



ARKANSAS
ENERGY & ENVIRONMENT

Arkansas

Weatherization Assistance Program

State Plan

Program Year (PY)

July 1, 2024 – June 30, 2025

August 29, 2024

Arkansas Energy Office
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

Mission Statement

The mission of the Arkansas Energy Office (AEO) is to promote energy efficiency, clean technology, and sustainable strategies that encourage economic development, energy security and the environmental well-being for all citizens of Arkansas.

The State Goals

The policies contained in this plan will enable Arkansas and its subgrantee network to weatherize homes of low-income Arkansans effectively, based on:

- Following priorities from the U.S. Department of Energy to serve elderly and disabled persons, households with children, and households experiencing a burden from high energy bills as well as households using a high amount of energy;
- Ensuring that only the most cost effective measures are installed on houses;
- Including client education about energy conservation; and
- Addressing health and safety issues affected by weatherization work on the home.

Executive Summary

The Arkansas Weatherization Assistance Program (WAP) State Plan for Program Year (PY) 2024 (July 1, 2024 – June 30, 2025) is derived from the state's application to the U.S. Department of Energy (U.S. DOE) for WAP funding. These funds will provide assistance to approximately 180 households across the State.

The purpose of WAP is to install energy conservation measures in the homes of income-eligible persons (up to 200% of federal poverty level). Funds are directed toward the most cost-effective energy efficiency measures, as determined by an on-site, highly technical energy audit of the eligible building. The program helps to:

- Reduce energy consumption in Arkansas,
- Reduce the cost of energy for low-income families, and
- Address health and safety issues in the home affected by weatherization work.

Currently, five (5) non-profit subgrantees provide Weatherization services in all seventy-five (75) counties. These entities provide energy efficiency weatherization services by subcontracting work to qualified contractors or by using their own trained weatherization crews. Energy efficiency measures funded through the program include air sealing; duct sealing; insulation; heating systems evaluation, repairs and replacement. The program weatherizes all types of housing: single family homes, a category which includes duplexes, triplexes and quadplexes; manufactured housing (mobile homes); and multi-family housing, consisting of small, garden-style apartments, group homes and emergency shelters.

The state will spend DOE funds for Program Year (PY) 2024 in accordance with this plan.

Acronyms and Commonly Used Terms

AECC	Arkansas Electric Cooperative Corporation
AEO	Arkansas Energy Office
BCD	Better Community Development, Inc.
BPI	Building Performance Institute
BRAD	Black River Area Development Corporation
CAA	Community Action Agency
CADC	Central Arkansas Development Council
CEU	Continuing Education Unit
CFR	Code of Federal Regulations
CRDC	Crowley's Ridge Development Council
CSCDC	Crawford-Sebastian Community Development Council, Inc.
DHHS	U.S. Department of Health and Human Services
DOE	U.S. Department of Energy
ECOS	Energy Conservation Online System
H&S	Health & Safety
HEP	Home Energy Performance
HUD	U.S. Department of Housing & Urban Development
HVAC	Heating, Ventilation & Air Conditioning
IREC	Interstate Renewable Energy Council
JTA	Job Task Analysis
KSA	Knowledge, Skills & Abilities
LIHEAP	Low Income Home Energy Assistance Program
NASCSP	National Association for State Community Services Programs
NHPA	National Historic Preservation Act
NREL	National Renewable Energy Laboratory
PAC	Policy Advisory Council
PO	Project Officer (DOE)
PSC	Public Service Commission
PY	Program Year (DOE)
QA	Quality Assurance
QCI	Quality Control Inspector
SEP	State Energy Program
SHPO	State Historic Preservation Office
SIR	Savings-to-Investment Ratio
Subgrantee	A non-profit organization receiving funds from AEO to provide weatherization services
SWS	Standard Work Specifications
T&TA	Training and Technical Assistance
USDA	U.S. Department of Agriculture
WAP	Weatherization Assistance Program
WPN	Weatherization Program Notice (DOE)

Disclaimer

NOTE: The Department of Energy (DOE), after reviewing Arkansas’s application to approve Program Year (PY) 2024 funding, may require changes be made to the information contained in this state plan.

Budget Information

Subgrantees	Number of Units	Budgeted Amounts
Better Community Development, Inc. (BCD)	34	\$449,292.00
Black River Area Development Corporation (BRAD)	16	\$240,971.00
Central Arkansas Development Council (CADC)	51	\$754,803.00
Crawford-Sebastian Community Development Council (CSCDC)	47	\$646,326.00
Crowley’s Ridge Development Council (CRDC)	32	\$486,560.00
Sub Total	180	\$2,577,952.00
Arkansas Energy Office (AEO)		
Administration and Training & Technical		\$411,533.00
Total		\$2,989,485.00

In addition to this annual grant, subgrantees and AEO have funding from:

1. LIHEAP annual formula/block grant
2. DOE infrastructure award

Policy Advisory Council Members

A Policy Advisory Council (PAC) assists in the development and implementation of the Weatherization Assistance Program (WAP) and provides input on a range of issues relating to the WAP. The PAC is broadly representative of organizations that provide services to low-income persons in Arkansas.

Arkansas Electric Cooperative Corporation--Mitch Ross

Arkansas Energy Office--Mitchell Simpson (ex officio)

Arkansas Historic Preservation--George Burson

Entergy--Heather Hendrickson

Entergy--T Denice Jeter

Epidemiologist--Quinyatta Mumford

LIHEAP--Iris Pennington

Public Service Commission--Wally Nixon

Summit Utilities--Kirk Pierce

Weatherization Provider--Darryl Swinton

V.1 Eligibility

V.1.1 Approach to Determining Client Eligibility

AEO understands that every dwelling unit weatherized must meet both the client eligibility and the building eligibility requirements. The dwelling unit is eligible for weatherization if the family unit occupying it:

1. has income in relation to household size which is at or below 200 percent of the federal poverty level, as published in Weatherization Program Notice (WPN) 24-3;
2. has a member who has received cash assistance payments at any time during the preceding twelve (12) months under Titles IV or XVI of the Social Security Act, Pub. L. No. 88-452, 42 U.S.C. § 2701 et seq. or applicable state or local law;
3. is eligible for assistance under the Low Income Home Energy Assistance Act of 1981 (LIHEAP); or
4. has been certified as meeting the income requirements of a U.S. Housing and Urban Development (HUD) means-tested program and proof is provided by applicant.

AEO acknowledges that all subgrantees must have on file proof of income eligibility for each household served or proof of categorical eligibility (see #2, 3, and 4 above). For each client waiting for services, subgrantees must re-certify eligibility every twelve months after initial determination of eligibility until selected for weatherization. The application eligibility expires twelve (12) months from certification date if work on dwelling unit (energy audit) has not been initiated.

The basis for household eligibility is WPN 23-3, containing current poverty income guidelines and definition of income. Arkansas will use 200% of poverty level and categorical eligibility based on Titles IV and XVI of the Social Security Act, LIHEAP, and HUD means-tested programs as described above.

VERIFICATION OF IDENTITY

The applicant or head of household must provide the subgrantee valid proof of identity before an application can be approved for weatherization services. Subgrantees must keep copies of identification documents in the case record. Acceptable proof includes a readable copy of any valid document that reasonably establishes identity, such as:

- A current Driver's license or ID card issued by a State or outlying possession of the United States if it contains: photograph, name, date of birth, gender, height, eye color, and address;
- ID card issued by federal, state, or local government agencies or entities;
- Birth certificate;
- School identification card with photograph;
- Identification card for health benefits or other assistance;
- Voter registration card;
- U.S. Military card or draft card;
- Military dependent's ID card; or
- Any type of paycheck stubs containing the name and address of the person.

Social Security Number Verification

Section 205(c)(2)(C)(i) of the Social Security Act authorizes states to require Social Security Numbers (SSN) as a condition of eligibility for use in verifying the identity of individual applicants and their household members.

Subgrantees may use the Social Security card or any other government or school document that includes the social security number for verification.

Applicants may get Social Security verification by visiting <http://www.ssa.gov/myaccount/>. Subgrantees should tell any applicant that is eligible for a SSN, but does not have one, to apply for one at <https://www.ssa.gov/forms/>.

How to Identify Valid social security numbers

- Number is 9 digits;
- Digits are not all zeros (000-00-0000);
- Digits are unique;
- Do not begin with "000", "666", or "900" – "999";
- Do not have double zero "00" as the middle number;
- Do not end with four zeros "0000"

Process for ensuring qualified aliens are eligible for weatherization benefits

U.S. DOE directs grantees to guidance provided by U.S. Department of Health and Human Services at [LIHEAP IM HHS Guidance on the Use of Social Security Numbers \(SSNs\) and Citizenship Status Verification | The Administration for Children and Families](#)

Subgrantees will:

- Consider the income of all persons residing in the dwelling unit when determining income eligibility for weatherization services, regardless of eligibility status of each individual person;
- Allow ineligible persons who reside in the household to apply for weatherization services on behalf of eligible minor children;
- Identify a legal resident noncitizen as an individual, who, at the time of application for a federal public benefit:
 - is a “Qualified Alien” according to 8 U.S. Code § 641(b);
 - is lawfully admitted for permanent residence under the Immigration and Nationality Act, or is present in the U.S. under Sections 203(a)(7), 207, 208, 212(d)(5), or 243(h) of the Immigration and Nationality Act;
 - is a Cuban or Haitian entrant, as defined in Section 501(e) of the Refugee Education Assistance Act of 1980; or
 - is battered or subjected to extreme cruelty in the United States.

See Attachment 4 of the DOJ Interim Guidance for a description of documentation for which grantees may legally ask to verify citizenship status as well as other valuable information which may be useful to grantees in fulfilling PRWORA’s citizenship status requirements. Attachment 5 lists the documentation that grantees may accept from “qualified aliens.” The guidance is available at:

<http://www.gpo.gov/fdsys/pkg/FR-1997-11-17/pdf/97-29851.pdf> (PDF)

The household is potentially eligible if there is at least one citizen or legal resident noncitizen in the household.

V.1.2 Approach to Determining Building Eligibility

Dwelling units are eligible for weatherization if occupied by an eligible family unit.

The Arkansas WAP application form (WAP 02) asks if the dwelling unit is owned or rented.

If owned by the applicant/family unit, proof of ownership is required in the form of a deed, quick claim deed, will, or documentation from the county assessor's office. Subgrantees are often able to view county assessor's files online and obtain a printout showing ownership to ease the burden on the applicant of supplying proof of ownership.

If the applicant/family unit lives in rental property, the landlord's name and contact information is required on the application. Then the tenant or subgrantee obtains written permission from the landlord to perform weatherization work on the property; this permission becomes part of the client file.

In buildings with more than one dwelling unit, at least fifty percent (50%) of tenant households must be income eligible for weatherization services in 2 and 4-unit buildings and sixty-six percent (66%) of the tenant family units must be income eligible in 3-unit buildings. For multi-family rental property, any vacant units that are weatherized must have the expectation of being occupied within 180 days of weatherization services being performed. Not more than fifty percent (50%) of units may be vacant and, in the case of fifty percent (50%) occupancy, all occupied units must have income eligible households residing therein.

In Arkansas, a dwelling unit may not receive weatherization services if it was previously weatherized less than fifteen (15) years prior to a current application for services, if the previous weatherization was

completed using federal funds. Dwelling units eligible for re-weatherization will have been previously weatherized prior to 7/1/2009.

In order to ensure that re-weatherization does not occur within the fifteen (15) year prohibited time period, Arkansas requires that subgrantees:

1. Search weatherization records by address as well as applicant/family name.
2. Search the older data base, used from approximately 2004 up to the implementation of ECOS in 2015, even though legacy data was entered in ECOS.
3. Search any existing paper records, if access is not available to the older data base.
4. Visually inspect the home prior to completing an energy audit, for signs that previous weatherization could have occurred, such as the presence of new windows and doors; new HVAC equipment; extensive interior caulking; existing insulation (check date on attic or floor insulation certificate) or the presence of materials and equipment brands that are often used by the agency assigned to that particular region; e.g., a particular brand of vented space heaters, such as Rinnai. These or any other signs of previous weatherization will be discussed with the applicant/household.
5. Ask the applicant, with this requirement expected to yield the most unreliable results. The weatherization application asks if the dwelling unit was previously weatherized, and previous weatherization is discussed with the applicant at the time s/he applies.

Arkansas does not expect to have re-weatherized units in PY 2024.

Building Eligibility – Housing Types:

Housing types eligible for weatherization include:

- owner-occupied and renter-occupied single-family (site-built homes, manufactured/mobile homes),
- residential buildings with 2 to 4 units, and
- multi-family buildings.

Residential buildings with 2 – 4 units are audited with ECOS, DOE-approved single-family audit tool. Any subgrantee can weatherize dwelling units in a building with 2 – 4 units. Better Community Development (BCD), as our multi-family subgrantee, will weatherize all complexes regardless of the size of the buildings.

Multi-family is defined as buildings having five (5) or more individually heated/cooled units in each building, which may either be a single building or a complex of buildings.

Non-traditional dwelling units, such as shelters, apartments over businesses, or camping trailers, require AEO approval prior to weatherization. AEO will ensure that requirements for eligibility are met prior to granting approval or reach out to the DOE Project Officer for discussion and approval.

For campers and trailers to be considered stationary and, therefore, eligible for weatherization, the following criteria must be met:

1. Axles have been removed.
2. Residential electric and water utility services have been established.
3. Mail service has been established using street address (PO Box does not qualify).

National Environmental Policy Act (NEPA) determination

Arkansas will follow the restrictions for the listed allowable activities and historic preservation in the NEPA determination.

State Historic Preservation Compliance (SHPO)

Arkansas will use the guidelines in its Historic Preservation Programmatic Agreement (PA) to comply with restrictions concerning weatherization. Dwelling units will either be exempt from restrictions based on age (less than fifty [50] years old) or types of weatherization measures installed. Dwelling units not exempt must be submitted for SHPO review.

Rental Units/Single-family

Arkansas's rental plan, as follows, protects renters' rights as specified in 10 CFR 440.22 (b)(3), (c)-(e).

- At the time of application, the subgrantee must obtain written permission from the owner/agent of the rental unit agreeing to weatherization of the property; this permission must be retained in the client file.
- The benefits of weatherization assistance are expected to accrue primarily to low-income tenants.
- No undue or excessive enhancement will occur to the value of dwelling units as a result of weatherization. Each energy audit of a rental unit will be reviewed by the subgrantee weatherization director to ensure that all measures authorized by the DOE-approved energy audit software (ECOS) and all Health & Safety measures are provided in compliance with DOE requirements. Any questions in this regard will be discussed with AEO prior to the start of weatherization. (ECOS is the DOE approved single-family energy audit software used in Arkansas.)
- Not less than sixty-six percent (66%) (50 percent for duplexes and four-unit buildings) of the households in a building must be income-eligible for weatherization services.
- The subgrantee will obtain and place in the client file an agreement signed by the landlord (or authorized agent of the landlord) stating that, for a minimum of twelve (12) months after weatherization work has been completed, the rent will not be increased based on the increased value of dwelling units due solely to weatherization.
- Subgrantees will provide copies of the signed Landlord Agreements to the tenants to ensure their understanding and provide an avenue for tenant complaints.
- Other Considerations:
 - In the event of a dispute between the tenant and property owner regarding a rent increase, the subgrantee will attempt to resolve the dispute; if that fails, the tenant will be referred to legal aid by the subgrantee.
 - Units being weatherized must be occupied by a qualified household; the only exception is that an applicant household may temporarily move out while work is ongoing, if the temporary nature of the move is documented and re-occupation of the house is expected once work is completed.
 - A vacant unit may be weatherized based on an expectation that the unit will be occupied within 180 days following weatherization.
 - Arkansas does not seek property owner agreements for placement of liens nor does it use other contractual restrictions.
 - WAP does not accept financial participation in weatherization costs from any single-family dwelling unit owner.

Rental Units/Multi-family

Multi-family weatherization has consistently represented less than twenty percent (20%) of total weatherization production in Arkansas. In PY 2023, fourteen percent (14%) of total production was multi-family.

During the selection process for a multi-family project, the energy auditor will complete a walk-through of the property and note the potential for energy savings.

The subgrantee does encourage or require the owner of multi-family complexes to contribute to the Weatherization project. In particular, owners are encouraged to utilize available resources, such as maintenance funds or HUD funds, to address measures that do not receive a savings-to-investment ratio (SIR) of 1.0 or greater and to ensure that the benefits of weatherization accrue mainly to the tenants.

Arkansas encounters quite a few multi-family complexes comprised of buildings with 2, 3, or 4 dwelling units in each building. For these projects, the subgrantee uses ECOS, the DOE-approved single-family energy audit software.

For projects with buildings of five (5) or more units, or buildings of any size that are centrally heated and cooled (e.g., shelters), AEO contracts with a qualified engineering firm to complete an energy audit. The energy audit is then submitted to DOE for approval prior to beginning weatherization work.

Better Community Development, Inc. (BCD) receives funds set aside for multi-family weatherization. BCD completes projects throughout the state. A partnership with USDA Rural Development has the goal of weatherizing multi-family complexes throughout Arkansas using a blended service approach where both WAP and Rural Development contribute funds to weatherize a complex.

ARKANSAS DEFERRAL POLICY

The decision to defer work in a dwelling is difficult but necessary in some cases. There are conditions and situations under which a subgrantee must not or may choose not to weatherize an otherwise eligible dwelling unit. Information for making this determination may become evident during the application process, during the initial inspection process, during the energy audit, or after weatherization work has begun.

The Deferral form (WAP 35) ensures that all information is discussed with the client and provided in writing both parties' signatures. The client is given a Fair Hearing form (WAP 23) to complete and return to the subgrantee if s/he disagrees with the deferral. Both forms are placed in the client file. The deferral tracking spreadsheet is completed on a cumulative basis during the program year.

DENIAL/DEFERRAL/REFERRAL POLICY

If a house is deferred, it does not mean that assistance will never be available, but that work must be postponed until the problems can be resolved and/or alternative sources of help are found. In some cases, the situation warrants denial of services. Note that subgrantees, which include crews and contractors, are expected to pursue reasonable options on behalf of the client, including referrals, and to use good judgment in dealing with difficult situations.

Beyond the Scope:

There are several reasons that a house cannot receive weatherization services. Basically, the issues presenting in the house need to be fixed to enable weatherization to proceed and the issues are beyond the scope of weatherization. In order to understand what is beyond the scope of the weatherization program, subgrantees staff must first understand the scope and purpose of WAP. The official definition of WAP is found in the Code of Federal Regulations – 10 CFR 440.1:

“This part implements a weatherization assistance program to increase the energy efficiency of dwellings owned or occupied by low-income persons or to provide such persons renewable energy systems or technologies, reduce their total residential expenditures, and improve their health and safety, especially low-income persons who are particularly vulnerable such as the elderly, persons with disabilities, families with children, high residential energy users, and households with high energy burden.”

Denials

Animals - if vicious or bothersome animals are present and the client refuses to restrain the animals in a location that will allow the energy audit or weatherization work to proceed undisturbed, the subgrantee staff or contractor is advised to leave and report the situation to supervisory personnel. The subgrantee is advised to send the client a letter explaining the situation and the need to restrain the animal(s) during the time that weatherization staff/contractors are working at the house, including during the final inspection. If the client fails to comply with this request, the house will not be weatherized. The situation should be documented in the client file.

- **Illegal substances** - if the subgrantee staff or contractor encounters a situation where drugs are visible in the home, they are advised to leave and report the situation to supervisory personnel. The subgrantee should document the situation in the client file and not weatherize the house.
- **Threatening behavior** - if subgrantee staff or contractor are threatened with or feel in danger of physical harm, they should leave, report to supervisor who will document the situation in the client file, and not weatherize the house.
- **Energy Audit** – when the home does not benefit from weatherization services, denial is in order. If the home does not pass the cost effectiveness test of the energy audit, it is not eligible for WAP. In order to understand the cost effectiveness of weatherizing a home, the auditor must know how to read the ECOS audit reports. Reading the ECOS reports – look at the cumulative SIR, which must be 1.0 or greater. The report that is of most interest to the auditor is the Energy Saving Measure Economics Table. This table can be divided into three (3) parts: 1) repairs needed to complete the ECMs; 2) the weatherization measures; and 3) health and safety items.

Repair items will always appear at the top of the table. Repairs are needed as incidental to but necessary for the effective performance or preservation of weatherization materials. These measures do not provide energy savings and show a cumulative SIR of 0. If they cannot be included in the whole job SIR calculation without the SIR falling below 1.0, the house cannot be weatherized. This information from ECOS provides documentation in the client file.

- **House is for sale or condemned or scheduled for demolition.**
- **House has serious structural problems.**
- **House is uninhabitable,** such as being partially burned out.
- **House is being remodeled** and weatherization work is not coordinated with a housing rehabilitation program.

Deferrals

Health & Safety:

The Arkansas Health & Safety Plan provides guidance on how to perform the mechanical, visual, and sensory inspections. When WAP funding cannot alleviate the health and safety hazards prior to the installation of Energy Conservation Measures (ECM), the home should be deferred. Reasons for deferrals may include, but are not limited to, the following:

- Appliances – a cook stove may be deemed a hazard from potential fire or from generating carbon monoxide. The primary methods of inspection are combustion testing and visual inspection. If the home fails combustion and visual inspection tests, it should be deferred. Documentation for deferral are the test results and photos supporting the visual inspection.
- Asbestos can be found in siding, ceilings, vermiculite, or pipe insulation. When a home has asbestos siding, insulating walls should be approached from the inside of the home. Asbestos in vermiculite may be encapsulated but cost prohibitive. Asbestos-containing pipe insulation must be removed by an AHERA-certified professional which is outside the scope of weatherization. Any extensive presence of asbestos is a reason for deferral. Documentation should include written notes by the auditor as well as photographic evidence from the visual inspection.
- Biologicals/unsanitary conditions – these conditions are detected by visual inspection: raw sewage, mold and mildew, rotting wood, garbage, and mustiness. The presence of bacteria and viruses can be assumed from some of these conditions. Deferral is required with documentation including written notes as well as photographic evidence documenting results of the visual inspection.
- Animal infestation – insects, rats, bats, roaches, reptiles, or other vermin.
- Lead-based paint – if the extent and condition of the presence of lead-based paint are beyond the scope of weatherization to abate the hazard.
- Electrical issues – hazardous wiring, including the presence of knob-and-tube wiring (KTW) in the attic where insulation is needed. The Arkansas Building Code does not allow insulating with KTW.
- Moisture problems beyond the scope of weatherization. Plumbing issues beyond an incidental repair would be included here.
- Improperly installed, therefore dangerous, mobile home – lack of proper supports is the main issue that could lead to a deferral.

Documentation

The deferral situation should be thoroughly documented in the client file with a WAP 35 completed and signed, photographic evidence of the situation/condition (with labeling on each photo), and any other communication with the client, AEO, or experts in the field. Evidence that the client received a WAP 23 to request a fair hearing must also be contained in the file. Referrals should be documented in the client file as well.

Referrals

The first consideration for help for clients who have been deferred is in-house. The Weatherization Readiness Fund (WRF) exists in order to repair houses that have been deferred by subgrantees. AEO has a WRF Plan which provides guidelines for using these funds to address deferrals.

Subgrantees may have other housing programs in-house that can be leveraged to work on deferred houses. A major resource in Arkansas is USDA Rural Development which has grant and loan programs designed to fund major repairs to low-income housing. Subgrantees have all used this resource and know how to refer clients to the regional office appropriate for the location where the client lives.

In addition, subgrantees may know of other local resources in their service area that might be of help to their deferred clients.

WEATHERIZATION READINESS FUND (WRF) PLAN

Arkansas will continue its WRF program with DOE and LIHEAP funds provided for the purpose of addressing the repair needs of homes when such repairs are outside the scope of weatherization and prevent the home from being weatherized until they are completed. WRF can only be used if available funds are adequate to completely resolve all issues that prevent weatherization. Funds may be braided in order to complete necessary repairs.

WRF provided to Arkansas by DOE will be allocated to Arkansas Weatherization subgrantees by using the same allocation formula AEO uses to allocate other weatherization funds.

Households will be prioritized for WRF using the same priority points used for Weatherization.

To be eligible for WRF services, a home must:

- Be eligible and currently waiting for or undergoing weatherization services;¹
- Be deferred for weatherization until repairs are complete;
- Require repair services that are beyond the scope of weatherization and within the scope of WRF services.

Allowable repairs: the following, if the condition of the house prevents weatherization:

Exterior:

- Roof repair is defined as flashing, shingle or metal roof repairs of less than ten (10) square feet;
- Roof replacement – if leak(s) cannot be required, the following protocols apply:
 - Justify the ability to treat as minor repair(s) by fixing leak(s).
 - Use same roof materials to replace part or all of the roof.
 - Provide justification if requesting to use different materials for roof replacement, including cost of proposed materials fs. Cost if same materials were used.
- Wall repair as necessary to stop air leakage or install wall insulation; allowable repairs include exterior sheathing and framing;
- Foundation or subspace repair – allowable repairs include floor joists and subfloor;
- Resolution of drainage issues: allowable work includes landscaping; gutter repair, replacement, or installation; grading in close proximity to the perimeter of the foundation; and

Interior:

- Ceiling repair – as necessary to stop air leakage or install attic insulation;
- Floor repair – as necessary to stop air leakage or install floor insulation;;
- Plumbing repairs – as necessary to stop water leaks that contribute to mold and moisture problems or negatively affect measures to be installed during weatherization;
- Electrical repairs – including replacement of knob-and-tube wiring.

¹ If repairs that are beyond the scope of Weatherization are discovered during Weatherization, usually during the Energy Audit but occasionally when work has begun, the home must technically be deferred to justify the use of WRF for repairs. Once completed, Weatherization can be continued.

Health & safety: clean-up/remediation of:

- Lead paint;
- Asbestos, confirmed or suspected, including vermiculite;
- Mold and moisture;
- Insect/rodent infestation and other animal nesting; and
- Standing sewage.

WRF may not be used for housing rehabilitation, restoration, remodeling, building additions, accessibility improvements, beautification, or enlarging the pressure boundary. Finish materials on an interior floor, wall, or ceiling will only be allowed if installed in a wet area, such as bathroom or kitchen.

If the homeowner (resident or landlord) has homeowner's insurance, a claim must be filed, if appropriate, prior to any WRF work being considered.

Management of WRF:

1) Allowable Costs:

- DOE WRF (annual formula grant) – the total spent on one dwelling unit is limited to an average cost per unit (ACPU) of \$12,500. AEO will not grant approval if the total cost for a particular dwelling unit will cause the subgrantee's ACPU to be exceeded.
- LIHEAP – minor repairs costing up to \$600 for each repair are allowable to enable installation of energy conservation or health and safety measures. There is no limit as to how much may be spent on one dwelling unit as long as the limit for each repair is not exceeded.
- DOE WRF (Infrastructure grant) – no WRF funds are available as part of the Infrastructure grant.

2) Braiding WRF funds:

- DOE WRF (annual formula grant):
 - DOE Infrastructure funds - it is allowable to use DOE WRF for dwelling units that will be weatherized with DOE Infrastructure funds. This is the only braiding of funds allowed with DOE Infrastructure and DOE annual formula grant funds.
 - LIHEAP Readiness funds- it is allowable to braid DOE WRF and LIHEAP Readiness funds on one dwelling unit as long as each repair is completed with a separate funding source. Due to different rules for spending DOE WRF and LIHEAP Readiness, these funding sources cannot be braided on a single repair/the same repair.
 - Other funds - it is allowable to braid DOE WRF with funds outside of Weatherization, such as HUD, USDA Rural Development, or nonfederal sources to make a dwelling unit weatherization ready.
- LIHEAP Readiness Funds:
 - DOE Infrastructure grant – it is allowable to braid with DOE Infrastructure grant.
 - DOE annual formula grant – it is allowable to braid with DOE annual formula grant.
 - Other funds – it is allowable to braid DOE WRF with funds outside of Weatherization, such as HUD, USDA Rural Development, or nonfederal sources to make a dwelling unit weatherization ready.

- Braiding DOE WRF and LIHEAP Readiness funds: When DOE WRF and LIHEAP Readiness funds are braided on the same dwelling unit, during subsequent Weatherization, costs must also be assigned to DOE (annual formula grant or Infrastructure grant) and LIHEAP. Each funding source must be assigned to one or more whole measures (energy conservation and/or health and safety). Individual WRF repairs cannot be braided. As with weatherization measures, only one (1) funding source can be assigned to each repair.
- 3) **AEO prior approval** is required on all WRF work before a subgrantee accrues any expenses. All requests for prior approval for WRF work should be submitted to the AEO WAP program manager and technical coordinator. Approvals will be based on a description, justification, and the estimated costs of the proposed WRF measure(s).
 - 4) Required documentation includes:
 - Proof of household eligibility (within the last 12 months),
 - Deferral form (WAP 35),
 - Photos, labeled and dated, of all areas needing the proposed repairs,
 - Itemized estimate(s),
 - Request for a Section 106 Review submitted to the State Historic Preservation Office (SHPO), if necessary, and the response provided to AEO.
 - Homeowners insurance claim and response, if applicable.
 - 5) **Use of Contractors: it is allowable to use:**
 - Weatherization contractors,
 - Contractors working in other housing programs operated by the subgrantee, or
 - Contractors procured for each dwelling unit repaired, which necessitates soliciting three (3) bids if cost is \$20,000 or more.
 - 6) **Timeframes:**
 - Weatherization must begin within sixty (60) days after all allowable WRF repairs are completed and inspected.
 - In PY 2024 (July 1, 2024 to June 30, 2025), all homes repaired with DOE WRF funds and weatherized with DOE PY 2024 annual formula grant funds, must be completed by June 30, 2025, and submitted for billing with the June 2025 invoice, due to the end of the three-year grant cycle on June 30, 2025.
 - 7) **AEO will monitor** WRF work by physical inspection and review of case files (desk monitoring). At least one weatherized dwelling unit with WRF work will be physically inspected each quarter for each per subgrantee. 100% of case files with WRF will be reviewed (desk monitored) each month during the invoice approval process.
 - 8) **Documentation required:**
In client files:
 - Deferral form (WAP 35).
 - Before and after photos – labeled and dated.
 - Selection of contractor.
 - Estimates (up to 3).
 - Final invoices.
 - Client satisfaction form (WAP 09b).
 - Proof of subgrantee’s inspection of WRF work.
 - Homeowners insurance claim and response, if applicable.
 - SHPO review request and response, if applicable.

Reporting:

- WAP 04, monthly.
- Deferral Tracking spreadsheet, submitted monthly with DOE invoice, if the invoice includes WRF expenses, and completed cumulatively for each Program Year.

V.1.3 Definition of Children

Definition of children (below age): 19

V.1.4 Approach to Tribal Organizations

Arkansas has no identified Native American tribes. Low-income Native Americans will receive the same weatherization services provided to other low-income persons in Arkansas.

V.2 Selection of Areas to Be Served

Arkansas has consistently served the entire state, seventy-five (75) counties in all, with the current configuration being five (5) subgrantees with service areas ranging from the largest with twenty-one (21) counties to the smallest with twelve (12) counties. At the beginning of PY 2022, CAPCA terminated its Weatherization program and its three (3) county territory is being temporarily served by CRDC. A Request for Qualifications (RFQ) to serve CAPCA's former territory will be issued during PY 2024. Since the ARRA period, selection of subgrantees has been through this competitive process, accepting submissions from non-profit CBOs and local governments.

Multi-family weatherization is provided statewide by BCD.

Arkansas allocates funds at the county level and aggregates amounts allocated to the counties in each service area. The methodology uses occurrence of the following in a weighted formula:

- Population below poverty level, given a weight of eighty percent (80%)
- Annual average heating and cooling degree days, given a weight of ten percent (10%)
- Percentage of houses built prior to 1990, given a weight of ten percent (10%)

V.3 Priorities

Each applicant is assigned priority points at the time of eligibility determination, as follows:

1. At least one member in the household is elderly (age 60 or older). (1 point)
2. At least one member in the household is a person with disabilities (receives disability benefits). (1 point)
3. At least one member in the household is a child (under the age of 19). (1 point)
4. The household has a high energy burden (spending at least 6.9% of total income on heating and cooling costs). (1 point) Source: for energy burden metrics see the “Background Data and Statistics on Low-Income Energy Use and Burden for the Weatherization Assistance Program: Update for Fiscal Year 2020” (ORNL/TM-2020/1566). This report will be updated as new information is available from DOE Better Buildings/Clean Energy for Low-Income Communities Accelerator fact sheet.
5. The household is a high energy user (spending 10 cents or more per square foot on electricity). (1 point) Source: Entergy Solutions “You have the power to lower your Entergy bill” brochure.

AEO is considering assigning applicants with a high energy burden more than one (1) point. This change will be discussed with stakeholders before a decision is made.

AEO is targeting people "who have been historically underserved, marginalized, and adversely affected by persistent poverty and inequality" by identifying communities which by federal definition are disadvantaged or underserved and encouraging subgrantees to focus outreach in these areas. AEO has plans to consider building the capability into management software and possibly creating a second waiting list for applicants living in Justice40 Communities.

Subgrantees have a priority list for each county in their service area in the ECOS software.

- AEO has approved the use of separate priority lists by county to give subgrantees flexibility when scheduling work crews and assigning contractors; this policy minimizes travel distances and maximizes available work hours and worker efficiency;
- A subgrantee may not work exclusively in one (1) county for more than one (1) month;
- The subgrantee is required to serve each county in proportion to the number of units planned for that county and to prioritize counties based on the number of priority points assigned to top applicants on each county list;
- The selection of a county in which to provide weatherization work exclusively for a coming month should be primarily based on where the client resides who has the highest number of points among all counties; and
- Priority points being equal, the age of the application is considered when selecting the next house for weatherization.

Subgrantees print and keep priority lists each month to document that these policies were followed. Each county list should contain explanatory notes, e.g., attempts to contact clients and other information pertinent to demonstrating that an eligible candidate with the highest number of priority points was chosen next to receive weatherization services.

Should there be any discrepancies in the priority points calculated by ECOS, the subgrantee has a responsibility to correct the priority points for use in selecting the next homes to weatherize.

V.4 Climatic Conditions

Total heating degree-days in Arkansas range from a high of 5,477 in the northcentral part of the state to a low of 4,987 in southeastern Arkansas. The average heating-degree-days are thirty (30) year averages that have been supplied by the National Oceanic and Atmospheric Administration (NOAA). In counties without reporting stations and in counties without complete data for thirty (30) years, data from nearby stations was utilized.

Black River Area Development Council (NE)	5,477
Central Arkansas Development Council (SW)	4,999
Crowley's Ridge Development Council (NE and central)	5,294
Crawford-Sebastian Community Development Council (NW)	5,298
Better Community Development (SE)	5,198

Following is a description of how weather data is used in Arkansas's energy audit software, Energy Conservation Online System (ECOS):

Methodology for calculating heat loss -- ECOS uses a balance point temperature when calculating energy usage/loss for building segments. DOE requires that when using this methodology, you utilize 68 degrees for heating and 78 degrees for cooling NOAA weather data is imported into ECOS from each weather station in Arkansas. The weather data is a twenty-year average which is standard practice for DOE protocol and includes all eight compass points and horizontal surfaces (future solar panel modeling potential).

Calculating demand -- When the model is run, for every hour of the day ECOS knows what the exterior temperature is based on the weather data. The demand is calculated on how much energy is needed to maintain a 68 degree heating and 78 degree cooling internal temperature. So, the hotter it is outside, the more demand is needed to meet the cooling balance point temperature. For example, if it is 98 degrees outside, this equates to a 20 degree delta T that must be met to reduce the cooling temperature to 78 degrees resulting in more loss of BTUs or usage and more energy (fuel) needed to meet the demand.

Calculating energy loss -- Segments or condition codes are assigned an R-value which was reviewed by DOE. When a user selects to “model” a building segment they enter the orientation (N/E/S/W) and select a condition code. ECOS will calculate the energy usage in BTUs based on the condition code and orientation to determine how much energy is needed to meet the demand for that segment over a period of time (one year). If the user selects to insulate that building segment (increase the R-value), ECOS will run the same calculation over the same wall segment and orientation. The result is how much energy will be needed to meet the demand for that wall segment.

This results in the following formula: Pre Energy Usage (in BTUs) – Post Energy Usage (in BTUs) = Estimated Savings (in BTUs) annually. Then the savings in BTUs is converted to units based on the primary fuel type. So, if it is natural gas, it is converted to therms, electricity to KWH, etc. This results in annual savings of units. Then it is a simple calculation to get the SIR. Depending on the life expectancy of the task, the annual savings are multiplied by the life expectancy then divided by the cost to get the SIR.

$(\text{Annual Savings} \times \text{Life expectancy} / \text{Task Cost}) = \text{Task SIR}.$

V.5 Type of Weatherization Work to Be Done

V.5.1 Technical Guides and Materials

Arkansas uses the following:

1. The “Arkansas Subgrantee Operations Manual” is a living document which codifies all program requirements, procedures and standards. On a regular basis, AEO will update the manual incorporating new language from DOE's WPNs and/or new state policies. When updates are made, the manual will reflect the appropriate effective dates of changed policies.

The Subgrantee Operations Manual is maintained on the AEO website.

Electronic Link <https://www.adeg.state.ar.us/energy/initiatives/pdfs/subgrantee-operations-manual.pdf>

See page 122, IX. Appendix, for Weatherization forms in use.

2. “Retrofitting Arkansas Standard Work Specification-Aligned Field Guide” is maintained on the AEO website and in ECOS.

Electronic Link on AEO Website <https://www.adeg.state.ar.us/energy/initiatives/pdfs/ar-sws-field-guide.pdf>

On any ECOS screen or page, scroll to the bottom, and click on “Standard Work Specifications” link in the lower right hand corner.

The guide in its entirety is in ECOS under the *Forms, Program Forms* tab.

3. “Arkansas Subgrantee Technical Manual, Energy Audit Policies & Procedures”. This manual will be posted on the AEO website and distributed to subgrantees after receiving final approval from DOE.

Documenting the Process for Distribution

Once revised versions of the Subgrantee Operations Manual or technical guides are issued, AEO will send a copy to each subgrantee via certified mail. Each subgrantee must sign for delivery. The US Postal Service will return the signature cards to AEO, providing written verification that each subgrantee received a copy.

Subgrantees require weatherization contractors to sign an acknowledgement form, verifying that they have received a copy of the “Retrofitting Arkansas Single Family Standard Work Specifications-Aligned File Guide” (ASFSWS) and the “Retrofitting Arkansas Manufactured Housing Standard Work Specifications-Aligned File Guide” (AMHSWS) at the time of their procurement to do weatherization work. Subgrantees must have written documentation showing each contractor has received both SWSs. During monitoring visits, AEO program monitors will check for compliance.

Statements of Assurances

AEO ensures that all subgrantee agreements and subgrantee vendor contracts will contain language which clearly specifies that all work performed will be of a quality outlined in WPN 22-4, Section 1.

The language clearly requires and documents the following:

- (1) that subgrantees and their contractors understand that work quality standards must align with the SWS,
- (2) that each subgrantee’s direct hire is aware of these standards, and
- (3) that they all must sign off that they have received a copy of both SWS technical guides.

AEO ensures that all work will be performed in accordance with our DOE-approved Energy Audit procedures (DOE memo dated 3/29/22) and all materials will be approved materials specified in 10 CFR 440, Appendix A, and in the above referenced memo:

Table 3 - Special Materials/Audit Procedures Approvals	
Item	Comments
Light Emitting Diode (LED) Lighting	Approved 12/18/2014
Updated Lifetimes (See attachment 1)	Approved by this Memo

Weatherization Assistance Program is approved to use the following life expectancies for measure evaluation when using the ECOS energy audit tool.

Measures Considered	Life Expectancy
Insulation Cellulose 3" open R-9	30
Insulate Cellulose Open 4" R-13	30
Insulate Cellulose Open 6" R-19	30
Insulate Cellulose Open 8" R-25	30
Insulate Cellulose Open 10" R-30	30
Insulate Cellulose Open 12" R-38	30
Insulate Cellulose Wall	30
Insulate Cellulose Floor	30
Insulate Fiberglass Blown MH Dome Roof/Top	30
Insulate Fiberglass Blown MH Pitched Roof/Ext	30
Insulate Fiberglass Blown MH Roof/Inside	30
Insulate Fiberglass Blown MH Walls	30
Dense pack Floor with open blow to R-38	30
Dense pack floor with open blow to R-49	30

Language in Subgrantee Agreement

The following language will be inserted into subgrantee agreements:

It is the signatory's responsibility to perform all weatherization and health & safety work to the specifications outlined in WPN 22-4 using DOE Standard Work Specifications (SWS) as found in "Retrofitting Arkansas Single Family Standard Work Specifications – Aligned Field Guide." Work quality standards that align with the SWS must be followed for all work performed on client homes. The signatory acknowledges receipt of the above referenced documents. All contractors of subgrantees must be assigned the same contractual responsibility and acknowledge receipt of the referenced documents.

The subgrantee is required to insert similar language in contractor agreements.

The subgrantee must ensure that every completed home is inspected for compliance with these standards and require reworks when the work is judged not satisfactory by the SWS standards.

Describe Mechanism Used

The mechanisms AEO uses to verify that subgrantees understand and agree to expectations of weatherization work is the subgrantee's signature on the grant agreement. In addition, third party QCI inspections review weatherization work vis-a-vis the SWS technical guides.

Arkansas will follow the restrictions for the listed allowable activities and historic preservation in the National Environmental Protection Act (NEPA) determination. Subgrantees will adhere to the Historic Preservation Programmatic Agreement (HSPA). Should Arkansas desire to perform activities not included in their NEPA determination, the State will submit an Environmental Questionnaire (EQ-1) to request a NEPA review.

Field Guide Approval Dates:

Single Family: 6/25/2021

Manufactured Housing: 6/25/2021

Multi-Family: N/A

V.5.2 Energy Audit Procedures

Audit Procedures and Dates Most Recently Approved by DOE

Audit Procedure: Single-Family

Audit Name: ECOS

Approval Date: 3/29/2022

Audit Procedure: Manufactured Housing

Audit Name: ECOS

Approval Date: 3/29/2022

Audit Procedure: Multi-Family

Audit Name: N/A

Approval Date:

Arkansas is committed to submitting energy audit approval requests to DOE every five (5) years, with the understanding that sufficient lead time (minimum 6 months) is required for the approval process.

DOE approved ECOS, a single-family energy audit tool, for continued use in Arkansas on March 29, 2022.

AEO submitted to our DOE Technical Project Officer the latest revisions in the energy audit policies and procedures on August 12, 2024.

Arkansas has one (1) subgrantee, Better Community Development (BCD) that provides multi-family weatherization for the entire state, but does not have a DOE-approved Multi-family energy audit tool, as Multi-family production in Arkansas is less than twenty percent (20%) annually. Energy audits for any Multi-family complexes with buildings no larger than four (4) units are entered in ECOS, Arkansas's DOE-approved, single-family audit tool.

For any complexes with one (1) or more buildings containing five (5) or more units, BCD will purchase energy audits from a qualified third party, e.g., an engineering firm. AEO and BCD understand that these projects must be submitted to DOE and approved by our Technical Project Officer on a case-by-case basis prior to commencing weatherization.

V.5.3 Final Inspection

AEO's Final Inspection & Assurance Statement

AEO requires that every DOE WAP unit reported as a "completed unit" has all weatherization measures installed in a workmanlike manner and in accordance with the priority determined by the energy audit procedures as required by 10 CFR 440.21 and undergoes a final inspection by a certified Quality Control Inspector (QCI), ensuring that all work meets the minimum specifications outlined in the Standard Work Specifications developed by DOE/NREL.

In accordance with WPN 22-4:

- Every client file will have a WAP 08 form that certifies that the unit had a final inspection and that all work met the required standards. The form will be signed by a certified QCI. Signatures will be accepted to demonstrate compliance. If a unit, inspected by the subgrantee QCI, is also inspected by the state, two (2) certification forms will be available in the client file - one for each inspection.

- Subgrantee final inspection information is entered in ECOS and a percentage reviewed as part of desk monitoring.
- The QCI includes an assessment of the original audit to confirm that the measures called for on the work order are appropriate and compliant with the state audit procedures and protocols approved by DOE and that there are no “missed measures” which should have been considered.

The Use of Quality Control Inspectors

AEO will monitor at least five percent (5%) of all units reported as complete in PY 2024 unless AEO determines that a subgrantee does not have a completely independent QCI process from its energy auditing function or the agency is on probation or determined via the assessment process to be high-risk. If any of these scenarios apply, AEO will monitor at least ten percent (10%) of all units reported as complete.

Policy & Procedures for Inadequate Inspection Practices

- Subgrantee QCI accompanies state/third party QCI to learn first-hand of any deficiencies in its own inspection and audit.
- State/third party QCI provides feedback during the inspection.
- State/third party QCI addresses incomplete and poor workmanship as well as missed opportunities on site and in reports. Needed specific and/or comprehensive training will be delivered in the field by the state/third-party QCI at the time of the inspection or arranged later.
- State/third-party QCI identifies call backs and missed opportunities and identifies required corrective actions at subgrantee’s expense including repayment of the cost of any disallowed measures.

Improvements are expected and AEO will meet with subgrantee weatherization directors to review expectations and discuss any corrective actions.

Inspection and Monitoring of Work Using Guidelines and Standards

For PY 2024 Arkansas will continue to ensure that Quality Control Inspector (QCI) competency is demonstrated by mandating certification as a BPI Home Energy Professional (HEP) QCI. AEO requires that each subgrantee employ or contract with a HEP QCI. Subgrantees must submit to AEO the credentials of all staff employed as a QCI and of any third parties engaged to conduct quality control inspections. Currently all subgrantees have QCI’s on staff as direct hires and do not contract with third party QCI’s. For PY 2024, AEO will procure third party QCI(s) to assist with the required number of inspections by AEO.

V.6 Weatherization Analysis of Effectiveness

Arkansas performs continuous weatherization analysis of effectiveness per 10 CFR 440.14(c)(6)(i);

- **Integrated diversity, equity, and inclusion objectives:** In the coming year, AEO plans to 1) develop a Justice40 waiting list to identify applicants who live in underserved areas, and 2) update Arkansas allocation formula to ensure limited weatherization resources are distributed equitably.

- **Assessing training needs**–Training content will be based on the following:
 - (1) Aggregating statewide findings/concerns from technical, administrative, and fiscal monitoring as well as considering individual subgrantee training needs;
 - (2) Subgrantee staff completing self-assessments for WAP managers who each submit a training plan to AEO for the allocation of T&TA funds, including needed training to maintain required certifications, which will be part of each Subgrant agreement. These self-assessments are based on Knowledge, skills, and abilities (KSAs) for each subgrantee staff employed in a WAP position. Weatherization directors use these self-assessments, and other information specific to staff, to develop a training plan.
 - (3) DOE findings and concerns;
 - (4) Training needs for contractors identified by both AEO and subgrantees (AEO will develop a specific policy to enable the use of T&TA funds for training contractors).

- **Path of continuous improvement:** In addition to conducting monthly desk reviews, AEO will resume making on-site monitoring visits.
- **Management findings or concerns:** corrective action plans are monitored and tailored training and technical assistance are provided.
- **Realized Energy Savings:** ECOS software has the capacity to capture pre and post energy usage which allows actual energy savings to be calculated.
- **On-site Inspections of Weatherized Units:** State/Third Party QCI will inspect a minimum of five percent (5%) of completed units for each subgrantee, unless AEO verifies that the subgrantee has not completely separated the audit and inspection functions, in which case a minimum of ten percent (10%) of completed units will be inspected (see previous Final Inspection section).
- **Monitoring:** Visits will focus on technical, fiscal, and administrative compliance with all applicable federal and state WAP rules and regulations. Findings will be communicated back to the subgrantee and will be tracked through a corrective action plan. Any patterns will be noted and addressed in the subgrantee’s risk assessment.
- **Single Agency Audits:** Each subgrantee must submit a financial audit within nine (9) months from the end of the agency’s fiscal year. Audits will be reviewed for findings applicable to Weatherization, and AEO will consider such findings as part of the financial risk assessment.
- **Productivity:** AEO will track expenditures and average cost per unit of each subgrantee to monitor utilization of grant funds, including monthly review of production. AEO will ensure that any needed technical assistance is provided.

V.7 Health and Safety

Arkansas' approved Health and Safety Plan is uploaded in the application attached to the SF-424.

Budgeted Health & Safety (H&S) funds for this program year are: \$322,523. The DOE approved percentage is 24.99% for Arkansas and will not be exceeded this program year.

Arkansas expects that H&S expenditures will average \$1,792 per unit, or 21% of the average cost per unit (\$8,448).

Minor repairs are capped at \$600.00.

V.8 Program Management

V.8.1 Overview and Organization

The Arkansas Energy Office (AEO) is a part of the Arkansas Department of Energy and Environment, Division of Energy and Mineral Resources.

Within AEO is the State Energy Program (SEP), which includes multiple programs; Low-Income Home Energy Assistance Program (LIHEAP); and Weatherization Assistance Program (WAP).

The Weatherization Program Manager and staff work with AEO administrative and fiscal staff. The organizational chart shows WAP is a unit under the Senior Programs Manager. Connection to the State Energy Office allows an exchange of ideas beneficial to WAP.

The E&E Arkansas Energy Office (AEO) organizational chart is uploaded as an attachment to SF-424.

V.8.2 Administrative Expenditure Limits

For PY 2024, the state/AEO has budgeted half of the total allocation for Administration, or 7.5%.

Subgrantee administration is half of the total allocation for Administration, or 7.5%.

Approval of additional administrative costs is based on each subgrantee's total grant being less than \$350,000 and the subgrantee having a cost allocation plan for overall agency administration. AEO will reach out to the subgrantee who has the option to request additional administrative funds this year.

V.8.3 Monitoring Activities

Arkansas Weatherization Practices & Procedures for Monitoring

I. Technical Monitoring

1. On-site Technical Monitoring:

AEO will use its QCI-certified staff (Wendy Ryan) to conduct technical monitoring visits. AEO will procure a third party QCI to meet the monitoring obligations under the DOE grant.

A minimum of five percent (5%) of units reported as complete will be selected for field review if the subgrantee certifies that its program operates with complete separation of staff who conduct energy audits and those who inspect the weatherization work. AEO will verify that this separation does exist.

For subgrantees who cannot document separation, a minimum of ten percent (10%) of completed units will be inspected.

File Review

1. State monitors and/or the subgrantee will choose jobs to review monthly from a list of completed jobs in the ECOS software.
2. AEO monitors will note any questions or concerns.
3. In some instances, conference calls may be warranted between the AEO monitor and pertinent subgrantee technical staff in order to resolve or clarify issues.
4. An email will be sent to the subgrantee WAP Director listing findings and concerns with a request to either address deficiencies or justify actions.
5. If the unit is selected for a field visit, relevant documents will be placed in a site visit folder with follow up areas noted.

The frequency of technical monitoring is as follows:

1. Quality control inspection of at least five percent (5%) of completed homes to determine the quality of workmanship and appropriateness of service delivered by each subgrantee. These QCI inspections will be conducted on a quarterly basis. At the end of the quarter, the number of inspections will be determined based on production.
2. Inspection of at least one (1) unit per quarter per subgrantee.

If AEO's technical monitors detect trends or deficiency patterns in the subgrantee's next QCI monitoring of completed units, the following steps will be taken:

- Monitoring of the subgrantee will increase so that an additional visit will be made prior to the next regularly scheduled visit;
- One (1) or more additional units completed since the last regularly scheduled monitoring visit will be inspected;
- One (1) in-progress unit will be inspected during this extra visit;
- AEO's QCI or third-party QCI (if applicable), and subgrantee staff will discuss: 1) contractor deficiencies, 2) quality of auditor assessments, and 3) subgrantee QCI giving a pass to substandard work and missed opportunities;
- Training needs relative to findings will be discussed and provided to subgrantee staff and contractors.

Note: Significant deficiencies are defined as: health & safety violations, poor quality installation of materials, and major measures missed.

Subgrantee noncompliance of repeated unresolved findings (based on a lack of improvement in two [2] consecutive monitoring visits) will be reported promptly to the DOE project officer.

Annually, a risk assessment will be based on performance during the previous year.

Technical Desk Monitoring

Every month, technical monitors conduct desk audits in the ECOS software after jobs have been submitted to AEO as complete. A desk review includes reviewing the following in ECOS:

- Energy audit,
- Work orders/SWS,
- Health & safety,
- Final inspection by subgrantee QCI,
- Separation of audit and final inspection (different staff, certified QCI),
- Required forms present, complete, signed and dated.

Any findings from the desk audit review will be sent to each subgrantee via email. Auditors/inspectors can also see the state monitor's notes on the Billing Review tab in ECOS. This feedback enables subgrantee staff to consider alternative procedures in what might be complex weatherization situations and offers the opportunity to rerun final calculations. In some instances, conference calls may be warranted between the AEO monitor and pertinent subgrantee technical staff in order to resolve or clarify issues.

The Unit may be removed from the invoice to allow time to resolve issues.

At least fifty percent (50%) of units billed will be reviewed each month.

In addition, monitors may conduct desk audits while the auditor/inspector is still in the audit/job. The objective is to look at audits and jobs in progress before they are completed and placed in a billing group; in this way compliance issues are averted or better ways to evaluate/analyze a unit can be discussed before the job is turned in to AEO.

Training & Technical Assistance Review

There will be an annual, on-site review of each subgrantee by a technical monitor. The following will be reviewed:

1. Review AEO's technical reports for each subgrantee for the preceding year prior to on-site visit;
2. Review each subgrantee's training plan, including all employee's self-assessment, to determine if training is being carried out, prior to on-site visit;
3. Review subgrantee certifications prior to on-site visit. Discuss subgrantee staff of upcoming renewal dates;
4. Verify if each contractor certifications are valid. Check to see if SWSs were issued with work order;
5. Review subgrantee plan for evaluating contractor work;
6. Review subgrantee contractor training plan (if applicable) and determine if improvements have been achieved;
7. Review subgrantee plan for dismissing contractors for poor performance;
8. Conduct inventory check on equipment (including vehicles) and materials;
9. Gather a list of equipment purchases/dispositions from previous and current program year prior to on-site visit. Inspect PPE and safety equipment;
10. Check to see if SWS field guides are in subgrantee and contractor vehicles;
11. Prepare a written report.

Year-End Reporting

AEO will submit a T&TA, Monitoring, and Leveraging Report in PAGE each year by September 30 for the previous grant year. These reports will include subgrantees monitored; major findings and resolutions; trends with respect to findings, other concerns or issues; needed T&TA (programmatic/administrative, technical, financial); list of subgrantees considered high risk (from other programs or program management); and outcome activities involving T&TA and training during monitoring.

II. Subgrantee Administrative/Compliance Monitoring:

Desk reviews are conducted monthly. A desk review includes:

1. Client files – sample files from most recent invoice for reimbursement (minimum fifty percent (50%) with increased numbers reviewed if deficiencies are found) to review: eligibility, rental agreement, SHPO compliance, job costs documentation;
2. Contractors' agreements - agreements for the work on the unit signed and citing SWS standards and work required to these standards;
3. Priority lists – confirm how clients are pulled from list; how priorities are entered in ECOS, are all five (5) priorities being calculated, is subgrantee re-determining client eligibility every twelve (12) months;
4. Program forms – ensures all relevant forms are accurate and complete and signed by both the subgrantee and the client (whenever applicable).

Annually, each subgrantee will be visited by an programmatic/administrative compliance monitor after a risk assessment, based on performance during the previous year. The following will be reviewed:

1. Management system relating to production;
2. Policies and procedures, including records retention.

III. Subgrantee Fiscal Monitoring

On a monthly basis desk reviews are conducted. A monthly desk review includes a comparison of the invoice to submitted support documents (per line item category). Desk reviews will also inform the annual risk assessment and on-site fiscal monitoring.

Each subgrantee will be visited by a fiscal monitor. The monitor will:

1. Sample general ledger compared to invoices, client files, and weatherization payroll;
2. Assess personnel and other expenses charged to weatherization administration;
3. Review policies and procedures for financial management and separation of duties;
4. Sample procurement, including documentation of the process;
5. Follow-up on any findings from most recent single agency audit.

Resolution Strategies & Corrective Action Plans

Results of On-site Visits

After an on-site visit, an exit conference will include a discussion of findings with executive director, financial director, and weatherization director as available. AEO will send subgrantee a written report within thirty (30) calendar days of the monitoring visit. A combined report for the program, including administrative and fiscal reviews will be provided when the Administrative monitor and Fiscal monitor visit at the same time. Each report containing findings will require a response from the subgrantee with a corrective action plan which AEO will accept or reject, in whole or in part, in a written response.

Results of Technical Review

Resolution strategies starts with AEO sending a letter to the subgrantee containing the findings and corrective actions required by the QCI and conveying the original AEO QCI reports to be filed in the client files. This letter requests that the subgrantee submit corrective actions taken and photographic documentation of such to AEO within fifteen (15) working days of the receipt of the letter. The letter also states that any corrective work must be completed with non-federal funds. Corrective action documentation specified in the corrective action plan will be sent to QCI for approval.

On-site, In-progress Technical Monitoring

As a part of the corrective action process, in-progress inspections will be included for subgrantees who have repeated major deficiencies from one technical monitoring visit to the next. A QCI employed by AEO will conduct in-progress inspections following recommended assessments as outlined in WPN 22-4.

Process for discipline and/or removal of a subgrantee from the program.

The “AEO General Terms and Conditions” in the Subgrantee Grant Agreement specify the criteria necessary for a subgrantee to be considered in compliance. Failure to maintain fiscal control, comply with federal regulations, or fulfill contract obligations will lead to probation.

The terms of probation will be specified in a Program Improvement Plan (PIP) which will include problems cited and improvements necessary, frequency of monitoring, and training to be provided by AEO. Probation will be initiated for six (6) months with the option to extend for another six (6) months if sufficient progress is not deemed to have occurred but some improvement has been shown. The PIP will be under continual review. At the end of the probation period, AEO will either 1) release the subgrantee from probation; 2) take additional steps to bring the program into compliance by reducing the workload to a more manageable level; in this regard, AEO may reallocate part of the unobligated WAP funds and part of the subgrantee’s service territory to a suitable replacement subgrantee on a temporary basis; or 3) terminate the subgrantee grant agreement.

Resolution strategy

Monitors will follow-up to ensure that corrective actions are carried out by each subgrantee according to the approved plan. Based on required corrective actions and the risk assessments from the previous year, each subgrantee will be placed on a monthly, quarterly, semiannual, or annual schedule of on-site monitoring visits. These scheduled monitoring visits will include a review of areas cited for corrective actions and any changes that have taken place with the subgrantee. Progress with production, staff training, and contractor performance will be reviewed. Any subgrantee placed on a monthly monitoring schedule will be deemed to be on probation.

AEO/WAP Program Staff

- Weatherization Manager: Janice Ivory began employment in this position in May 2024.
- Technical Coordinator: Wendy Ryan began employment as a WAP Technical Monitor in December, 2019. Wendy has Energy Auditor and QCI certifications and previously worked at the subgrantee level as both an Energy Auditor and a Quality Control Inspector, beginning in 2012, before joining the AEO program. She was promoted to Technical Coordinator in 2023.
- Fiscal monitor: Angela Kelley has been serving in this position since July, 2020. She is under the direct supervision of Tim Scott, AEO's Senior Operations Manager, who oversees budgets, funds tracking, payment/reimbursements, and fiscal reporting. Both work together to provide financial management to the WAP.
- Administrative Analyst: Diane Bowen has been employed by AEO Weatherization since 2010.
- DOE CEIF Fellow: Kristen Wright Pounds started Aug. 1, 2024, as a member of the WAP Team.
- WAP Technical Monitor position: vacant since vacated by Wendy Ryan. AEO is in the process of hiring for this position.
- WAP Grants Analyst/Programmatic Monitor (2) positions are vacant.
- Third Party QCI - AEO has plans to hire one (1) or more contractors in order to be able to maintain the required 5% - 10% inspection of all dwelling units reported as complete.
- Senior Programs Manager: Kay Joiner, in this position since 2017, oversees Weatherization.

V.8.4 Training and Technical Assistance Approach and Activities

PY 2024 will feature in-person training opportunities.

Training content will be based on two distinct categories:

1. Comprehensive, occupation-specific training which follows a curriculum aligned with the JTA for that occupation. This training must be administered by, or in cooperation with, a training program that is accredited by a DOE-approved accreditation organization for the JTA being taught.
2. Specific, single-issue, short-term, training to address deficiencies in the field or to bolster skills, such as dense packing, crawlspace, ASHRAE, etc. Conference trainings are included in this category.

Specific training content will be identified from the following:

1. Aggregating statewide findings/concerns from technical, administrative, and fiscal monitoring;
2. Subgrantee staff completing self-assessments for for the training plan submitted to AEO for the allocation of T&TA funds, including needed training to maintain required certifications, which is part of each Subgrantee grant agreement;
3. DOE findings and concerns; and
4. Training needs for contractors identified by both AEO and subgrantees. AEO will develop a specific policy to enable the use of T&TA funds for training contractors.

AEO requires that each subgrantee have at least one (1) certified QCI on staff. This requirement has been met since July 1, 2015. Currently, there are fifteen (15) certified QCIs employed among the five (5) subgrantees and one (1) QCI employed by the state. AEO will procure contractors for QCI services to complete inspections in fulfillment of Arkansas' Monitoring Plan.

Building Performance Institute (BPI) requires that all individuals who renew, or pursue a new, QCI certification hold an Energy Auditor certification. All QCIs in Arkansas WAP are also certified Energy Auditors.

AEO recommends that new staff hired by subgrantees complete Building Analyst Technician, Building Analyst Professional, and Manufactured Housing training to establish a solid foundation for going on to certification as an Energy Auditor and Quality Control Inspector (QCI). AEO provides T&TA funding for subgrantees to include both Building Analyst micro-certifications for inexperienced, non-credentialed staff in their training plans. Some staff who need to start out with Building Science are supported in obtaining that training, which provides a good foundation for weatherization work.

AEO requires that weatherization directors and field staff (auditors and inspectors) as well as contractors have active certification in lead-safe practices through the Environmental Protection Agency's Renovation, Repair, and Painting program. In addition, AEO technical staff and the Weatherization Manager are required to have this certification.

Maintaining workforce credentials:

AEO stays abreast of credentials and their renewal requirements by maintaining a spreadsheet tracker based on the staff certifications submitted by subgrantees. AEO provides T&TA funds for subgrantees to obtain required continuing education units for QCIs and Energy Auditor based on the subgrantee's approved training plans.

Technical training, both Comprehensive and Specific, will be provided by a trainer affiliated with an IREC-accredited training center to provide CEUs leading to and maintaining certifications: Building Analyst Technician, Building Analyst Professional, and Manufactured Housing; QCI, Energy Auditor, Crew Leader, Installation Technician. While all of this training is required for new staff, if needed to prepare the employee for successful functioning as an Energy Auditor or QCI, the only required certification is for the QCI position, and now for Energy Auditor in tandem with QCI. AEO has established a working relationship with Environmental Energy Consultants (Caleb Copeland-Cook), affiliated with the IREC accredited training center in New Mexico but located in southern Missouri. AEO and subgrantee staff attends Environmental Energy Consultants (EEC) trainings at their facility in southern Missouri and EEC conducts trainings in Arkansas. AEO will follow procurement procedures to obtain training during PY 2024.

Training provided by AEO in Arkansas is considered mandatory. Subgrantees have consistently attended available training, and, therefore, AEO has not needed to establish ramifications for noncompliance. In the case of nonattendance at training, AEO would consider requiring absent subgrantee staff to find and attend equivalent training elsewhere.

AEO encourages the following with T&TA funds made available to subgrantees:

1. Attend Building Analyst Technician, Building Analyst Professional, and Manufactured Housing training;
2. Attend DOE/National Home Performance Conferences;
3. Attend Energy OutWest Conference;
4. Attend NASCSP conferences, if appropriate.

AEO staff attend the fall and spring NASCSP conferences, Energy Outwest and the National Home Performance conferences. AEO staff will attend one (1) additional conference, if demonstrated to be specifically applicable to weatherization and job duties.

2024 AR WAP Annual Training:

During PY 2023, Arkansas Energy Office (AEO), in conjunction with LIHEAP, hosted a statewide annual training conference in Little Rock, Arkansas in October, 2023. As an alternative to an annual conference, AEO will hold grants guidance twice a year during PY 2024. Training for program management and fiscal staff will be provided as well as training identified as needed for technical staff, possibly offering CEUs. A grants guidance was held in July 2024.

For PY 2024, AEO now has a DOE Fellow, Kristen Wright Pounds. Kristin started on August 1, 2024 and has the primary task of procuring and bringing training to Arkansas for WAP. To capture all training needs, a T&TA log for each staff person working in weatherization is now required. The log contains training received and upcoming training needs.

Support of on-the-job training:

AEO requires that weatherization field staff new to the job are supervised by trained and certified staff until such time that skills are demonstrated satisfactorily and any required certifications are completed.

Planning for industry-wide initiatives and future program requirements:

AEO strives to keep abreast of industry standards through attendance at national conferences and to include these areas in Arkansas training requirements. In addition, AEO has established in-state connections; for instance, a relationship exists for training opportunities with the AR HVACR Association.

For PY 2024, Janice Ivory, AEO Weatherization Manager, and Wendy Ryan, AEO Weatherization Technical Coordinator, are registered for the NASCSP 2024 Annual Training Conference being held September 16-20, 2024, in Memphis, Tennessee.

During the planning for PY 2024, AEO will reach out to home industry trainers as needs are identified. In addition, AEO will partner with statewide home performance industry professionals on training issues.

Use of effective and energy savings evaluations to develop training:

ECOS generates energy savings data from each job that provides snapshots of savings by different variables. In PY 2024, AEO will work with JAI to generate useful reports, such as the range of energy savings from common energy efficiency measures and quarterly and annual DOE reporting. AEO will seek consultation on using this data to guide development of specific and comprehensive training and assessment of effectiveness.

AEO intends to use as measures of effectiveness (1) job analysis and energy auditor's judgment/justifications, (2) the timeliness of completion rates for houses audited, (3) a review of reasons for deferral, and (4) measurement of energy savings.

Grantee effectiveness: AEO uses the resources of NASCSP for training and information relevant to implementing and administering the grant. AEO budgets for attendance at these and other conferences.

Arkansas Health & Safety Plan:

In 2019, AEO utilized the DOE Health & Safety (H&S) template as its guide in developing the Arkansas H&S Plan. The template was populated with DOE and Arkansas H&S requirements and was reviewed by The WAP technical committee. The technical committee met on three (3) occasions to complete the H&S Plan. It was finalized and approved by DOE in the fall of 2019. In 2022, the Health & Safety Plan was crosswalked with WPN 22-7. The current Health & Safety Plan for PY 2024 was updated and is attached to the SF-424.

Client Education:

Client education is built into auditing and inspecting and is considered an important part of the weatherization process. There are specific forms to document the information given to and discussed with the client in the home.

AEO encourages subgrantees to budget for materials that each agency considers useful in educating clients. For the past four (4) years, AEO has provided a specific training session on communications which is designed for weatherization staff in the office and in client homes to learn to communicate more effectively with clients. Subgrantees are encouraged to respond to outreach requests and most are presenters in the LIHEAP Assurance 16 program in which clients learn household management skills, including energy efficiency practices.

Arkansas Mentoring Program:

Approved for PY 2022, continued in PY 2023, and continuing in PY 2024, the Arkansas WAP mentorship program is a creative effort to support recruitment, efficient onboarding, and career advancement at the subgrantee level.

The mentorship program consists of:

- Staff who currently work for WAP but not in the technical part of the program, or who are hired from outside to work in WAP without EA and QCI certification, must express interest in becoming a QCI mentee.
- The QCI Job Task Analysis will be reviewed with the mentee in order to define the scope of work that will be part of the learning curve leading to EA and QCI certification.
- The mentee will work alongside energy auditor and QCI mentors to learn the tasks that are necessary for passing the written and field tests for EA and QCI.
- At the point that the energy auditor and QCI rate the mentee as proficient to work alone, the mentee will complete inspections that must be reviewed and approved by the certified QCI. The mentee will utilize video or virtual technology to document the steps in the inspection he/she completed; the certified QCI will review and sign off on the mentee's inspection on the WAP08.
- As a mentee, a minimum of ten (10) audits performed with modeling in software and ten (10) inspections must be completed independently and approved by the certified mentors. Approval will be granted by on-site or virtual review of mentee performance. Both the mentee and certified QCI are required to sign the Arkansas inspection form, WAP08.
- In addition, Arkansas WAP will bring in qualified trainers from IREC accredited training centers to provide classes for mentees and others on the following topics: building science, building/envelope analysis, mobile homes, and installer. These classes will be offered in various regional locations so that mentees from all subgrantees can easily attend. One of these classes will be taught at least every other month while mentees are receiving on-the-job training and advancing to completion of independent inspections. Mentees without construction experience will be required to take the installer class while others with verified construction experience will not.
- AEO WAP will inspect at least ten percent (10%) of completed units where a subgrantee has an ongoing mentorship program.
- Arkansas expects that a minimum of six (6) months will be necessary to prepare a mentee to take the Energy Auditor and QCI exams.