Guide to Integrating the Weatherization Assistance Program (WAP) with Home Electrification and Appliance Rebates (HEAR)

January 2025







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INTRODUCTION

GUIDE TO INTEGRATING WAP + HEAR

This guide is provided for States and Indian Tribes interested in pursuing an integrated program design for their US Department of Energy (DOE) Weatherization Assistance Programs (WAP) and Home Electrification and Appliance Rebates (HEAR) Programs, aka IRA Section 50122 funds.

The content in this guide provides a framework and some key considerations for states to design their respective WAP + Rebates delivery approaches in ways that are both legal and practical.

Please note that the material presented is inexhaustive and is meant to be a support resource for states designing their HEAR Program. States are *strongly* advised to follow the respective program requirements and guidance for HEAR and WAP, as well as to consult their DOE Project Officer for the most up to date information on WAP + HEAR Integration.

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HOW TO USE THIS GUIDE TO INTEGRATING WAP WITH HEAR



Getting Started: Integrating the Weatherization Assistance Program (WAP) with Home Electrification and Appliance Rebates (HEAR)

January 2024

This document is intended to help State Energy Offices (SEOs)[1] consider implementing an integrated program design for the Home Electrification and Appliance Rebates (HEAR)[2] Program and their state's Weatherization Assistance Program (WAP).[3] Integrating WAP and HEAR is a great opportunity to deliver deep home energy retrofits for low-income households. However, states must intentionally design integrated delivery of the two programs to achieve meaningful energy savings and ensure that upgrades meet the specific requirements of each program.

While only State Energy Offices are the authorized formula grant recipients of HEAR, states administer WAP funding through of a variety of state-level agencies.[4] As such, HEAR integration may require a coordinated effort between different state agencies.

DOE staff are available to assist states with designing an integrated WAP and HEAR approach. ***Please contact your Home Energy Rebates Project Officer to request this technical assistance.***

Overview of WAP

The purpose of WAP is to increase the energy efficiency of dwellings owned or occupied by low-income persons, or to provide such persons with 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. WAP provides core program formula grants to 57 Grantees, which include 50 states, US territories, the District of Columbia, and Tribal Organizations. WAP Grantees contract with approximately 700 local organizations nationwide that consist of community action agencies (CAAs, or "CAP Agencies"), or other public or nonprofit entities that are identified as Subgrantees to DOE. These Subgrantees identify eligible households, assess the households for suitability, and use energy audits to determine appropriate energy efficiency measures (such as insulation and air sealing) for installation. Subgrantees use a mix of in-house crews and contractors to perform the weatherization services for low-income households.

[1] In this document "States" means "States, U.S. territories, and the District of Columbia" unless otherwise indicated.
[2] See 42 U.S.C. 18795a(c)(1) for the statutory language that governs the HEAR Program.
[3] See Weatherization Assistance Program guidance on the DOE program webpage.
[4] WAP provides a tool to identify state weatherization administrators by state.

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HOW TO USE THIS GUIDE

GETTING FAMILIAR WITH INTEGRATING WAP AND HEAR

Getting Started: Integrating WAP with HEAR

This resource provides a starting point for States considering integration of WAP + HEAR. Prior to use of this guide, States and Tribes may benefit from reviewing this content as background information on the programs.

Link to resource: https://www.energy.gov/scep/articles/getting-started-integrating-weatherization-assistance-program-wap-home

USING THE CORRESPONDING RESOURCES WITH THIS GUIDE

There are three supplemental resources that correspond to this guide. It is recommended to review, use, and reference these three resources throughout the use of this guide, as they provide a framework and additional considerations for an effective integrated approach.

A. WAP + HEAR Integrated Approach Template with Prompts and Checklists

States can use this optional template to create a 9-step design of a WAP + HEAR Program. For each of the nine steps, key considerations and additional details for the integration process are outlined in this guide.

B. WAP + HEAR Funding Types and Allowable Activities

This document provides the types of funding and allowable activities for WAP and HEAR. This resource can be referenced for the “Funding Source(s) Used” Column in the WAP+ HEAR Template (A).

C. Guidelines for Utilizing WAP Energy Modeling with HEAR

This short document provides instructions on how to conduct a WAP energy audit and create an acceptable WAP scope of work that incorporates HEAR-funded measures, with a Savings to Investment Ratio (SIR) of > 1.

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SIMPLIFIED DIAGRAM OF A WAP + HEAR INTEGRATED APPROACH

These diagram slides can be used as a reference resource while filling out the 9-step WAP + HEAR integrated approach template or while reviewing the detailed information within this guide.

SIMPLIFIED WAP & HEAR EXAMPLE PROCESS FOR A SUBGRANTEE (STEPS 1-4)

Step 1 Outreach, Targeting, Prioritization

Step 1a.) Conduct outreach to households in compliance with the state's integrated approach that aligns WAP eligibility thresholds and WAP recipient prioritization procedures with HEAR requirements and program design.

Step 1b.) Invoice the time/labor expended for outreach activities with HEAR administrative funds or project-related costs, as needed (depends the state's HEAR budget).

Step 2 Intake & Verifying Income Eligibility

Step 2a.) Process intake once local WAP subgrantee submits completed application through the state's streamlined procedures for a household to qualify for HEAR when they apply for WAP.

Step 2b.) Verify income eligibility for low-income households that qualify for 100% of qualifying costs through categorical eligibility (if 200% FPL < 80% AMI) and/or manually check the household's income to ensure it is below both 200% FPL and 80% AMI.

Step 2c.) Invoice time expended by WAP subgrantee staff to verify for HEAR income eligibility to HEAR project-related costs.*

Step 3 Energy Audit/Limited Assessment

Step 3a.) Collect Data based on the existing conditions of the home, including the additional data points to meet HEAR requirements.

Step 3b.) Modelling to calculate energy savings, SIRs, and HVAC sizing (as needed). Identify Incidental Repair Measures (IRMs) and Health & Safety Measures (H&S).

FS

If fuel-switching, subgrantees will need to follow their state's approved process, which may follow DOE WAP guidance. If state requirements do not include WAP approval for fuel switching, subgrantees must model Utility Bill Impact and collect consumer acknowledgement, as required by HEAR.

Step 4 Submit Scope of Work

Step 4a.) Assign Funding Sources for each measure.

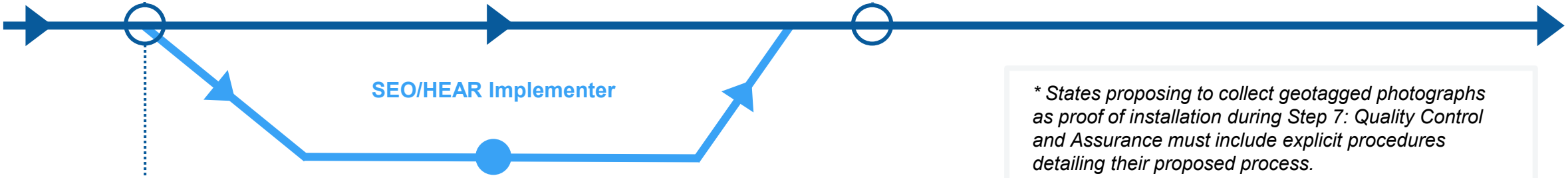
Step 4b.) Assign Qualified Contractors for each measure from Eligible Installer List, with considerations for WAP-specific eligible contractor list and HEAR-specific qualified contractor list.

** See full list of eligible "Activities directly related to delivery of rebates" on p13: Home Energy Rebates Program Requirements and Application Instructions*

SIMPLIFIED WAP & HEAR EXAMPLE PROCESS FOR A SUBGRANTEE (STEPS 5-6)

Step 5 HEAR Rebate Reservation

Step 5a.) Submit rebate reservation | WAP Subgrantee submits to SEO or State HEAR Implementer: Claimant Details, Contractor Details (where applicable), Home Details, Proposed Upgrade categories. SEOs/HEAR Implementers may also require submission of the Limited Home Assessment information.



Step 5b.) Reserve rebate | SEO/HEAR Implementer ensures rebate reservation is generated with Coupon and Notice that shows:

- Max approved rebate amount
- Rebate bucket (Low/Mod Income)
- Product type(s)
- Address ID
- Applicant ID
- DAC status
- Coupon expiration date

Step 6 Measure Installation

Step 6a.) Install | Subgrantee/contractor installs measures. For HEAR measures, must provide for post-installation geotagged photograph/proof of installation.*

Step 6b.) Safety testing | Subgrantee/contractor performs safety testing (when necessary).

Step 6c.) Upgrade recipient invoice and sign off | Local subgrantee/contractor provides invoice** to Building Owner, as needed. Recipient signs off on the work completed (may be included with final WAP sign-off forms).

** States proposing to collect geotagged photographs as proof of installation during Step 7: Quality Control and Assurance must include explicit procedures detailing their proposed process.*

*** Itemized invoice for HEAR must include:*

- *Total cost*
- *Equipment cost(s)*
- *Material costs*
- *Rebate amount applied to equipment/ material costs*
- *Labor Rebate amount applied to labor/install costs (where applicable)*

SIMPLIFIED WAP & HEAR EXAMPLE PROCESS FOR A SUBGRANTEE (STEPS 7-9)

Step 7 Quality Control and Assurance

Step 7a.) Installation inspection | Quality Control Inspector (QCI) conducts WAP project inspection for every home where a job is completed. Third party inspector completes HEAR inspections, as needed (certain number of jobs based on the contractor, i.e., first 5 of a contractor's jobs and 5% of their jobs after).

Step 7b.) Grantee Monitor | State WAP Monitoring Team conducts monitoring inspections on 5-10% of projects. If needed, this team can also complete the "3rd Party" inspections of HEAR measures.

Step 9 HEAR Rebate Payment Issuance

Step 9a.) WAP payment | Subgrantee submits the WAP project invoices for work performed and receives payment following the state plan.

Step 9b.) Rebate redemption | Subgrantee/contractor receives the rebate that is issued according to their respective SEO/ HEAR Implementer's process for rebate redemption and distributes the HEAR rebate reimbursement and contractor incentives.

Step 9c.) Consumer survey | Subgrantee/contractor issues the HEAR consumer satisfaction survey to claimant.

Step 8 Final Data Collection

Step 8a.) WAP data collection | Subgrantee ensures all required elements of a WAP client file are collected. Subgrantee submits to the WAP Grantee/SEO/HEAR Implementer the Proof of Upgrade Completion, including 1.) Installation attestation, 2.) Invoice, 3.) Purchase receipt, and 4.) Quality installation documentation.

Step 8b.) HEAR data reporting | Grantee/SEO/HEAR Implementer submits to DOE all HEAR-required data elements as detailed in the Data and Tools Requirement Guide, Table 7 and Table 11.

Step 8c.) Document retention | Grantee/SEO/HEAR Implementer retains required project information as compliant to their state's WAP and HEAR data retention policies, as well as 2 CFR 200.334 through 200.338.

STEP BY STEP CONSIDERATIONS AND SAMPLE RESPONSES

For use with the WAP + HEAR Integrated Approach Template



STEP-BY-STEP CONSIDERATIONS

The content in this section provides considerations for each of the nine steps of the optional WAP + HEAR integrated approach template.

As you navigate the content, please note that there are headings and sub-headings in the top-left corners to denote **A.) the relevant program** and **B.) the relevant step** in the example approach.

Example slide



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STEP 1

Outreach, Targeting, and Prioritization

WAP PRIORITIES FOR SERVICE

WAP Grantees and Subgrantees may target their services to maximize program effectiveness.

Per DOE regulations, Grantees must have a procedure to ensure the following clients have priority to receive services:

- The elderly
- Persons with disabilities
- Families with children
- High residential energy users
- Households with a high energy burden



Left side photos from Google; right side photos from Weatherization Network

HEAR OUTREACH AND TARGETING REQUIREMENTS

Outreach Requirements

All States must have the following as part of their HEAR program:

- Answers in application relevant for outreach:
  - ❑ Q60 on “proactive steps to encourage integration with other programs”
  - ❑ Q61 on “supporting households, contractors, and other stakeholders in understanding how the State program may leverage other resources.”
- Education & Outreach Plan
- Community Benefits Plan, including Community + Labor engagement

Targeting Requirements

All States must reserve the following as part of their HEAR program:

- ~40% of rebate funds for low-income households
- 10% of rebate funds for low-income multifamily households

All States must adopt a definition of “disadvantaged communities” and must make efforts to encourage delivery of rebates to these communities.

SAMPLE TEMPLATE RESPONSE

STEP 1: OUTREACH, TARGETING, PRIORITIZATION

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› Grantee sets prioritization list as part of its state's WAP plan	› WAP Grantee Admin
WAP: Subgrantee-level	› Local subgrantees perform community outreach and engagement activities.	› WAP Program Operations
HEAR	› HEAR team references the state's WAP prioritization list(s) in its Education and Outreach Plan and/or Community Benefits Plan › State references outreach activities conducted by local subgrantees in its Education and Outreach Plan and/or Community Benefits Plan	› HEAR Admin Funds, can supplement time from local subgrantees for outreach if needed

Integration Details: HEAR team builds on the priority list(s) included in the state's WAP plan and emphasizes these populations as targets for rebates. HEAR team also designs their outreach to disadvantaged communities and low-income households to be completed via WAP subgrantees.

STEP 2

Intake and Verifying Income Eligibility

STEP 2: INTAKE AND VERIFYING ELIGIBILITY

WAP ELIGIBILITY

Every dwelling weatherized under the Weatherization Assistance Program must meet the requirements for both **Client eligibility** and **Building eligibility.**

Client Eligibility

Income eligibility must be in accordance with DOE regulations and the Grantee State Plan. The household must be qualified by one of the following:

- **A** At or below **200% of the Federal Poverty Level (FPL)**, relevant to size of the family.
- **B** Eligible for **supplemental cash assistance payments** under Title IV or Title XVI of the Social Security Act, or
- **C** Eligible for **LIHEAP,** which may be as high as 60% State Median Income.
  - If the Grantee elects, income eligibility can be determined if the household is eligible for one of the following:
    - **HUD means-tested programs,** *ranging from 30-80% AMI*
    - **USDA means-tested programs,** *ranging from 30-80% AMI*

WAP Eligibility

Building Eligibility

When determining building eligibility, Grantees should consider the following:

- **Re-weatherized units** | WAP prohibits re-weatherization for 15 years
- **Rental Units** | WAP's regulations and application requirements include permission from building owner.
- **Weatherization readiness** | Eligible structure must be weatherization ready before measures can be installed using WAP.
- **Housing type*** | The following are eligible for the Weatherization Assistance Program:
  - **Single Family** *Either Owner-occupied or Renter-occupied*
  - **Manufactured Housing** *Either Owner-occupied or Renter-occupied*
  - **Multifamily buildings**

**Shelters, if it is in the State Plan, can be weatherized but there are some restrictions around what constitutes a "shelter." See annual guidance, currently WPN 24-1-Application Instructions. DOE does not allow weatherizing "campers," etc.*

WAP INTAKE AND ELIGIBILITY REQUIREMENTS SUMMARY

- Grantees must have a **clear procedure** for their Subgrantees to prioritize clients.
- Grantees are required to provide a description within their Grantee Plan of what **documentation is needed to demonstrate a specific dwelling and client are eligible**.
- Gathering the **required documentation** is critical to identifying eligible clients.
- **Building-level information** also must be reviewed (housing type, re-weatherization, etc.) to determine whether they are eligible for weatherization.



STEP 2: INTAKE AND VERIFYING ELIGIBILITY

HEAR ELIGIBILITY

HEAR has the following income eligibility requirements for households:

- **Households at <80% AMI**: rebates cover up to full cost of measures / maximum rebate
- **Households at 80–150% AMI**: rebates cover up to half cost of measures / maximum rebate

Rebates for projects under HEAR can only be provided to income-qualified households under the following circumstances:

1. As part of new construction
2. To replace a nonelectric appliance
3. As a first-time purchase with respect to that appliance funding

Maximum HEAR Funding by Eligible Measure

Upgrade Type	Qualified Product	Rebate Amount Not to Exceed
Appliance	Heat Pump Water Heater	$1,750
Appliance	Heat Pump for Space Heating and Cooling	$8,000
Appliance	Heat Pump Clothes Dryer	$840
Appliance	Electric Stove, Cooktop, Range, or Oven	$840
Building Materials	Electric Load Service Center	$4,000
Building Materials	Insulation, Air Sealing, and Ventilation	$1,600
Building Materials	Electric Wiring	$2,500
Maximum Rebate		$14,000

See Table 7: Product Service Rebates and Rebate Limitations Home Energy Rebates Program Requirements and Application Instructions, pg. 54.

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80% AMI (for HEAR) vs 200% FPL (for WAP)

In areas where 80% AMI is > 200% FPL, households are categorically eligible for the lower-income rebate amounts if they are eligible for WAP (typically urban areas)

In areas where 80% AMI is < 200% FPL, programs must check household income to ensure they are eligible for lower-income rebate amounts (typically rural areas)

PNNL created a tool to compare 200% FPL to AMIs for each area in a state: https://view.officeapps.live.com/op/view.aspx?src=https%3A%2F%2Fwww.pnnl.gov%2Fsites%2Fdefault%2Ffiles%2Fmedia%2Ffile%2F2024_AMI_80_Compared_to_200_FPL_240405_Update.xlsx&wdOrigin=BROWSELINK

State_Name	USPS_State_Abbr	USPS_State_Code	County_Name	County_Code	County_or_Town_Name	Household of 1	Household of 2	Household of 3	Household of 4	Household of 5	Household of 6	Household of 7	Household of 8
Vermont	VT	50	Bennington County	3	Stamford town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE
Vermont	VT	50	Bennington County	3	Sunderland town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE
Vermont	VT	50	Bennington County	3	Winhall town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE
Vermont	VT	50	Bennington County	3	Woodford town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE
Vermont	VT	50	Caledonia County	5	Barnet town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE
Vermont	VT	50	Caledonia County	5	Burke town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE
Vermont	VT	50	Caledonia County	5	Danville town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE
Vermont	VT	50	Caledonia County	5	Groton town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE
Vermont	VT	50	Caledonia County	5	Hardwick town	TRUE	TRUE	TRUE	TRUE	TRUE	TRUE	FALSE	FALSE

SAMPLE TEMPLATE RESPONSE

STEP 2: INTAKE AND VERIFYING INCOME ELIGIBILITY

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› Grantee enforces the existing policies and processes to ensure that the rebate amount is correct and aligns with the verified income category.	› WAP Grantee Admin
WAP: Subgrantee-level	› After a household completes WAP application, local subgrantee verifies that the household has eligible income and refers household to colleagues for energy audit.	› WAP Program Operations › HEAR Project-related Costs for extra work needed to verify income eligibility
HEAR	› HEAR team works with the state WAP team (or relevant subgrantee) to add application steps / process to the standard WAP intake process. › HEAR team works with PNNL to set up rebate reservation tool with categorical eligibility for places where 200% FPL < 80% AMI. › If located in places without categorical eligibility for low-income households that qualify for 100% of qualifying costs to be covered by rebates (i.e., where 80% AMI < 200% FPL), HEAR team works with state WAP team to train subgrantees to check if household income is <200% FPL and <80% AMI.	› HEAR Admin Funds to create standard intake process

Integration Details: HEAR team will work with the state WAP team and/or subgrantees to create a single application process that also qualifies a household for rebates when they are applying for WAP. This will either use categorical eligibility for the income eligibility or a check of the household's income to ensure it is below 200% FPL and 80% AMI.

STEP 3

Energy Audits & Limited Home Assessments

WAP ENERGY AUDIT REQUIREMENTS

Every WAP Grantee must utilize an “approved” energy audit “procedure” that consists of an electronic energy audit software tool, as well as written procedures to direct the energy audit.

The written procedures include how to implement the approved Grantee Health and Safety Plan.

WAP approved Energy Audit Software must be able to:

- ✓ **Estimate the energy use** of a dwelling and all its related components (envelope, mechanical, baseload) based on location specific climate data and either site-specific utility costs or generally accepted engineering practices.
- ✓ **Select and rank Energy Conservation Measures (ECM)** for individual homes (dwelling units).
  - ✓ Calculate the energy savings for each proposed measure and package of measures
  - ✓ Discounting rate to present value
  - ✓ Including Incidental Repair Measures (IRM)
- ✓ **Prioritize the measures** to be installed based on interacted energy savings (SIR).

HEAR PRE-INSTALLATION LIMITED HOME ASSESSMENT REQUIREMENTS

States are required to conduct a “limited home assessment” prior to installation of Qualified Electrification Projects (QEPs) that include any electric heat pump for space heating and cooling.

A **limited home assessment** consists of, at a minimum:

- Data collection consistent with Section 3.2 of the Data & Tools Requirements Guide.
  - **Electrical Panel Max Amps is datapoint not included in WAP**
- A recommendation of a properly sized unit recommended by **a qualified contractor for HVAC**, if applicable.
- An onsite visual inspection of **the existing condition of duct sealing for HVAC & envelope**.
- If the upgrade includes a fuel switch, an estimate of **utility bill impacts** and **written acknowledgement** by the consumer.
- **Written acknowledgement** from the consumer of the amount they will owe not covered by the rebates.
- If the upgrade falls within one of the state’s pre-defined set of home pre-condition(s) and/or scope of work scenario(s) that will constitute unacceptable risk of raising utility bills, an estimate of **utility bill impacts** and written acknowledgement by the consumer.

Table 12: Required Limited Assessment Inputs for Section 50122 HVAC

	Category	User Inputs	Required for Limited Assessment
1	General	Address	X
2	General	Assessment date	X
3	General	Home Year built	X
4	General	Conditioned floor area	X
5	General	Electrical panel max amps (If adding electrical load)	X
6	Envelope	Professional whole home air sealing (yes / no)	X
7	Envelope	Type of attic insulation	X
8	Envelope	Attic insulation R-value	X
9	HVAC	Fraction of conditioned floor area served by each heating/cooling system	X
10	HVAC	Heating system fuel (for each system)	X
11	HVAC	Heating system type (for each system)	X
12	HVAC	Heating system efficiency or year installed for pre-retrofit (for each system)	X
13	HVAC	Cooling system type (for each system)	X
14	HVAC	Cooling system efficiency or year installed for pre-retrofit (for each system)	X
15	HVAC	Ducts sealed (yes / no)	X
16	HVAC	Ducts insulated (yes / no)	X
17	HVAC	Whole Home ventilation system type (supply, exhaust, balanced, CFIS, ERV, HRV)	X
18	HVAC	Whole Home ventilation system rated flow rate (CFM)	X

See Table 12: Required Limited Assessment Inputs for Section 50122 HVAC on Data & Tools Requirements Guide, pg. 61.

COMPARING WAP ENERGY AUDIT AND HEAR LIMITED HOME ASSESSMENT

Data collection is mostly the same for both WAP and HEAR, apart from 50122-specific requirements for states' consideration.

- **Electric panel max amps (5) – <u>not</u> included in the WAP Energy Audit or ventilation analysis**
- **Whole home ventilation system type (17)** – included in required WAP ventilation analysis
- **Whole home ventilation system rated flow rate (18)** – included in required WAP ventilation analysis

See 50122 Data & Tools Requirements Guide, Table 6. Numbers in parenthesis above are reference numbers to table index. IRA Home Energy Rebates: Data And Tools Requirements Guide | Department of Energy

WAP + HEAR COMPARISON FOR FUEL-SWITCHING

Both WAP and HEAR programs have requirements when a heat pump is impacted by the upgrade and/or when fuel-switching occurs.



Energy audit

Both WAP and HEAR require energy audits when fuel switching



Customer utility bills

Both WAP and HEAR require **utility bill impact modeling** and **written consumer acknowledgement** when fuel-switching.

For WAP Grantee-level approval processes, Grantees must submit customer utility bills as supporting documentation.

See Section 4.2.4 of the Program Requirements and Application Instructions.

WAP + HEAR KEY CONSIDERATIONS: FUEL-SWITCHING

Fuel Switching Approval

- WAP approval for fuel-switching measures **is not required when using HEAR funds**, provided that no WAP funds are expended for the purchase and installation of the fuel switching measure itself.
- This allows greater flexibility in implementing fuel-switching projects without explicit WAP approval, if the measures purchased and installed are solely funded through HEAR.

Funding Restrictions

- Measures paid for with HEAR funds **may not be also funded** (or “co-funded”) with any other federal grant or rebate funds, including WAP. *See these guidelines for more details, which are also included on slide 71.*
- Local WAP Agencies must carefully **track and document** the funding sources for each measure to avoid any co-mingling of funds.
- This restriction prevents the duplicate use of federal funds and ensures compliance with each program's guidelines.

SAMPLE TEMPLATE RESPONSE

STEP 3: ENERGY AUDITS & LIMITED HOME ASSESSMENTS

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› Grantee determines method of approval for energy audit modelling to include fuel-switching (either universal coverage or “case-by-case”). Grantee can also decide to not fund fuel switching measures with WAP funds and not need any additional approvals	› WAP Grantee Admin
WAP: Subgrantee-level	› Local subgrantees conduct WAP energy audit using standard process, maintains data in a way that is compliant with HEAR requirements	› WAP Program Operations › HEAR Project-related Costs
HEAR	› HEAR team integrates WAP energy audit into its answers for utility bill risks (Q54) and into the Consumer Protection Plan › HEAR team ensures that WAP Grantee and subgrantee understand what data needs to be maintained for rebates requirements. › HEAR team ensures that WAP subgrantees / contractors are included on the state’s qualified HVAC contractor list. › Local subgrantee collects additional info on the Electrical Panel Max Amperage	› HEAR Admin Funds for updating application answers, setting up qualified contractor list

Integration Details: HEAR team uses the standard WAP energy audit process to collect and maintain the necessary “Limited Home Assessment” data, provide a recommendation on the properly sized HVAC unit, and receive written acknowledgement from the customer of potential utility bill impacts.

STEP 4

Submit Scope of Work

WAP + HEAR KEY CONSIDERATIONS: CREATING A SCOPE OF WORK IN A WAP ENERGY MODEL

WAP Energy Modeling Requirements

Energy Model and Savings to Investment Ratio (SIR)

- ✓ Any Energy Conservation Measure (ECM) installed using HEAR funds **must be included in the energy model** as an ECM with a measure SIR.
- ✓ Only Incidental Repair Measures (IRMs) **paid for with WAP funds must be included in the Savings to Investment Ratio** (SIR) calculation of the total package of weatherization measures.
- ✓ Health and Safety Measures (H&S) and Weatherization Readiness Funds measures (WRF) **do not need to be included** in the energy model or SIR calculations, **unless they directly result in energy savings** (e.g., heat pump water heater replaced for health and safety reasons).

Appropriate funding sources (WAP, HEAR, Low Income Home Energy Assistance Program (LIHEAP), etc.) should be selected for each measure only after the energy modeling has been completed and the individual measures and package of measures have been assigned an SIR value.

STEP 4: SUBMIT SCOPE OF WORK

WAP MEASURE ELIGIBILITY FOR SCOPE OF WORK

Selected Measures	Measure Cost	Measure SIR	Package SIR
WRE – Roof Replacement	$13,000	WRF = 0	N/A
IRM – Electric Load Center Upgrade	$5,500	IRM = 0	TBD
IRM – Electric Wiring Upgrade	$2,500	IRM = 0	TBD
Attic Insulation	$2,650	3.5	3.5
Heat Pump Water Heater	$2,500	2.5	3.1
Air Sealing	$1,100	1.9	2.9
Wall Insulation	$3,800	1.7	2.3
Floor Insulation	$2,700	1.6	1.9
Low Flow Showerheads	$75	1.5	1.9
DWH Tank Insulation	$80	1.2	1.8
Refrigerator Replacements	$850	1.1	1.7
Duct Sealing	$750	1.0	1.6
Duct Insulation	$1,200	0.9	1.5
Install Heat Pump	$9,200	0.6	1.3
DWH Pipe Insulation	$135	0.4	1.3
Low E Windows	$4,750	0.3	1.1
H&S – Electric Stove/Oven	$1,100	H&S = 0	N/A
H&S – Ventilation Fans (ASHRAE)	$1,600	H&S = 0	N/A

Heat pump HVAC and DWH electric upgrades. Only eligible for WAP IRM funds if the repairs are required for a WAP funded measure. Eligible for any other funding source that allows it (Utility, HEAR, etc.)

If funded by WAP, must be included in package SIR. If funded with HEAR or other source, *not* included in package SIR.

Measure SIR of less than 1.0 but with package SIR of 1.0 or greater qualify for leveraged funds from other sources (i.e., HEAR or LIHEAP).

Roof Replacement using DOE Weatherization Readiness Funds (WRF), per Grantee plan.

Measure SIR of 1.0 or greater qualify for WAP funding *and* leveraged funds from other sources (i.e., HEAR or LIHEAP)

H&S measures which qualify for HEAR funding, or DOE H&S funding, or other leveraged funds as allowed by funding source (e.g., LIHEAP).

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STEP 4: FINAL PROJECT BUDGET SAMPLE

					DOE WAP	LIHEAP WX	Utility	HEAR	DOE WRF	Totals	Contractor Assignment
Selected Measures	**Measure Cost**	**Measure SIR**	**Package SIR**	**Max DOE Cost Share**	**$ 9,000**	**$ 9,000**	**$ 6,000**	**$ 14,000**	**$ 20,000**	**$ 58,000**	
WRF - Roof Replacement	$ 13,000.00	WRF = 0	N/A						$ 13,000	$ 13,000	Roofer
DOE IRM - Door Repair	$ 250.00	IRM = 0	0.0		$ 250					$ 250	CAA Subgrantee
DOE IRM - Patch Exterior Siding	$ 500.00	IRM = 0	0.0		$ 500					$ 500	CAA Subgrantee
ECM - Attic Insulation	$ 2,650.00	3.5	2.5			$ 2,650				$ 2,650	CAA Subgrantee
ECM - Heat Pump Water Heater	$ 2,500.00	2.5	2.3				$ 750	$ 1,750		$ 2,500	Plumber
ECM - Air Sealing	$ 800.00	1.9	2.1					$ 800		$ 800	CAA Subgrantee
ECM - Wall Insulation	$ 3,800.00	1.7	2.0		$ 3,000	$ 800				$ 3,800	CAA Subgrantee
ECM - Floor Insulation	$ 2,700.00	1.6	1.9		$ 1,000	$ 1,700				$ 2,700	CAA Subgrantee
ECM - Low Flow Showerheads	$ 75.00	1.5	1.9		$ 75					$ 75	CAA Subgrantee
ECM - DWH Tank Insulation	$ 80.00	1.2	1.8		$ 80					$ 80	CAA Subgrantee
ECM - Refrigerator Replacements	$ 850.00	1.1	1.7		$ 850					$ 850	CAA Subgrantee
ECM - Duct Sealing	$ 750.00	1.0	1.6		$ 750					$ 750	CAA Subgrantee
ECM - Duct Insulation	$ 1,200.00	0.9	1.5	$ 1,080.00	$ 800		$ 400			$ 1,200	CAA Subgrantee
ECM - Install Heat Pump	$ 7,500.00	0.6	1.3	$ 4,500.00			$ 1,690	$ 5,810		$ 7,500	HVAC
ECM - DWH Pipe Insulation	$ 135.00	0.4	1.3	$ 54.00	$ 50	$ 85				$ 135	CAA Subgrantee
ECM - Low E Windows	$ 4,750.00	0.3	1.1	$ 1,425.00	$ 1,350	$ 3,100	$ 300			$ 4,750	CAA Subgrantee
DOE H&S - CO/Smoke Alarms	$ 185.00	H&S = 0	N/A		$ 185					$ 185	CAA Subgrantee
HEAR H&S - Electric Stove/Oven	$ 840.00	H&S = 0	N/A					$ 840		$ 840	Electrician
HEAR H&S - Ventilation Fans (ASHRAE)	$ 800.00	H&S = 0	N/A					$ 800		$ 800	Electrician/HVAC
HEAR IRM - Electric Load Center Upgrade	$ 4,000.00	IRM = 0	N/A				$ 2,000	$ 2,000		$ 4,000	Electrician
HEAR IRM - Electric Wiring Upgrade	$ 2,500.00	IRM = 0	N/A				$ 500	$ 2,000		$ 2,500	Electrician
Totals	**$ 49,865**				$ 8,890	$ 8,335	$ 5,640	$ 14,000	$ 13,000	$ 49,865	

Color Key
DOE WAP Only
Braided (Leveraged) Funds
WAP Co-Funded Measures
HEAR Rebate Measures

- All ECMs are included in the energy audit results, regardless of the funding source.
- Only IRMs paid for with WAP funds are included in the package SIR calculation.
- H&S and WRF costs are not included in the package SIR calculation.
- HEAR may co-fund measures where non-federal funds (i.e., utility) are the other cost share.

SAMPLE TEMPLATE RESPONSE

STEP 4: SUBMIT SCOPE OF WORK

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› *No WAP Grantee work needed for this step in this example.*	› *N/A*
WAP: Subgrantee-level	› Create Scope of Work (“SOW”) from energy assessment data, including measure costs and SIRs. › Identify which measures are IRMs, WRF, and H&S (special categories of WAP funding). › Identify funding sources to be used for each measure	› WAP Program Operations
HEAR	› During WAP Scope of Work process, run package analysis in a “funding-agnostic” manner that considers the outcomes with measures regardless of the funding source(s). Then assign funding sources, including items funded by HEAR, that provides the most measures while still ensuring that the retrofit package has a Savings to Investment Ratio of < 1.0.	› N/A: In this instance, Subgrantee can use WAP program operations funds to see the results of the two different SOW runs, since this is a WAP-required step.

Integration Details: The WAP Subgrantee completes a standard Scope of Work for the Weatherization project, analyzing which list of measures are eligible to be funded while ensuring the package SIR is still >1. The WAP subgrantee assigns HEAR funding for the HEAR eligible measures (with additional funds from LIHEAP or a utility EE program if needed and available).

STEP 5

HEAR Rebate Reservation

HEAR REBATE RESERVATION CONSIDERATIONS

Data required for the SEO/HEAR Implementer to generate a HEAR rebate reservation is collected from the Intake and the Energy Audit/Limited Home Assessment process. Less data is required than for the rebate redemption/reimbursement issuance process.

Relevant considerations for HEAR Rebate Reservation Process's Required Data Elements

- **Income Eligibility**: SEO/HEAR implementer will check a Y/N attestation box that income verification is complete to determine rebate levels.
- **Product Details:** Only product category is required for rebate reservation. Product specifications will be required for rebate redemption.
- **Contractor Information:** Company name and contractor name will be required to be collected by the SEO/HEAR Implementer during the rebate redemption process, but it is not collected by the DOE for rebate reservation.

HEAR REBATE RESERVATION CONSIDERATIONS (CONT'D)

The data required to generate a HEAR rebate reservation will depend on the state's decided method of reporting, which is one of two ways:

Method A. Real-time Reporting

DOE/PNNL Rebate Tracking System, DOE will automatically receive this data via the DOE/PNNL Main API at the time of each transaction.

- States need to provide the data required for real-time API reporting upfront to reserve rebates.
- Rebate reservation would be required prior to proceeding with installation.

Method B. Batch Monthly Reporting

States must submit this data monthly (on the last day of the month) via the DOE/PNNL Main API or a DOE/PNNL standardized spreadsheet.

- Rebate reservation is less likely to affect the sequence of measure installation, as coupon notices are generated from the monthly batch.
- States will need to determine a rebate reservation process that aligns with the respective state's tools and processes utilized for monthly reporting.

SAMPLE TEMPLATE RESPONSE

STEP 5: HEAR REBATE RESERVATION

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› *No WAP Grantee work needed for this step in this example.*	› *N/A*
WAP: Subgrantee-level	› WAP Subgrantee submits required info State HEAR Implementer.	› HEAR Project-related Costs to collect and submit required rebate information
HEAR	› State HEAR Implementer confirms that all required info was submitted, then generates a rebate reservation coupon that shows max approved rebate amount, income level, product type(s), address ID, applicant ID, DAC status, Coupon expiration date	› State HEAR implementer uses HEAR Admin Funds to process rebates.

Integration Details: WAP Subgrantee collects and submits all required information for a rebate reservation to the State HEAR implementer. The State HEAR implementer then reserves the rebate funding for the project and issues a digital coupon (or an equivalent) to the WAP subgrantee to be used for future submission after the project is completed.

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STEP 6

Measure Installation

STEP 6: MEASURE INSTALLATION

WAP + HEAR INSTALLATION STANDARDS & SAFETY TESTING REQUIREMENTS

WAP and HEAR each have their own requirements for quality installation standards and safety testing for their respective program-funded measures. These slides on Step 6 summarize each program's requirements.

States can choose two different viable pathways for quality standards for their integrated approach:

A Set same standards for HEAR-funded measures as WAP's installation standards

B Set different installation standards for WAP-funded vs HEAR-funded measures

Whichever specifications the state decides to set as installation standards for WAP-funded and HEAR-funded measures that are part of the same Scope of Work, **the state must ensure that detailed invoices and information identify which distinct and separable upgrades were funded by which federal sources**, with subdivided labor costs associated with each line item.

This includes labor expended for measure installation, safety testing, and quality assurance and control.

STEP 6: MEASURE INSTALLATION

WAP QUALITY WORK PLAN OVERVIEW

The state's **Quality Work Plan (QWP)** includes the requirements for what constitutes a quality installation of Weatherization Assistance Program measures, outlines how those measures are inspected and validated, and prescribes acceptable training and credentialing of workers.

- **Purpose:** Defines minimal acceptable outcomes for home upgrades and ensures standardization across WAP projects.
- **Variance Requests:** Submit any time to your PO. Expires at the same time as the field guide (every 5 years).
- **Field Guides**
  - Create Grantee-specific minimum standards for WAP measure installations.
  - Standards must meet current DOE Standard Work Specifications (SWS) stringency (updated every 5 years).
- **Grantee Responsibility**
  - Engage stakeholders throughout the process
  - Provide their SWS to subgrantees and third-party contractors
  - Monitor in accordance with the SWS (5-10%)

See Quality Workplan Requirement update in WPN 22-4 Section 1 for more details: https://www.energy.gov/scep/wap/articles/weatherization-program-notice-22-4-quality-work-plan-requirement-update

STEP 6: MEASURE INSTALLATION

HEAR INSTALLATION STANDARDS

States are required to develop and implement a **Consumer Protection Plan (CPP)** for HEAR that outlines Quality Assurance (QA) protocols to ensure quality installation and services.

The DOE requires states to provide the CPP for documented minimum installation standard that:

- Insures identification of state and local laws, permits, codes, industry standards
- **Establishes minimum quality installation standards for rebated technologies**
- Promotes standardized and sequenced procedures

Minimally acceptable quality installation standards will:

- Confirm which rebated technologies to which QI standards apply
- Confirm whether a state will rely on an existing industry standard (ENERGY STAR, ACCA) or utilize a state- or program-specific standard
- More info required if not using industry standard for an alternate state-specific standard

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See Home Energy Rebates (IRA Sections 50121 and 50122): Consumer Protection Plan Required Elements and Sample Responses | Department of Energy for more information.

WAP + HEAR REQUIREMENTS FOR MEASURE INSTALLATION

WAP Final Sign-off Requirements (see WAP Client File Checklist):

- ✓ Client Sign off on the work completed (may be included with the final inspection form).
- ✓ Acknowledgment work was completed.
- ✓ Acknowledgment/awareness of any warranties.
- ✓ Acknowledgment of client education/maintenance information (Standard Work Specification (SWS) compliant).
- ✓ Acknowledgment of how the worksite was left - cleaned up, materials taken away.
- ✓ Signed and dated by the client

HEAR Invoice Requirements:

"States must ensure that detailed invoices and information identifying which distinct and separable upgrades were funded by which federal sources are collected and retained when a home/building is using funding from multiple federal grants. **Each upgrade or QEP component must be a line item on the invoice of the home energy upgrade package with subdivided labor costs associated with each line item.**" *(Section 4.3.2 of the Program Requirements and Application Instructions)*

STEP 6: MEASURE INSTALLATION

WAP + HEAR CONSIDERATIONS FOR QUALIFIED CONTRACTORS

WAP-funded measures must comply with specific Federal regulations, 2 CFR 200, that establish procurement standards that must be followed.

- Each Grantee will have their own set of requirements based on their state laws and agency practices. All of this must be incorporated into how the organization procures goods and/or services for WAP.

HEAR-funded measures must be installed by qualified contractor, pursuant to the state's 50122 Consumer Protection Plan's standards for a Qualified Contractor List.

- At the point a rebate is paid out for work performed, those funds are considered expended and are no longer bound by Federal requirements.

Subgrantees have flexibility to assign HEAR-funded measure installations to contractors on the SEO/HEAR Implementer's Qualified Contractor List, even if the contractor is not one procured through the WAP process.

State Energy Offices can structure their Qualified Contractor List to include their WAP-procured contractors for an easier WAP + HEAR integrated process.

Weatherization Assistance Program Procurement Resources: Step-by-Step Process for Procurement (energy.gov)

STEP 6: MEASURE INSTALLATION

WAP HEALTH AND SAFETY TESTS

- WAP requires testing/inspection requirements to be met for all **Air-Conditioning, Heating Systems, and Combustion Appliances included in a project scope**, even if they are not funded by WAP funding.
- WAP testing/inspection for Health and Safety Measures are conducted pre- and post-installation, latter of which is completed during the QCI.
- States should review their DOE-approved Grantee Annual Health and Safety (H&S) Plan, which is updated annually, to validate for any state-specific requirements and protocols for safety testing.

WPN 22-7 Testing/Inspection Requirements for Air-Conditioning, Heating Systems, and Combustion Appliances

Testing/Inspection

Required:

- Verify that primary heating systems are present, operable, and performing correctly.
- Conduct a visual inspection of all combustion appliances and their related venting
- Conduct combustion appliance testing of all gas and liquid-fueled combustion appliances.
- Depressurization and spillage testing is required for all Category 1 appliances pre- and post-weatherization and before leaving the home on any day when work has been done that could affect draft (e.g., air or duct sealing, adding exhaust ventilation).
- CO testing is required for all gas and liquid-fueled combustion appliances, regardless of venting type.
- Verify proper clearances for all combustion venting types
- Visually inspect the entirety of solid fuel-fired appliance installations (e.g., wood stoves, coal stoves, pellet stoves, fireplaces) including the venting system to ensure it adheres to the applicable code or local authority having jurisdiction. Appliances must be inspected pre- and post-weatherization and any safety issues found should be included in the client H&S notification form.
- Conduct pre- and post- weatherization worst case CAZ depressurization testing in spaces having a fireplace or woodstove. Since there is no consensus method for verifying safe operation of fireplaces and woodstoves, Grantees can propose testing policies and limits. If the Grantee does not propose a policy and fireplaces or woodstoves are left operational, the vent must meet national or local codes, or the home cannot be weatherized.
- Safety inspections related to space heaters, fireplaces, and woodstoves must include, but not be limited to, verification of adequate floor protection, and code-compliant clearances to walls and other combustible materials.

Weatherization Program Notice 22-7: Weatherization Health and Safety (energy.gov)
Weatherization Program Notice 22-7 Table of Issues (energy.gov)

WAP REQUIREMENTS FOR INCIDENTAL REPAIR MEASURES

10 CFR 440.3: Incidental Repairs means "those repairs necessary for the effective performance or preservation of weatherization materials.

Such repairs include, but are not limited to, framing or repairing windows and doors which could not otherwise be caulked or weather-stripped and providing protective materials, such as paint, used to seal materials installed under this program."

Per WPN 19-5:

- IRM installations must be associated with a specific ECM or group of ECMs.
- IRMs must be justified by written and photo documentation in the client file.
- IRM costs must be included the SIR calculation of the total package of weatherization measures.

HEAR CONSUMER PROTECTION PLAN SAFETY TEST REQUIREMENTS

DOE requests that states provide what they are proposing to do around health and safety for these elements based on their installation standards, as well as best practices. In their CPPs, states are responsible for identifying or defining a standard for proper safety testing and for proposing their approach to satisfying HEAR requirements:

Combustion Safety Testing	HVAC Commissioning Test	Roof, Drainage, and Mold/Moisture Inspection
Combustion safety testing is required in Section 50122 for HVAC and envelope projects if combustion appliances remain in the home after the retrofit occurs.	States are required to confirm that they will retain proof of commissioning testing on HVAC equipment in all homes where HVAC systems are installed.	States must assess when the following rebate measures may be impacted by moisture issues: HVAC system(s), heat pump water heater, air sealing, and insulation.

See Section 4.2.5 of the Program Requirements and Application Instructions and the Home Energy Rebates (IRA Sections 50121 and 50122): Consumer Protection Plan Required Elements and Sample Responses | Department of Energy for more information.

HEAR SAFETY TESTING DATA & TOOLS REPORTING REQUIREMENTS

For Data and Tools Requirements, DOE requires program **implementers** to retain:

- Proof of combustion safety testing on fossil fuel equipment in all homes where fossil fuel systems have been impacted by the installation.
- Proof of commissioning testing on HVAC equipment in all homes where HVAC systems are installed.

Safety Testing elements are listed in Table 7 (Rows 45-54) of the Data and Tools Requirements Guide.

- These data points are for reporting purposes and not always required for every HEAR project.
- Many of the data elements have an API input option of “N/A” – this can be used if combustion safety testing or HVAC commissioning is not needed.

Safety Testing Elements in D&T Requirements Guide (Table 7)

HEAR Safety Testing	Input
Combustion safety testing: • Venting test • Spillage test • Gas leak detection • Ambient CO test • Undiluted CO test	Passed/ Failed/ Warning/ NA
Signs of mold or moisture in or outside the home	Y/ N or N/A
Roof condition	Good/Potential issues or N/A
Drainage system condition	Good/Potential issues or N/A
ASHRAE 62.2 calculation pre- and post-retrofit for proper indoor air quality	Y/N
Information from above disclosed to homeowner	Y/N

STEP 6: MEASURE INSTALLATION

REVIEW OF INTEGRATED APPROACH'S OPTIONS INSTALLATION STANDARDS

A **Set same standards for HEAR-funded measures to WAP's installation standards**

Given that WAP-funded measures must meet Standard Work Specifications (SWS) standards, **Grantees/subgrantees may follow the WAP SWS for HEAR-funded measure installations** and QA if they are part of the WAP SOW.

B **Set different installation standards for WAP-funded and HEAR-funded measures**

Alternatively, states can propose an alternative industry standard or a state-specific standard (approved by the DOE) applicable only for the HEAR-funded measure, as **there are no WAP restrictions for SWS installation standards posed by WAP for non-WAP-funded measures.**

SAMPLE TEMPLATE RESPONSE

STEP 6: MEASURE INSTALLATION

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› *No WAP Grantee work needed for this step in this example.*	› *N/A*
WAP: Subgrantee-level	› a. WAP subgrantee and/or contractor(s) install measures following SWS. › b. Subgrantee performs safety testing, as needed. › c. Subgrantee provides summary of work to homeowner/building owner.	› WAP Program Operations funding for installation costs, safety testing, and summary + attestation.
HEAR	› a. WAP subgrantee and/or contractor(s) install HEAR measures following SWS, take geo-tagged photos of installed appliances. › b. Subgrantee/contractors perform CAZ test, HVAC commissioning, other safety tests for HEAR measures. › c. Subgrantee creates invoice that, at minimum, shows the amount covered by HEAR.	› Option 1: Subgrantee includes labor costs for equipment, installation, testing, invoice prep in the cost of the measures with HEAR Rebate Funds. › Option 2: Subgrantee charges equipment and labor for installation to HEAR Rebate Funds; charges testing, invoice preparation to HEAR Project-related Costs.

Integration Details: WAP subgrantee and/or contractors must be included on HEAR Qualified Contractor List to receive a HEAR rebate. WAP subgrantee and/or contractors install measures and perform safety testing according to SWS protocols, then prepare WAP attestation forms and HEAR invoices. Subgrantee charges labor time to each program based on proportional effort.

U.S. Department of ENERGY

STEP 7

Quality Control and Assurance

WAP + HEAR REQUIREMENTS FOR FINAL INSPECTION

WAP

Every home where a job is completed must be inspected by a Quality Control Inspector (QCI)

HEAR

Inspections of—at a minimum—each contractor's first 5 projects and 5% of their projects thereafter. States determine inspectors' qualification requirements.

Similarity

Post-installation home inspections are required.

Differences

WAP: Requires QCI inspections of all jobs.

HEAR: Requires inspections of a certain number of jobs based on the contractor (first 5 and 5% after) **by 3rd party**.

HEAR: States can decide the inspectors' qualifications.

STEP 7: QUALITY CONTROL AND ASSURANCE

WAP + HEAR COMPARISON: INSPECTION CONFLICT OF INTEREST

WAP

Grantee technical monitoring of Subgrantee dwelling units shall **not be completed by the same QCI certified individual** that had completed the Subgrantee's energy audit or Final Inspection of the same dwelling unit

(See Sec. 2 of WPN 22-4)

HEAR

A requirement to conduct **independent onsite post-install inspections** on a minimum of:

- The first five projects of new contractors; and
- Five percent of projects thereafter for each contractor (provided no issues are found)

(See Sec. 4.2.5 of the Program Requirements)

Some potential options to meet both WAP + HEAR requirements include:

- If WAP subgrantee uses subcontractors for HEAR items, QCI can complete inspections for both WAP and HEAR measures
- Complete normal QCI inspection for WAP measures, use 3rd party inspector for the measures funded by HEAR
- Use QCIs from another WAP subgrantee
- Use the 5-10% of projects that are subject to a WAP Grantee Monitoring process to also inspect 5% of HEAR projects

STEP 7: QUALITY CONTROL AND ASSURANCE

WAP GRANTEE MONITORING

WAP Grantee Monitoring:
Reviews 5-10% of all projects to QC energy audit and installation.

5% of projects
When a Subgrantee's designated QCI performs only the final quality control inspection on unit

10% of projects
When the same Subgrantee certified individual performs the energy audit, creates the work order, and performs the final quality control inspection

HEAR does not have a requirement equivalent to the WAP Grantee Monitoring process.

See WPN 24-4: https://www.energy.gov/sites/default/files/2024-05/wap-wpn-24-4_051024.pdf

CONSIDERATIONS FOR INSPECTION INVOICING

Invoicing for the HEAR inspections must be a separate line item on the invoice of the home energy upgrade package with subdivided labor costs (including inspections) associated with each line item that is billed to HEAR.

Additional Considerations

- **QCI inspector for WAP measures could also inspect HEAR measures if the QCI inspector is an independent third-party from the installer and does not have financial conflicts of interest**
- **Best practice: if independent, subdivide the costs for QCI among federal sources contributing to measure installation costs**
- **For HEAR, states can charge costs related to inspection to either HEAR administrative costs or project-related costs.**

EXAMPLE WITH INSTALLATION AND SAFETY TESTING

Selected Measures	Funding Source	Contractor Assignment	Required Testing	Safety Testing Assignment	QCI/Final Inspection Assignment	Invoice Installation, QA/QC, and Costs Expended for Labor, i.e., Coordination
WRF - Roof Replacement	DOE WRF	Roofer	N/A	N/A	QCI Final Inspection	Billed to WRF
IRM - Electric Load Center Upgrade	HEAR & Utility	Electrician	State & Local Requirements	State & Local Requirements	Permit Inspection	Billed to HEAR & Utility
IRM - Electric Wiring Upgrade	HEAR	Electrician	State & Local Requirements	State & Local Requirements	Permit Inspection	Billed to HEAR & Utility
Attic Insulation	LIHEAP Wx	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to LIHEAP
Heat Pump Water Heater	HEAR & Utility	HVAC/Plumber	Combustion Safety Testing (if applicable)	CAZ (if appliable)	3rd party installation inspector	Billed to HEAR & Utility
Air Sealing	LIHEAP Wx	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to LIHEAP
Wall Insulation	WAP	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP
Floor Insulation	WAP & LIHEAP Wx	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP, LIHEAP
Low Flow Showerheads	WAP	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP
DWH Tank Insulation	WAP	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP
Refrigerator Replacements	WAP	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP
Duct Sealing	WAP	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP
Duct Insulation	WAP & Utility	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP, Utility
Install Heat Pump	HEAR & Utility	HVAC/Plumber	Combustion Safety Testing	CAZ – Completed by QCI	3rd party installation inspector	Billed to HEAR & Utility
Install Heat Pump	HEAR & Utility	HVAC/Plumber	HVAC Commissioning Test	HVAC/Plumber Contractor	3rd party installation inspector	Billed to HEAR & Utility
DWH Pipe Insulation	WAP & LIHEAP Wx	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP, LIHEAP
Low E Windows	WAP & LIHEAP Wx & Utility	CAA Subgrantee	Follow State's Approved WAP Field Guide	Follow State's Approved WAP Field Guide	QCI Final Inspection	Billed to WAP, LIHEAP
H&S - Electric Stove/Oven	HEAR & Utility	Electrician	N/A	N/A	3rd party installation inspector	Billed to HEAR & Utility
H&S - Ventilation Fans (ASHRAE)	HEAR	Electrician	ASHRAE 62.2 Test	CAZ (if appliable)	3rd party installation inspector	Billed to HEAR & Utility

SAMPLE TEMPLATE RESPONSE

STEP 7: QUALITY CONTROL AND ASSURANCE

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› State Grantee performs monitoring review of 5-10% of WAP projects.	› WAP Grantee Admin
WAP: Subgrantee-level	› WAP Subgrantee Quality Control Inspector (QCI) performs inspection of work completed, including energy audit, measure installation, and health & safety tests.	› WAP Program Operations for QCI inspection
HEAR	› If HEAR work is performed by a separate contractor from Subgrantee, WAP QCI can serve as 3rd party and complete inspection for 5% of projects per contractor. If subgrantee performs installation, State WAP Grantee can perform inspection during monitoring.	› Subgrantee's QCI or State Grantee Monitoring team charge to HEAR project-related costs for inspections.

Integration Details: WAP Subgrantee QCI performs normal post-installation inspection for WAP-funded project. QCI or State Monitoring team then performs inspections for HEAR-funded measures.

STEP 8

Final Data Collection

WAP REQUIREMENTS FOR FINAL INSPECTION DATA

Final inspection form requirements are listed in WPN 22-4. It can be in various formats (e.g., digital or paper) and must be retained in the client file

- The inspection form must contain the QCI's printed name, signature, certification number, and date.
- Must verify that all WAP-funded measures meet the Grantee's field standards.
- Must include an assessment of the energy audit, including the work order.

Best Practice (optional) is to include a sign-off by the client acknowledging the work completed and their acceptance of it.

- Additional items may be required by the Grantee, as necessary.

WAP REQUIREMENTS FOR SUBGRANTEE INVOICING

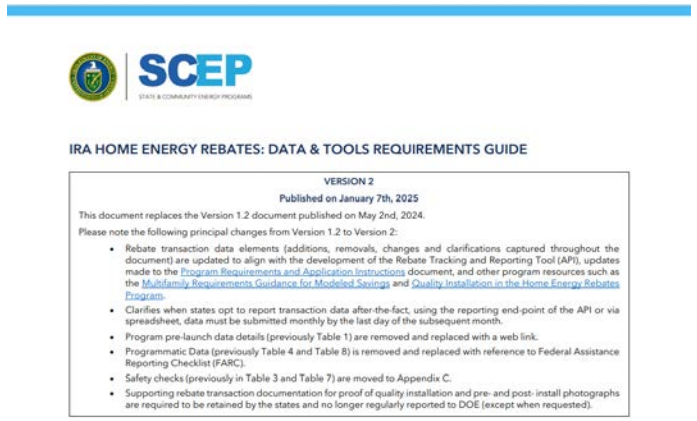
Each WAP Grantee establishes specific invoicing requirements for Subgrantees.

- At minimum, the Grantee must be able to separate each Subgrantee invoice into the appropriate WAP budget categories. (e.g., Program Operations, Administrative, Health & Safety)
- Best practice is to include a separation of funding source, category, and labor/materials split.

Grantees may require additional invoicing details, not specific to WAP.

HEAR REQUIREMENTS FOR FINAL DATA COLLECTION

- **Table 2** and **Table 5** of the Data and Tools Requirement Guide lists all the data that is required to be collected by the state or a third party for each rebate transaction associated with the Section 50122 rebates.
- Some of the data elements **must also be reported to DOE**. Any data components not designated as “Report to DOE” must be retained and provided to DOE upon request.
- States can elect to share any of the following data elements with DOE via the **Main API** or **DOE/PNNL standardized spreadsheet** unless otherwise noted.


SCEP

IRA HOME ENERGY REBATES: DATA & TOOLS REQUIREMENTS GUIDE

VERSION 2

Published on January 7th, 2025

This document replaces the Version 1.2 document published on May 2nd, 2024.

Please note the following principal changes from Version 1.2 to Version 2:

- Rebate transaction data elements (additions, removals, changes and clarifications captured throughout the document) are updated to align with the development of the Rebate Tracking and Reporting Tool (API), updates made to the Program Requirements and Application Instructions document, and other program resources such as the Multifamily Requirements Guidance for Modeled Savings and Quality Installation in the Home Energy Rebates Program.
- Clarifies when states opt to report transaction data after-the-fact, using the reporting end-point of the API or via spreadsheet, data must be submitted monthly by the last day of the subsequent month.
- Program pre-launch data details (previously Table 1) are removed and replaced with a web link.
- Programmatic Data (previously Table 4 and Table 8) is removed and replaced with reference to Federal Assistance Reporting Checklist (FARC).
- Safety checks (previously in Table 3 and Table 7) are moved to Appendix C.
- Supporting rebate transaction documentation for proof of quality installation and pre- and post- install photographs are required to be retained by the states and no longer regularly reported to DOE (except when requested).

[IRA Home Energy Rebates: Data And Tools Requirements Guide | Department of Energy]

WAP + HEAR REQUIREMENTS FOR RECORD RETENTION

WAP

- Record retention requirements are outlined in the Terms and Conditions of the state's WAP plan and requirements in 2 CFR 200.334.
- Grantees reporting completed WAP units shall keep a file for each client or building with all applicable records and make files available to DOE on request.
- Grantees must have a system in place to safeguard PII and sensitive information when sharing client files with DOE (2 CFR 200.303 Internal Controls).

HEAR

- All the following data elements must be collected and retained by the state or its implementer
- Any data components not designated as "Report to DOE" must be retained in compliance with the state's own legal obligations regarding security and privacy.
- Data must be accessible upon request by DOE for purposes of compliance and evaluation.

CONSIDERATIONS FOR WAP + HEAR INTEGRATION

Given the level of information required for HEAR data reporting, states will likely need to develop a new reporting workflow (in addition to reporting already completed for WAP) to ensure that the information from the energy audit and post-installation processes can meet the reporting requirements for HEAR.

- **WAP Grantees often have separate software and databases for program management and energy auditing.**
- **The data elements outlined in Table 2 and Table 5 of the HEAR Data & Tools Requirements Guide may require inputs from both WAP program management and energy auditing software.**
- **Considerations for adding functionalities to existing WAP tools for streamlined exporting, querying, etc. should be respective to the State's WAP and HEAR program designs and requirements.**

SAMPLE TEMPLATE RESPONSE

STEP 8: FINAL DATA COLLECTION

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› Final inspection by QCI collects and verifies all required data for close-out of project.	› WAP Funds from either Program Operations or other special budget category
WAP: Subgrantee-level	› Subgrantee submits to the WAP Grantee/HEAR Implementer the Proof of HEAR Upgrade Completion, including 1.) Installation attestation, 2.) Invoice, 3.) Purchase receipt(s), and 4.) Quality installation documentation. › Subgrantee//HEAR Implementer submits to DOE/PNNL all HEAR-required data elements as detailed in the Data and Tools Requirement Guide, Table 2 and Table 5.	› HEAR Project-related Costs for data collection and submission for HEAR-funded measures.
HEAR	› *No HEAR Implementer work needed for this step in this example.*	› *N/A*

Integration Details: WAP Subgrantee QCI collects and verifies WAP-related data and HEAR related data after project close-out. QCI ensures that all data is submitted properly in the right formatting for WAP and HEAR requirements.

STEP 9

HEAR Rebate Payment Issuance and Customer Satisfaction Survey

REMITTING PAYMENTS

The process of remitting payments for the HEAR and WAP integrated approach depends on each state's workflows for rebate tracking and processing.

DOE's Rebate Tracking System and Coupon Generator can help states fulfill some of these functions.

For states using the API (with or without the Coupon Generator), it is important to consider how these systems must or ideally should be tied directly into the API.

- Generate rebate coupons for qualified contractors
- Remit payments to contractors and vendors for used rebate coupons

For additional requirements and considerations, see the Home Energy Rebates Data and Tools Requirements Guide, Section 4.0.

HEAR INSTALLATION INCENTIVES

An ***eligible entity representative*** (governmental, commercial, or nonprofit) that applies for and receives a rebate on behalf of an eligible entity and performs the installation of the QEP shall receive an incentive payment not to exceed $500 in addition to the available rebate. States must determine a payment schedule for installation incentives; examples of qualifying activities are shown in Table 9.

- States may provide installation incentives to other parties using sources of funds other than the Home Electrification and Appliance Rebates.
- An eligible entity representative may be paid an incentive of up to $200 (as part of the maximum $500 incentive) for an installation completed in a home located in a disadvantaged community as defined by the state.

Qualifying Activity - Table 9	Incentive (Example)
Substantial installation located within a disadvantaged community (excludes installations of electric stoves and electric heat pump dryers) per dwelling unit	$200
Installation of one or more electric heat pump water heaters	$150
Installation of one or more electric heat pumps for space heating and cooling per dwelling unit – ducted	$300
Installation of one more electric heat pumps for space heating and cooling per dwelling unit – non-ducted	$200
Installation of one electric stove, cooktop, range, or oven	$0
Installation of one electric heat pump clothes dryer	$0
Installation of one or more electric load service center	$150
Installation of insulation per dwelling unit	$250
Installation of air sealing and materials to improve ventilation per dwelling unit	$250
Installation of electric wiring per dwelling unit	$250

See Section 4.2.3 of the Program Requirements and Application Instructions

HEAR REQUIREMENT

CUSTOMER SATISFACTION SURVEY

For the HEAR Consumer Protection Plan, DOE requires states to develop and manage a system for collecting and responding to consumer feedback that:

- ✓ Allows households to file complaints, concerns, and issues directly to the implementer
- ✓ Contains procedures for addressing negative feedback, including how programs will communicate the feedback to affected contractors or aggregators
- ✓ **Manages a consumer satisfaction survey be sent to the household at least 3 months and no more than 6 months after the project's completion date**



Recipients will be required to provide quarterly updates to DOE on their progress and activity under the Consumer Protection Plan.

U.S. Department of ENERGY

SAMPLE TEMPLATE RESPONSE

STEP 9: HEAR REBATE PAYMENT ISSUANCE

Relevant Program	Process	Funding Source(s) Used
WAP: State-level	› Grantee requests payment from WAP via online system.	› WAP Admin Funds pay for admin costs of invoicing and payments
WAP: Subgrantee-level	› Subgrantee requests payment from Grantee › Subgrantee/installer receives the rebate that is issued according to their respective HEAR Implementer's process for rebate redemption.	› HEAR Rebates + Project-related Cost Funds
HEAR	› Subgrantee/installer receives the rebate that is issued according to their respective HEAR Implementer's process for rebate redemption. HEAR implementer then distributes the installer incentives to subgrantee/installer. › HEAR Implementer sends out a consumer satisfaction survey to all households who received a rebate 3-6 months after installation is complete.	› HEAR Admin Funds to pay for work associated with distributing rebates and installer incentives. › HEAR Project-related Costs for rebates paid for by rebate funds and installer incentives.

Integration Details: Subgrantee is paid for WAP-covered work by Grantee.

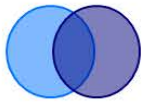
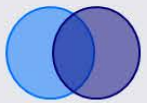
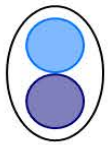
Subgrantee/installer for HEAR measures receives rebate and installer incentives from HEAR Implementer.

HEAR Implementer sends out a consumer satisfaction survey to all households who received a rebate.

CONCLUSION

RULES FOR LEVERAGING OTHER FUNDS WITH HEAR

States seeking to integrate additional funding sources in additional to WAP should keep in mind the rules below. In general, state and utility funds are the most flexible.

Sources of Funding	Allowance	Requirements to Combine Funding Within Same Household	Examples
Other Federal Grants E.g., funding from WAP, LIHEAP	**Can Braid** 	Must "braid" and use other federal grants to fund distinct and separable measures from "single upgrades" funded by rebate.	EE measures from WAP (insulation, air sealing, baseload measures), appliance measures from rebate (heat pump, HP water heater)
Federal Loans: E.g., Loan from DOE Revolving Loan Fund	**Can Co-Fund** 	Can co-fund any remaining costs for the same "single upgrade" above the value of the Home Electrification and Appliance Rebate.	Loan from a State's DOE Revolving Loan Fund covers remaining upgrade costs after rebate has been applied
Non-Federal Funding: E.g., EE Utility $, State/Local $	**Can Co-Fund** 	Can co-fund any remaining costs for the same "single upgrade" above the value of the Home Energy Rebate.	Utility incentive provides additional funding toward remaining upgrade costs after rebate has been applied
Tax Credits: E.g., 25C, state/ local tax credits (may vary based on state/local law)	**Reduce Credit Basis** 	Reduce basis amount of the expenditure on which tax credit is claimed by rebate, then claim a tax credit based on the remainder of the cost.	Tax credit claimed on remaining basis of EE measures after rebate has been applied

CONCLUSION

CONTACT US

Please note that the information provided in this guide is accurate as of the date of publication.

For State, Territorial, Tribal, and District of Columbia Energy Offices and State/Territorial WAP Offices:

DOE staff are available to assist with designing an integrated WAP and HEAR approach. Please direct your questions, comments, or requests for updated information to your respective **DOE Home Energy Rebates Project Officer.**

