TO: Governor A

FROM: Kaia Hu

Date: March 8, 2026

SUBJECT: Analysis of Alternatives for the 2026-27 LIHEAP Program Modification

Summary of the Issue and Options

This memo provides recommendations for redesigning the state's 2026-27 Fiscal Year Low-Income Home Energy Assistance (LIHEAP) programs to maximize efficiency and equitable outcomes. The memo will first reflect on the reasons behind the early termination of 2025-26 programs and use the analysis to guide the alternative design goals.

The redesign aims to achieve two primary goals: 1. Keep the LIHEAP spending below the federal funding appropriation. 2. Provide the maximum benefit possible to the state residents who face the highest home energy needs. Two design options are identified that both meet the design criteria, offering distinct advantages based on immediate vs. long-term impacts. The choice between each option depends on the state's current priority of the first two goals as well as the uncertainties regarding 2026-27 fiscal year's federal funding estimate.

	Option 1	**Option 2**
Design	1. Decrease initial cash grant level by 10% from 2025-26 level then adjust down 5% cash grant level. 2. Change income eligibility of Crisis Grants to above 125% poverty level 3. Decrease Weatherization allocation to 5%. 4. Decrease Administration allocation to 2%.	1.Decrease cash grant level by 10% except for households belonging to the three high need subgroups. 2. Lower the maximum benefit of Crisis Grants from $1500 to $1250 2. Decrease Weatherization allocation to 5%. 3. Decrease Administration allocation to 2%.
Reduced Spending	$13.6 million - $22.7 million	$6.68 million - $8.68 million
Positive Impact Evaluation	73,000-77,000 of high-need households will have 50%+ burden reduction	120,000-121,000 of high-need households will have 50%+ burden reduction
Negative Impact Evaluation	3400-7400 of households facing increased burden	864-936 of households facing increased burden

Explanation of Early Termination of 2025-26 Heating Assistance Program

Program Design Modifications in 2025-26 Fiscal Year

There are two layers of reasons that led to the program design modification during the 2025-26 Fiscal Year. First, there was a 6% expected increase in federal funding, backed by the state's Congressional Delegation; Second, since federal law only permits the state to carry over 10% of the total allocation to the following year, if unused, there would be pressure to spend as much of the total federal allocation as possible. Thus, the state raised benefit levels and expanded eligibility limits. Specifically, the income eligibility for the Heating Assistance program was changed to 150% of the Federal Poverty Level (FPL) from 125%, and the cash grant level was also increased by 10% over the 2024-25 level. The same income eligibility change was also applied to the Crisis Assistance Program. Though there were no major design changes on the Weatherization program, $15.3 million was transferred to the Department of Community Assistance (DCA), a roughly 6% increase from the average spending on this program between 2022 and 2025. However, since the state is allowed to spend up to 15% of the federal funds on weatherization, instead of making big and unchangeable modifications to the other two programs, it could have waited till it received the federal funding and then increased allocation on weatherization if there is risk of returning unused funds.

Impact of Changes in the Heating Assistance Program and Crisis Assistance

As the state's actual 2025-26 Fiscal Year allocation remained nearly the same as the prior year, with the spending increase, the program was projected to run out of funds by early February. As a result, DHS decided to close applications two months early on January 31. The table below explores the potential impact of program modifications in two scenarios: with the Heating Assistance program's early closure, and without the early closure. Detailed analysis can be found in Section A of the Appendix.

	Without early closure of the Heating Assistance		**With** early closure of the Heating Assistance	
	Heating Assistance	Crisis Program	Heating Assistance	Crisis Program
Impact on **Number of Participants**	Additional 50,000 applications and 40,000 approved participants	Additional 6000 more applicants due to lowered eligibility limits	Potential reduction of over 34,000 participants who would have been qualified for the program	Number of participants increased around 9000 in addition to the increase from changed eligibility due to

				a spike in demand.
Impact on **Spending**	It could have spent over $90 million, rather than the $87 million it had planned, which is $12 million higher than the spending in 2024-25	Total spending would be close to $33 million, $3 million higher than it had planned, which is $4.6 million higher than the spending in 2024-25	Due to the early closure, the spending on Heating Assistance Program stayed within budget	The early closure potentially led to $4 million in addition to the increase from changed eligibility due to a spike in demand

Summary of Factors Contributing to Early Closure

Based on the analysis, both the Heating Assistance and the Crisis Grants programs would exceed their budgets if the former was not terminated early, even with the anticipated increase in federal funding. According to the above table, the expected spending for those two programs could reach $123 million in total without program interruption, which makes the total expected spending reach $153 million, $6 million higher than the original expectation on federal funding. Therefore, the 2025-26 program modification on eligibility and benefit is inherently unsustainable while the shortfall in federal funding made the problem more evident.

In addition, the Crisis Grants program is predicted to spend 9% more than expected, compared to 3.4% of the Heating Assistance program, if the latter was not terminated early. With the impact of increasing demand from the early termination of the Heating Assistance program the Crisis Grants program actually spent over 20% more than planned. As a result, the 2026-27 spending forecast for the Crisis Grants program should include greater flexibility to account for potential uncertainties.

Aside from those two major LIHEAP programs, instead of waiting to see how much federal fundings it would receive and setting up allocation for weatherization and administration accordingly, the state made direct commitment to those allocations which would be impossible to change if actual funding was less than expected.

Therefore, with potential funding decrease in the 2026-27 Fiscal Year, it is crucial to not only redesign the Heating Assistance, and the Crisis Grants programs to keep their costs under control, but also restructure funding allocations of the Weatherization program and administration to account for uncertainties and potential funding gap the LIHEAP program might encounter.

Alternative Designs for the 2026-27 LIHEAP Program

Goals and Priorities

Since the theoretical uninterrupted operation of the 2025-26 program could reach a total cost of $153 million, $9 million higher than the actual funding available to spend and $13 million higher than the 3-year average available funding from 2022 to 2025, the 2026-27 program design should at least reduce its total expected spending by $9 million and an additional $4 to 6 million considering the concerns on reduced federal funding.

With the goal of cutting spendings, the total benefit people would receive is deemed to decrease. Therefore, it is crucial to set the impact goal as to ensure maximum benefits possible to those state residents who most need assistance with their energy costs.

Therefore, in summary, there are the two main goals of this design with their priorities:

	Goals	Priorities
1	Keep the LIHEAP spending below the federal funding appropriation.	High
2	Provide the maximum benefit possible to the state residents who face the highest home energy needs.	High

Highest Home Energy Need Resident Subgroup Analysis

According to LIHEAP Statute, the term "highest home energy needs" means the home energy requirements of a household determined by considering both the energy burden of such household and the unique situation of such household that results from having members of vulnerable populations, including very young children, individuals with disabilities, and frail older individuals. As one of the primary program goals involves providing the maximum benefit possible to the residents having highest home energy needs, this memo conducted a detailed analysis on the state's household home energy data to locate specific subgroups that should be given extra attention in the redesign of 2026-27 programs.

A detailed analysis can be found in Section B of the Appendix. In summary, the analysis pinpoints three subgroups of residents who are likely experiencing high energy burden and having members of vulnerable populations: households with income below $5000, households that rely on propane and fuel oil as primary heating fuel sources, and households that reside in single-family detached homes or mobile homes. The latter two subgroups may overlap and represent a small group of residents that not only utilize low-efficiency fuels but also are naturally susceptible to high heating cost due to their housing types.

Alternative Design

To consider alternative designs on all elements of the LIHEAP program, this memo will explore different options for the Heating Assistance, Crisis Grants, and Weatherization programs, as well as potential allocation modifications on Administration and Assurance, the latter of which was not appropriated in 2025-26 program.

Potential changes to the Heating Assistance program and the Crisis Grants program can be divided into two general approaches: changing eligibility or changing benefit level. With the "changing eligibility" approach, alternative designs for both programs include changing income eligibility limit from above 150% federal poverty level in 2025-26 to125% poverty.

With the "changing benefit level" approach, there are more diverse alternative options. First, the state could introduce an overall reduction in cash grant levels. Specifically, the Heat Assistance program could decrease cash grant level by 10% from 2025-26 level, or the Crisis Grants program could lower the maximum benefit from $1500 to $1250. Second, to take into consideration of maximizing benefit for residents with the highest needs, the Heat Assistance program could keep cash grant level the same at 2025-26 level for the three vulnerable subgroups defined above while decreasing by 10% for other residents.

Third, while the Crisis Grants amounts are determined by applicant needs, and therefore it is hard to adjust the benefit amount standard during the program year, the Heating Assistance program has such flexibility. Thus, another potential alternative design for the Heating Assistance program includes decreasing initial cash grant level by 15% from 2025-26 level then adjust cash grant level to up to 2025-26 level based on available funding and application volume in October & November.

For alternative designs on the Weatherization program, one approach is diverting partial allocations to other programs. Currently, about 10% of the state's total LIHEAP allocation is sent to the state Department of Community Assistance (DCA), yet there is no required minimum allocation. Since this allocation only makes up a third of the total state's funding on the Weatherization Program, and two of the neighboring states currently only allocate 5-6% of their LIHEAP funding on this program, decreasing the allocation of LIHEAP on weatherization to 5% could be justifiable and avoid major cut-back on the Heating Assistance Program funding. Specifically, this level of diverting allocations could increase the funding for the Heating Assistance Program by around 10%.

Similarly, the state could also decrease 2% of allocations from Administration to increase savings. Decreasing budget for administration could be much more difficult compared to weatherization as the program requires sufficient management and governance, and neighboring states mostly spend at least 8.5% of the total funding on administration.

Lastly, since one of the vulnerable subgroups are experiencing high sources expenditures due to inefficient fuel choice, it might be worthwhile to create new allocations of up to 5% on improving energy efficiency by providing services to enable households that rely on propane and fuel oil for heating to switch to electric or natural gas furnaces, which are more efficient energy sources.

Below is a chart summarizing all the alternative designs that will be explored in this memo.

Heating Assistance	Eligibility	1. Change income eligibility to above 125% poverty level
	Cash Grant Level	1. Decrease cash grant level by 10% from 2025-26 level. 2. Decrease cash grant level by 10% except for households belong to the three vulnerable subgroups. 3. Decrease initial cash grant level by 10% from 2025-26 level then adjust up or down 5% cash grant level based on available federal funding in October.
Crisis Grants	Grant Limit	1. Lower the maximum benefit from $1500 to $1250.
	Eligibility	1. Change income eligibility to above 125% poverty level
Weatherization	Allocation	1. Divert 5% allocation to other programs.
Administration	Allocation	1. Decrease the allocation by 2%.
Energy Efficiency	New Allocation	1. Utilize 5% of the fund on providing services that enable households to switch to more efficient energy source.

Impact Analysis

Impact Estimation Equation

All alternatives will be evaluated by their impacts on the three program design goals: spending, impact on alleviating home energy burden, and avoiding over 10% carryover. They will first be analyzed independently and be mixed and matched at the end to create optimized alternative designs. Using the conceptual impact models (recorded in Appendix Section C), here are the impact estimation equations for the first two goals. The achievement of the last goal is dependent on the total spending and total federal funding so it will be analyzed at the end for each mixed-and-matched optimized design.

Spending

- **Heating Assistance**: Spending = # in Community x Income Eligibility Limit x Participation Rate x Heating Grant Amounts
- **Crisis Grants**: Spending = # in Community x Income Eligibility Limit x Participation Rate x Cost of Service x Government Share
    - Government Share = IF [Cost of Service <= Grant Maximum], 100%; ELSE, Grant Maximum / Cost of Service x 100%
- **Weatherization**: Spending = Allocation
- **Administration**: Spending = Allocation
- **Energy Efficiency**: Spending = Allocation

Alleviating Home Energy Burden

- **Heating Assistance**: % Reduction = Heating Assistance Grants/Heating Expenditure
- **Crisis Grants**: % Reduction = Crisis Grants / State Average Heating Cost
- **Weatherization**: % Reduction = Heating Cost Saved[1] / State Average Heating Cost
- **Administration**: Assume Administration has no direct impact on burden reduction.
- **Energy Efficiency**: % Reduction = (Heating Cost When Relying on Propane or Fuel oil – Heating Cost After Switching to Electricity or Natural Gas) / State Average Heating Cost

[1] In this memo, the heating cost saved value is assumed to be identical across all households that received weatherization assistance. Using data from the Department of Community Service and Development Website (link), the average yearly savings from weatherization is over $400 per household.

Impact Analysis Data Summary (Analysis Summary.xlsx)

Category	Subcategory	Alternative	Case (If any)	Scenario	Total Spending (million)	Reduced/Extra Spending (million)	% Reduction in Burden	# Households Benefited
Heating Assistance	Eligibility	Change income eligibility to above 125% poverty level		Same Participation in Eligible Residents as the Expected Participation of 2025-26 Without Early Termination	$92.0	$2.0	Over 50%	121,000
				5% Increase in Participation Compared to 2025-26 Fiscal Year	$96.0	$6.0	Over 50%	127,000
	Cash Grant Level	Decrease cash grant level by 10% from 2025-26 level		Same Participation in Eligible Residents as the Expected Participation of 2025-26 Without Early Termination	$85.0	-$5.0	Over 50%	110,000
				5% Increase in Participation Compared to 2025-26 Fiscal Year	$89.0	-$1.0	Over 50%	115,600
		Decrease cash grant level by 10% except for households belong to the three vulnerable subgroups.				$7.70	Over 50%	48,589
		Decrease initial cash grant level by 10% from 2025-26 level then adjust up or down 5% cash grant level based on available federal funding in October	The federal funding drops and the state decides to have another 5% decrease in cash grant level	There is no major increase or decrease in October's application volume	$82.0	-$8.0	Over 50%	107,000
				Due to the public's concern on further decreasing grant benefit, there is a 5% increase in October's application	$81.5	-$8.5	Over 50%	109,000
			The federal funding stays at similar level and the state decides to keep the 10% decrease in October	There is no major increase or decrease in October's application volume	$85.0	-$5.0	Over 50%	105,000
				Due to the public's concern on further decreasing grant benefit, there is a 5% increase in October's application	$84.0	-$6.0	Over 50%	107,000
			The federal funding has a small increase and the state decides to reduce the cash grant decrease from 10% to 5%	There is no major increase or decrease in October's application volume	$88.0	-$2.0	Over 50%	113,500
				Due to the public's concern on further decreasing grant benefit, there is a 5% increase in October's application	$87.0	-$3.0	Over 50%	114,000
Crisis Grant	Grant Limit	Lower the maximum benefit from $1500 to $1250				-$0.54	-25%	36
	Eligibility	Change income eligibility to above 125% poverty level		The participation in 2026-27 remains close to 2024-25 fiscal year level		-$4.50	-45%	6,500
				The participation in 2026-27 remains close to 2024-25 fiscal year level but due to extreme cold winter, the application from 2026 December to 2027 February increases by 10% and the average grant value increase by 5% due to greater weather damage		-$1.80	-47%	2,500
Weatherization	Allocation	Divert 5% allocation to other programs.	Federal Allocation for 2026-27 Remains Unchanged (Around $139 Million)	No additional allocation to other programs		-$7.00	-41%	900
				Additional allocation to Heating Assistance program			-41%	900
							42%	17,000
				Additional allocation to Crisis Grants program			-41%	900
							47%	15,400
			Federal Allocation for 2026-27 Drops by 2.5% (Around $135 Million)	No additional allocation to other programs		-$6.90	-41%	891
				Additional allocation to Heating Assistance program			-41%	891
							42.4%	17,000
				Additional allocation to Crisis Grants program			-41%	870
							47%	15,000
			Federal Allocation for 2026-27 Drops by 5% (Around $131 Million)	No additional allocation to other programs		-$6.70	-41%	864
				Additional allocation to Heating Assistance program			-41%	864
							42.40%	16,000
				Additional allocation to Crisis Grants program			-41%	864
							47%	14,800
Administration	Allocation	Decrease the allocation by 2%.	Federal Allocation for 2026-27 Remains Unchanged (Around $139 Million)			-$2.84		
			Federal Allocation for 2026-27 Drops by 2.5% (Around $135 Million)			-$2.76		
			Federal Allocation for 2026-27 Drops by 5% (Around $131 Million)			-$2.68		
Energy Efficiency	New Allocation	Utilize 5% of the fund on providing services that enable households to switch to more efficient energy source.	Federal Allocation for 2026-27 Remains Unchanged (Around $139 Million)			$7.00	73%	1,300
			Federal Allocation for 2026-27 Drops by 2.5% (Around $135 Million)			$6.75	73%	1,250
			Federal Allocation for 2026-27 Drops by 5% (Around $131 Million)			$6.55	73%	1,200

Vulnerable Subgroup
Negative XX%: Increase in % Burden
Positive $XX: Additional Spending

Above is a detailed overview of the impact on spending and % burden reduced for all proposed alternative designs. Assume the incorporation of alternatives of different programs (for example, Heating Assistance program and Crisis Grant program) will not interfere with each other. Under this assumption the impacts of different programs' alternative designs could be linearly stacked together to provide a total impact value.

Mixing and matching different designs of the programs, here are two optimized alternative designs that both meet the program design's two main goals while having their own advantages. Option 1 can generate the highest savings among all designs, and even with its minimum saving, the program budget would be reduced to a safe level where there is a low chance of running into a deficit. Option 2 will result in a smaller saving, but it would be sufficient to operate if the 2026-27 federal appropriation stays similar to the previous fiscal year's. On the other hand, Option 2 can reduce over 50% heating expenditure for almost 1.6 times more residents with highest home energy burden, and it will also result in more than 4 times fewer households with additional burden compared to Option 1.

Since both options meet goals and yet have different advantages, choosing between them would depend on the state's current priority of the first two goals as well as the uncertainties regarding 2026-27 fiscal year's federal funding estimate.

	Option 1	Option 2
Design	1. Decrease initial cash grant level by 10% from 2025-26 level then adjust down 5% cash grant level. 2. Change income eligibility of Crisis Grants to above 125% poverty level 3. Decrease Weatherization allocation to 5%. 4. Decrease Administration allocation to 2%.	1.Decrease cash grant level by 10% except for households belong to the three vulnerable subgroups. 2. Lower the maximum benefit of Crisis Grants from $1500 to $1250 3. Decrease Weatherization allocation to 5%. 4. Decrease Administration allocation to 2%.
Max Savings	$22.7 million	$8.68 million
Max Savings Scenarios	1. Federal Allocation for 2026-27 drops by 2%, so the state decides to increase the 10% decrease to 15% after October 2. Due to the public's concern on further decreasing grant benefit, there is a 5% increase in October's application 3. The Crisis Grants participation in 2026-27 remains close to 2024-25 fiscal year level	1. Federal Allocation for 2026-27 Remains Unchanged from 2025-26 level 2. Due to the public's concern on further decreasing grant benefit, there is a 5% increase in October's application
Min Savings	$13.6 million	$6.68 million
Min Savings Scenario	1. Federal Allocation for 2026-27 Remains Similar or even slightly higher to 2025-26. 2. There is no major increase or decrease in October's Heating Assistance application volume 3. The participation in 2026-27 remains close to 2024-25 fiscal year level but due to extreme cold winter, the application from 2026 December to 2027 February increases by 10% and the average grant value increase by 5% due to greater weather damage	1. Federal Allocation for 2026-27 Drops by 5% from 2025-26 level 2. There is no major increase or decrease in October's application volume
# Households with 50%+ Burden Reduced	107,000-113,500	154,000-156,000
# Expected Households in Vulnerable Subgroup	73,000-77,000	120,000-121,000
# Households with Additional Burden	3400-7400	864-936

Implementation

In order to ensure successful passage of whichever option you choose and to ensure maximum effectiveness in both reducing cost while maximizing impact, the following steps should be taken:

1. **Coordinate with DHS on Weatherization Allocation**. Since both options involve decreasing the funding allocation on Weatherization, immediate coordination with the Department of Human Services (DHS) will be critical. Since DCA also subcontracts with local non-profit organizations that typically hire unemployed and low-income individuals to perform the weatherization work, cutting its funding could result in strong pushback from the community and negatively impacting local employment. Therefore, organizing a series of inter-agency meetings with DHS and relevant state offices will help identify potential indirect social impact and funding gaps because of the funding reallocation.
2. **Launch a Task Force for Efficient Heating Fuel Transition**. To assist more households in transitioning to efficient heating fuels, the state should establish a specialized task force. This group, comprising energy experts, local government representatives, and community organizations, can identify barriers to adoption, such as cost or infrastructure limitations, and provide more well-rounded recommendations on future LIHEAP allocations to support this transition.
3. **Engage Community Partners for Outreach and Implementation**. Regardless of the chosen design, community engagement will be essential for success. Partnering with local organizations can facilitate outreach to vulnerable households who face high financial burdens from home energy. For example, launching a public awareness campaign in collaboration with non-profits and community centers can boost awareness of home weatherization or the state's mission to improve heating fuel energy efficiency.

Attachments:

Excel

- LIHEAP_Pt1_2526 without early termination analysis: estimation of 2025-26 participation without early termination; results are shown in Appendix Section A.
- LIHEAP_Heating Assistance_Impact_Analysis: detailed calculations on the impact analysis of Heating Assistance redesign alternatives.
- Heating Burden Calculation: an estimation of heating expenditure of different fuel source, income groups and household sizes.
- Analysis Summary

Draft Press Release

Questions and Answers (Internal)

Appendix

Section A: Impact Analysis of Changes in the Heating Assistance Program and Crisis Assistance in 2025-26 Fiscal Year

(Original calculation can be found in LIHEAP_Data_Pt1.xlsx, "Spending Detail" tab)

To estimate the spendings between February 2026 to April 2026 if the Heating Assistance Program had not been shut down early, it is assumed that the application trend of those months will follow the same pattern as in 2024-25 Fiscal Year while the overall volume is increased due to the program design changes. The volume increase can be estimated using the state operation data of 2024-25 and 2025-26 programs from October to January, since both years' programs operated normally in those months. Therefore, the application estimates for month A are calculated by multiplying the average of the (2025-26 applications /2024-25 applications) ratios of October to January, by month A's application counts in 2024-25 Fiscal Year. As shown in the two small tables below (titled "Heating assistance change" and "Crisis Program Change"), the grey highlighted cells demonstrate the mean ratios of 2025-26 application volume to 2024-25. They show that the overall volume of applications and spendings increased from 2024-25 Fiscal Year to 2025-26 Fiscal Year.

State LIHEAP Program Operations

	2024-25							2025-26						
	Heating Assistance				Crisis Program			Heating Assistance				Crisis Program		
Month	Applications	Approvals	Spending	Avg. Grant	Grants	Spending	Avg. Pmt	Applications	Approvals	Spending	Avg. Grant	Grants	Spending	Avg. Pmt
October	72,856	69,213	$30,136,528	$435	1,958	$1,026,775	$524	82,327	78,211	$33,852,695	$433	2,154	$1,186,854	$551
November	41,748	37,573	$15,616,296	$416	8,483	$3,892,425	$459	48,845	43,960	$18,121,726	$412	9,331	$4,628,176	$496
December	27,918	23,730	$9,393,136	$396	11,746	$5,338,322	$454	31,826	27,052	$10,594,099	$392	12,921	$6,047,028	$468
January	30,245	25,708	$9,158,485	$356	13,052	$5,817,798	$446	36,994	30,335	$11,673,390	$385	14,357	$6,776,504	$472
February	33,355	27,685	$9,314,859	$336	15,662	$6,570,522	$420	0	3,600	$1,261,419	$350	26,918	$11,628,576	$432
March	13,331	11,865	$3,976,340	$335	9,789	$4,021,125	$411	0	0	$0	0	10,768	$4,597,936	$427
April	0	1,976	$680,486	$344	4,568	$1,850,779	$405					5,025	$2,115,525	$421
May	0	0	$0		0	$0						0	$0	
Total	219,453	197,750	$78,276,130	$396	65,258	$28,517,746	$437	199,992	183,159	$75,503,329	$412	81,474	$36,980,599	$454

Heating assistance change			
	Ratio of Application	Ratio of Approvals	Ratio of Spending
	1.1299962	1.13	1.123311
	1.1699962	1.17	1.160437
	1.1399814	1.14	1.127855
	1.2231443	1.18	1.274598
			0.13542
Mean	1.1657795	1.155	1.17155

Crisis Program Change		
	Ratio of Application	Ratio of Spending
	1.1001021	1.155905
	1.0999646	1.189021
	1.1000341	1.132758
	1.0999847	1.164788
Mean	1.1000214	1.160618

The calculated table is shown below, with the estimated values highlighted in orange. There are two rows named "Difference" that measure the differences of estimated and real

applications volumes and spendings. From top to bottom, the first one calculates the difference between the estimated 2025-26 application values and the actual 2025-26 application values, and the second calculates the difference between the estimated 2025-26 application values and the actual 2024-25 application values.

	2025-26 PREDICTED IF NOT TERMINATED EARLY					
	Heating Assistance				Crisis Program	
Month	Applications	Approvals	Spending		Grants	Spending
October					2,154	$1,186,854
November	82,327	78,211	$33,852,695		9,331	$4,628,176
December	48,845	43,960	$18,121,726		12,921	$6,047,028
January	31,826	27,052	$10,594,099		14,357	$6,776,504
February	36,994	30,335	$11,673,390		17,229	$7,625,867
March	38,885	31,976	$ 10,912,827		10,768	$4,666,991
April	15,541	13,704	$ 4,658,483		5,025	$2,148,048
May		2,282	$ 797,224		0	0
Total	254,418	227,521	$90,610,443	**Total**	71,785	$33,079,467
2025-26 Actual	199,992	183,159	$75,503,329	**2025-26 Actual**	81,474	$36,980,599
Difference	54,426	44,362	15,107,114	**Difference**	-9,689	-3,901,132
2024-25 Actual	219,453	197,750	$78,276,130	**2024-25 Actual**	65,258	$28,517,746
Difference	34,965	29,771	12,334,313	**Difference**	6,527	4,561,721

Section B: Highest Home Energy Need Resident Subgroup Analysis

1. Subgroup That Experiences Disproportionately High Percentage Burden on Home Energy Expenditures

To identify specific income groups that experience a disproportionate level of burden from home energy cost, spending burden is calculated from dividing the midpoint of household income range of a demographic group by the average expenditures for space heating, whose data is presented in the table below. This calculation assumes that household incomes are uniformly distributed within each income group.

	Electricity	Natural Gas	Propane	Fuel Oil
Average Expenditures for Space Heating				
(dollars per household using the fuel for space heating)				
Household Income				
All Incomes	$509	$724	$1,206	$1,443
Less Than $5,000	$504	$621		
$5,000 - $9,999	$371	$633		
$10,000 - $19,999	$471	$617	$1,118	
$20,000 - $39,999	$522	$687	$1,229	$1,790
$40,000 - $59,999	$486	$689	$1,170	
$60,000 - $99,999	$473	$714	$1,180	$1,710

After the division, the below table is generated, with each cell representing the average percentage income burden of one group of households. As shown in this table, household groups with an average income of $2500 experience a significantly higher burden from home energy expenditure, more than 5 times higher than most other income groups. This analysis shows that households with income less than $5000 are extremely vulnerable to high home energy costs and therefore is a crucial subgroup to evaluate designs' effectiveness on.

Household Income	Electricity	Natural Gas	Propane	Fuel Oil
$2,500	0.202	0.248	0.000	0.000
$7,500	0.049	0.084	0.000	0.000
$15,000	0.031	0.041	0.075	0.000
$30,000	0.017	0.023	0.041	0.060
$50,000	0.010	0.014	0.023	0.000
$80,000	0.006	0.009	0.015	0.021

2. Subgroup That Experiences Highest Home Energy Need due to Inefficient Fuel Choices or Housing Types

As shown in the Average Expenditure for Space Heating table above, households that rely on propane and fuel oil as primary sources of heating fuels may experience a heating expenditure of almost two times higher than households that rely on electricity and natural gas. Moreover, as shown in the table of percentage utilization of different fuels by different housing types, propane is most commonly used in mobile homes. Therefore, mobile home

households and households that use propane and fuel oil as main home energy fuels are also important subgroups to be considered.

Housing Type	Electricity	Natural Gas	Propane	Fuel Oil
Single-Family Detached	27.1%	59.7%	5.7%	4.9%
Single-Family Attached	31.2%	65.5%	1.0%	2.3%
Apartment (2-4 unit bldg)	44.8%	51.3%	0.0%	3.9%
Apartment (5+ unit bldg)	60.4%	36.3%	0.8%	2.5%
Mobile Home	58.5%	24.2%	10.4%	3.5%

Lastly, households that reside in single-family detached homes also experience significantly higher heating cost across all home energy fuels, as shown in the home energy cost by different housing types and fuel sources table below. Households using propane or fuel oil who reside in single-family detached homes especially face an extremely high home energy cost.

Housing Type	Electricity	Natural Gas	Propane	Fuel Oil
Single-Family Detached	$564	$798	$1,268	$1,627
Single-Family Attached	$493	$629	$783	
Apartment (2-4 unit bldg)	$459	$660		
Apartment (5+ unit bldg)	$355	$328	$205	
Mobile Home	$548	$632	$981	

In addition to high home energy cost, residents in mobile homes and single-family detached homes are likely to involve vulnerable populations. Mobile homes have always been a popular choice of housing for elderly people, many of whom struggle with a limited fixed income. Historical data by the Consumer Financial Protection Bureau shows that one third of the total adults living in mobile homes are people aged 60 and older.[2] As for single-family detached homes, since over 70% of households with 4+ members live in single-family detached homes in the state, there is a significant chance that those households have members of young children and frail older individuals.

Conclusion

The above analysis demonstrates three subgroups of residents who are potentially facing significantly higher home energy needs than others: households with income below $5000, households that rely on propane and fuel oil as primary heating fuel sources, and households in single-family detached homes or mobile homes. The latter two subgroups

[2] CFPB Office for Older Americans. "Data Spotlight: Profiles of Older Adults Living in Mobile Homes." Consumer Financial Protection Bureau. Accessed December 10, 2024. https://www.consumerfinance.gov/data-research/research-reports/data-spotlight-profiles-of-older-adults-living-in-mobile-homes/full-report/.

may overlap and present a small group of population that not only utilize low-efficiency fuels but also is naturally susceptible to high heating cost due to their housing types.

Section C: Impact Models on Governmental Spending and Recipient Need

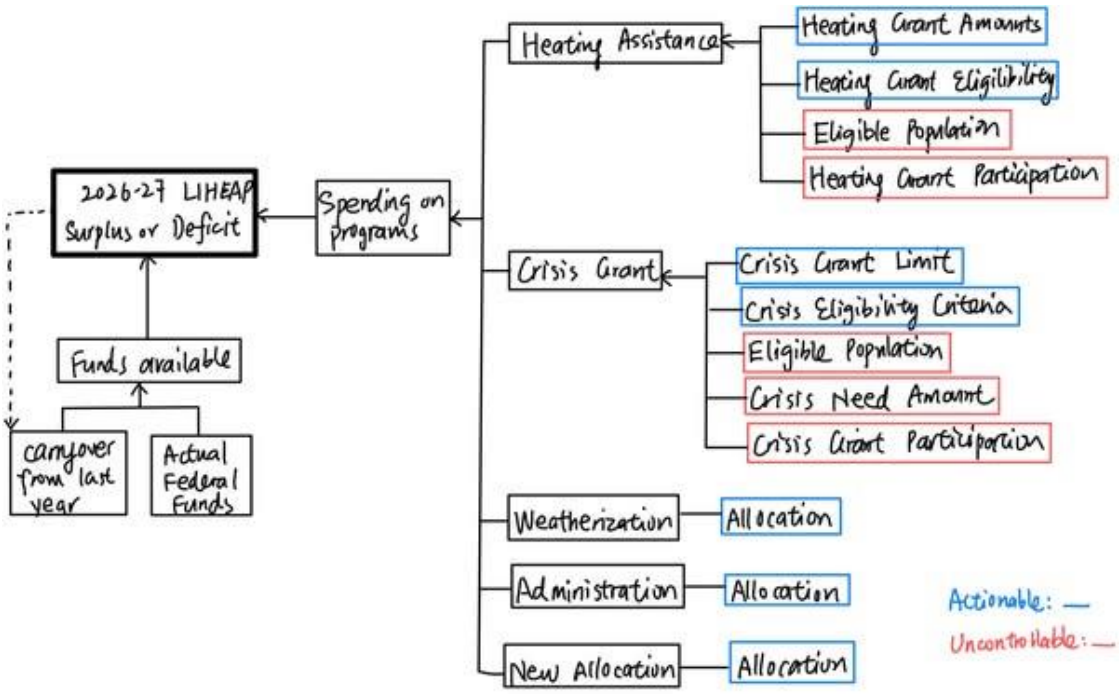

Image C-1: Impact Model on Spending

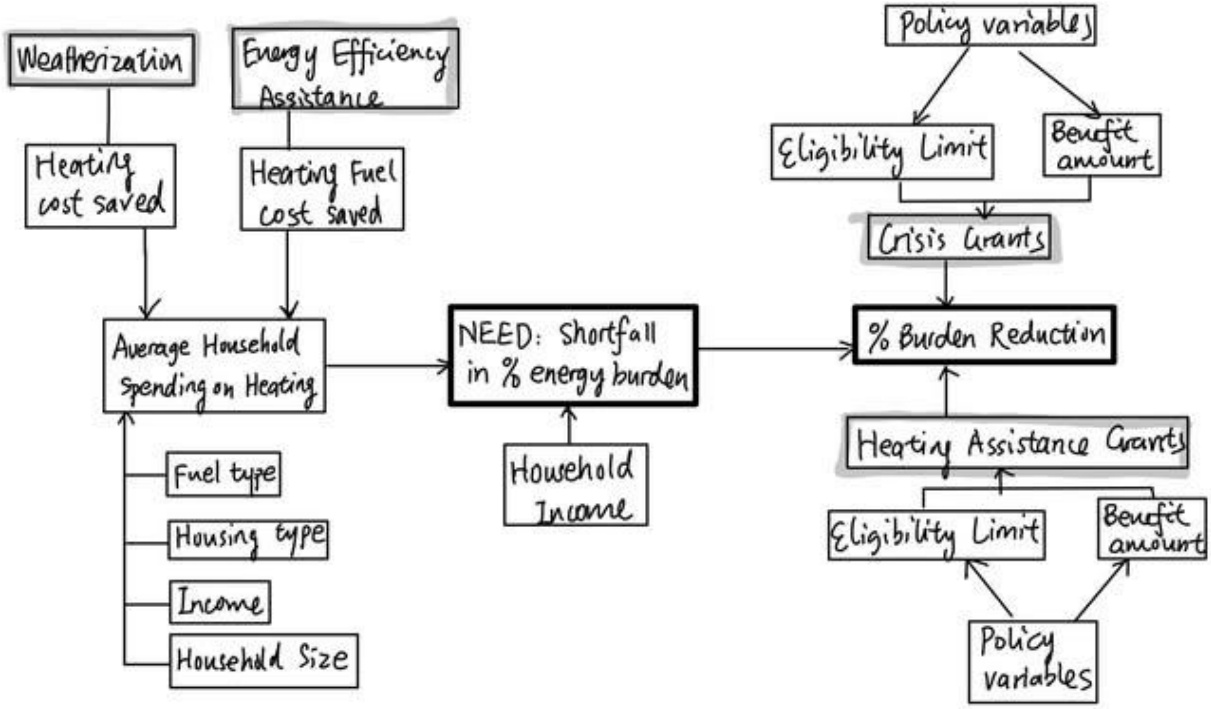

Image C-2: Impact Model on % Heating Cost Burden

Section D: Impact Analysis for Crisis Grants Alternative Designs

Lower Maximum Grant from $1500 to $1250

Goal: Determine the number of grants issued in 2024-25 that have values above $1250

Known: minimum grant value $25, maximum grant value $1500, threshold value is $1250, average grant value is $437, there are in total 65258 grants.

Assumption: The distribution of grant values is a normal distribution; the Rule of Thumb for Normal Distribution applies (Assume that most data lie within 3 standard deviations of the mean).

Step 1: Calculate Standard Deviation

$$\sigma = \frac{1500 - 25}{6} \approx 245.83$$

Step 2: Calculate Z-score

$$z = \frac{1250 - 437}{245.83} \approx 3.31$$

Step 3: Calculate Proportion Above $1250

$$1 - P(Z \leq 3.31) = 1 - 0.9995 = 0.0005$$

Step 4: Number of Grants Above $1250

$$65258 * 0.0005 \approx 32.63$$

Step 5: Adjust for 2025-26 Level (Increase due to Changed Eligibility)

$$\#\ Grants\ Above\ \$1250\ in\ 2025/26 = 32.63 * \frac{Total\ Expected\ Grants\ in\ 2025/26}{Total\ Grants\ in\ 2024/25}$$

$$\approx 32.63 * 1.1 \approx 36$$

Step 6: Calculate Total Values of Grants Above $1250

New Assumption: Assume that the average value of this upper tail lies about 1 standard deviation beyond the threshold

$$\mu \approx 1250 + 245.83 \approx 1496$$

$$Total\ Values\ of\ Grants = 36 * 1496 = 53856$$

Step 7: Analyze % Burden Increased

$$\frac{\$1496 - \$1250}{Average\ Heating\ Expenditure\ (all\ fuel\ types\ \&\ all\ income)} = \frac{\$246}{\$971} \approx 25.3\%$$

Conclusion: Lowering the maximum crisis grant from $1500 to $1250 could potentially decrease $54000 on Crisis Grants spending, but it comes with the compromise of increasing 36 households' expenditure on heating crisis by roughly 25%.

Change Income Eligibility to Above 125% Federal Poverty Level

Scenario 1: The participation in 2026-27 remains close to 2024-25 fiscal year level (as both years' programs use the same income eligibility criteria)

Spending Decrease = 2025-26 Expected Spending (Assume no early termination of Heating Assistance) – 2024-25 Spending = $33,079,467 – $28,517,746 ≈ $4.5 million

Number of Residents Who Become Ineligible = 71,785-65,258 ≈ 6500

$$\%\ Burden\ Increased\ for\ Those\ Residents = \frac{Average\ Crisis\ Grants\ Value}{Average\ Heating\ Expenditure} = \frac{\$437}{\$971} \approx 45\%$$

Scenario 2: The participation in 2026-27 remains close to 2024-25 fiscal year level but due to extreme cold winter, the application from 2026 December to 2027 February increases by 10% and the average grant value increase by 5% due to greater weather damage

	Grants	Average Amount
October	1,958	$524
November	8,483	$459
December	12921	$477
January	14357	$468
February	17228	$440
March	9,789	$411
April	4,568	$405
May	0	0
Total	69,304	$31,265,377

Assume that the baseline for application volume and crisis grant value stay similar to 2024-25 fiscal year. The above table showcases a possibility of the 2026-27 Crisis Grants spending.

Spending Decrease =$33,079,467—$31,265,377 ≈ $1.8 million

Number of Residents Who Become Ineligible = 71,785-69,304 ≈ 2500

$$\%\ Burden\ Increased\ for\ Those\ Residents = \frac{Average\ Crisis\ Grants\ Value}{Average\ Heating\ Expenditure} = \frac{\$455}{\$971} \approx 47\%$$

Section E: Impact Analysis for Weatherization Alternative Designs

Divert 5% Allocation to Other Programs

Weatherization Average Cost in 2026-27 = Weatherization Average Cost in 2025-26 * (1+ Mean Spending Growth Rate Between 2022 and 2026) [Calculated Results in Table Below]

		Weatherization Program		
Program Year		Homes Weatherized	Spending Per Home	Spending Growth Rate
2022-23		2,197	$6,372	
2023-24		2,155	$6,691	0.0500628
2024-25		2,114	$7,026	0.0500673
2025-26		2,074	$7,377	0.0499573
			$7,746	0.0500291

***Scenario 1**: Federal Allocation for 2026-27 Remains Unchanged (Around $139 Million)*

Total available fund = $139 million + $3 million carryover = $142 million

Diverting Allocation Value: $142 million * 0.05 ≈ $7 million

# of Fewer Homes Weatherized: $7 million / $7746 ≈ 900

$$\%\ Burden\ Increased\ for\ Those\ Residents = \frac{Lost\ Saving\ from\ Weatherization}{Average\ Heating\ Expenditure} = \frac{\$400}{\$971} \approx 41\%$$

<u>Uses of the Diverting Allocation:</u>

1. No additional allocation to other programs
    a. Impact on Spending: Decrease spending by $7 million
    b. Impact on Burden Reduction: 41% burden increase for 900 households.
2. Additional allocation to Heating Assistance program (Assume same application volume and grant value as expected in 2025-26 fiscal year)
    a. Impact on Spending: 0
    b. Impact on Burden Reduction: 42% burden reduction for 17,000 households
        i. Additional approvals for Heating Assistance: $7 million / $412 ≈ 17,000
        ii. % Burden reduction for those households: $412/$971 ≈ 42.4%
3. Additional allocation to Crisis Grants program (Assume same application volume and grant value as expected in 2025-26 fiscal year)
    a. Impact on Spending: 0

b. Impact on Burden Reduction: 47% burden reduction for 15,400 households.
    i. Additional approvals for Crisis Grants: $7 million / $454 ≈ 15,400
    ii. % Burden reduction for those households: $454/$971 ≈ 47%
4. Additional allocation to support energy efficiency (Analysis in Appendix Section F)

***Scenario 2**: Federal Allocation for 2026-27 Drops by 2.5% (Around $135 Million)*

Total available fund = $135 million + $3 million carryover = $138 million

Diverting Allocation Value: $135 million * 0.05 ≈ $6.9 million

# of Fewer Homes Weatherized: $6.9 million / $7746 ≈ 891

$$\%\ Burden\ Increased\ for\ Those\ Residents = \frac{Lost\ Saving\ from\ Weatherization}{Average\ Heating\ Expenditure} = \frac{\$400}{\$971} \approx 41\%$$

Uses of the Diverting Allocation:

1. No additional allocation to other programs
    a. Impact on Spending: Decrease spending by $6.9 million
    b. Impact on Burden Reduction: 41% burden increase for 891 households.
2. Additional allocation to Heating Assistance program (Assume same application volume and grant value as expected in 2025-26 fiscal year)
    a. Impact on Spending: 0
    b. Impact on Burden Reduction: 42% burden reduction for 16,000 households
        i. Additional approvals for Heating Assistance: $6.9 million / $412 ≈ 17,000
        ii. % Burden reduction for those households: $412/$971 ≈ 42.4%
3. Additional allocation to Crisis Grants program (Assume same application volume and grant value as expected in 2025-26 fiscal year)
    a. Impact on Spending: 0
    b. Impact on Burden Reduction: 47% burden reduction for 15,000 households.
        i. Additional approvals for Crisis Grants: $6.9 million / $454 ≈ 15,000
        ii. % Burden reduction for those households: $454/$971 ≈ 47%

***Scenario 3**: Federal Allocation for 2026-27 Drops by 5% (Around $131 Million)*

Total available fund = $131 million + $3 million carryover = $134 million

Diverting Allocation Value: $134 million * 0.05 ≈ $6.7 million

# of Fewer Homes Weatherized: $6.7 million / $7746 ≈ 864

$$\%\ Burden\ Increased\ for\ Those\ Residents = \frac{Lost\ Saving\ from\ Weatherization}{Average\ Heating\ Expenditure} = \frac{\$400}{\$971} \approx 41\%$$

Uses of the Diverting Allocation:

1. No additional allocation to other programs
    a. Impact on Spending: Decrease spending by $6.7 million
    b. Impact on Burden Reduction: 41% burden increase for 864 households.
2. Additional allocation to Heating Assistance program (Assume same application volume and grant value as expected in 2025-26 fiscal year)
    a. Impact on Spending: 0
    b. Impact on Burden Reduction: 42% burden reduction for 16,000 households
        i. Additional approvals for Heating Assistance: $6.7 million / $412 ≈ 16,000
        ii. % Burden reduction for those households: $412/$971 ≈ 42.4%
3. Additional allocation to Crisis Grants program (Assume same application volume and grant value as expected in 2025-26 fiscal year)
    a. Impact on Spending: 0
    b. Impact on Burden Reduction: 47% burden reduction for 14,800 households.
        i. Additional approvals for Crisis Grants: $6.7 million / $454 ≈ 14,800
        ii. % Burden reduction for those households: $454/$971 ≈ 47%

Section F: Impact Analysis on New Allocation for Enabling Households to Have Higher Efficiency Home Energy

According to the State LIHEAP Energy Data, across all household income, the average expenditure for space heating is $509 for electricity, $724 for natural gas, $1206 for propane, and $1443 for fuel oil. In terms of the installation cost for electricity heating and natural gas heating, since electric furnaces cost between $2291 and $8005, and the average cost of a new gas furnace is $5500, it will be assumed that the cost of assisting one family to transition to electric or natural gas heating system is $5500.[3] [4] Since 4.4% of state residents use propane as primary heating fuel and 4.2% use fuel oil, this analysis will assume that almost equal number of residents use these two fuels as primary heating fuel.

***Scenario 1**: Federal Allocation for 2026-27 Remains Unchanged (Around $139 Million)*

- Impact on Spending = $142 million * 0.05 ≈ $7 million
- # of Households Who Will Receive Assistance ≈ 1300

$$\%\ Burden\ Decreased\ for\ Those\ Residents = \frac{1}{2} * \frac{Saving\ from\ Switching\ Propane}{Average\ Heating\ Expenditure} + \frac{1}{2} * \frac{Saving\ from\ Switching\ Fuel\ Oil}{Average\ Heating\ Expenditure} \approx 73\%$$

***Scenario 2**: Federal Allocation for 2026-27 Drops by 2.5% (Around $135 Million)*

- Impact on Spending = $138 million * 0.05 = $6.9 million
- # of Households Who Will Receive Assistance ≈ 1250
- $\%\ Burden\ Decreased\ for\ Those\ Residents \approx 73\%$

***Scenario 3**: Federal Allocation for 2026-27 Drops by 5% (Around $131 Million)*

- Impact on Spending = $134 million * 0.05 = $6.7 million
- # of Households Who Will Receive Assistance ≈ 1200
- $\%\ Burden\ Decreased\ for\ Those\ Residents \approx 73\%$

[3] Allie Ogletree. "How Much Does It Cost to Install an Electric Furnace?" Angi. August 29, 2024. https://www.angi.com/articles/how-much-does-it-cost-install-electric-furnace.htm.

[4] Nick Cellucci, Lexie Pelchen. "How Much Does a Gas Furnace Cost?" HVAC. Forbes. August 26, 2024. https://www.forbes.com/home-improvement/hvac/how-much-does-a-gas-furnace-cost/.