

STAFF REPORT

DATE: March 25th, 2024

TO: Yolo County Climate Action Commission

FROM: Yuridiana Pantoja, CivicSpark Fellow
Kristen Wraithwall, Sustainability Manager

RE: Approve Yolo County Weatherization Program Proposal

RECOMMENDED ACTION

1. Approve the Yolo County Weatherization Program Proposal (Attachment M).
2. Recommend allocation of \$50,000 in Climate Action American Rescue Plan (ARP) funds for the implementation of the Yolo County Home Weatherization Program from 2024-2026.

REASON FOR RECOMMENDED ACTION

Staff recommend approval of a Yolo County Weatherization Program, which addresses the community-voiced need for improved energy efficiency in homes, especially for low-income residents and renters. Developed based on feedback received during Climate Action and Adaptation Plan (CAAP) workshops, the program aligns with our goals to enhance energy efficiency and reduce greenhouse gas emissions in residential buildings across the county. It will provide residents with the tools and knowledge to enhance their home's energy performance, supported by technical assistance to ensure accessibility and effectiveness. Approval of this program would reinforce Yolo County's commitment to sustainable living and climate action, demonstrating a tangible step towards our collective environmental objectives. It would also allocate funding to a community-identified priority, particularly for low-income renters. Following the community's guidance, County staff have researched best practices, consulted stakeholders, and drafted the program proposal (Attachment M) for your consideration.

BACKGROUND

The Weatherization Program in Yolo County originated from valuable insights and community engagement during the 2023 CAAP workshops. Utilizing a dot activity, residents highlighted their preference for improving energy efficiency, especially for those facing financial challenges. The results from the dot activity supported the weatherization initiative, placing it among the top 7 climate action and adaptation community preferences Countywide. The program is crafted to enhance energy efficiency, improve indoor air quality, and boost the well-being of Yolo County's community members, emphasizing straightforward, practical weatherization solutions aimed at assisting the economically vulnerable.

Funded by the Climate Action American Rescue Plan (ARP) Fund, the program contributes to Yolo County's climate goals while addressing community needs, providing solutions that lower energy bills and enhance indoor comfort for vulnerable populations.

Adoption of a Weatherization Program would represent a dedication to both environmental sustainability and social equity. Not only does this meet both action and adaptation goals, but this initiative is also an embodiment of turning community input and goals from the CAAP workshops into concrete actions that enhance resident well-being.

BENEFITS OF WEATHERIZATION

Economic Impact

Enhanced energy efficiency through weatherization not only contributes to environmental sustainability but also provides a positive economic impact for residents by reducing their utility bills. By implementing weatherization measures such as improving insulation and sealing air leaks, households can decrease their energy consumption, leading to savings on utility costs.¹ The Weatherization Assistance Program (WAP), as detailed by the U.S. Department of Energy, underscores the economic impact of enhanced energy efficiency, particularly in terms of reducing utility bills for low-income households. On average, households that have undergone weatherization through WAP experience about \$372 in yearly energy savings, expressed in 2022 dollars, reflecting a direct financial benefit from reduced energy consumption.² The investment in weatherization returns about \$1.72 in energy benefits and \$2.78 in non-energy benefits for every dollar spent,³ encapsulating the multifaceted value of these interventions. The non-energy benefits, such as improved health, safety, and comfort, enhance the living conditions of low-income families, further contributing to their economic stability and well-being.

These figures reinforce the role of weatherization in alleviating the energy burden on low-income families, who typically spend 14% of their income on energy compared to 3% for higher-income households.⁴

¹ Bradshaw, J. L., Bou-Zeid, E., & Harris, R. H. (2016). Greenhouse gas mitigation benefits and cost-effectiveness of weatherization treatments for low-income American urban housing stocks. *Energy and Buildings*, 128, 911-920. <https://doi.org/10.1016/j.enbuild.2016.07.020>

² U.S. Department of Energy, Weatherization Assistance Program Fact Sheet, July 2023

³ Tonn, B., D. Carroll, S. Pigg, M. Blasnik, G. Dalhoff, J. Berger, E. Rose, B. Hawkins, J. Eisenberg, F. Uncar, I. Bensch, and C. Cowan. 2014. *Weatherization Works – Summary of Findings from the Retrospective Evaluation of the U.S. Department of Energy's Weatherization Assistance Program*. Oak Ridge National Laboratory, ORNL/TM-2014/338.

⁴ Rose, E., B. Hawkins. 2020. "Background Data and Statistics on Low-Income Energy Use and Burden for the Weatherization Assistance Program: Update for Fiscal Year 2020." weatherization.ornl.gov/wp-content/uploads/2021/01/ORNL_TM-2020_1566.pdf

Health and Safety Improvements

Poor indoor air quality is a significant health hazard, with one notable risk being the exacerbation of asthma - a condition affecting millions, especially vulnerable children.⁵ Through targeted weatherization efforts, such as reinforcing insulation and guaranteeing proper ventilation, the program can help diminish exposure to harmful indoor pollutants, a vital factor during extreme weather events that can exacerbate indoor air quality issues. Therefore, the Weatherization Program extends beyond simple energy conservation, serving as a tool for enhancing climate resiliency. It plays a role in protecting resident health and ensuring safer living environments, which is especially critical in preparing and responding to the challenges posed by a changing climate and its impact on vulnerable populations.

GHG Reduction Potential

The effort to mitigate greenhouse gas (GHG) emissions through weatherization contributes to our goal and a broader strategy to combat extreme weather, especially in sectors such as residential and commercial buildings. While the precise emissions benefits of a weatherization program is expected to be modest, the project has critical adaptation, equity, and economic co-benefits.

PROGRAM DETAILS

Target Demographics

Our weatherization program is designed to be inclusive, offering services to all residents while prioritizing aid for those in greatest need. In alignment with our commitment to social equity, the program will prioritize low-income households, the elderly, individuals with disabilities, and renters, recognizing these groups as the most vulnerable to energy inefficiency impacts. Staff will work with community outreach partners to conduct targeted outreach to priority populations, ensuring that the benefits of the program reach a broad and diverse population.

Services Provided

The provided kits will be comprehensive, containing a range of weatherization and energy conservation tools tailored to the specific needs and characteristics of each household. Items included are weatherstrips, window insulation kits, door sweeps, outlet and switch gaskets to prevent drafts, and water conservation tools such as toilet leak detection tablets. In addition to these materials, the kits will feature energy-saving items

⁵ Asthma and Allergy Foundation of America. "Asthma Facts and Figures." Accessed March 04, 2024. www.aafa.org/asthma-facts/

like LED light bulbs and smart outlets to help residents manage their energy use more effectively. Understanding that homes are as diverse as their inhabitants, our kits are designed to be adaptable. County staff will build an online system that allows residents to request kits tailored to their specific needs, ensuring the interventions are as effective and relevant as possible to their living environment. By allowing customization of the kits, we ensure that each household receives the most relevant and impactful solutions, minimizing potential waste.

Educational Component

Alongside the physical tools, our program will include educational materials and online resources to guide residents in the proper installation and use of the provided items. These resources will also offer additional energy-saving tips and information on further steps households can take to reduce their energy consumption. Given that this program will launch at the same time as the Electrification Retrofit Rebate Outreach (ERRO) Program this fall, kits will have information on how to take advantage of ERRO program offerings provided in partnership with Valley Clean Energy.

Community Engagement

To foster a sense of community ownership and involvement and to ensure we are reaching priority communities, we will engage with local community-based organizations and volunteers in the outreach and distribution process. Compensation for community outreach partnerships is included in the funding allocation below.

Funding Allocation

With a proposed budget of \$50,000, we plan to assemble and distribute approximately 300 weatherization kits over the course of 3 years. The budget has been developed based on the cost to purchase weatherization kit elements and energy efficiency additions. Budget has also been added to compensate community outreach partners for providing support in program outreach and kit distribution.

Description	Total Cost
Weatherization Kits <i>100 kits per year for 3 years</i>	\$35,000
Community Outreach Partnerships <i>\$5,000 per year for 3 years</i>	\$15,000
Total Annual Budget	\$50,000

Monitoring and Evaluation

To assess the program's impact, we will conduct post-distribution surveys, enabling us to quantify the benefits achieved, and adapt our program to community need throughout

the three-year implementation period. This data will be crucial for refining the program and securing ongoing support and funding.

NEXT STEPS

Pending recommendations by the Commission, the next steps and estimated timeline for the Weatherization program are as follows:

April 9th, 2024	Weatherization Program to Board of Supervisors
Summer 2024	Begin Outreach about Program
	Release Solicitation for Community Outreach Partners
Fall 2024 - 2026	Distribution of Weatherization Kits