2025



SOUNDS OF HOUSTON

Final Report



Summary

Sounds of Houston: Voices from a Changing Landscape is a creative placemaking and oral history project preserving narratives, soundscapes, and music in the Houston communities significantly affected by climate change.

The project paired four resident narrators with artist collaborators to interview, record, and amplify stories of Houston through sonic memoirs.

These sonic memoirs are audio files that combine:

- the voices of the resident narrators
- sounds of the environment
- original music



Sounds of Houston is supported by



Chamber Music America and Wallace Foundation.

Goals

Listen to a sonic memoir here

By creating collaborative sonic memoirs, we aim to uncover how this process shapes perceptions of climate change and examining whether and how art can foster deeper understanding of complex social issues.

This pilot project investigates whether hearing lived experiences through a combination of sound and music can drive meaningful change in attitudes toward climate justice and displaced communities.

This project responds to the pressing need to safeguard narratives—as well as voices, histories, environmental sounds, and music—that face erasure due to the impacts of climate change.

Sounds of Houston humanizes the abstract concept of climate change, making it tangible and immediate.

Project Background

Houston's Climate Challenge

Houston is home to some of the most extreme climate disparities in the country. A well-resourced section of the city known as the **Houston Arrow** benefits from strong infrastructure and lower climate risk. In contrast, the rest of the city—primarily working-class communities of color—faces growing climate threats with fewer protections.

Cost of Climate Disasters

Citywide, Houston is in the 83rd percentile overall, and the 90th percentile specifically for "change in the percent of properties at risk of flooding by 2050."

Economic and Productivity Losses

Citywide, Houston is above the 95th percentile for loss of high-climate-risk jobs, loss of feasible working season for outdoor workers, and loss of crop yields by the year 2100.

Urban Heat Island Extreme Heat Days

Even including the Houston Arrow, the Houston metro area falls entirely between the 89th and 96th percentile.

Flooding

Houston ranks above the 93rd percentile for coastal flooding, riverline flooding, and sea level rise. The overuse of concrete in the metro area has obstructed natural drainage and deprioritized tree cover, and is a direct contributor to the heat and flooding from which the entire community suffers.

Chronic Illness

Every tract outside of the Arrow falls above the 80th percentile for diabetes, stroke, heart disease, adult asthma, and COPD, with most tracts falling above the 90th for most chronic illnesses.

Sounds of Houston: The People, The Sounds



Aris Kian Brown Poet

Tangi Smith Narrator

An Ongoing Fight







Chelsea de Souza **Pianist**

Jaime Alvarado **Narrator**

The Storms We Work





Jalen Baker **Vibraphonist**

Nichole Redus Narrator

Time





Austin Lewellen Double-Bassist & **Community Lead**

Zed Minale & **Belay Andarge Narrators**

We Are The New **Americans**



Listen to all the tracks on <u>Sounds of Houston | Soundcloud</u>



Promotional Poster



SOUNDS OF HOUSTON

VOICES FROM A CHANGING LANDSCAPE

Sounds of Houston is a creative placemaking project dedicated to preserving the voices, soundscapes, and music of Houston communities deeply affected by climate change.

Climate change threatens not just our environment but also the histories and sounds of communities at risk of erasure. Through sonic memoirs, this project makes climate change personal, tangible, and immediate.

HOW IT WORKS:

- Scan the QR code on one of the photos.
- Listen to a unique track that includes brief pre- and post-listening surveys.

Your responses will help us understand the impact of the arts on climate justice.

PRODUCED IN PARTNERSHIP WITH:





Objectives

This project evaluated how listening to sonic memoirs—first-person audio stories from residents impacted by climate change in Houston—shaped public understanding and response to climate change.

We assessed listener responses across four key areas:

- **Understanding:** How does hearing a personal narrative influence awareness of climate change and climate-driven displacement?
- **Empathy:** Does listening increase emotional connection to and concern for affected communities?
- Motivation to Act: Are listeners more likely to support or engage in climate action after hearing these stories?
- Communication Preferences: How does the sonic format shape preferences for receiving and retaining climate-related information?

Methodology

We used a mixed-methods approach to assess the impact of the sonic memoirs:

- Pre- and Post-Listening Surveys: Participants completed brief surveys before and after listening to a memoir. These included both quantitative (e.g. rating scales) and qualitative (e.g. open-ended reflections) questions.
- Data Collection: Anonymous and voluntary surveys.

Key Findings

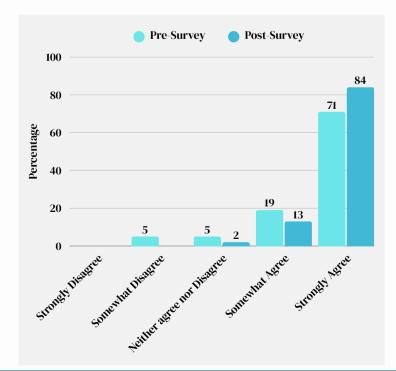
- Understanding others' experiences increased by 26.4%, the most significant shift observed.
- Over **50%** of the listeners found the *combination of the sound elements* to be what moved them.
- Feelings of personal responsibility for climate action rose by **17.3%**, showing that the stories inspired people to care and act.
- Awareness of the link between climate change and migration grew by 18.6% after listening.

Across all listening sessions, participants consistently showed

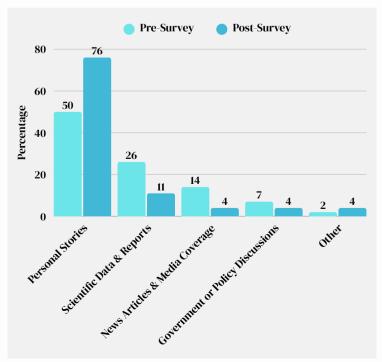
- greater empathy
- increased understanding of climate change
- motivation to act

after hearing the sonic memoirs.

"Climate change will affect people in my community"



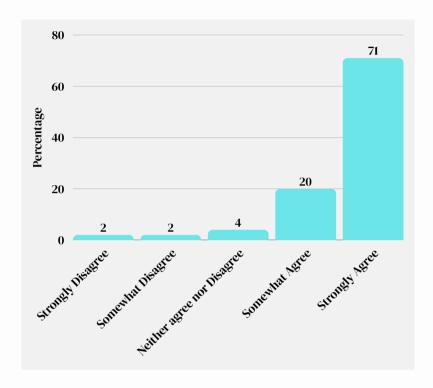
"What type of information do you think is most effective in raising awareness about climate change?"



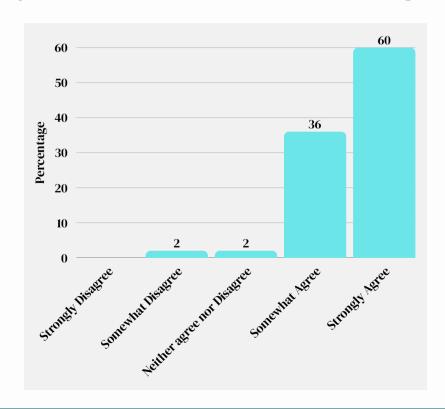
These changes happened on a 5-point scale, where 1 means "strongly disagree" and 5 means "strongly agree".

Key Findings Cont.

"I would recommend others listen to the sonic memoirs to better understand climate displacement."



"I felt emotionally connected to the narrator while listening to their story".



Listener Reflections

Listeners most frequently named the narrator's voice and the combination of sound elements as the most emotionally impactful parts of the sonic memoirs.

"I previously believed that music did not necessarily have any power to effect change in the climate change arena. I now believe that when important stories are told through music, the impact can be far greater and therefore effect greater change."



Hearing first-hand stories about someone's displacement and trauma around climate change affecting their community has a huge emotional weight and not only brings personal awareness and understanding but inspires action.

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"I have always understood that this was going to become a major issue, but hearing it in her voice made it more emotional."

"Climate displacement is a serious trauma that should be shared more widely."

What does this mean?

Sonic memoirs are an effective, scalable tool for climate education and advocacy.

 Listeners' understanding, empathy, and sense of responsibility all increased after engaging with the stories.

Sound builds emotional connection.

 Listeners frequently named the narrator's voice and the layering of sounds as what moved them most, evoking powerful emotional responses.

Emotional impact supports long-term learning.

- Integrating emotion and story into learning experiences may support more lasting engagement with social and environmental issues.
- Sonic memoirs helped crystallize how climate change affects the listener and their community.

Sonic memoirs are an important tool for advocacy and illicit more immediate responses than numbers and statistics.

Invest in community-based, story-driven media that centers sound, music, and voice.

Fact Sheet

Narratives improve science communication: Storytelling increases comprehension, interest, and engagement among non-expert audiences when conveying scientific topics (Dahlstrom, 2014).

Narratives can shape environmental beliefs: Because they present personal experiences rather than abstract truths, narratives are often accepted without skepticism, making them intrinsically persuasive (Dahlstrom, 2014).

Emotionally charged narratives shift resistant attitudes: Stories that evoke "negative" emotions have been shown to change the climate beliefs of politically conservative audiences and others typically resistant to climate action (Wong & Feygina, 2020).

Empathy enhances belief in climate change: Empathetic messaging—often present in personal climate narratives—can lead to stronger belief in climate change (Mendy, Karlsson, & Lindvall, 2024).

Storytelling builds connection: Stories about climate change help individuals feel more personally connected to the issue, bridging the emotional and psychological distance often felt (Global Energy Alliance, 2024).

References

Dahlstrom, M. F. (2014). Using narratives and storytelling to communicate science with nonexpert audiences. Proceedings of the National Academy of Sciences, 111(Supplement_4), 13614-13620.

Global Energy Alliance for People and Planet. (2024, May 31). The power of storytelling: Communicators as catalysts for climate action. https://energyalliance.org/the-power-of-storytelling-communicators-as-catalysts-for-climate-action/

Mendy, L., Karlsson, M., & Lindvall, D. (2024). Counteracting climate denial: A systematic review. Public Understanding of Science, 33(4), 504–520. https://doi.org/10.1177/09636625231223425

Wong-Parodi, G., & Feygina, I. (2020). Understanding and countering the motivated roots of climate change denial. Current Opinion in Environmental Sustainability, 42, 60-64.

Next Steps

Expand to other climate-impacted cities

The success of Sounds of Houston demonstrates the potential for sonic memoirs to engage listeners across diverse contexts.

We plan to bring this model to new regions where climate displacement is already unfolding deepening place-based learning.

Develop a sonic memoir toolkit

We aim to create an adaptable toolkit and curriculum that outlines how to guide story collection, sound design, and community listening sessions.

We hope others will replicate the impact of sonic storytelling in their own settings.

Deepen data collection through longitudinal follow-up

Future phases will include long-term follow-up with listeners helping us understand not only immediate shifts in awareness, but also how stories shape behavior and worldview over time.



Appendix

Pre-Survey Questions

- 1. How often do you engage with stories about climate change?
 - Never
 - Sometimes
 - Frequently
- 2. I am informed about the relationship between climate change and migration.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 3. I understand what people are experiencing when they have to move because of climate change.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 4. I feel personal responsibility in addressing climate change
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 5. Climate change will affect me.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree

Pre-Survey Questions Cont.

- 6. Climate change will affect people in my community.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 7. I currently live in an area impacted by climate migration and/or extreme weather.
 - Yes
 - I'm not sure
 - o No
- 8. If yes, where do you live?
- 9. What type of information do you think is most effective in raising awareness about climate change?
 - Personal stories
 - Scientific data and reports
 - News articles and media coverage
 - Government or policy discussions
 - Other
- 10. If you chose other, please share what type of information you think is most effective in raising awareness about climate change.
- 11. What actions (if any) have you taken to support climate justice? (Check all that apply)
 - Recycling/Upcycling
 - Reducing transportation emissions (biking, EVs, public transit, etc.)
 - $\circ\;$ Donating to an organization that supports climate change
 - Protesting/Activism
 - I have not yet taken action

Post-Survey Questions

- 1. I felt emotionally connected to the narrator while listening to the sonic memoir.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 2. Listening to the sonic memoir has motivated me to learn more about climate change.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 3. I would recommend others listen to the sonic memoirs to better understand climate change and displacement.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 4. Climate change will personally affect me.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree
- 5. Climate change will affect people in my community.
 - Strongly disagree
 - Somewhat disagree
 - Neither agree nor disagree
 - Somewhat agree
 - Strongly agree

Post-Survey Questions Cont.

- 6. What aspect of the memoir did you find the most moving?
 - Narrator's voice
 - Environmental sounds
 - Music
 - Combination of multiple elements
- 7. How did the memoir change your understanding of the relationship between climate change and migration? (open question)
- 8. What type of information do you think is the most effective in raising awareness about climate change?
 - Personal stories
 - Scientific data and reports
 - News articles and media coverage
 - Government or policy discussions
 - Other
- 9. If you chose other, please share what type of information you think is the most effective in raising awareness about climate change (*open question*).

10. I plan on

- Donating to an organization that supports climate justice
- Volunteering at a local organization that supports climate justice
- Recycling/ Upcycling
- Organizing a drive/ activation in my community
- Creating art to raise awareness about climate change
- Exploring pathways toward climate action in my own organization
- Learning how I can support communities affected by climate change
- Unsure

Special Thanks

This project was made possible thanks to the generous support of Chamber Music America and The Wallace Foundation.

Thank you to **Ellie Allen** for her collaboration in developing and analyzing the survey findings, deepening our understanding of this work's impact.

Heartfelt thanks to our local narrators — Jaime Alvarado, Zed Minale, Belay Andarge, Nichole Redus, and Tangi Smith — for sharing their stories.

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Poster Graphic Design by Chance Jonas-O'Toole



Contact Us



www.soundsthatcarry.com



soundsthatcarry@gmail.com

