA is incorrectly including direct work-in-process expenses in the Weatherization Monthly Expense Report. Only direct job-based expenses for completed weatherization projects should be included in the Weatherization Monthly Expense Report.

There are many reasons why consistent monthly reporting on a project completion basis is important to the proper oversight of the grantees. First, in order for the OEO to properly monitor grantee budget-to-actual performance both the budget and the actuals must be on the same basis, i.e., a project-completion basis. Second, the OEO relies on project completions for all of its key performance indicators (KPIs). Third, grantee reimbursement is ultimately tied to project completions; completion based reporting, therefore, promotes maintaining a "tight" project schedule with the emphasis on maintaining high productivity and the timely completion of projects.

The OEO Business Manager has discussed the issue with the SEVCA Weatherization Director concerning the correct reporting procedure and will follow up in detail on the corrective reconciliation process that is to be completed by December 31, 2002.

The records examined as part of the review procedures were in good order. No exceptions were noted.

#### **RECOMMENDATION 6**

OEO should maintain its current program of monitoring procedures over grantees with renewed scrutiny of the Weatherization Monthly Expense Report to assure all monthly expenditure reports are submitted on a project completion basis.

#### FINDING 7

The Business Manager (OEO) plans to retire during the 2004 program year. This could compromise the proper management and control of the weatherization program.

#### **Discussion**

The current Business Manager at OEO has been the incumbent for more than 20 years. He is very familiar with the nuances of the weatherization program and especially the financial monitoring and control process that encompass a number of federal reporting requirements. If his departure is not managed well, the proper financial monitoring and control of the weatherization program could be compromised.

#### **RECOMMENDATION 7**

The OEO should plan sufficient time to find a replacement for the incumbent Business Manager. Further, sufficient funds and time should be budgeted to develop a succession plan which includes overlap time (i.e. incumbent and successor working together) to ensure a smooth transition.

#### FINDING 8

The Department of Taxes lacks an adequate compliance program to provide reasonable assurances that all businesses required to contribute to the Weatherization Trust Fund are doing so and that the amounts contributed are being calculated properly.

The Department of Taxes has adequate systems and internal controls in place to properly account for the amounts that are contributed.

#### **Discussion**

n 1990 the State of Vermont General Assembly passed bill H.832, which established the Vermont Weatherization Trust Fund (WTF). The WTF provides state funding for weatherization services through a one-half percent gross receipts tax on all annual retail sales over \$10,000 by sellers of non-transportation fuels and electricity sold in the state.

The WTF stabilized the funding, infrastructure and technical capacity of the program and it helped to raise the average investment per job to provide more comprehensive weatherization services.

According to 33 V.S.A. § 2503 (c) "The tax shall be administered by the commissioner of taxes and all receipts shall be deposited by the commissioner in the home weatherization assistance trust fund." According to the Department of Taxes, \$4,671,087 in gross receipts tax was collected in the fiscal year which ended June 30, 2002.

In the FY 2003 budget Form 4 statement, OEO reports these WTF funds:

....

<u>Fiscal Year</u>	WTF Funds
94-95	\$2,940,235
95-96	\$2,925,458
96-97	\$2,983,289
97-98	\$3,325,000
98-99	\$3,822,236
99-00	\$3,749,962
00-01	\$3,821,536
01-02	\$3,526,945

The Department of Taxes reported that the taxes deposited in the state's 2002 fiscal year were based on the following gross receipts, by fuel type:

	Sales	Tax	
Heating Oil:	\$182,592,344	\$912,962	
Propane:	\$91,675,812	\$458,379	
Gas:	\$56,375,259	\$281,876	
Electric:	\$603,272,250	\$3,016,361	
Coal:	\$301,740	\$1,509	
Total:		<b>\$4,671,087</b> <sup>27</sup>	

When a new home fuels dealer applies for, and completes, a Business Registration Application, and anticipates sales in excess of \$10,000 annually, a box on the application is checked indicating the business is subject to the fuel gross receipts tax. The Tax Department then sends the business a Fuel Gross Receipts Tax return with the dealer's name that must be filed quarterly with the Tax Department. An Information Bulletin is also sent that describes the purpose of the tax, who is liable, what type of sales receipts are subject to this tax, and how to report and pay the tax.

If, after filing three quarters, a dealer realizes that fuel sales will not exceed the \$10,000 minimum for the year, the business may file for a refund. However, according to the Department of Taxes, no dealer has done this to date. The Department noted that the refund provision is in the "Guide to Vermont Business Taxes" and refunds can be filed up to three years from the time the return was filed.

Out-of-state fuel dealers who meet the \$10,000 gross receipts in sales in Vermont are subject to the tax. The Vermont Oil Heating Institute sends a list of out-of-state dealers to the Department of Taxes which then sends out a tax return for completion. In the past three fiscal years, a total of approximately \$30,000 in tax receipts was collected from dealers outside Vermont who sell fuel to Vermont residents.

When the Fuel Gross Receipts Tax return is received, it follows the same procedure as all other tax return processing. Our Office has documented this process in the Department a number of times through testing of personal income tax processing, testing of internal controls within the department and testing of cash receipts. Within the past year this process has improved dramatically - with

<sup>&</sup>lt;sup>27</sup> E-mail correspondence from Ellen Tofferi, Deputy Commissioner, Vermont Department of Taxes, October 15, 2002.

few exceptions, all tax returns are processed within 48 hours and checks are deposited quickly.

The Department sends the Office of Economic Opportunity business manager a monthly Tax Receipt Summary Report which shows the number of returns filed, the fuel gross receipts for that month as compared to the previous year's month and the year-to-date total as compared to the prior year-to-date. Any transactions such as refunds and adjustments are also shown on this report. The report does not include a breakdown by dealer or type of fuel sold.

Once the returns are processed, they are sent to a tax examiner who does a cursory review to see if the appropriate amount of tax has been paid. The Desk Audit group also conducts occasional audits of the Business Master File of businesses and if they are subject to the fuel gross receipts tax they might follow up to see if a return has been filed. In either case if a return hasn't been filed or additional taxes are due, an invoice with the amount due will be sent to the dealer. However, there has been no official compliance review of this tax area to provide assurance as to whether or not all businesses required to contribute are, indeed, doing so, and in the correct amounts.

The Department's view is that there are few businesses which would not file this return if they are liable. Businesses are required to file tax returns, and if they are a fuel dealer, they must indicate both by checking the box on the business application and by the SIC number (federal code to designate the type of business) found on the return.

The Department deposits all tax receipts, including receipts from the fuel gross receipts tax, into the State's receipts account at the Howard Bank. If a deposit includes receipts from the fuel gross receipts tax, a direct journal entry is prepared to assign those receipts to the Weatherization Assistance Trust Fund.

#### **RECOMMENDATION 8**

The Department of Taxes should develop a compliance program that provides reasonable assurance that every business required to pay the gross receipts tax is doing so.

The Department of Taxes should undertake periodic reviews to provide reasonable assurance that all entities are paying the proper amount.

Discussion, Susan Watson, Auditor's Office, George Phillips, Tax Policy Analyst, Brenda Vovakes, Director of Compliance, Francis Bell, Tax Examiner, October 25, 2002.

#### FINDING 9

The Treasurer's Office and the Department of Finance and Management are not reporting interest earned on the WTF to OEO in a timely manner.

#### Discussion

assistance trust fund, all interest earned by the fund shall be deposited into the WTF fund. At the end of each month the Treasurer's Office calculates the interest due on this account by using the average daily balance in the fund. Once calculated, the Department of Finance and Management enters the interest on the books through a journal entry in VISION. It is through this entry that the OEO Business Manager is able to determine the amount of interest the fund has earned. Information provided by OEO on interest earnings for FY 2001 showed a total of \$170,223 in interest compared to \$70,411 for FY 2002. However, no financial information, such as the average daily balance or the rate of interest, is included with the report on the interest earnings.

# Restricted Funds Interest Rates for Home Weatherization Assistance Trust Fund July 2001 - June 2002

Average daily fund balance times Monthly Rate gives month's fund interest. Annual rate is informational and = Monthly rate \* 12.

Month	Monthly Rate	Annual Rate	Avg Balance	Earnings	(calculated)
July-01	0.002851	0.03358	\$3,288,765.52	\$9,379.56	\$9,376.27
August-01	0.002417	0.02847	\$3,829,238.50	\$9,259.10	\$9,255.27
September-01	0.002336	0.0284335	\$3,495,120.43	\$8,168.10	\$8,164.60
October-01	0.002505	0.029492	\$3,323,814.66	\$8,325.49	\$8,326.16
November-01	0.001039	0.012629	\$3,783,776.22	\$3,927.56	\$3,931.34
December-01	0.001654	0.019491	\$3,306,557.75	\$5,473.68	\$5,469.05
January-02	0.001463	0.017228	\$3,079,725.41	\$4,506.25	\$4,505.64
February-02	0.000686	0.0089425	\$3,618,673.39	\$2,482.41	\$2,482.41
March-02	0.001315	0.015476	\$3,183,644.16	\$4,184.58	\$4,186.49
April-02	0.001872	0.022776	\$2,920,994.38	\$5,468.10	\$5,468.10
May-02	0.002242	0.0263895	\$4,121,037.25	\$9,236.48	\$9,239.37
June-02	0.001349	0.016425	\$325,822.03	\$439.86	\$439.53
			Total:	\$70,851.17	\$70,844.23

Interest earned on the WTF was posted monthly under Vermont's former financial management information system (FMIS). However, posting of interest to the WTF has not been timely and consistent under the new VISION accounting system.

For example, the monthly interest for July 2001 through February 2002 was posted in March 2002 and March interest was posted in April 2002. The interest for April, May and June of 2002 was not posted until November 2002. As of November 22, 2002 no further interest has been posted to the WTF.

#### **RECOMMENDATION 9**

The Treasurer's Office and the Department of Finance and Management should provide timely information to the Office of Economic Opportunity on the interest earned on the Weatherization Trust Fund and should include a calculation showing how the amount credited to the account was derived. The OEO Business Manager should review the interest calculations with the Tax Summary Receipt Report from the Department of Taxes to verify that the source information is reasonable.

# Appendix A

# Purpose, Scope & Methodology

### **Purpose**

The Office of the State Auditor conducted a performance review, or audit, of the Vermont Office of Economic Opportunity's (OEO) Weatherization Assistance Program (WAP) as required by Section 32 of Act No. 156 of 1998:

"The auditor of accounts shall conduct a performance audit of the weatherization assistance program, including an evaluation of the program's progress in providing services to all eligible low income Vermont households, and shall report the findings and recommendations of the audit to the general assembly on or before December 31, 2002."

A performance audit is an objective and systematic examination of evidence for the purpose of providing an independent assessment of the performance of a government organization, program, activity, or function in order to provide information to improve public accountability and facilitate decision-making by parties with responsibility to oversee or initiate corrective action.<sup>29</sup>

A performance audit is not a financial audit, but can include findings on such issues as financial controls, as well as procurement practices, efficient operating procedures, compliance with regulations, general effectiveness of an organization, and barriers to better performance.<sup>30</sup>

## **Authority**

This review was conducted pursuant to the State Auditor's authority contained in 32 V.S.A. §§ 163 and 167 and in accordance with Act No. 156 of 1998, Section 32.

### **Scope and Methodology**

The scope of this performance review included an evaluation of OEO's oversight and management of the Weatherization Assistance Program outlined in 33 V.S.A. Chapter 25, particularly for the program years of April 1, 2000 to March 31, 2001 and April 1, 2001 to March 31, 2002.

The methodology involved a review of the relevant statutes, regulations, policies, internal memoranda and correspondence relating to OEO's Weatherization Assistance

<sup>&</sup>lt;sup>29</sup> Government Auditing Standards, United States General Accounting Office, 1994, page 14.

<sup>&</sup>lt;sup>30</sup> Ibid., pages 14-16.

Program. It included interviews with relevant OEO staff, regional WAP staff and recipients of WAP services to ensure that established procedures and controls are being followed and documenting OEO's and the regional WAP internal control policies and procedures. The Auditor's Office conducted field tests (on a sample basis) of OEO's and the regional providers' business processes related to purchasing, invoicing and deposits. We also documented and evaluated the Department of Taxes' oversight and administration of the gross receipts tax authorized in 33 V.S.A. § 2503(a). Finally, we conducted test work on the Weatherization Trust Fund, which is the primary source of funding for this program.

Our efforts relied upon representations of, and information provided by, the staff from OEO, the regional Weatherization Assistance Programs, the Department of Finance and Management, the Department of Taxes, and the State Treasurer's Office.

# Appendix B

## Background

he Vermont Weatherization Program (WAP) was created in 1976 in response to the nation's energy crisis. The WAP's mission is to reduce the energy costs for low-income families, particularly for the elderly, people with disabilities, and children, by improving their energy efficiency and comfort of their homes while ensuring their health and safety. The health and safety benefits result from reductions in carbon monoxide levels and risk for home fires; the program also provides financial benefits by reducing the amount of money people need to pay energy bills and by increasing their ability to control their energy consumption.

The WAP has broader social benefits by reducing the amount of pollution produced by generating and distributing electricity and by reducing emissions produced by households through reduction in the amount of energy used for heating.

The WAP is administered and managed by the Vermont Office of Economic Opportunity (OEO), an Office of the Vermont Agency of Human Services located in Waterbury, Vermont. The Weatherization program year (PY) begins on April 1 and concludes on March 31 the following year. Program year 2000 begins on April 1, 2000, for example.

#### **Budgets and Jobs**

OEO administers the program on a statewide level and provides annual grants to five regional service organizations which provide direct services. The five regional service organizations, with the weatherization budget and employees, are presented in Table 7 (following page).

The program today boasts many front-line workers and energy auditors who have been able to stay on the job year after year, add to their experience, improve their skills, and deliver better performance for the weatherization providers. Enthusiastic, skilled, hardworking, long-term employees are a prime asset of the program.

Weatherization services are available at no cost to income-eligible people and include:

- Comprehensive "whole house" assessment of energyrelated problems;
- State-of-the-art building diagnostics including: blower door, carbon monoxide and heating system testing and infrared scans;
- "Full-service" energy efficient retrofits including: dense-pack sidewall insulation, air sealing, attic insulation, heating system upgrades and replacements;
- Replacement of inefficient lighting and appliances in partnership with (and funded separately by) Efficiency Vermont; and,
- Year-round emergency furnace replacement (under separate funding).

#### TABLE 7

Organization, Weatherization Budget & Staff PY 01	<u>employees</u>	
Bennington-Rutland Opportunity Council	\$ 961,551	17
Central Vermont Community Action Council, Inc.	\$ 947,408	15*
Champlain Valley OEO	\$1,171,319	20**
Northeast Employment and Training Organization	\$ 917,620	17
Southeastern Vermont Community Action, Inc.	\$ 902,916	13
Total	\$4,900,814***	82

- \* = includes 6 subcontract employees from three shell contractor businesses that work 90 percent of the time for the agency. A shell contractor adds insulation and seals air leaks on the shell of a building, similar to the trained agency crews.
- \*\* = includes two subcontract employees from a shell contractor business which works almost 100 percent of time for agency.
- \*\*\* = includes \$100,000 in special funds for the Health and Safety Heating System Replacement Program.

Note: Not included in the employee numbers above are dozens of private contractors and their workers in the plumbing, heating and electrical fields hired on a subcontract basis by the five weatherization agencies as the need arises. In PY 2001 (April 1, 2001 - March 31, 2002) the amount of funds paid to private contractors for labor and supplies statewide was \$1,014,464.<sup>31</sup> An assortment of Vermont vendors also received \$862,126 in the same program year for materials purchases and general supplies.<sup>32</sup> Please note: also not included in the above employee numbers are four additional community action agency directors and five fiscal managers who charge 5 to 10 percent of their time to the Weatherization program.<sup>33</sup> The stable full-time jobs created by the Weatherization Assistance Program are important. Prior to the creation of the state Weatherization Trust Fund, the fluctuating funding levels made it hard for the regional weatherization teams to retain good employees. Indeed, OEO reports that since 1994 Department of Energy funds have declined nearly 43 percent,<sup>34</sup> further highlighting the importance of the decision to establish a special fund for state support.

<sup>&</sup>lt;sup>31</sup> Communication, Jules Junker, Office of Economic Opportunity, December 4, 2002.

<sup>32</sup> Ibid

<sup>&</sup>lt;sup>33</sup> Communication, Jules Junker, Office of Economic Opportunity, November 22, 2002.

<sup>&</sup>lt;sup>34</sup> Office of Economic Opportunity, FY 2003 Budget, Form 4.

Two OEO employees analyze beneficial technical innovations for incorporation into the program. The OEO Program Coordinator routinely monitors the five regional grantees for proper administrative oversight while the OEO Weatherization Technical Monitor inspects 10 percent of completed jobs to ensure quality workmanship. Between 1990-2001, 13,790 homes received services from the WAP in Vermont.<sup>35</sup>

### **Program Funding**

The U.S. Department of Energy (DOE) provided initial funding for the WAP. This changed in 1990 when the Vermont General Assembly passed bill H.832, which established the Vermont Weatherization Trust Fund (WTF). The WTF provides state funding for weatherization services through a one-half percent gross receipts tax on all annual retail sales over \$10,000 by sellers of non-transportation fuels and electricity sold in the state.

The WTF funds and the allocation received from the Department of Energy provides the basis for the program's ability to leverage other funds for various types of energy efficiency services to the homes being weatherized. The overall funding report for the most recent completed program year is broken down in Table 8 (*below*).

#### **TABLE 8**

### Weatherization Program Resources 2001 Program Year (April 1, 2001 - March 31, 2002)

Weatherization Trust Fund	\$3,745,992
Dept. of Energy	860,443*
PATH/LIHEAP (emergency heating system replacements)	309,816
Efficiency Vermont	1,116,789
Electric Efficiency Return Pilot Program	17,669
Vermont Gas Piggyback Program	40,995
Rental Owner Investments (primarily health & safety)	105,609
Client Self-help	60,157
Total:	<b>\$6,257,470</b> <sup>36</sup>

<sup>\*</sup> In the current federal fiscal year, DOE funding has increased by \$432,976 to \$1,293,419, allowing an increase in weatherized units from 1,096 in 2001-2002 to 1,316 homes for 2002-2003.

<sup>&</sup>lt;sup>35</sup> Office of Economic Opportunity Website, Overview of Weatherization Services located at http://www.ahs.state.vt.us/oeo/weather.htm.

<sup>36</sup> Communication from Jules Junker, Weatherization Programs Coordinator, December 6, 2002. Not all of these pass through OEO financial system; for example, Efficiency Vermont has separate contracts with the five grantee organizations.

The Weatherization Trust Fund stabilized the funding, infrastructure and technical capacity of the program and it also allowed Vermont to raise the average investment per job to provide more comprehensive weatherization services. The program has more than doubled in size from 1990 when program revenues totaled \$2.6 million. Projected funding for PY 2002 weatherization services in Vermont is approximately \$5.4 million - 83 percent to come from the state collected gross receipts fuel tax and 17 percent in federal funds from the DOE. Unless reauthorized by the General Assembly, the fuel gross receipts tax is currently scheduled to terminate on July 1, 2003.

A breakdown of the gross receipts tax collected by the Tax Department in FY 2002 is outlined by type of energy source in Table 9 (*below*).<sup>37</sup>

TABLE 9

Type of Energy	FY 2002 Gross Receipts Tax	Percent of Total
Electric	\$ 3,016,361	65%
Heating Oil	\$ 912,962	19%
Propane	\$ 458,379	10%
Gas	\$ 281,876	6%
Coal	\$ 1,509	Less than 1%
Total	\$ 4,671,087	100%

At the time the General Assembly established the Weatherization Assistance Trust Fund it also included language that created an escrow account of 12.5 percent of the tax receipts of the fuel gross receipts tax for the preceding year to be used for rebates to fuel sellers.

According to 33 V.S.A. §§ 2503(e) and (f), fuel sellers which provide conservation programs that meet the goals of the weatherization program in a manner approved by the Public Service Board (for regulated fuel sellers) and OEO (for unregulated fuel sellers) and which enhance OEO's capacity to serve low-income households, may be eligible for rebates. The law states that the Public Service Board and OEO may authorize rebates that are equal to the expenditures provided that the expenditures were made in accordance with WAP guidelines.

<sup>&</sup>lt;sup>37</sup> E-mail correspondence from Ellen Tofferi, Deputy Commissioner, Vermont Department of Taxes, October 15, 2002.

Documentation provided by OEO<sup>38</sup> shows rebates to fuel sellers in the following amounts during the last four years:

State Fiscal Year	Total Rebates		
2002	\$130,143.84		
2001	\$185,495.03		
2000	\$233,834.81		
1999	\$234,797.99		

#### **Program Eligibility Requirements**

Owner-occupied or renter-occupied dwelling units that are homes to households with incomes at or below 150 percent of the poverty level are eligible for WAP services. Recipients of fuel assistance services through the Low-Income Home Energy Assistance Program (LIHEAP), General Assistance (GA), or Aid to Needy Families with Children (ANFC) are automatically qualified for WAP services. Priority for providing WAP services is further broken down in accordance with the standards outlined in the State Plan as follows:

"Priority shall be given to identifying and providing weatherization assistance to elderly or handicapped or children age 5 or under low-income households. The identification of the elderly, handicapped or children age 5 or under households that are eligible for this program shall be the responsibility of the contractor. LIHEAP recipients are also determined to be a priority under this plan."

"Methods for identifying households shall include the use of the news media for public service announcements, services of contractor's outreach personnel, and referral procedures with appropriate agencies including but not limited to Area Agencies on Aging, Community Action Agencies, the Social and Rehabilitation Services Division of the Agency of Human Services, the Vermont Department of Social Welfare and the Vermont Public Service Department.

"Priority for receiving weatherization services will be as follows:

- a. Elderly, handicapped, children age 5 or younger, and LIHEAP recipients at or below 125 percent of the poverty level.
- b. All others at or below 125 percent of the poverty level.

<sup>&</sup>lt;sup>38</sup> Memoranda from David Tucker, Director of OEO, to Richard Germana, OEO Business Manager, dated December 8, 1998; December 10, 1999; December 20, 2000; and November 26, 2001.

- c. Elderly, handicapped, children age 5 or younger, and LIHEAP recipients at or below 150 percent of the poverty level.
- d. All others at or below 150 percent of the poverty level, but not placed ahead on waiting list of dwelling units whose income is at or below 125 percent of poverty level or elderly or handicapped occupants or children under the age of five of either poverty level.
- e. Grantees are encouraged to prioritize weatherization of high energy consuming dwelling units to the extent possible within each category."<sup>39</sup>

The federal government determines poverty levels annually and publishes guidelines in the Federal Register. The poverty levels as published in the February 14, 2002 Federal Register for family units with household incomes at 150 percent of the poverty level are outlined below in Table 10 (*below*).

TABLE 10

Size of Family Unit	Annual Income	Monthly Income	Weekly Income
1	\$13,290	\$1,108	\$256
2	\$17,910	\$1,493	\$344
3	\$22,530	\$1,878	\$433
4	\$27,150	\$2,263	\$522
5	\$31,770	\$2,648	\$611
6	\$36,390	\$3,033	\$700
7	\$41,010	\$3,418	\$789
8	\$45,630	\$3,803	\$878

<sup>&</sup>lt;sup>39</sup> U.S. Department of Energy, State Plan/Master File Worksheet, Grant Number: R130635, State: VT, Program Year: 2003, page 3.

Table 11 *(below)* presents eligible household income data by geographic service area for each of the five regional WAP service providers that receive annual grants from OEO. The geographic service areas generally follow county boundaries with the exception of a few towns that are more geographically aligned with an adjoining service area.<sup>40</sup>

**TABLE 11** 

Number of Households in Vermont With Income in 1999						
Below 150% of Poverty Level By Service Area						
Service Area	Number of Households in Area	Percent of Total Households in Vermont	Number of Households in Vermont with Income in 1999 Below 150% of Poverty Level	Percent of Households below 150% of Poverty as a % of Total Vermont Households Below 150% of Poverty	Percent of Households Below 150% of Poverty as a % of Total Households in Service Area	
Champlain Valley Area – Addison, Chittenden, Franklin, Grand Isle Counties	89,120	37.02%	14,040	31.73%	15.75%	
Bennington and Rutland Area	40,508	16.83%	8,181	18.49%	20.20%	
N.E. Kingdom– Caledonia, Essex and Orleans Counties	24,723	10.27%	6,364	14.38%	24.74%	
Central VT. – Lamoille, Orange and Washington Counties	43,858	18.22%	7,851	14.74%	17.90%	
Windham and Windsor Area	42,535	17.67%	7,813	17.66%	18.37%	
Total	240,744	100%	44,249	100%	18.38%	

 $<sup>^{40}</sup>$  U.S. Census Bureau. Census 2000 Summary File (SF 3) - Sample Data. P93. Ratio of Income in 1999 to Poverty Level by Household Type [19] - Universe: Households.

# Appendix C

# Office of Economic Opportunity Response to Auditor's Draft Report 12/16/02

### **Findings - Program Performance**

#### FINDING 1

State funding for Weatherization services is scheduled to sunset on July 1, 2003, at a time when data show the need is increasing.

The number of low-income Vermonters is growing, and increasingly they live in housing stock that is aging, unsafe, and wasteful of energy and important household income.

According to 2000 Census data:

- One in five Vermonters, or 44,249 households, live at or below 150 percent of the federal poverty level, an increase of 14.1 percent since 1989.
- 152,182 Vermont dwelling units are 30 years or older, approximately 52 percent of the total Vermont dwelling units. Older homes typically feature high energy leakage and potential threats to the health and safety of the occupants.

The need to reduce energy spending in the typical low-income household budget has increased due to the rapid rise of other basic needs such as health care and rent and home ownership costs. Low-income people typically spend 14 percent of their annual income on energy compared to 3.5 percent for other households.

RESPONSE: OEO agrees that the number of low-income Vermonters is growing. This combined with the fact that Vermont's housing is among the oldest in the nation means that the need to reduce energy spending in the typical low-income household budget has increased.

#### **RECOMMENDATION 1**

The Legislature should remove the sunset provision on the Weatherization Assistance Program in order to continue providing services to a growing population of income-eligible households, many who live in old, energy-wasting, and often unsafe homes.

RESPONSE: We agree that the Weatherization Trust Fund provides a valuable resource for Vermont and should continue to provide support for the Weatherization Assistance Program.

#### FINDING 2

The Weatherization Assistance Program has been successful in producing energy savings on a cost-effective basis. The administration and monitoring of the program are more than adequate and services provided have significant financial and health benefits for low-income Vermonters.

Two separate technical studies showed that homes receiving weatherization services saw energy savings of approximately 22 percent.

The more recent evaluation indicated that when both energy and non-energy benefits are combined the program produces \$5.26 of benefits for every dollar spent.

RESPONSE: OEO agrees that the Weatherization Assistance Program has proven its cost effectiveness many times over and provides a substantial return on investment.

#### **RECOMMENDATION 2**

Future evaluations of the Weatherization Assistance Program should be conducted at minimal cost utilizing existing resources within state government to analyze the full range of performance data available in OEO's Weatherization Data Management System.

RESPONSE: We concur. Currently, significant resources are spent on out-of-state contractors to perform an evaluation of the Weatherization Program every two years. OEO feels confident it can conduct an evaluation of the program utilizing existing resources within state government.

#### FINDING 3 a

Outreach efforts to interest income-eligible family, elderly, and handicapped households in weatherization services are performed at low cost by various individuals in regional offices.

Efforts appear to be sufficient to provide a steady stream of completed applications throughout the year to efficiently run the program, avoiding "downtime" with no homes to weatherize and avoiding lengthy waiting times for services as well.

RESPONSE: We agree. OEO will continue to support its current outreach activities to ensure a steady flow of future clients.

#### FINDING 3 b

OEO collects and tracks a substantial amount of data related to the program through its Weatherization Data Management System (WDMS).

However, very little information related to the demographic makeup of the households receiving weatherization services is reviewed and disseminated by OEO for reporting, tracking and targeting of outreach efforts.

RESPONSE: OEO will continue to refine and look at new approaches to "mine" the extensive data that is collected about the program and the demographic makeup of households receiving service. OEO will work with local providers to develop reports that will assist, improve and target outreach efforts.

#### **RECOMMENDATION 3 a**

To improve local outreach efforts, applications should record how applicants learned about the Weatherization Assistance Program and outreach coordinators should adjust their strategies accordingly.

RESPONSE: While some agencies record how a client found out about the program, OEO will require <u>all</u> agencies to record how applicants learn about the Weatherization Program.

#### **RECOMMENDATION 3 b**

OEO should better utilize and report on the demographic data related to recipients of Weatherization Assistance Program services that are collected and entered into the WDMS data collection system. OEO should organize and report the demographic information by geographic service area and should ensure that regional service providers are earmarking services to the population subgroups that are targeted for prioritization of services.

RESPONSE: As described in finding 3b above, OEO will organize and report demographic data by geographic service area to ensure local providers are correctly earmarking services to those considered priorities.

#### FINDING 4

OEO's formula to distribute Weatherization Assistance Program funds to the five regional service providers is based on population data that is up to 10 years old with little attention to two important variables important to the program -families with children under 5 and LIHEAP recipients below 125 percent of poverty.

RESPONSE: OEO is planning on incorporating new census data into the funding allocation formula.

#### **RECOMMENDATION 4**

The Office of Economic Opportunity, with input from the regional service providers, should consider a phased-in revision to the funding formula that places greater weight on the number of income-eligible households in each service area.

Any revised formula should factor in available data on the populations targeted for prioritization of services.

The population data utilized in the formula should be periodically updated as the information becomes available to reflect shifts in demographics. OEO should routinely consult with the Agency of Human Services Central Office Planning Division and the University of Vermont's Center for Rural Studies for updates to the population data.

RESPONSE: OEO will convene a meeting of the Weatherization Policy Advisory Council to discuss updating the funding allocation with new census data and develop a mechanism to include periodic updates from the Agency of Human Services Planning Division and the University of Vermont's Center for Rural Studies.

In addition, the Weatherization Program Director and the OEO Administrative Assistant have registered for training with the Center for Rural Studies on the new census data and how to use it. Such training will enable OEO staff to make better use of census data in assessing the performance of the Weatherization program.

#### FINDING 5

Low-income renters are underserved by the Weatherization Assistance Program despite strong efforts by the five regional weatherization providers to recruit and approve renting households for services

RESPONSE: OEO will continue to place emphasis on reducing barriers to the weatherization of low-income rental housing. While very positive inroads have been made in multifamily rentals in partnership with affordable housing groups and Efficiency Vermont's Residential Energy Efficiency Program (REEP), OEO understands that barriers to operating in rental properties still exist and we will continue to seek new and effective means to overcome these barriers.

#### **RECOMMENDATION 5**

OEO and WAP providers should develop new ways to educate rental property owners about the benefits of weatherization and the process of getting assistance.

RESPONSE: OEO will continue the positive partnership with the affordable housing groups throughout the state and the REEP Program. OEO will continue to develop new ways to educate rental property owners about the benefits of participating in the weatherization process.

Administrators should also consider changes in the program guidelines to achieve this goal, such as a process to "qualify" a multi-family rental building rather than 50 percent of households in the building.

RESPONSE: Currently this approach is not allowable under Federal Regulations. OEO will discuss the process of "qualifying" multi-family rentals with the Department of Energy Boston Support Office and will explore options for changing applicable Federal Program guidelines.

## **Findings - Business Processes**

#### FINDING 6

The financial controls over the weatherization program are functioning properly. However, our testing revealed that one of the three grantees reviewed was filing its monthly expenditure reports on a work-in-progress basis and not on a project-completion basis as required by the Office of Economic Opportunity.

RESPONSE: OEO concurs that one subgrantee was filing monthly expenditure reports on a work-in-progress basis and not on a project completion basis. OEO has taken steps to correct this finding.

#### **RECOMMENDATION 6**

OEO should maintain its current program of monitoring procedures over grantees with renewed scrutiny of the Weatherization Monthly Expense Report to assure all monthly expenditure reports are submitted on a project completion basis.

RESPONSE: OEO Business Manager will update monitoring procedures to ensure that monthly expenditure reports are filed on a project completion basis.

#### FINDING 7

The Business Manager (OEO) is planning to retire during the 2004 program year. This could compromise the proper management and control of the weatherization program.

RESPONSE: OEO understands the importance of a seamless transition in the Business Manager's position.

#### **RECOMMENDATION 7**

The OEO should plan sufficient time to find a replacement for the incumbent Business Manager. Further, sufficient funds and time should be budgeted to develop a succession plan which includes overlap time (i.e. incumbent and successor working together) to ensure a smooth transition.

RESPONSE: Plans will be implemented over the next twelve months to ensure the current Business Manager and Administrative Assistant will work closely with the new hire to ensure a seamless transition.

#### FINDING 8

The Department of Taxes lacks an adequate compliance program to provide reasonable assurances that all businesses required to contribute to the Weatherization Trust Fund are doing so and that the amounts contributed are being calculated properly.

The Department of Taxes has adequate systems and internal controls in place to properly account for the amounts that are contributed.

RESPONSE: N/A to OEO.

#### **RECOMMENDATION 8**

The Department of Taxes should develop a compliance program that provides reasonable assurance that every business that is required to pay the gross receipts tax is doing so.

The Department of Taxes should undertake periodic reviews to provide reasonable assurance that all entities are paying the proper amount.

RESPONSE: N/A to OEO.

#### FINDING 9

The Treasurer's Office and the Department of Finance and Management are not reporting interest earned on the WTF to OEO in a timely manner.

RESPONSE: OEO concurs and will review interest calculated on a regular basis once available.

#### **RECOMMENDATION 9**

The Treasurer's Office and the Department of Finance and Management should provide timely information to Office of Economic Opportunity on the interest earned on the Weatherization Trust Fund and should include a calculation showing how the amount credited to the account was derived. The OEO Business Manger should review the interest calculations with the Tax Summary Receipt Report from the Tax Department to verify that the source information is reasonable.

RESPONSE: The OEO Business Manager will review the interest calculations with the Tax Summary Report from the Tax Department to verify that the source information is reasonable.

# Appendix D

# Department of Taxes Response to Auditor's Draft Report 12/18/02

### **Appendix A (Scope & Methodology)**

The methodology involved a review of the relevant statutes, regulations, policies, internal memoranda and correspondence relating to OEO's Weatherization Assistance Program. It included interviews with relevant OEO, regional WAP staff and recipients of WAP services to ensure that established procedures and controls are being followed and documenting OEO's and the regional WAP internal control policies and procedures. The Auditor's Office also conducted field tests (on a sample basis) of OEO's and the regional providers' business processes related to purchasing, invoicing and deposits. We also documented and evaluated the Tax Department's oversight and administration of the gross receipts tax authorized in 33 V.S.A. § 2503(a), and the Weatherization Trust Fund which is the primary source of funding for this program.

RESPONSE: This section incorrectly refers to the Department's oversight and administration of the fuel gross receipts tax and the Weatherization Trust Fund. There is no oversight or administrative activity which the Department is responsible for, or performs, with regard to the Fund. See 33 V.S.A. § 2501. The Department does administer the fuel gross receipts tax which funds this account. (Auditor's Note: This final report includes changes that reflect this comment.)

#### **FINDING 8**

The Department of Taxes lacks an adequate compliance program to provide reasonable assurances that all businesses required to contribute to the Weatherization Trust Fund are doing so and that the amounts contributed are being calculated properly.

The Department of Taxes has adequate systems and internal controls in place to properly account for the amounts that are contributed.

#### **RESPONSE:**

1. Finding 8 discusses the Department's compliance activities peculiar to fuel gross receipts tax but leaves the implication that this tax is also part of our general compliance activity. In nearly all cases, the Department audits are conducted on a "package" basis. That is, when a fuel oil dealer or utility is selected for audit, the examiner will review compliance for sales tax, income tax, withholding tax, fuel gross receipts tax and any other taxes administered by the Department to which the company may be exposed. Although audits performed during the period covered by the report apparently did not include any fuel dealers or utilities they are part of our general audit population. The report is correct in noting that

Department staff believes there is a high degree of compliance with the fuel gross receipts tax but we have not dropped the tax from our audit program.

- 2. With regard to the discussion of revenue processing, virtually all checks are deposited within 24 hours (the returns received in April are the exception).
- 3. The last paragraph of Finding 8 refers to Weatherization Trust Fund receipts rather than Fuel Gross Receipts tax receipts and may be unclear about the mechanics of the Department's activities.

#### A better statement would be:

The Department deposits all tax receipts, including receipts from the fuel gross receipts tax, into the State's receipts account at the Howard Bank. If a deposit includes receipts from fuel gross receipts tax, a direct journal entry is prepared to assign those receipts to the Weatherization Assistance Trust Fund. (Auditor's Note: This final report includes changes that reflect this comment.)

#### **RECOMMENDATION 8**

The Department of Taxes should develop a compliance program that provides reasonable assurance that every business that is required to pay the gross receipts tax is doing so.

The Department of Taxes should undertake periodic reviews to provide reasonable assurance that all entities are paying the proper amount.

RESPONSE: The Department does not disagree with these recommendations but, as noted in our response to Finding 8, we believe these procedures are in place.

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