



Equal outcomes for a sustainable future: Net Zero in Williamson

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Land Acknowledgement

We respectfully acknowledge that Williamstown stands on the ancestral homelands of the Stockbridge-Munsee Mohicans, who are the indigenous peoples of the region now called Williamstown.

Following tremendous hardship after being forced from their valued homelands, they continued as a sovereign Tribal Nation in Wisconsin, which is where they reside today. We pay honor and respect to their ancestors past and present as we commit to building a more inclusive and equitable space for all.

Our project

ENVIRONMENTAL PLANNING WORKSHOP (ENVI 402)

- Seniors studying environmental studies work with community organizations and municipalities

Clients

- Wendy Penner and Nancy Nylén
- Members of Net Zero Task Force



Williamstown Climate Action Roadmap



(Clean Choice Energy, 2023)

- Serves as a net zero emissions resolution plan
- Key framework is ensuring that the report is “**inclusive and equitable**”



Energy efficiency, renewables,
electrification and other
sustainability efforts **should not be
seen as luxuries**
(Todd Holland, 2023)





TABLE OF CONTENTS



01

Background

Net zero and equity in Williamstown



02

Methodology

Case studies, interviews, survey, focus group



03

Results

Obstacles towards creating an inclusive and sustainable Williamstown



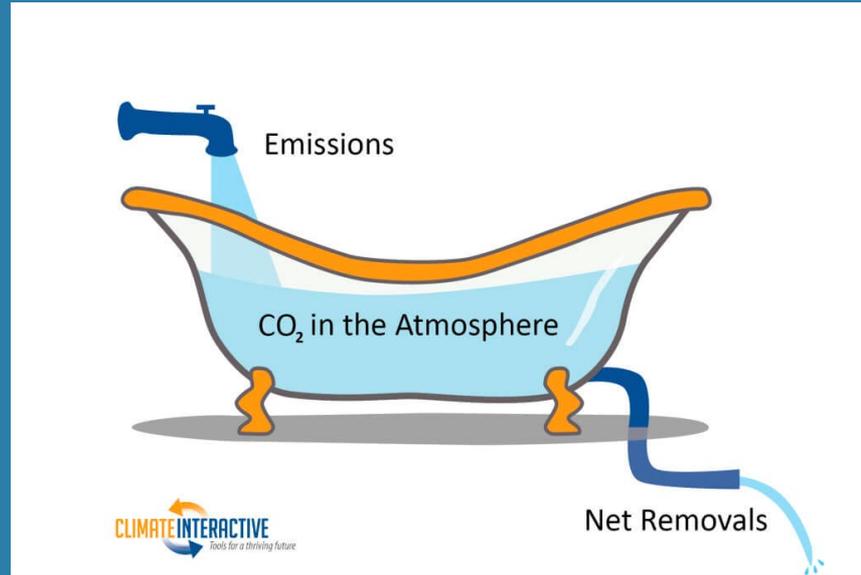
04

Recommendations

How can Williamstown incorporate equity into its net zero plan

What is Net Zero?

Reducing fossil fuel emissions, such as those from burning oil and gas, to as close to zero as possible



(Climate Interactive, 2023)



Municipal Guide to Inclusive Climate Action and Equitable Procurement



(Northeast Clean Energy Council, 2023)

Equity

- core principle that addresses systemic disparities
 - inclusive of all individuals and communities
 - It places marginalized individuals at the forefront
- 



background



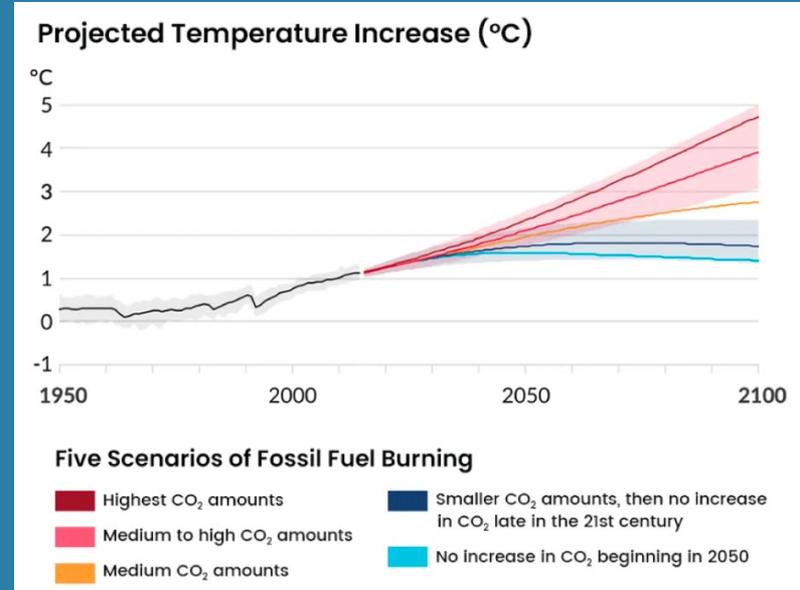
Net Zero In context

Why net zero?

- Catastrophic consequences if temperatures continue to rise (United Nations, 2023)

What are net zero targets?

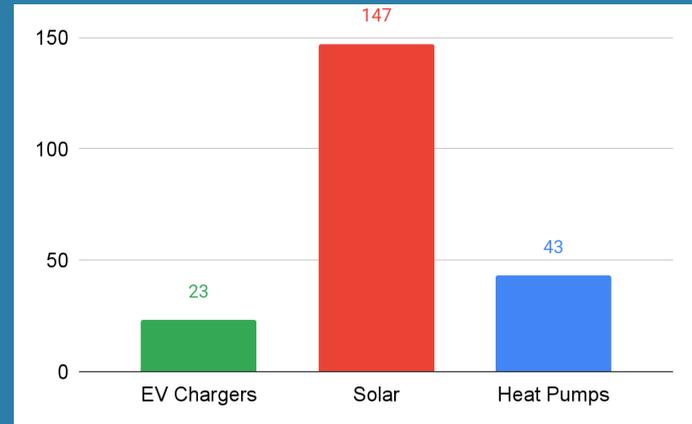
- Set to reduce emissions
- Energy efficiency, electrification, and renewables
- States, such as Massachusetts, and town municipalities have set net zero targets for future dates



Graph: Center for Science Education, 2021

State of Williamstown sustainability

- In 2021, Williamstown committed to achieving net zero by 2050
- Comprehensive climate action plan drafted to address barriers and inequities
- Fewer than 6.5% households have installed solar
- Sustainability measures are expensive and inaccessible to low-income residents



(Williamstown Permits supplied by Andrew Groff, 2023)

Equity in Williamstown

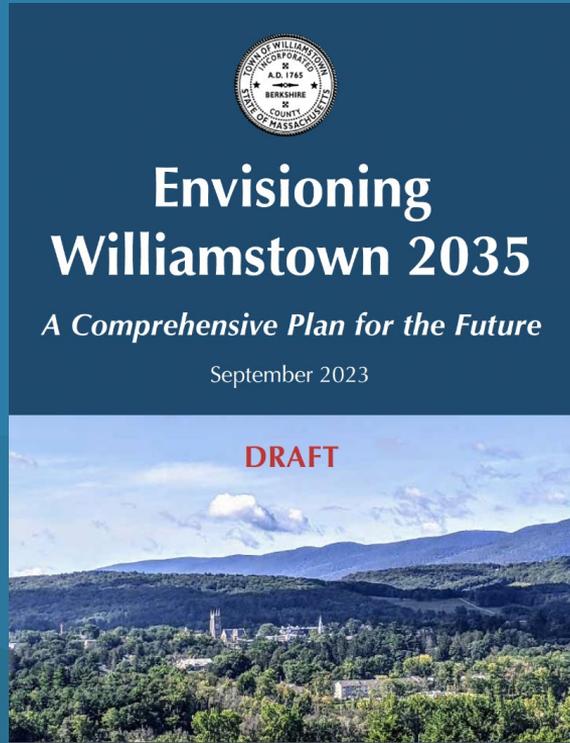


(Destination Williamstown, 2023)

- 11% live in poverty (US Census, 2023)
- Some residents don't live in well heated home
- Electrical bills can be a burden
- Town government seeks to address inequities, challenging



Project goals



(Williamstown Comprehensive Plan, 2023)

- Identify needs of low-income residents
- **Positive, solution based, economically viable strategies for net zero plan**
- Establish pathways for long-term relationships with community members



deliverables

1

Develop a **framework** for a focus on **equity**

2

Action items with a specific focus on **equity**





methodology



1. Case studies
2. Interviews

3. Survey
4. Focus Group

Case studies

- Other community climate action plans
- Used to guide development of framework for incorporating equity into a net zero plan
- 10 case studies

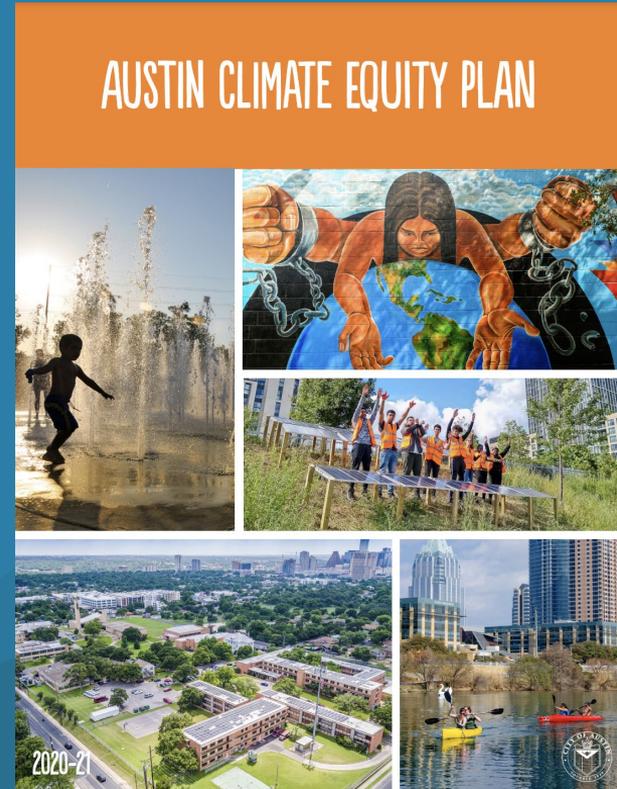


(iStock)

Case Studies: Acton Plan, Pierce County's Greenhouse Gas Reduction Plan, Tacoma Environmental Action Plan, Methow Valley Climate Action Plan, Spokane Sustainability Action Plan, King County Climate Action Plan, Thurston Climate Mitigation Plan, Municipal Guide to Inclusive Climate Action and Equitable Procurement, Bainbridge Island Climate Action Plan, Austin Climate Equity Plan

Example: Austin, TX Climate Equity Plan (2020)

- Addressing climate change is impossible without addressing racial and class inequities
- Use of an equity tool - asks questions around proposals to determine how equitable the specific proposals are



(Austin Climate Equity Plan, 2020)

interviews



- 11 interviews with key stakeholders
- Goal of interviews: learn from people in Williamstown who provide services to low-income residents

Interviewees: Andrew Groff, Andi Bryant, Bryan O'Grady, Renee Schmidt, Carin De'Mayo, Andy Hodgeland and Cheryl Shanks, Jane Tekin, Li Platz, Senator Paul Mark, Tanja Srebotnjak and Jason Moran, Todd Holland (n = 11)

Renee Schmidt



(Berkshire Community Action Council, 2021)

- Director of weatherization at BCAC (Berkshire Community Action Council)

Takeaways: Identified Barriers

- Behind on taxes
- Existing structural issues
- Don't want others in home
- Lack of contractors

senator paul mark

Overview

- Attended talk at log lunch, then had interview
- How can Williamstown use the Massachusetts green bank's funding?

Takeaways

- Low interest loans to decarbonize and weatherize the housing stock
- Loans available for single family homes
- 10% of funding will be dedicated to rural communities



(The Berkshire Edge, 2022)

survey

Survey distribution:

- Online listserv and Community listserv (n = 22)
- **Williams College employees (n = 4)**
- **Food pantry (n = 13)**
- Stop and Shop (n = 26)
- **Focus group (n = 7)**



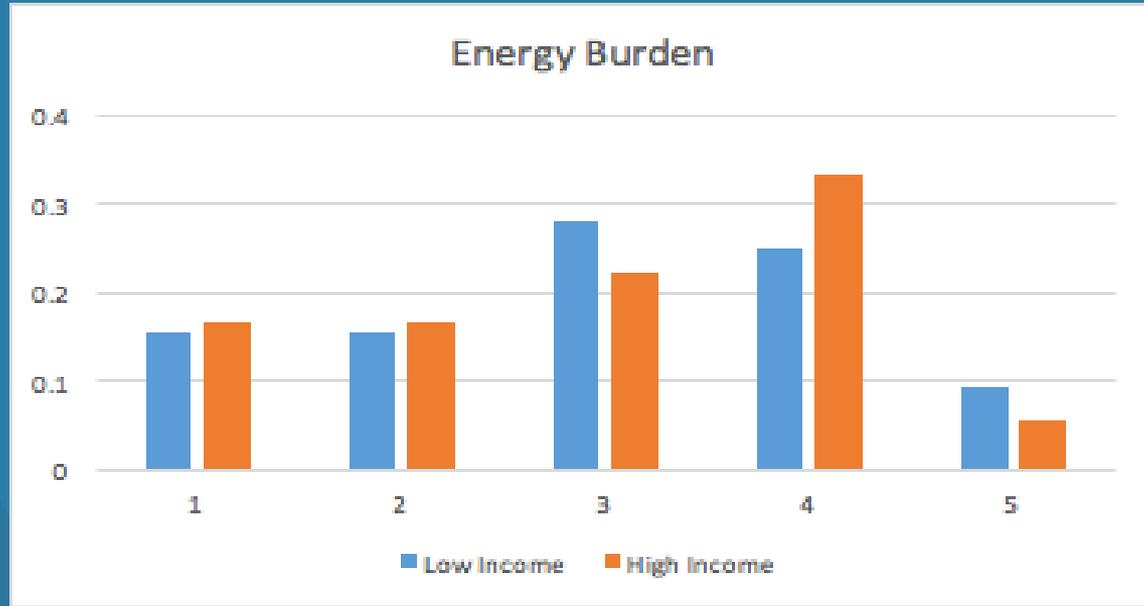
14 survey questions

- Homeownership status, income level, energy burden from electric bill, barriers to heating home, information dissemination, inclusion within Williamstown



survey Findings

Low-income \$0 - \$49,999 (n = 33) and **high-income** over \$100,000 (n = 18)



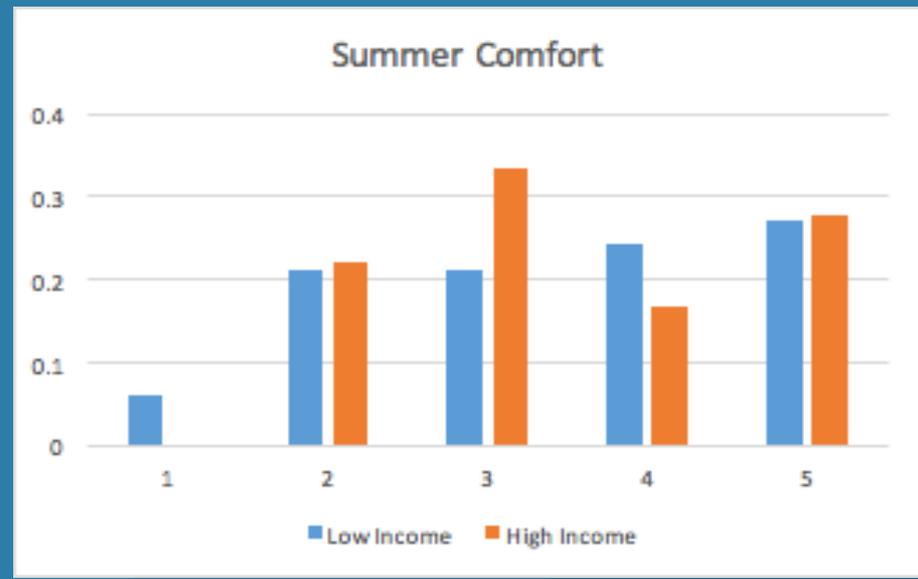
Energy burden:

Scale of 1 (Affordable) to 5 (A Burden)



Home comfort in the winter:

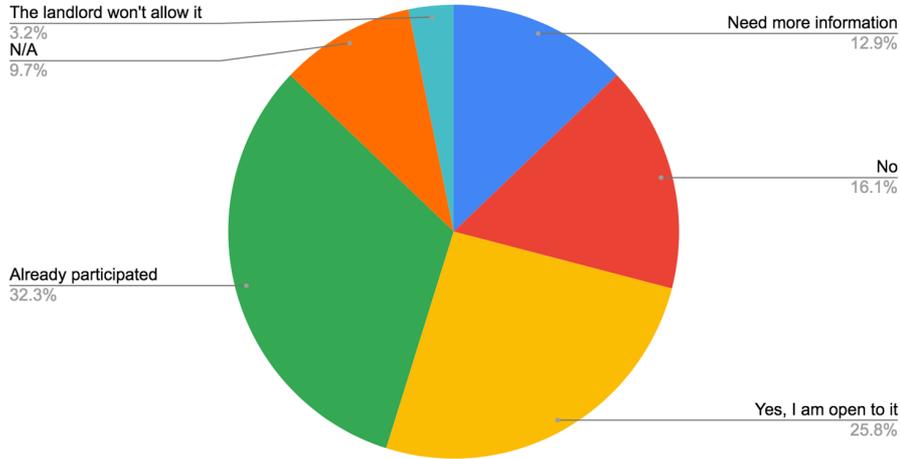
Scale of 1 (Cold and Uncomfortable) to 5 (Warm and Comfortable)



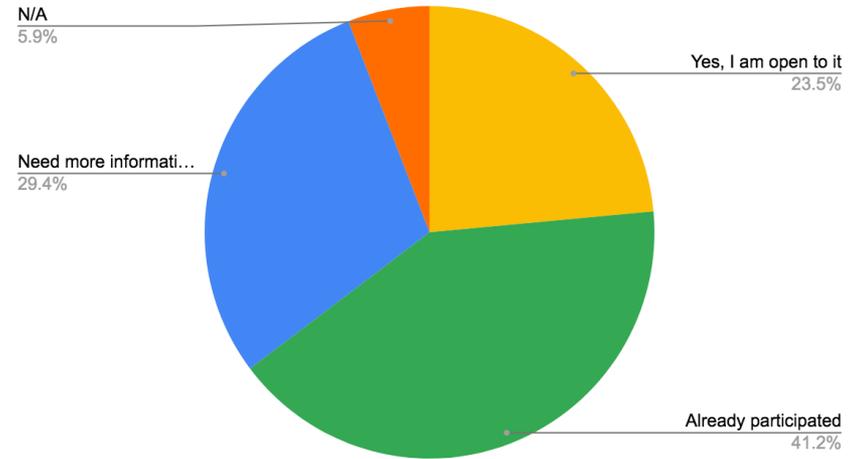
Home comfort in the summer:

Scale of 1 (Hot and Uncomfortable) to 5 (Cool and Comfortable)

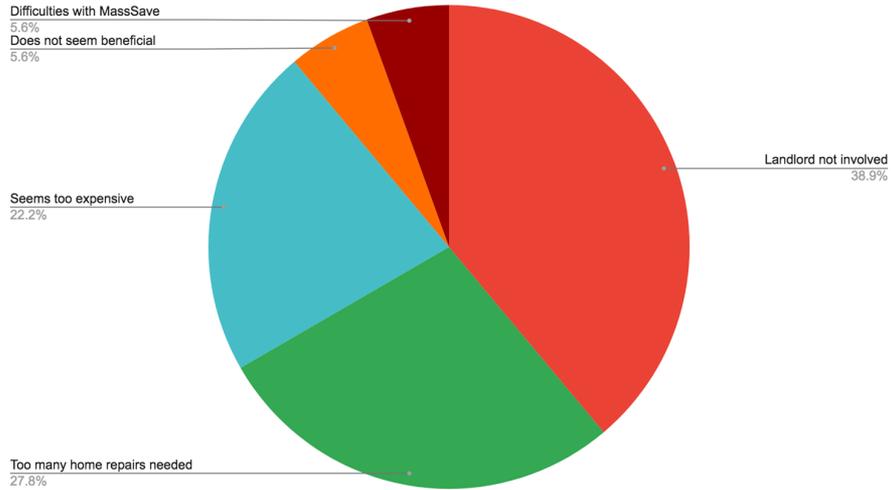
Would you feel comfortable with someone coming to your home for an energy assessment? (Low Income)



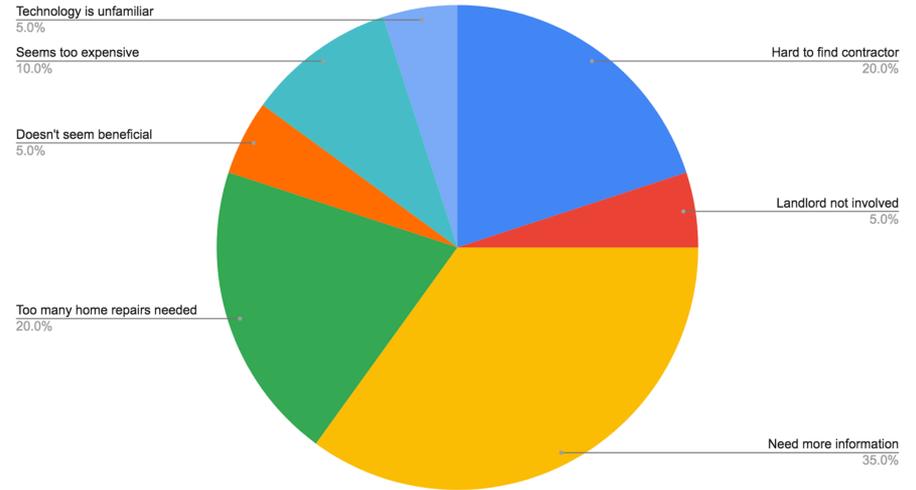
Would you feel comfortable with someone coming to your home for an energy assessment? (High Income)



Barriers to Weatherization (Low Income)



Barriers to Weatherization (High Income)





Qualitative findings

“I would like to do some speaking events, maybe sharing my story. I feel like I have so much to give back.”

“I feel overlooked because the wealth gap is so great. Most of the town population is very wealthy and I don't think they understand how some of us have to live with daily hardships of keeping a household running.”

“I worry that Williamstown is a two-tiered society - there's the college people + similar, then there's the town folks. I think the town folks often get left out or looked down on.”



“I have done everything to have my voice be heard and again nothing the government does.”



“Town hall meetings?
Unsure of where government buildings are located.”

Focus group Key takeaways

- **Equity:** Lack of sense of community
- **Transport:** Improve public transport
- **Energy Efficiency:** prefer new heat pumps to oil or gas
- **Information:** many avenues for some, others only through existing connections

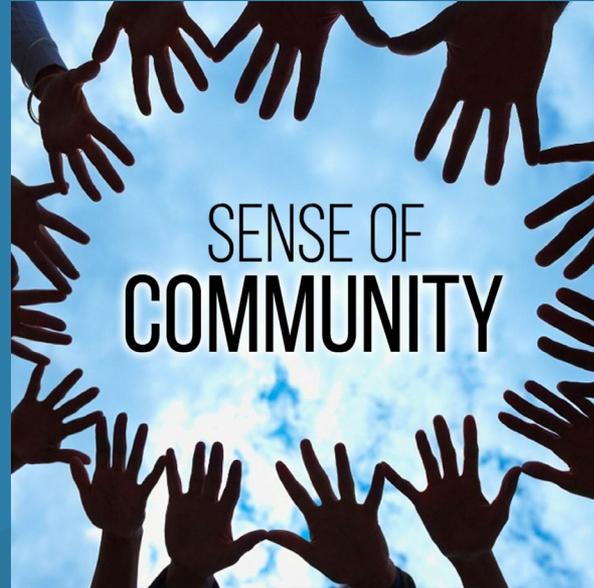




Results: Obstacles

Attitudes towards low-income residents

- Low-income residents feel a sense of stigma
- Impedes use of programs and services
- Feel isolated by lack of affordability



(NPR, 2021)

information dissemination ANd AwAreness



(RockDove Solutions, 2023)

- Ineffective information dissemination to low-income communities
- Unaware that programs exist
- Unaware that they qualify for certain programs

outreach to low income residents

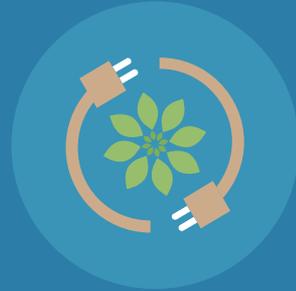


(Solarize Mass Save, 2021)

- Challenging group to reach
- Residents do not feel heard by town government

ACCESSIBLE PROGRAMS

- Some programs don't help if home is not in condition for weatherization to take place



- Programs unable to address everyone basic energy and weatherization needs

The background features a stylized landscape with blue mountains and green hills. The sky is a solid blue color with four white, fluffy clouds scattered across it. In the bottom right corner, there is a green plant with several leaves.

recommendations

I. equity as a guiding principle

Language

- Why equity is essential to incorporate into climate plan?
 - Disproportionate impacts → Prioritized during transition

Framework

- How history created inequities
- Equity used to create more just outcomes
- Equity tool/checklist

Theme 1: Health Strategy improves health (physical and mental) outcomes for low-income communities and communities of color. The strategy upholds the fundamental human right to clean, healthy and adequate air, water, land, food, education, transportation, safety, and housing.	Impact		
	Harm -1	Neutral or N/A	Benefit +1
Does the proposed action reduce air pollution (Ozone, VOC, NOx, etc.) and reduce asthma and other respiratory-related hospital visits?			
Does the proposed action extend expected longevity and/or quality of life for populations experiencing health disparities?			
Does the proposed action reduce stress, anxiety, and depression, i.e., improve mental health?			
Does the proposed action help restore or protect ecosystem health (air, land, water, soil)?			
Overall response to these questions with justification:			

(Austin Climate Equity Plan, 2020)

1. home repair funding

- Creation of housing rehabilitation program
- Ensure homes are in shape for home energy efficiency programs
- Green bank = potential source of funding
- Addresses most prevalent barrier preventing people from receiving weatherization services



(ClearCorps)

III. Awareness and outreach campaign



Step 1

Creating a centralized source of information

Step 2

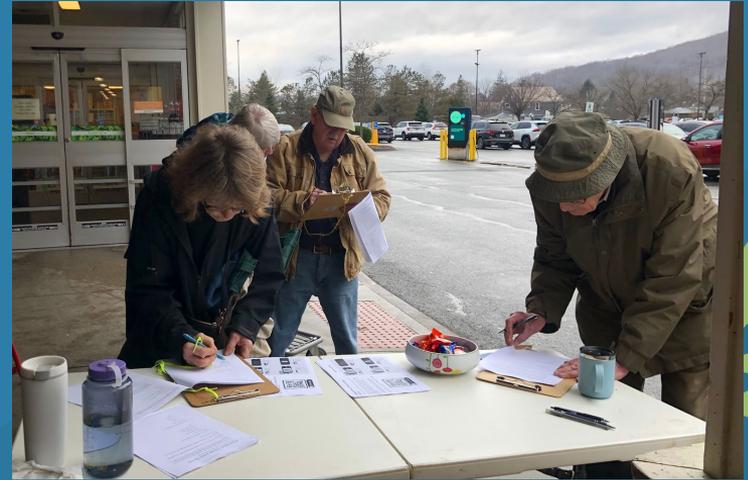
Outreach to the community, pushing awareness

Step 3

Continued communication

IV. ADVISORY COMMITTEE

- Formed through outreach efforts
- Representative of marginalized identities
- Allow community members to be at the forefront and to shape progress
- Cultural shift away from top-down structures
- Collaborate with DIRE committee
- Encourage intersectionality
- Feasibility - financial incentives



V. Williams college involvement



“An education at Williams should not be regarded as a privilege destined to create further privilege, but rather as a privilege that creates the opportunity and responsibility to serve society at large” (Office of the President, 2017)

(Wikipedia)



NEXt steps



Where to go from here

1. Outreach to groups we didn't reach
1. Engage landlords
1. Inclusion of renters



(istockphoto, 2023)



“If we aren’t proactively addressing equity, we’re perpetuating injustice.”

(Austin Climate Equity Plan, 2020)



**Thank you to everyone who helped
make this project possible!**

