

ALBEMARLE HOUSING IMPROVEMENT PROGRAM

Community Outreach of Crozet, VA

Global Sustainability, Fall 2011

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PROBLEM DEFINITION

The Problem

The possible energy inefficiency of older homes in Crozet and lack of education on how to make the home more sustainable.

Research into Materials of the Homes

Vinyl siding was the most prominent material used in the homes we observed in Orchard Acres. Vinyl siding is not seen as a 'green product' for homes mainly because of environmental concerns regarding its manufacturing, usage, and disposal. The thicker the vinyl siding is the more expensive it is, so if the home is made cheaply it likely has a very thin vinyl siding material. In order for the vinyl siding to save the homeowner energy though, insulation must be applied in order to increase the tightness of the home. Vinyl siding has been found to allow moisture into the home, which could cause issues if the homeowner has Open Cell Insulation that loses its binding properties when wet. Additionally, if insulation is not installed correctly then the homeowner could be losing energy and money.

Stakeholders Involved

Our community partners and contacts are Ravi Respeto and Joyce Dudek who work with the Albemarle Housing Improvement Program. Joyce is the Associate Director for Real Estate Development and her primary responsibilities are monitoring AHIP's multi-family rental program and research into single-family rehabilitation. Ravi is the Development Director of AHIP and is in charge of resource development, event planning and marketing and communication programs. Our group is also a stakeholder since we have much to gain in this semester project. The Crozet Community is another stakeholder since they will directly benefit from AHIP's outreach and aid.

Currently there is little outreach in the Crozet area. While there are many new developments in Crozet, there are still numerous older homes that could use assistance from AHIP. Connecting them with AHIP could help them make repairs on their homes that they would have otherwise not been able to make and also make their homes more energy efficient. We hope that making a brochure with AHIP's information could help them connect with AHIP and show them how to increase home efficiency without spending too much money.

The gatekeepers for this project are the places that we plan to distribute our brochures since they have the ability to restrict or allow us to disseminate our information.

Problem Statement

We want to inform the town of Crozet and its homeowners and help them find ways make their homes more energy efficient and sustainable. We also want to tie the tips back to the Albemarle Housing Improvement Program (AHIP) and the services that they provide, potentially bringing more customers to AHIP. Our community partners, Ravi Respeto and Joyce Dudek, are from AHIP and they will be working with Orchard Acres in their upcoming project. Currently, individuals of the area have been helped but overall the community is unaware of the recent outreach. We hope to improve the community by increased awareness and participation of citizens and decrease energy bills.

APPROACH

Conceptualization Process

Originally we were going to focus on community engagement specifically in Orchard Acres and how AHIP could reach out to this neighborhood. However, after driving through the neighborhood and Crozet in

general we came up with the idea to reach out to the Crozet area in general. We did not see an obvious need to pinpoint our outreach to the Orchard Acres area because many of the homes were in good repair and decently well kept. We did see that many of the homes were constructed using vinyl siding, which is less energy-efficient at keeping the home envelope tight. We decided to make a brochure and place them in main community locations.

We will continue to document our project through the creation of a flyer, and will end the project with a finished flyer outlining ways to make the home more sustainable.

We will research the inefficiency of vinyl siding and other common issues with home energy efficiency that may be seen in Crozet. We will also research building practices in the area to tailor the flyer to their area's needs.

Addressing the Problem

We will address the problem of energy inefficiency by creating and distributing flyers around Crozet. The flyers will contain information about how homeowners can decrease energy bills, and we will focus on tasks that they can do on their own as well as jobs that AHIP can assist them with on their home. We will also give tips of varying price ranges, from nearly free, small changes to large renovation and rehabilitation work through AHIP. We will use resources from government websites such as the Department of Energy to find useful tips for our research.

We also will create a map of the areas that we want the flyer to be distributed in order to show that they are distributed across a wide area evenly.

Final Design Approach

Public Spaces for Distribution: We decided a good way to get the community engaged and aware is by distributing the flyers and information at local hotspots. Crozet is a considerably rural area. The community would most likely get involved if the flyers were located in public places rather than civic ones. Additionally placing flyers in a grocery store, for example would allow for individuals without a car to participate as well. We also would like this flyer to be on the AHIP website. We will create a map of these spaces to show that the flyers will be distributed across the Crozet area.

Possible Public Spaces:

- Crozet Library
- Crozet Park
- Western Albemarle High School & Henley Middle School
- Crozet Elementary & Brownsville Elementary
- Mint Springs Park
- Old Trail shopping center
- Great Valu shopping center
- Dairy Queen
- Crozet Pizza & Sals Pizza
- Mudhouse
- Starr Hill Brewery
- Chiles Peach Orchard

Contact Influential People: We will look up who the community leaders are in Crozet, such as the Community Advisory Council, newspaper writers, engaged citizens, Claudius Crozet Park Board, and town meeting places. Our plan will include meeting with them and getting input on what they think the best plan is for engagement in their community.

- Crozet Gazette (Mr. Marshall, news@crozetgazette.com; 434-466-8939)

- Crozet Community Advisory Council (434-296-5822)
- Crozet Community Association
- Parent-Teacher Organizations at local schools
- Claudius Crozet Park Board
- Crozet VA facebook page

Neighborhood Canvassing: Neighborhood Canvassing with information about AHIP would help inform the community about their programs. Small flyers about the program and home energy efficiency in newspaper boxes would get the basic information about AHIP and their resources out to Crozet.

Mapping the Area: We would like to have a map of the area to show where our flyer will be distributed and that it will be distributed across the Crozet area.

BUDGET AND FUNDING

The only large cost would be to print the flyers. We plan to do a brochure-style flyer, and its size depends on the amount of information we choose to have. Another cost will be for gas to distribute them and any fees associated with advertising in local newspapers like the 'Crozet Gazette'.

CONSTRAINTS AND BARRIERS

We do not expect any constraints to our plan to distribute the flyers, since we expect at least some of our possible areas to leave the flyers to agree to having our flyers at their location. We hope that having the flyer in multiple areas where people of Crozet go will improve the chances of it being read and used.

TIMELINE

- September 21st: Project Definition Finished
- October 5th: Conceptual Design Finished
- October 31st: Visit Orchard Acres

We drove through the neighborhood of Orchard Acres and portions of Crozet to gain a better understanding of the community and the style of homes in this area. We observed that many of the homes are in decent repair, and only found one that seemed to need substantial work done to its exterior.

- November 1st: Research on after school clubs, influential people in the community

We looked into the important boards and councils in Crozet, as well as popular publications that we could use to publicize our flyer.

- November 2nd: Preliminary Report Finished
- November 2nd: Budget

We outlined our costs, which will only be the cost to print the flyer, the cost to drive and distribute the flyer, and any fees associated with newspaper advertisements of the flyer.

- November 22nd: Mock Flyer: Summer/Winter Tips
- November 29th: Editing of Final Report
- December 10th: Final meeting together to finish project and creation of the map
- December 10th: Final Report Due
- December 12th: Present final information to the class

DOCUMENTATION AND ASSESSMENT

In order to assess the success of the flyers, we would like to have a survey that will go out to a certain neighborhood in Crozet to see if they are aware of AHIP and energy efficiency. If we have the flyer on AHIP's website, we would also like to find a way to count the number of times the flyer is viewed or downloaded.

DEFINITION OF SUCCESS

We will define our project as successful if people contact AHIP from the Crozet area looking into their resources and assistance. We will also define it as successful if people pick up the flyers and begin using the tips included in the brochure, even if they do not directly contact AHIP for home rehabilitation needs. We see getting the word out about AHIP and home energy efficiency as the ultimate goal.

APPENDIX

Brochure: Front

WHO IS AHIP?

AHIP (Albemarle Housing Improvement Program) works to improve affordable housing in Albemarle County, Charlottesville and Greene County through rehabilitation and urgent repairs. Common AHIP repairs include assisting residents fix health hazards, increase energy efficiency, and lower utility cost within their home. Emergency home repairs include, fixing broken pipes, patching a leaky roof, and installing smoke detectors. AHIP also assist in fixing the housing gap by maintaining neighborhoods.

AHIP serves over 350 people a year. Most clients fall within the 20-50 percentile of the Area Median Income.


HOW CAN I HELP AHIP

There are many ways to support AHIP. Donations of all kinds are appreciated. Donations are be made online or sent through mail. Additionally, donations of services, materials, vehicles, and appliances are more than helpful. Volunteering is another way to contribute to the organization. They have a variety of projects for all ages and skill levels.

Volunteer Tasks Include:

- Helping Construct Houses
- Installing Flooring
- Landscaping
- Tearing off Siding
- Building Ramps
- Roofing

Contact Jeni Klippe
@ 434-817-2447 x27 or
jklippel@ahipva.org
to get involved.

AHIP 
Albemarle Housing Improvement Program

Main Office:
2127 Berkmar Drive
Charlottesville, Virginia 22901

Phone: (434) 817-2447
Fax (434) 973-3730
General Email: info@ahipva.org

How to Improve the Efficiency of Your Home

Add Insulation: Insulate your attic to keep warm air from entering in the summer and cool air from entering in the winter.

Have Duct Systems Inspected: Get an inspection to pinpoint areas of concern. Ducts in crawl spaces & attics are a priority to check.

Replace Air Conditioner and Heating System Filters: Dirty filters restrict airflow and can cause the system to run longer, increasing energy use. Replace filters at least every three months for maximum benefits.

Service your HVAC System: Remember to have your HVAC system serviced annually to check that it is running at maximum energy efficiency.

Caulk and Close Open Spaces: Air leaks can waste energy dollars year-round. Caulking cracks and weather-stripping your home will keep cool air in during the summer and cold air out during the winter.

in SUMMER MONTHS...

Turn Up Thermostat: Set your thermostat to 78 degrees when you are home and 85 degrees or off when you are away.

Use Ceiling Fans: Remember ceiling fans cool you, not the room, so turn the fan off to save energy when you leave the room.

Keep Dampers Shut: Check to see that your fireplace damper is tightly closed.

Send Humid Shower Air Out: Open the bathroom window while showering to send hot air outside.

Ventilate Your Home: Try opening your windows in the morning and closing up before the mid-day heat hits to efficiently cool your home. If your house is well insulated it will stay cooler throughout the day so you don't have to rely on your thermostat for comfort.

Close Curtains to Block Strong Sunlight: Close the curtains and shades of south & west facing windows before leaving for the day to keep the sun's rays from heating your home. Use white shades and curtains to reflect light and heat.

in WINTER MONTHS...

Turn Down Thermostat: You can save 3% on your heating bill by reducing your thermostat one degree.

Use Fans Wisely: Keeping the bathroom or kitchen fan on pushes the warm air out of the household.

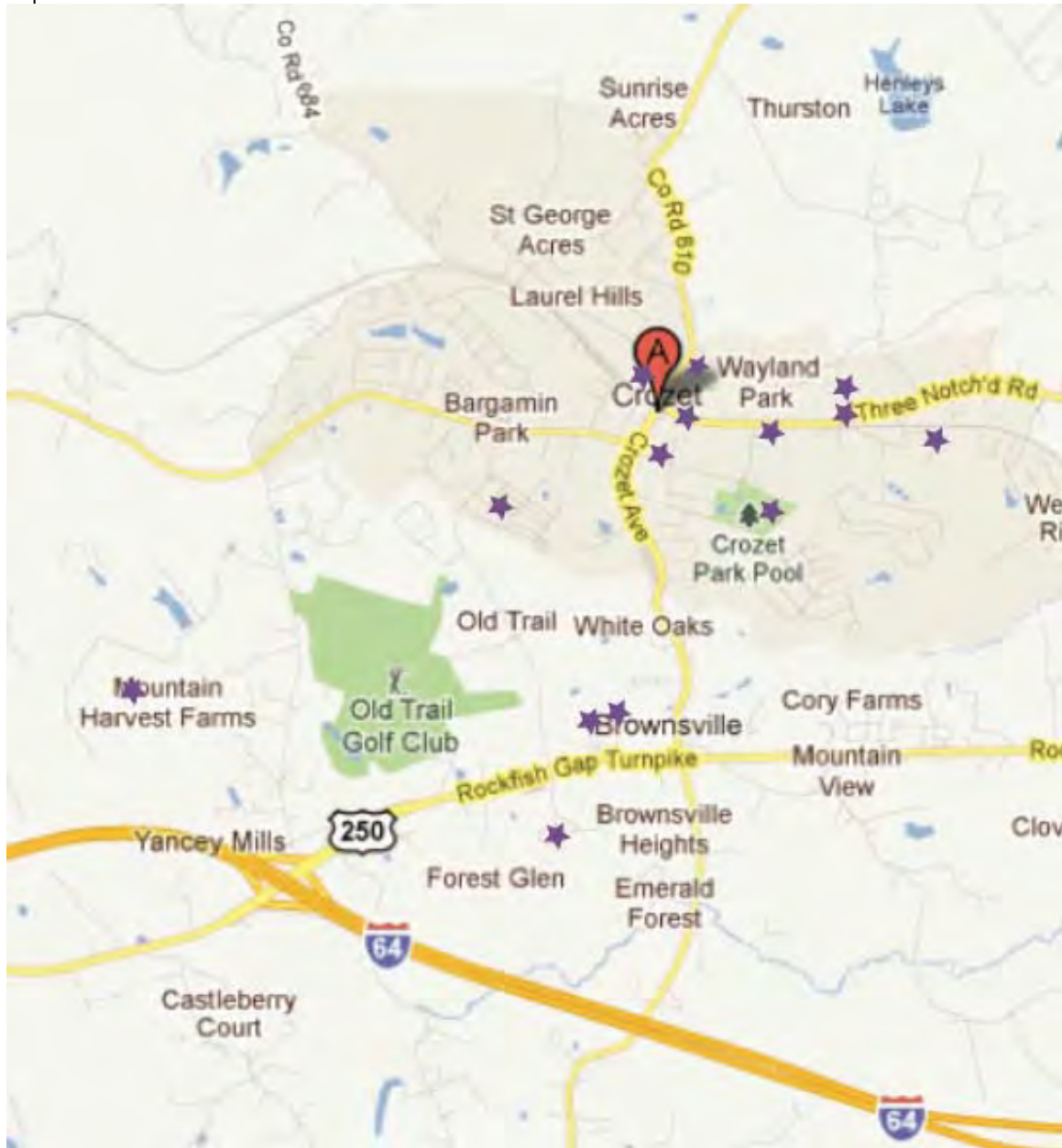
Reduce Water Heater: Reduce your heater to 115-120 degrees F to decrease power use.

Check Vent Placement: Make sure all heating vents are clear and in open spaces. Covering a vent by rugs or furniture stops air from circulating a room effectively.

Use Curtains and Blinds Efficiently: Open shades on the south facing windows to let warm light to pass through, naturally heating the room. Close all curtains at night to reduce the escape of heat. Also trim any hedges that might block sunlight.

Keep Warm Air: When taking a shower keep the door open and fan off. The steam from the shower will spread to other rooms and increase their temperature.

Map of the Area



Pictures of Orchard Acres homes

