



VIRGINIA HOUSING  
ALLIANCE



# VIRGINIA'S HOUSING INNOVATIONS IN ENERGY EFFICIENCY (HIEE) PROGRAM

*July 2025 | Impact Report*

Above: Winchester Forest by Better Housing Coalition. N. Chesterfield, VA

---

# Table of Contents

## Introduction | p. 1

*About the Housing Innovations in Energy Efficiency (HIEE) Program*

*ASNH Supplemental Program*

*Weatherization Deferral Repair (WDR) Program*

## Regional Greenhouse Gas Initiative(RGGI) | pp. 2-4

*Background on RGGI | p. 2*

*Legal Challenge and RGGI Withdrawal | p. 3*

*Implications on Housing and Energy Efficiency | pp. 3-4*

## Impact Maps | pp. 3-4

*ANSH Supplemental Project Distribution | p. 3*

*WDR Project Distribution | p. 4*

## Glossary | p. 5

## HIEE Funded Project Highlights | pp. 6-16

*ASNH Supplemental Case Studies*

*Kindlewood I (Charlottesville) | p. 6*

*Cool Lane Commons (Richmond) | p. 7*

*Ilda's Outlook (Fairfax) | p. 8*

*Northway Apartments (Galax) | p. 9*

*Winchester Forest (N. Chesterfield) | p. 10*

*WDR Case Studies*

*Spaulding Family (Tazewell County) | p. 11*

*Widener Family (Washington County) | p. 12*

*Ms. Miller's Home (Scott County) | p. 13*

*Robinson Family (Roanoke) | p. 14*

*New Market Apartments (New Market) | p. 15*

*416 W St. Apartments (Petersburg) | p. 16*

## Acknowledgements | p. 17

---

# INTRODUCTION

The Virginia Housing Alliance (VHA) and the Association of Energy Conservation Professionals (AECOP) have collaborated to produce a report on the importance of programs funded through Virginia's Housing Innovations in Energy Efficiency (HIEE). **HIEE enhances access to affordable energy-efficient housing and provides critical home repairs for income-qualifying households, unlocking their potential to participate in additional energy efficiency programs in Virginia.**

Administered by the Virginia Department of Housing and Community Development (DHCD), money from the HIEE program currently funds two programs, both enhancing access to energy efficient housing among disadvantaged and marginalized communities.

The first pot of HIEE resources fund the department's Affordable and Special Needs Housing (ASNH) supplemental program. The ASNH supplemental program combines money from the Virginia Housing Trust Fund (VHTF) with other state and federal funding sources to finance the development of affordable housing units for Virginia's most vulnerable populations. The second pot of HIEE resources fund the Weatherization Deferral Repair (WDR) program. WDR provides critical home repairs that would otherwise prevent income-qualifying households from accessing and participating in other energy-saving programs.

This report will explain the history of the HIEE program and feature both ASNH supplemental funded projects and WDR home repair recipients throughout the Commonwealth. **Without these funds, thousands of Virginian households, including the households in this report, would have been left underserved or unserved altogether.** Featured projects in this report will highlight the real impact the HIEE-funded ASNH supplemental program and the WDR program have on affordable housing properties and disadvantaged Virginians.

## Regional Greenhouse Gas Initiative: The Hidden Affordable Housing Donor

*The Regional Greenhouse Gas Initiative (RGGI)* is a multi-state carbon cap and trade program. Participating states include Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, Vermont, and previously Virginia. **States participate in cap and trade pollution permit auctions to collectively reduce their greenhouse gas emissions below an established and steadily declining benchmark.** States reinvest proceeds generated from the sale of such permits into a wide range of programs decided by the individual needs of each participating state. Programs may involve expanding environmental sustainability efforts in the state, increasing availability of affordable housing, and reducing energy costs for residents.

In 2021, DHCD initiated the HIEE program to use 50% of Virginia's RGGI proceeds to finance the environmentally sustainable, energy-efficient upgrades of affordable housing properties and home repairs to income-qualifying households throughout the Commonwealth. *The HIEE funded ASNH supplemental program* resources are braided and leveraged with complex capital stacks, often being the crucial dollars taking affordable housing projects over the finish line. *The HIEE funded WDR* also unlocks millions of dollars in energy efficiency programs and services to qualifying households by providing home repairs needed before energy savings measures can be safely and effectively installed.



Photo Courtesy of Community Housing Partners

Since its inception, the HIEE ASNH supplemental program has helped fund **8,892 energy-efficient affordable housing units**, leveraging **\$178.1 million in HIEE funds**.

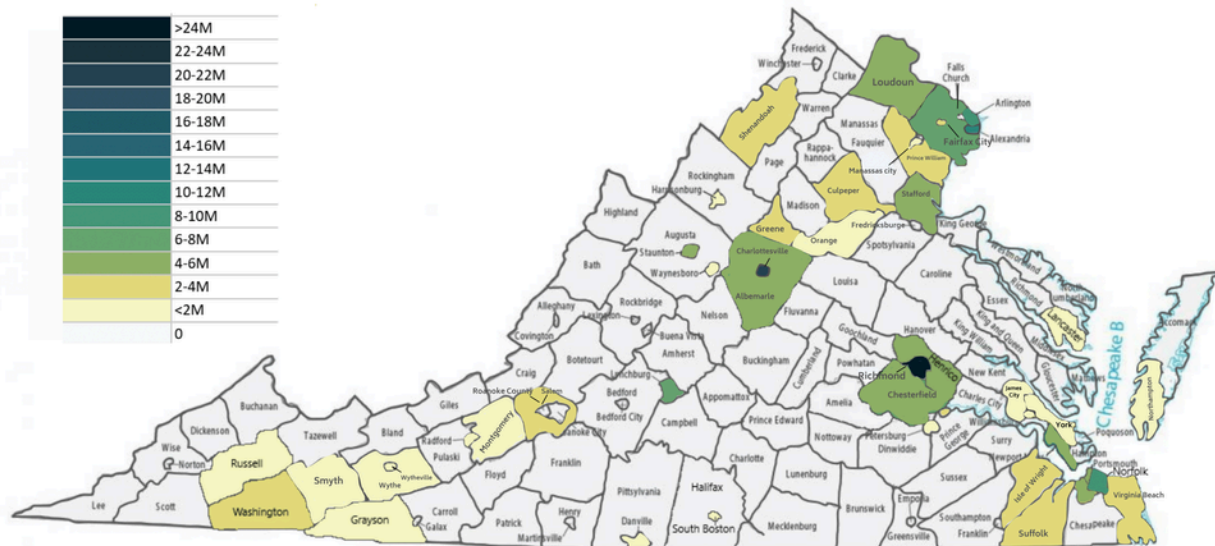
Similarly, the HIEE WDR program helped fund more than **2,600 unique home repairs** for **1,966** income-qualifying Virginians, leveraging **\$25.5 million in HIEE funds**. These figures capture production numbers for HIEE ASNH and WDR up to January 2025 - the latest data sets available for this report.

## Regional Greenhouse Gas Initiative: The Hidden Affordable Housing Donor (Cont.)

However, in 2023, Governor Glenn Youngkin pulled Virginia out of RGGI over claims of the program being a hidden tax on Virginians' energy bills. AECP then challenged Governor Youngkin's administration claiming it was unlawful for the Governor to withdraw from a program Virginia entered through an act of legislation from the General Assembly through executive regulatory actions.

In November 2024, a Floyd County Circuit Court judge ***ruled in AECP's favor, laying the groundwork for Virginia's re-entry into the RGGI program.*** The judge's ruling has been paused while the case is appealed.

### ***Distribution of RGGI Energy Efficiency Funds to Affordable and Special Needs Housing (ASNH+) Projects Across Virginia***

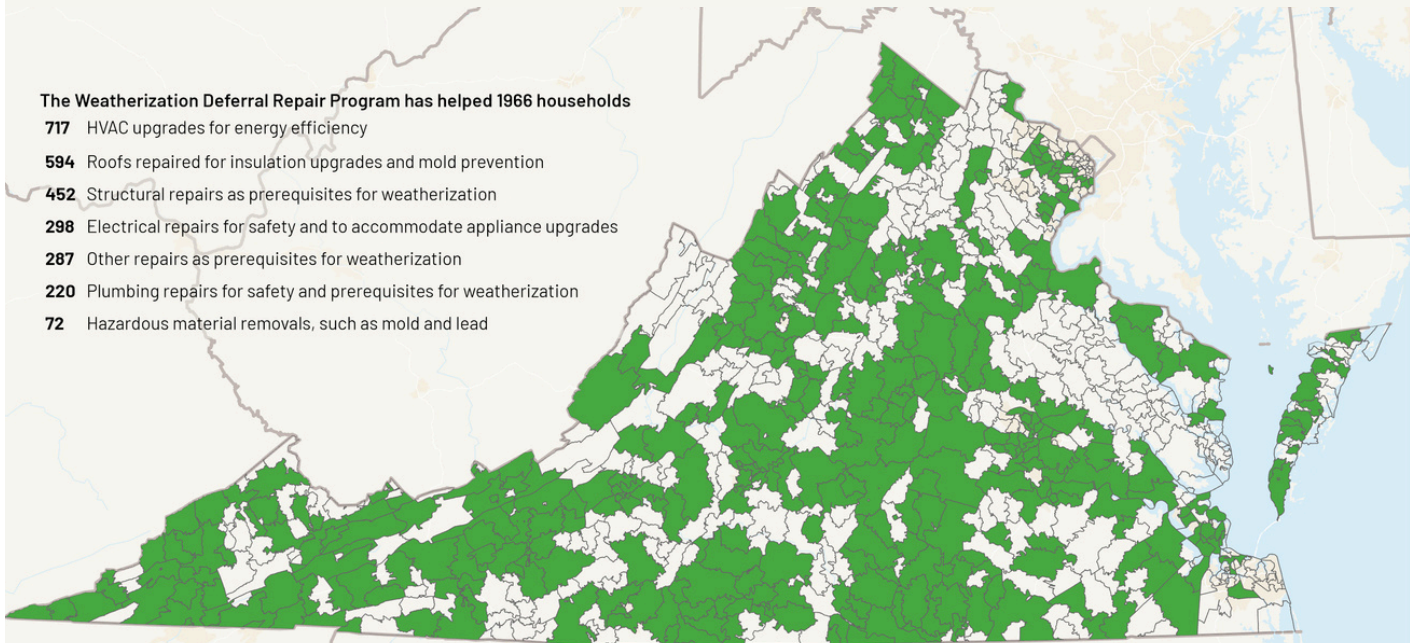


Data includes the Spring and Fall 2021, Fall 2022, Spring and Fall 2023 and Spring 2024 ASNH allocations. Map courtesy of the Virginia Energy Efficiency Council (VAEEC).

## Distribution of RGGI Energy Efficiency Projects Funded through the Weatherization Deferral Repair (WDR) Program

The Weatherization Deferral Repair Program has helped 1966 households

- 717 HVAC upgrades for energy efficiency
- 594 Roofs repaired for insulation upgrades and mold prevention
- 452 Structural repairs as prerequisites for weatherization
- 298 Electrical repairs for safety and to accommodate appliance upgrades
- 287 Other repairs as prerequisites for weatherization
- 220 Plumbing repairs for safety and prerequisites for weatherization
- 72 Hazardous material removals, such as mold and lead



**Funded only by RGGI, WDR keeps families in affordable homes while lowering energy bills.**



- Zip Code
- WDR Program Project

Data Note: presumed typos were corrected for 8 of the 375 zip codes where the original WDR Public dataset had no Virginia zip code match.  
 This map and the data shown therein are provided "as is" for informational purposes only and should not be relied upon for other purposes, including commercial purposes, navigation, or purposes that may affect health or safety. The Nature Conservancy makes no warranty of accuracy or safety with respect to map details, including, without limitation, political demarcations or territories. The Nature Conservancy does not hold itself out as an arbiter regarding the status of any boundary, area or place-name.

Map produced by D. Kulas | 3/12/2025  
 Data Sources: Virginia Department of Housing and Community Development (WDR Data, 2021-2025), US Census Bureau, The Nature Conservancy, ESRI.  
 Map courtesy of The Nature Conservancy.



## Glossary

**AECP** - Association of Energy Conservation Professionals

**AEP** - American Electric Power

**AMI** - Area Median Income

**ASNH** - Affordable and Special Needs Housing Program

**CDBG** - Community Development Block Grant

**DOE** - Department of Energy

**DHCD** - Department of Housing and Community Development

**HIEE** - Housing Innovations in Energy Efficiency

**HUD** - U.S Housing and Urban Development Department

**HVAC** - Heating, Ventilation, and Air Conditioning

**LIHEAP** - Low-Income Home Energy Assistance Program

**SMI** - State Median Income

**UVA** - University of Virginia

**VHA** - Virginia Housing Alliance

**VHTF** - Virginia Housing Trust Fund

**WAP** - Weatherization Assistance Program

**WDR** - Weatherization Deferral Repair

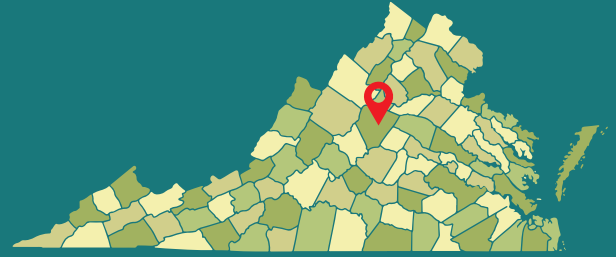
**WRF** - Weatherization Readiness Fund

*The properties in this report received improvements and retrofits funded in part by HIEE funds. The descriptions and photographs included were provided by the developers and weatherization providers of each project, with some additions of publicly available information. The Virginia Housing Alliance and the Association of Energy Conservation Professionals are grateful for the collaboration and support of these developers and providers.*

# KINDLEWOOD I

460 GARRETT ST  
CHARLOTTESVILLE, VA

**HIEE ASNH**



PIEDMONT **HOUSING ALLIANCE**

Affordable Units	106
HIEE Funding	\$1.997 M
Target AMI	0-80%

## THE PROJECT

Kindlewood (formerly known as Friendship Court) is the beginning of the transformation of a former Section 8 community in Charlottesville. The original 12-acre property replaced a historic Black neighborhood after the area was demolished as part of urban renewal. With a resident-led, build-first design process, *Piedmont Housing Alliance* constructed Kindlewood Phase I with 106 units for families ranging from extremely low income up to 80% AMI. **HIEE funds helped Kindlewood achieve high sustainability standards through energy efficiency and a rooftop solar array.**

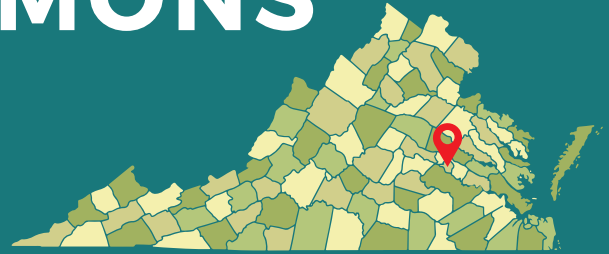
*"Without the HIEE funding at Kindlewood, Piedmont Housing Alliance would not have had nearly \$2 million for permanent financing resources. Given that, we would not have been able to develop the buildings at the high energy efficiency standards that were ultimately developed. Additionally, creating a resilient building is a core principle of the resident-led Advisory Committee, and this funding helped us achieve this key goal."*

*- Alicia García, Director of Real Estate Development*



# COOL LANE COMMONS

1900 COOL LN  
RICHMOND, VA  
HIEE ASNH



Affordable Units	86
HIEE Funding	\$ 1.068 M
Target AMI	50%

## THE PROJECT

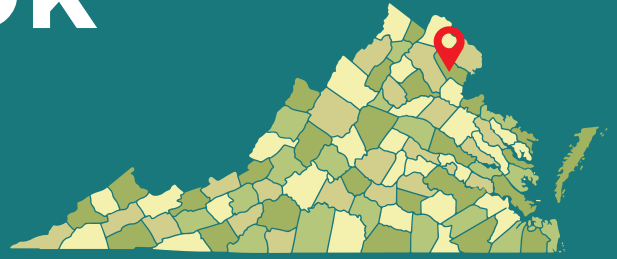
Cool Lane Commons, a permanent supportive housing community in eastern Henrico, contains 80 one-bedroom and 6 studio apartments for people who have experienced homelessness and/or make less than 50% AMI. All units are supported by U.S. Housing and Urban Development (HUD) project-based vouchers administered by the *Richmond Redevelopment and Housing Authority*. Cool Lane Apartments was an adaptive re-use of a vacant assisted living facility.

Cool Lane Commons offers voluntary support services for housing, daily living, mental, and social wellbeing. The complex is located near a bus stop and contains the onsite SupportWorks Richmond Headquarters where residents can access case management services and trauma-informed care. **20% of the building's energy load is offset by a 180-panel solar array.**



# ILDA'S OVERLOOK

10055 BRADDOCK RD  
FAIRFAX, VA  
HIEE ASNH



Affordable Units	80
HIEE Funding	\$ 1.21 M
Target AMI	30-60%

## THE PROJECT

Ilda's overlook is a *TrueGround Housing Partners* affordable senior apartment building in Fairfax, Virginia. The property contains 72 one-bedroom and 8 two-bedroom units.

***Thanks in part to HIEE funding, the property meets EarthCraft and Viridiant sustainability certification standards.***

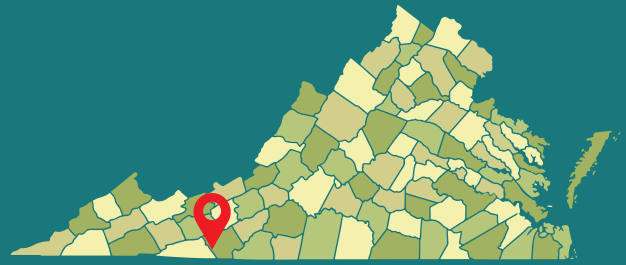
Unit features include energy-efficient appliances, modern light fixtures, ample natural light, a large kitchen bar, a walk-in closet, and full-size washer and dryer. The property's amenities include a fitness center, business center, multipurpose room, shuttle service, package lockers, 24-hour maintenance, onsite services, and resident programming.



# NORTHWAY APARTMENTS

128 WILSON AVE  
GALAX, VA

**HIEE ASNH**



COMMUNITY  
HOUSING PARTNERS

Affordable Units	72
HIEE Funding	\$750,000
Target AMI	60%

## THE PROJECT

Community Housing Partners' Northway Apartments in Galax, Virginia contains 72 affordable units at 60% AMI. Beginning in April 2022, the property underwent its first renovation since 2005. With renovations completed in September 2024, the new apartments feature refreshed kitchens, bathrooms, balconies, appliances and flooring. Updates were heavily informed by resident input.

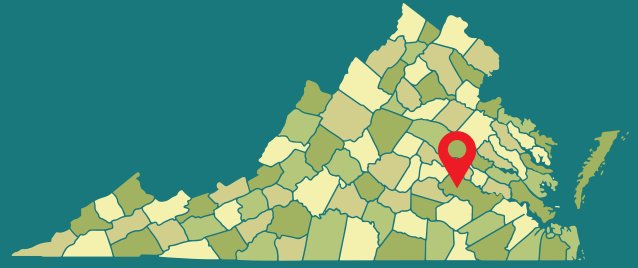
***Northway's HIEE funds also allowed the property to use Aroseal, a product that improves the building envelope to keep conditioned air in and reduces the load on space heating and cooling for residents.***

Furthermore, the HIEE funds provided gap funding, enabling the complex funding stack to work. Community Housing Partners reports the project likely would not have happened without the HIEE funding.



# WINCHESTER FOREST

2701 DREWRY'S BLUFF RD  
N. CHESTERFIELD, VA  
HIEE ASNH



Better Housing  
COALITION

Affordable Units	160
HIEE Funding	\$ 1.77 M
Target AMI	60%

## THE PROJECT

Winchester Forest is a 160-unit affordable multi-family development in North Chesterfield adjacent to the Winchester Greens campus near Rt. 1 and the GRTC bus line. This \$45.3 million development consists of nine two- and three-story garden-style apartment buildings with balconies and patios on a wooded, 13-acre site. Qualifying households at Winchester Forest have annual incomes between 40 and 60% of Area Median Income (AMI). Amenities include in-unit washer/dryer, barrier-free access, a community room, accessible playground, fitness room and dog park (coming in 2025). Campus amenities include walking trails, retail, banking and health care facilities, and a childcare center.

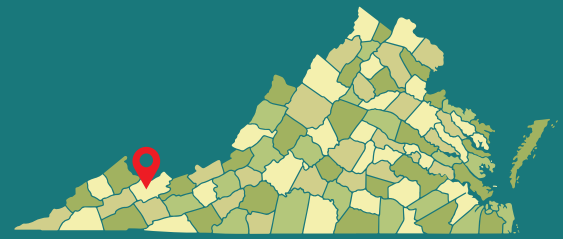
***The property received nearly \$1.8 million in HIEE funding, which enabled the Better Housing Coalition to build energy efficient units with eco-smart materials to minimize their impact on the environment.***



# SPAULDING FAMILY

TAZEWELL COUNTY, VA

## HIEE Weatherization Deferral Repair (WDR) Program



Income Qualification: 60% SMI

### THE PROJECT

In 2024, *Clinch Valley Community Action's* weatherization services provided extensive repairs and upgrades to Ms. Spaulding's manufactured home in Tazewell County. Prior to Clinch Valley's work, structural issues were evident, including multiple areas on the roof where sections had fallen through and were leaking to the inside of the home. The homeowner, facing significant personal challenges such as a loss of income, had been unable to maintain the property, leading to further decline.

To get the home ready for weatherization, the *Clinch Valley* team **utilized HIEE WDR funds to repair and replace damaged sections throughout the home including in the home's roof, walls, and belly - which protects the insulation under the floor.** Once repairs were completed, the team was able to provide weatherization improvements, including the installation of a new heat pump.



#### **HIEE Funds Used**

WDR - \$10,886

#### **Leveraged Funds**

AEP- \$5,924

LIHEAP - \$10,508

WAP - \$518

*"I can't say how much I appreciate all of the help. This service was a blessing to me and the way the individuals treat you while completing it...I would recommend it to anyone. It truly prevented me from losing my home"*

*- Ms. Spaulding*

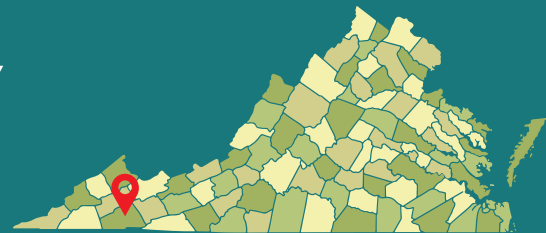


# WIDENER FAMILY

WASHINGTON COUNTY, VA

HIEE Weatherization Deferral

Repair (WDR) Program



Income Qualification: 60% SMI

## THE PROJECT

Mr. and Mrs. Widener have lived on their family land in Washington County since marrying in 1975. They raised two daughters while Mr. Widener worked on a tobacco farm and later in factories until health issues forced him to stop. A few years ago, he endured a six-month hospitalization due to a severe illness.

When PEOPLE's weatherization team assessed their home, they found a leaking 30-year-old roof that needed replacement before any energy efficiency improvements could begin. **Through the HIEE WDR Program, the Wideners received a new roof.** Once installed, the crew added insulation to the attic and floors, installed smoke and carbon monoxide detectors, and sealed windows to improve energy efficiency. Additionally, **the program replaced their aging furnace and window-unit air conditioners with a new heat pump**, ensuring a safer and more comfortable home.



### HIEE Funds Used

WDR - \$5300

### Leveraged Funds

AEP - \$5400

WAP - \$1897.01

LIHEAP - \$1897.02

*"There's no way on our fixed-income that we would have been able to get that done. All of a sudden, gosh, we have a new roof...our house is airtight, and we have a heat pump. It was like, 'Thank you Lord!'"*

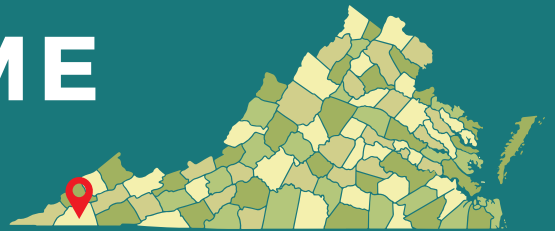
*- The Wideners*



# MS. MILLER'S HOME

SCOTT COUNTY, VA

**HIEE Weatherization Deferral  
Repair (WDR) Program**



Income Qualification: 60% SMI

## THE PROJECT

For Ms. Miller, a senior living alone in Scott County, being able to stay in her home safely was critically important. However, unable to afford the necessary improvements, Ms. Miller was living with a leaking roof, structural damage, and a broken heat pump.

**With HIEE WDR support, AppCAA replaced her non-functioning heat pump, installed a new roof, and completed structural repairs.** The team replaced the damaged front door, flooring, ceilings, and water heater. Weatherization upgrades could then be installed, including insulation, air sealing, a vapor barrier, and insulating the water heater. Additional upgrades such as smoke and carbon monoxide detectors, LED lighting, a mainstream vent fan, a roof vent, a range hood, and a dryer vent further improved her home's safety, comfort, and efficiency.



### **HIEE Funds Used**

WDR - \$25,804

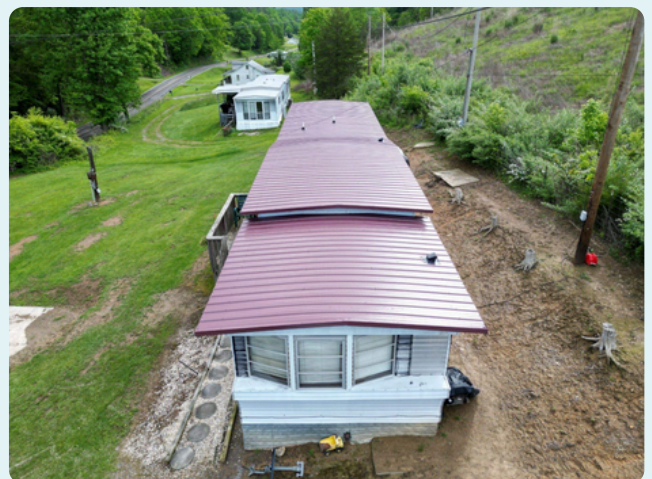
### **Leveraged Funds**

LIHEAP - \$165

WAP - \$4,426

*"All of the workers were so nice and helped make my home a safe place to live. I will recommend this program to everyone that needs repairs done to their home."*

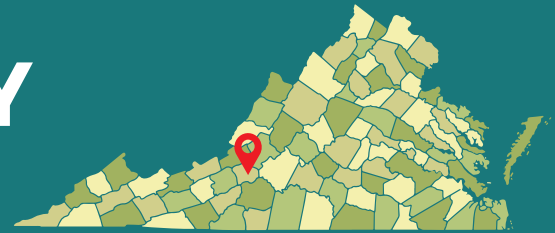
*- Ms. Miller*



# ROBINSON FAMILY

ROANOKE, VA

## HIEE Weatherization Deferral Repair (WDR) Program



Income Qualification: 60% SMI

### THE PROJECT

The Robinson family's home in Roanoke, VA faced significant structural and safety issues. As a single mother with two children, including a child with disabilities, Ms. Robinson was having trouble keeping up with the house. Built in 1900, the home had a non-working upstairs bathroom, rotting floors and walls in the downstairs bathroom, and ceiling damage from roof leaks. Additionally, the home had foundation concerns, outdated electrical wiring, and lacked essential safety features.

With substantial funding through *Roanoke City's Major Rehab Program*, TAP was able to provide urgent and necessary rehabilitation work. Two new HVAC systems were installed along with a new roof. New exterior doors were installed, the foundation was reinforced, and safety updates were made like replacing knob-and-tube wiring and installing smoke detectors. **Combined with weatherization improvements, these repairs and updates addressed structural concerns, improved the family's comfort, and increased the energy efficiency of the home.**



#### **HIEE Funds Used**

WDR - \$27,700

#### **Leveraged Funds**

CDBG\* - \$66,789

AEP - \$14,000

WAP - \$3,832

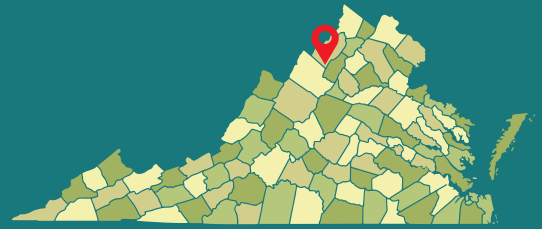
\*Roanoke City Major  
Rehab Program



# NEW MARKET APARTMENTS

NEW MARKET, VA

**HIEE Weatherization Deferral Repair (WDR) Program**



Income Qualification: 60% SMI

## THE PROJECT

New Market Apartments is an income-restricted community of 74 units across nine buildings, providing housing for families in need. While approved for weatherization, **several buildings first required roof replacements due to active water leaks, and outdated through-the-wall HVAC units needed upgraded. With funding from the HIEE WDR program, these critical updates were completed**, ensuring the buildings were ready for energy efficiency improvements.

CHP Energy Solutions led a comprehensive weatherization effort to bring lasting benefits to the residents. Attic insulation, air sealing, and high-efficiency heat pumps and dehumidifiers were installed, creating a more comfortable and controlled indoor environment. LED lighting, faucet aerators, and health and safety measures further enhanced energy efficiency and overall livability.

These upgrades not only reduce utility costs for residents but also contribute to a more sustainable future for the community. Thanks to the dedicated work of CHP Energy Solutions, New Market Apartments is now a safer, healthier, and more energy-efficient place to call home.



ENERGY SOLUTIONS

### **HIEE Funds Used**

WDR - \$775,000

### **Leveraged Funds**

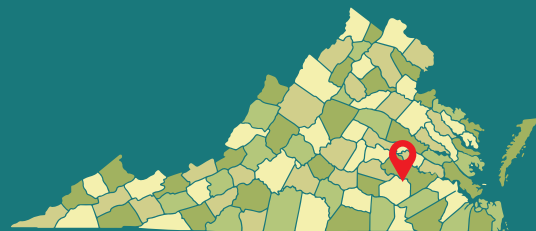
WAP - \$125,000



# 416 W. ST APARTMENTS

PETERSBURG, VA

## HIEE Weatherization Deferral Repair (WDR) Program



Income Qualification: 60% SMI

### THE PROJECT

In October 2023, *Project:HOMES* completed a vital weatherization project at 416 S West Street in Petersburg, a multifamily apartment building in desperate need of repairs. The Petersburg community, often underserved, faces significant challenges in maintaining safe and energy-efficient housing.

The aging structure had long been vulnerable to drafts, leaks, and rising utility costs, making daily life difficult for its residents. Understanding the urgency, ***Project:HOMES stepped in to provide critical energy efficiency upgrades, ensuring that the building was properly insulated, sealed, and equipped for long-term sustainability.***

With these improvements, the residents of 416 S West Street can now experience a safer and more comfortable home environment. The newly weatherized apartments help keep warmth in during the winter and heat out in the summer, reducing energy consumption and lowering utility bills. No longer burdened by extreme temperatures or costly inefficiencies, families can focus on their well-being without the constant worry of high heating and cooling costs.



#### **HIEE Funds Used**

WDR - \$46,000

#### **Leveraged Funds**

WAP - \$23,000



# ACKNOWLEDGEMENTS

The **Virginia Housing Alliance (VHA)** and the **Association of Energy Conservation Professionals (AECP)** collaborated to produce this report. Special thanks to VHA Fellow *Charles Miller* for his contributions and coordination with affordable housing developers to synthesize these highlights.

Special thanks to the *Virginia Department of Housing and Community Development* for administering the HIEE programs and providing access to historical production data.

Additional thanks to *Virginia Energy Efficiency Council* and *The Nature Conservancy* for providing maps highlighting the impact of HIEE-funded projects.

AECP and VHA are also grateful for the many affordable housing developers and weatherization providers who submitted projects that showcase the impact of the HIEE program across Virginia.

To learn more and get involved, visit [www.vahousingalliance.org](http://www.vahousingalliance.org)



VIRGINIA HOUSING  
ALLIANCE



Aerial view of Fredericksburg, VA  
Harlow Chandler / via Getty Images

We thank you for your continued support.

Virginia Housing Alliance  
2800 Patterson Ave, Ste 302  
Richmond, VA 23221  
[vahousingalliance.org](http://vahousingalliance.org)



VIRGINIA HOUSING  
ALLIANCE

Virginia Housing Alliance  
2800 Patterson Ave, Ste 302  
Richmond, VA 23221  
[vahousingalliance.org](http://vahousingalliance.org)



Association of Energy  
Conservation Professionals  
PO Box 152  
Floyd, VA 24091  
[aecpes.org](http://aecpes.org)