



AUGUST 2024

LIHEAP NEEDS A LIFELINE:

A Call to Strengthen the Low Income Home Energy Assistance Program in a Changing Climate

AUTHORS

Caleb Smith, WE ACT for Environmental Justice

Annie Carforo, WE ACT for Environmental Justice

Juanita Constible, Natural Resources Defense Council



TABLE OF CONTENTS

Acknowledgements	3
Executive Summary	4
Heat is Especially Deadly for People of Color and Low-Income Households	5
LIHEAP Basics	6
The Role of LIHEAP in Climate Resilience	8
Recommendations	12
Recommendation 1: Maximize Funding for LIHEAP	12
Recommendation 2: Reduce Eligibility Barriers	14
Recommendation 3: Improve Public Participation.....	15
Recommendation 4: Develop and Implement Holistic Heat Resilience Plans	16
Conclusion	17
Endnotes	18

ACKNOWLEDGMENTS

This policy brief serves to amplify the countless experiences and insights shared by directly impacted community members in WE ACT for Environmental Justice’s membership who have been foundational to our understanding of what is at stake when we do not address the deadliest effects of climate change. We are deeply grateful for their continual time and support.

We also offer our thanks to all the people who supported the funding, review, editing, and design of this policy brief. This report grew out of the New York State Extreme Heat Coalition’s efforts to catalyze legislative action to protect communities from the deadly threat of extreme heat. Our allies strengthen our ability to protect marginalized urban communities through policy, adaptation planning, and resilient infrastructure interventions that advance health equity.

Finally, we appreciate Rachit Sharma and Anna Weber for their assistance with data analysis and visualization and the following reviewers (listed alphabetically): Meredith Dennis, Isabel Friedman, Laurie Geller, Eric Goldstein, Sabrina Johnson, Tanya Jones, Larissa Larsen, Lindsay Robbins, Leah Schinasi, and Adelle Thomas.

About NRDC

NRDC (Natural Resources Defense Council) is an international nonprofit environmental organization with more than 3 million members and online activists. Established in 1970, NRDC uses science, policy, law and people power to confront the climate crisis, protect public health and safeguard nature. NRDC has offices in New York City, Washington, D.C., Los Angeles, San Francisco, Chicago, Beijing and Delhi (an office of NRDC India Pvt. Ltd).

About WE ACT for Environmental Justice

WE ACT for Environmental Justice is a 501(c)(3) environmental justice organization and our mission is to build healthy communities by ensuring that people of color and/or low-income residents participate meaningfully in the creation of sound and fair environmental health and protection policies and practices. WE ACT is a membership organization with more than 1,100 members and offices in Harlem, N.Y. and Washington, D.C.

NRDC contacts: Chief Communications Officer Kristin Wilson-Palmer, and Senior Media Director, Josh Mogergerman

WE ACT for Environmental Justice contact: Senior Communications Manager of Federal Policy, Ashley Sullivan



EXECUTIVE SUMMARY

The bipartisan Low Income Home Energy Assistance Program (LIHEAP) and its predecessor programs have helped eligible U.S. households keep their power on since the 1970s.¹ Originally created by Congress to help meet energy needs in winter, LIHEAP has gradually become one of the few national sources of financial assistance for low-income households coping with increasingly hot summers.²

In fiscal year (FY) 2022,³ LIHEAP helped prevent loss of energy service for more than 1.7 million households and restored service to nearly 238,000 others.⁴ As federal agencies, advocacy organizations, and elected officials have rightly observed, LIHEAP is a lifeline for the most vulnerable among us.^{5,6,7}

But LIHEAP itself needs a lifeline. The chronically underfunded program is not up to the task of protecting low-income households from widening economic inequality, rising energy prices, and the ravages of climate change.⁸ Without urgent action, the disproportionate health burden of extreme heat on low income households will get even heavier, particularly in disadvantaged Black and Brown communities, which have lower rates of air conditioning access and higher energy burdens.⁹

This brief uses existing literature and publicly available data from all 50 states and the District of Columbia to examine LIHEAP's role as a health-protective program in the face of deadlier, more dangerous summers.

Based on this analysis, we make the following recommendations:

- Congress should refill LIHEAP's long-empty emergency contingency fund and put the program on a path to annual appropriations of \$40 billion per year.

- Grantees should reduce eligibility barriers among particularly heat-vulnerable households.
- The U.S. Department of Health and Human Services' Administration for Children and Families and LIHEAP grantees should continue to improve opportunities for public participation in the development of annual LIHEAP plans.
- All levels of government should develop and implement comprehensive heat resilience strategies beyond LIHEAP.



HEAT IS ESPECIALLY DEADLY FOR PEOPLE OF COLOR AND LOW-INCOME HOUSEHOLDS

The summer of 2023 was the hottest on record globally, continuing a trend of increasingly hot summers.¹⁰ In July 2023, more than 190 million U.S. residents were under heat advisories, and four U.S. states experienced their hottest July on record.^{11,12} We can expect record-breaking heat waves and hotter summers to continue, even with steep global cuts in the greenhouse gas pollution causing climate change.^{13,14}

Heat is already the deadliest form of extreme weather in the U.S., killing more people each year on average than floods, tornadoes, and hurricanes combined.¹⁵ In addition to causing well-known heat-related illnesses such as heatstroke, high temperatures can exacerbate heart disease, respiratory conditions such as asthma, and kidney disease. Heat also can contribute to preterm births and other poor birth outcomes and increase the chance of emergency room visits for schizophrenia, suicidality, and other serious mental health conditions.¹⁶ For older adults without underlying conditions, just eight hours indoors at temperatures above 78.8 °F (26 °C) can increase core body temperature and signs of cardiovascular strain—potential precursors to heat-related illness or death.¹⁷

Communities dealing with generations of disenfranchisement and environmental racism are among the most vulnerable to extreme heat. A large body of research links historical housing, labor, and land development policies and practices to present-day racial and class disparities in access to green space, high-quality housing, and neighborhood infrastructure and services.^{18,19,20} The households and communities most exposed to heat also tend to lack the economic resources needed to purchase and maintain cooling units, weatherize their homes, plant trees on their properties, or implement other measures to keep themselves safe from heat.

These disparities are particularly glaring in cities like New York. High population density, less vegetation, and more heat-absorbing surfaces such as asphalt can increase temperatures by up to about 9 °F (5 °C) in the hottest census tracts relative to the coolest ones.²¹ This phenomenon, called the urban heat island effect, tends to be most intense in Black, Latinx, and high-poverty census tracts.^{22,23}

Access to in-home air-conditioning or other mechanical cooling is also deeply inequitable. Nearly 9 in 10 U.S. households had air-conditioning equipment in 2020.²⁴ However, available data suggest that Black, Latinx, and low-income people are less likely to have air-conditioning units in their homes.²⁵

Air-conditioning is commonplace in some states but can be a luxury in others. As temperatures rise each year, it has now become a necessity. Disparities in access to cooling are directly connected to disproportionate heat-related harms.^{26,27,28} In New York City, for instance, an estimated 350 people died from heat-related causes per year from 2013 to 2022.²⁹ Black residents had a death rate twice as high as white residents, and residents of neighborhoods with very high poverty had a death rate three times as high as those in low-poverty neighborhoods. Air-conditioning data were available for 24 people who died in New York City after being exposed to extreme heat at home; of this group, 42 percent had air-conditioning units that weren't working or weren't in use, and 58 percent had no air-conditioning at all.³⁰ A similar picture comes from Maricopa County, Arizona. In 2023, 156 people died indoors from heat-related causes. About 85 percent of decedents had air-conditioning units that were not working or not in use.³¹

LIHEAP BASICS

LIHEAP is a federal block grant program funded primarily by annual appropriations. The Administration for Children and Families (ACF), an office of Health and Human Services (HHS), uses congressionally determined formulas to distribute grants to every state, the District of Columbia, five U.S. territories, and about 150 Native Nations.³² Due to the lack of publicly available territorial and tribal data, we will refer solely to state grantees (including D.C.) for the rest of this brief.

States have significant flexibility in how they deploy their LIHEAP funds, including deciding who is eligible for benefits.³³ Eligibility can be determined by income criteria or categorical criteria, which qualify households on the basis of receipt of other federal assistance such as food stamps.³⁴ In fact, the wide variation across states has made it a challenge to evaluate LIHEAP's performance nationwide or to make comparisons among states.³⁵

For income-based eligibility, household income may not exceed 150 percent of the federal poverty level or 60 percent of the state median income.³⁶ But states can decide what to count as income, including sources as varied as regular wages (including wages earned by children), strike pay, cash gifts, and income tax refunds.³⁷



There are three main types of benefits available through LIHEAP.³⁸

- **Regular heating or cooling benefits** account for more than half of program funding nationwide. These benefits typically take the form of payments directly to energy providers to partially cover utility bills. Some states provide heating or cooling equipment instead.³⁹ Preliminary data indicate that states offering cooling benefits in FY2022 gave eligible households an average of \$584.⁴⁰
- **Crisis benefits** are offered to households that face an emergency of some kind, such as a disconnection notice or extreme weather. On average, states use about 18 percent of total LIHEAP funding for a mix of winter crisis, summer crisis, and year-round crisis benefits. Some states, like Ohio, offer summer crisis benefits but no regular cooling benefits, perhaps to maximize flexibility in the face of limited funding. Preliminary data suggest that states offering summer crisis benefits in FY2022 gave eligible households an average of \$337.⁴¹
- **Weatherization benefits** help reduce the need for regular and crisis benefits by cutting energy consumption through measures such as caulking windows and doors and repairing roofs or cooling equipment. However, states can allocate no more than 15 percent of their LIHEAP grants to weatherization unless they apply for and receive a waiver that can increase the percentage to 25 percent.^{42,43}

Unlike the Supplemental Nutrition Assistance Program (SNAP), LIHEAP is not an entitlement program. This means that eligible households are not guaranteed assistance when they apply. Based on the average of FY2011 to FY2022 data, just over 17 percent of eligible households nationwide receive any type of LIHEAP benefit each year, largely due to limited funding.⁴⁴

Furthermore, states often limit households to either a one-time regular heating or regular cooling benefit per year, *and/or* one crisis benefit per year. This is a drop in the bucket for households that struggle to pay their utility bills each month.⁴⁵

There is also no legal requirement for states to provide cooling benefits under LIHEAP. As discussed on page 9, just 24 states offered regular cooling benefits in FY2022.

LIHEAP is one of 13 HHS programs covered by the Justice40 initiative.⁴⁶ Justice40 refers to the Biden-Harris administration's commitment to ensure that disinvested communities directly benefit from 40 percent of federal investments in climate change mitigation, clean energy and energy efficiency, the development of critical clean water and wastewater infrastructure, and other programs. It may be easier for HHS to meet Justice40 goals with LIHEAP than with some other programs because it was originally designed to focus on low-income households.⁴⁷ However, as we demonstrate in the next section, there is still a major gap between the needs of underserved communities and what LIHEAP can deliver.

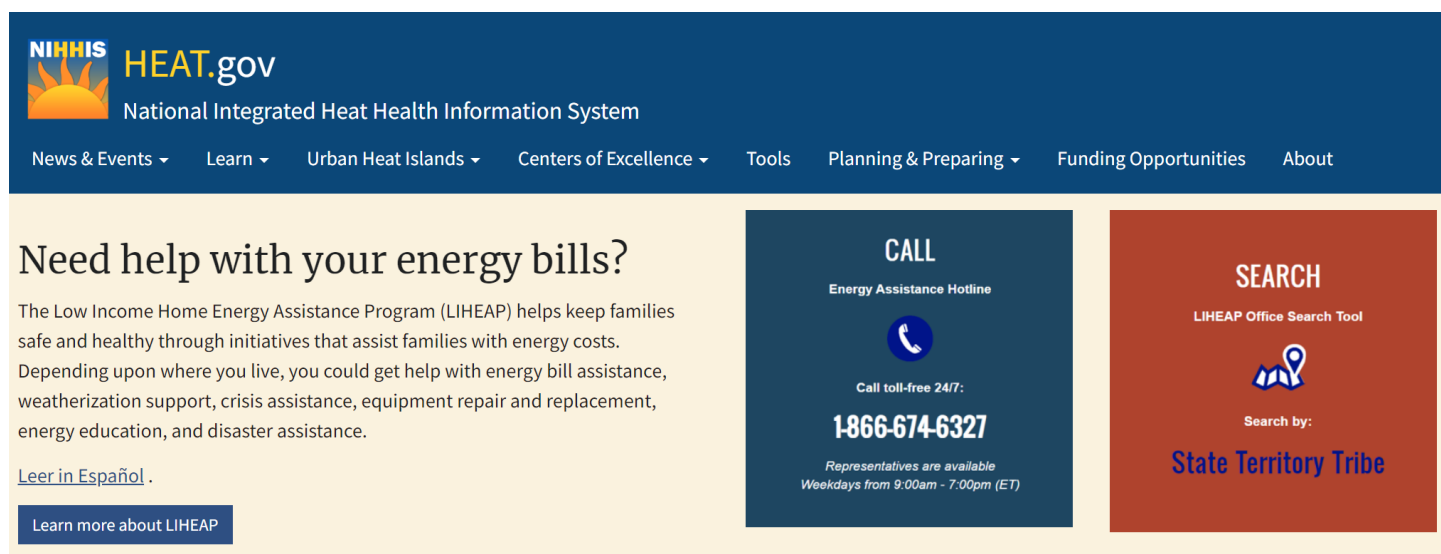


THE ROLE OF LIHEAP IN CLIMATE RESILIENCE

Extreme heat poses cumulative and discrete threats to human health. Without a uniform protocol across systems to track heat deaths, there is a chronic underestimation of heat mortality. Because our current disaster-response and policymaking frameworks struggle to capture these impacts including costs of heat-related health harms and the benefits of climate adaptation measures, extreme heat has historically been given less prioritization by policy-makers.^{48, 49}

Recognizing the need to change course, the Biden-Harris administration has consistently featured LIHEAP as part of its response to the health dangers of extreme heat. The program was cited in White House press releases in each of the administration's first three summers^{50, 51, 52}; it is listed as one of the president's climate resilience achievements⁵³; and it occupied part of the homepage of the HEAT.gov website in March 2024 (Figure 1).⁵⁴

FIGURE 1: SCREENSHOT OF THE HEAT.GOV HOMEPAGE, MARCH 2024



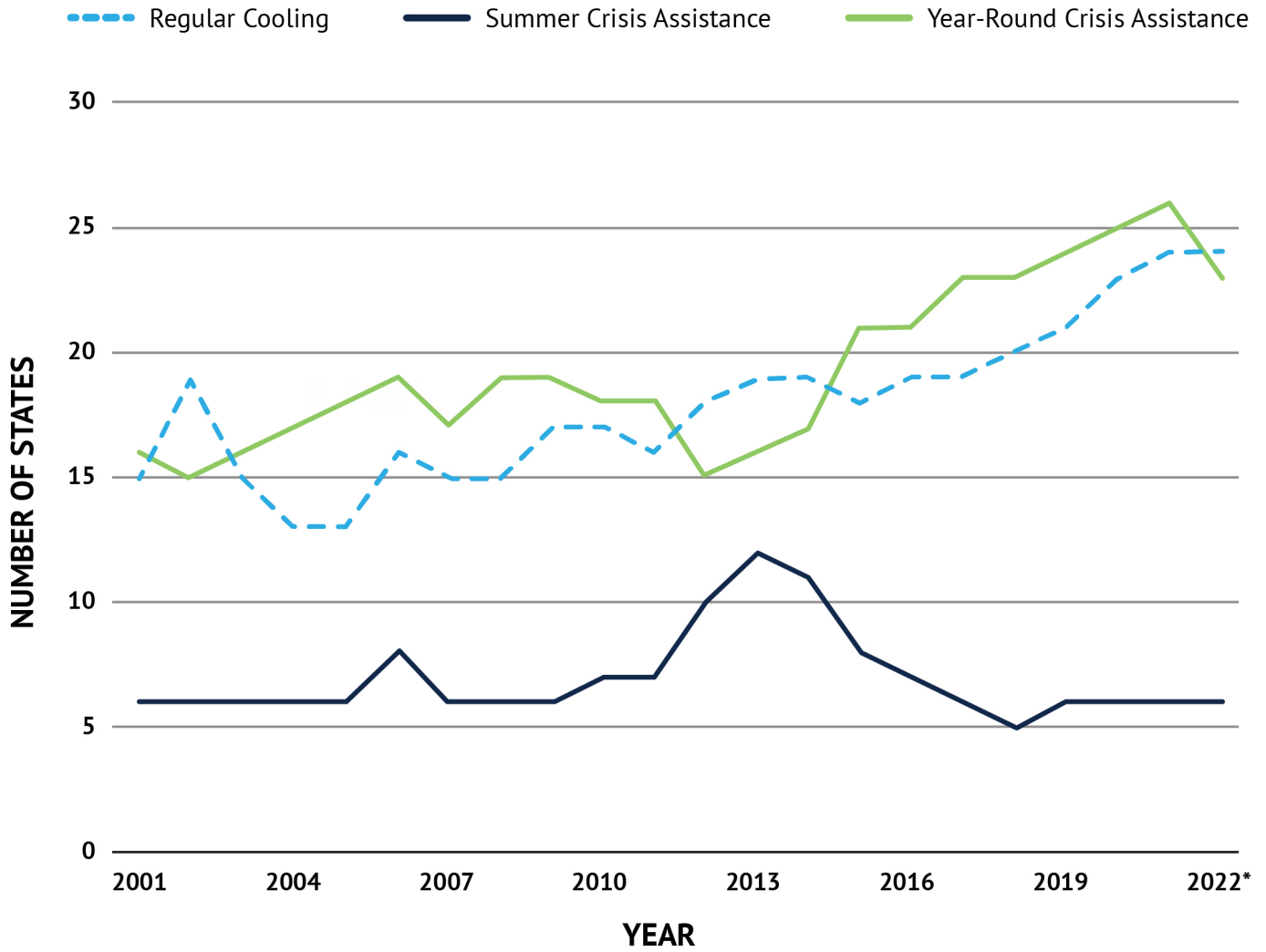
Further, ACF has devoted considerable effort to helping states understand how they can use LIHEAP to protect low-income households in the summer. In the first three years of the Biden-Harris administration, the agency developed short videos in multiple languages, a heat-health dashboard,⁵⁵ and a LIHEAP eligibility tool. It also issued guidance to grantees about their ability under LIHEAP to offer cooling assistance.^{56, 57, 58}

Unfortunately, grantees can't take advantage of increased flexibility in the program without the funds to match. For example, states frequently run out of money partway through the cooling season—or before it even starts.

A common question on the “Frequently Asked Questions” on the ACF website is *“I applied for LIHEAP but was told that there wasn't any LIHEAP money left. What can I do?”*⁵⁹

The number of states offering regular cooling assistance through LIHEAP has certainly increased since FY2001 (Figure 2).⁶⁰ However, less than 2.5 percent of income-eligible households⁶¹ nationwide received regular cooling assistance in each of the past few years.⁶² Summer crisis assistance served only another 0.5 percent of eligible households.⁶³

FIGURE 2: NUMBER OF STATES PROVIDING COOLING BENEFITS FY2001 - FY2022



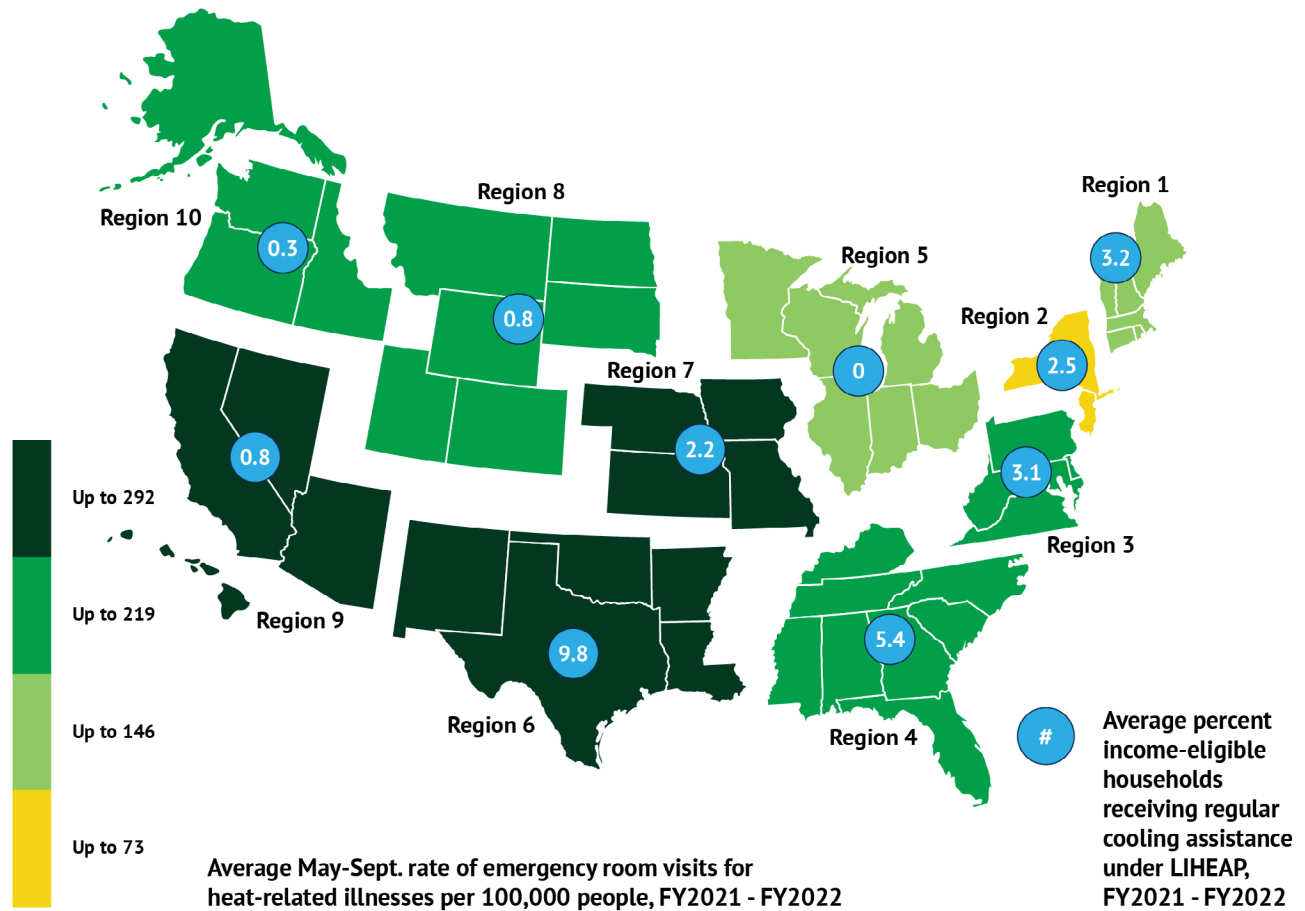
*FY2021 to FY2022 data are preliminary pending final data validation.
 Source: HHS LIHEAP Data Warehouse, <https://liheappm.acf.hhs.gov/datawarehouse>.

A closer look at the HHS region level suggests incongruity between the share of households receiving regular cooling benefits in a given region and that region’s heat-health needs. Figure 3 shows the average rate of emergency room visits for heat-related illnesses incurred in any setting (including outdoors) and the average percentage of eligible households receiving regular cooling benefits.⁶⁴ Every region of the country has experienced heat illnesses—including the five northernmost regions, each of which provided cooling assistance to less than 4 percent of eligible households.

Even Region 6, which includes some of the hottest states in the country, provided cooling assistance to less than 10 percent of eligible households.

Note that due to lack of data for U.S. territories, the values for both emergency room visits and households served likely are conservative for Region 2 (which contains Puerto Rico and the Virgin Islands as well as New York and New Jersey) and Region 9 (which includes all other island territories, along with Arizona, California, Hawaii, and Nevada).

FIGURE 3: RATE OF EMERGENCY ROOM VISITS FOR HEAT-RELATED ILLNESSES AND SHARE OF INCOME-ELIGIBLE HOUSEHOLDS SERVED BY REGULAR COOLING BENEFITS

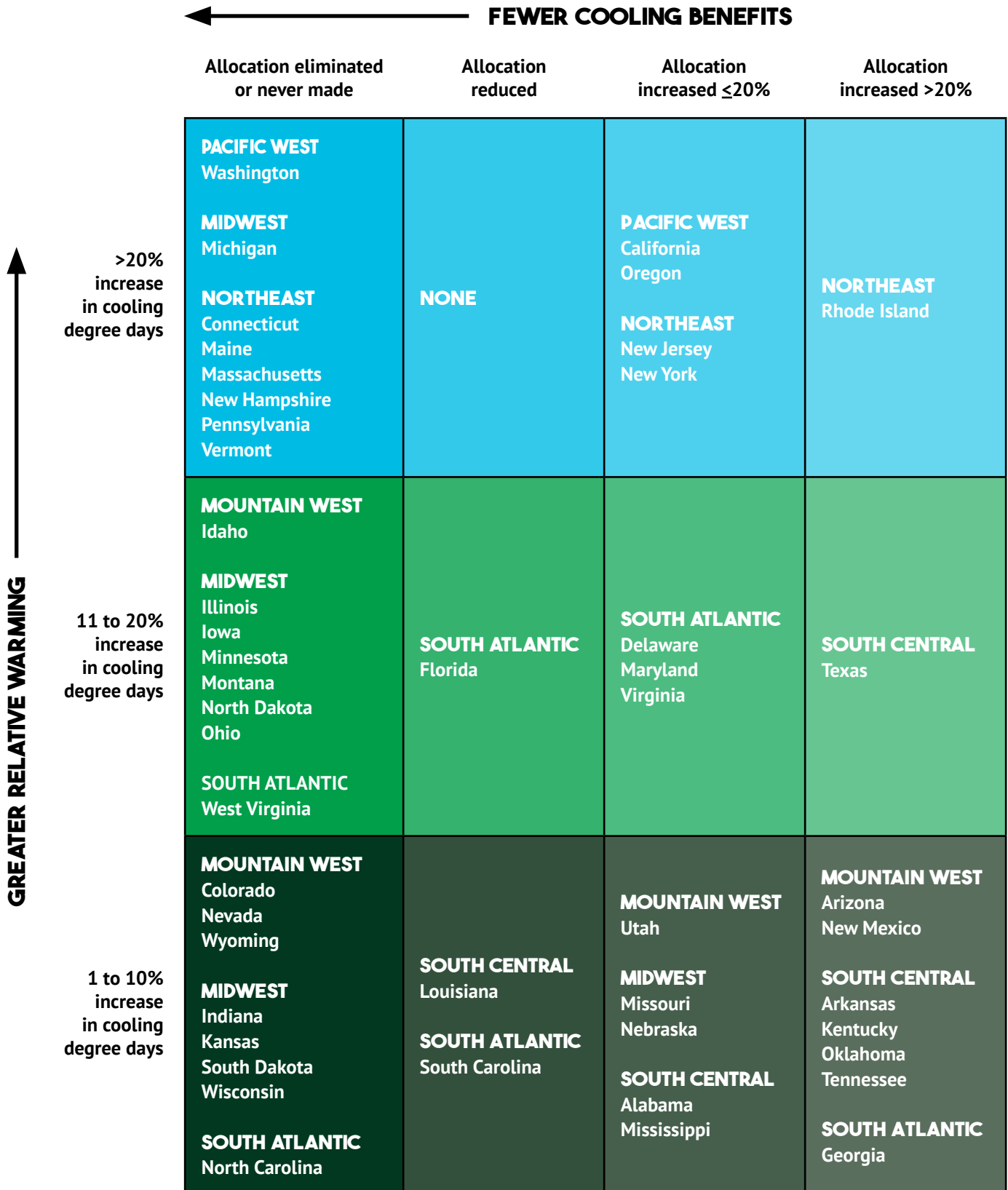


Data: Centers for Disease Control and Prevention Heat & Health Tracker and LIHEAP Data Warehouse. LIHEAP data for FY2021 and FY2022 are preliminary pending validation.

The Pacific Northwest (Region 10) offers an ideal example of why states that currently offer little to no cooling assistance should reconsider.⁶⁵ In 2021 an “unprecedented” heat wave that would have been “virtually impossible” without climate change killed at least 200 people in Oregon and Washington and sent many others to emergency rooms.^{66, 67, 68, 69, 70} In Multnomah County, Oregon, 94 percent of the recorded heat deaths occurred in people’s own homes, most of which lacked air-conditioning. Nearly one-fifth of the people who died at home did not even have a fan.⁷¹ Washington State did add cooling to its year-round crisis benefits after the 2021 heat wave but still didn’t have a regular cooling allocation as of its draft FY2024 plan.^{72, 73}

There also appears to be a disparity between climate change-driven increases in temperature and the increase in cooling benefits under LIHEAP. Figure 4 uses cooling degree days (CDD) as an indication of how hot it is outside.⁷⁴ The higher the CDD count, the more energy is needed to keep indoor spaces cool.⁷⁵ In this figure, the states in the top section have had the largest relative increase in average CDDs since the period from FY2001 to FY2003. The states in the first column have never allocated assistance funds to regular cooling benefits in their state plans or eliminated the allocation at some point after FY2021. The states with the lightest colors made the largest relative increases in cooling allocations.

FIGURE 4: CHANGE IN COOLING DEGREE DAYS AND PLANNED ALLOCATION TO COOLING BENEFITS, FY2001 - FY2003 TO FY2020 - FY2022



Data: NCEI/NOAA and LIHEAP Data Warehouse. LIHEAP data for FY2021 to FY2022 are preliminary pending validation. NCEI/NOAA data not available for Alaska, Hawaii, or the District of Columbia.

The geographic patterns in the figure are stark: the fastest-warming states with the lowest cooling allocations are almost all in the northern tier of the country. This is true even though northern states have historically received much larger LIHEAP allocations than southern states due to the historic focus of the program on meeting wintertime energy needs.^{76,77} Keep in mind, too, that even the states that increased their cooling allocation by more than 20 percent serve just a fraction of eligible households, ranging from an average of about 2 percent in Arizona in the three

most recent years of data to less than 17 percent in Oklahoma and Rhode Island.

The need for cooling benefits under LIHEAP will only grow as average temperatures continue to increase and heat waves get longer, more frequent, and more extreme due to climate change.^{83,84} At the same time, the need for heating benefits hasn't gone away. Without additional and sustained funding, LIHEAP managers will continue to have to make hard choices between keeping households warm in winter or cool in summer.

CASE STUDY: NEW YORK STATE

New York State receives the largest LIHEAP allocation in the country—nearly two times the second-largest allotment (for Pennsylvania). Yet it regularly runs out of funding for its cooling assistance program.⁷⁸ In FY2022, New York received nearly \$869.5 million and allocated only 2.3 percent, or \$20 million, toward cooling assistance.⁷⁹ Due to additional funding from the American Rescue Plan, the cooling assistance budget was \$23 million, the state's largest total to date.⁸⁰ However, on July 8, 2022, just 10 weeks after the program opened for the year and less than three weeks into the summer season, the state ran out of funding.⁸¹ Less than a month into summer of 2024, despite five million more in funds than the previous year, the program ran out of money again only a week later than usual.⁸²



RECOMMENDATIONS

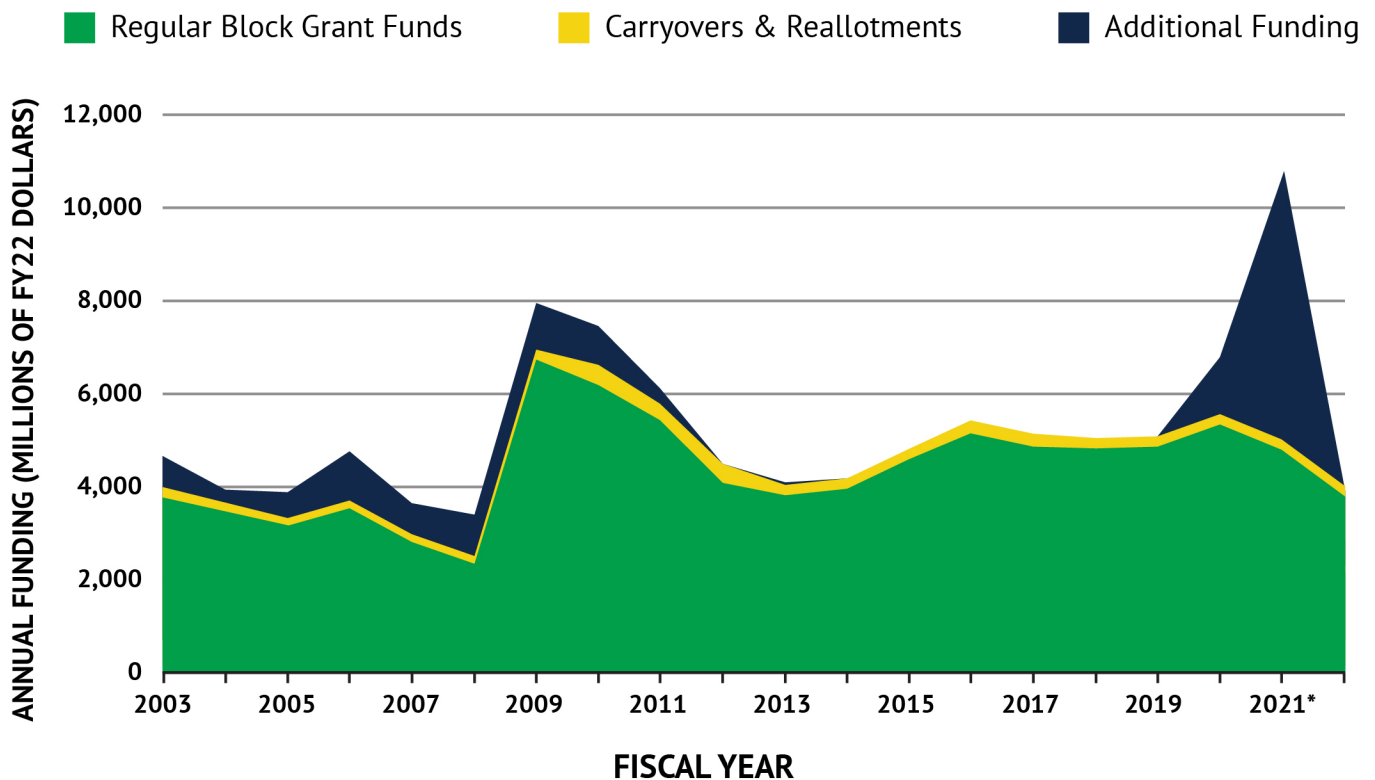
Below are several recommendations to address previously outlined gaps and barriers including improved funding, public participation, and accessibility measures.

RECOMMENDATION 1: Maximize Funding for LIHEAP

Available data indicate that total inflation-adjusted LIHEAP funding ranged from a low of about \$3.3 billion in FY2008 to a high of more than \$10.6 billion in FY2021 (Figure 5).^{85,86} Regular block grants, which typically account for the largest share of annual LIHEAP funding, increased after the Great Recession of 2008 to 2009, declined between FY2009 and FY2012, and have stayed relatively flat ever since.⁸⁷ In other words, block grant funding has not kept up with recent economic trends, the COVID-19 pandemic, or the climate crisis.

Furthermore, LIHEAP's emergency contingency fund has remained empty since FY2011.⁸⁸ The fund, which can be refilled each year to a maximum of \$600 million, is intended to respond to extreme weather, spikes in energy prices, or other emergencies.

FIGURE 5: INFLATION-ADJUSTED LIHEAP FUNDING TO STATE GRANTEES, FY2003 - FY2022



*FY2021 to FY2022 data are preliminary pending final data validation.
 Source: HHS LIHEAP Data Warehouse, <https://liheappm.acf.hhs.gov/datawarehouse>.

ACF distributes the contingency funds to some or all grantees “based on criteria appropriate to the emergency.”⁸⁹ After Hurricane Katrina, for instance, Alabama, Florida, Louisiana, and Mississippi received a combined total of \$27.25 million in additional LIHEAP funds (2007 dollars).⁹⁰ Contingency funding has not been released in response to extreme heat since FY2002 despite a slew of deadly heat waves in places like California in 2006, Wisconsin in 2012, Washington in 2021, and Arizona in 2023.^{91, 92, 93, 94}

Congress has instead responded to recent stressors with disaster relief bills and major climate change legislation. Historic boosts in total funding over the last three years came from the 2020 Coronavirus Aid, Relief, and Economic Security Act (CARES); the 2021 American Rescue Plan Act (ARP); the 2021 Infrastructure Investment and Jobs Act, and other spending packages.^{95, 96}

Congress should refill the contingency fund and put LIHEAP on a path toward annual appropriations of \$40 billion, as envisioned in the Heating and Cooling Relief Act (H.R.893/S.405).⁹⁷ That level of funding would:

- allow eligible households to receive heating and cooling benefits in a single calendar year, instead of just heating or cooling benefits alone;
- provide additional energy assistance to grantees and households during extreme heat events; and
- increase the amount of funding available for weatherization under LIHEAP, which would proactively reduce the need for utility bill assistance.

The additional recommendations that follow cannot be fully realized without additional funding.

RECOMMENDATION 2: Reduce Eligibility Barriers

As discussed above, the LIHEAP statute {Section 2605(b)(2)(B) or Assurance 2} sets income eligibility for households at or below 150 percent of the federal poverty guideline, or 60 percent of the state median income level. Due to limited funding, some states add additional requirements to shrink the pool of eligible applicants and target the most vulnerable residents.

For example, households applying for cooling assistance in New York State must contain a member with a documented medical condition that is exacerbated by extreme heat, unless the household also contains a member over the age of 60 or under the age of 6.⁹⁸ When New York waived this requirement for cooling assistance after receiving additional funding from the American Rescue Plan in 2022, the state was overwhelmed with income-eligible applicants, forcing the cooling program to shut down only three weeks into summer due to lack of funds.⁹⁹ New York reinstated the medical requirement the following year.

States with medical requirements are trying to ensure that their programs can serve as many of the most vulnerable residents as possible. However, these requirements likely have the opposite effect for some households, thereby deepening existing cooling inequities. For instance, according to New York's LIHEAP requirements, "the medical documentation must be in writing from a physician, physician's assistant or nurse practitioner and must clearly state the health condition, and that the individual would benefit from the establishment of a cooling room or fan."¹⁰⁰

Obtaining proof of a medical condition can be a burdensome and expensive task for applicants without ready access to health care, for reasons such as mobility limitations, lack of transportation, lack of health insurance, or inability to take time off from work. Research on other social assistance programs

finds that administrative burdens such as medical requirements can act both as barriers to participation and as sources of significant stress and anxiety.¹⁰¹ Without additional funding, states like New York will be forced to continue to limit program eligibility. Within that constraint, however, **grantees can still consider creative options to ensure that they are serving the most vulnerable populations.** For example:

- for states that do not have access to a specific tool for identifying these factors, using the Minority Health Social Vulnerability Index or the Climate and Economic Justice Screening Tool (developed for Justice40) as a means to identify areas for targeted outreach, or even as an initial selection mechanism for households that apply for LIHEAP;^{102, 103, 104}
- requiring medical certification only once every five years for disabilities or certain chronic conditions; or
- expanding the list of eligible health-care professionals allowed to provide documentation. For instance, Georgia's FY2023 plan allowed public health officials to verify medical eligibility for crisis heating or cooling benefits.¹⁰⁵

ACF should also help facilitate conversations between clinicians and medically vulnerable LIHEAP applicants by disseminating the Centers for Disease Control and Prevention's new clinical guidance for heat to grantees and the public.¹⁰⁶



RECOMMENDATION 3: Improve Public Participation

To receive LIHEAP funds, states are required to submit an annual plan to ACF that includes how they will meet each of 16 “assurances” in Subsection 2605(b), including setting appropriate eligibility criteria, treating renters and owners equitably, and providing the highest level of assistance to the households in greatest need.¹⁰⁷ States also must “provide for timely and meaningful public participation” in the development of the annual plan.

The statute also says that ACF “may not prescribe the manner in which the States will comply.” This means that performance on the public participation assurance varies widely across states (despite training and other compliance assistance from ACF).¹⁰⁸

A 2024 report from ACF found that some states had “robust public participation” in FY2022 and FY2023, while others had “unclear or hasty” processes.¹⁰⁹ The report does not indicate which states were reviewed, but North Carolina provides one example of a rushed process. The state made its FY2024 LIHEAP plan available for review for just seven days and held only one public hearing, in the middle of a typical workday.¹¹⁰ This rushed approach excludes people who can’t afford to take time off from work or need to arrange transportation or child care.

Grantees should offer multiple public hearings, including some outside of normal business hours, and provide free translation and child-care services to attendees. Where possible, members of the public should have the opportunity to testify at multiple points during a hearing instead of having to wait along with everyone else until the end, or to sign up for speaking slots within one of several 20- to 30-minute windows.

LIHEAP grantees should also broaden how they accept comments outside of public hearings. This could include soliciting feedback from households during or shortly after the application process, or accepting recorded audio comments to better include residents with low technology proficiency and limited access to the internet. Artificial intelligence for transcription and translation is growing more accurate and available, which can help reduce the administrative burden of diversifying public comment methods. In December 2021, President Biden signed Executive Order 14058, “Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government.” According to the Director of the White House Office of Science and Technology Policy and Assistant to the President for Science and Technology, Arati Prabhakar, in her testimony to the House Committee on Oversight and Accountability Subcommittee on Cybersecurity, Information Technology, and Government Affairs, artificial intelligence technology is an essential tool “to modernize government and implement services that are . . . accessible, equitable, transparent, and responsive for everyone in America.”¹¹¹ **While state grantees are not bound by this executive order, ACF can provide guidance to grantees to support the order’s aims of reducing “time tax” and linguistic or ableist barriers to participation confronting those in need of LIHEAP benefits who wish to offer feedback on state draft plans.**¹¹²



ACF should additionally develop more guidance on what counts as meaningful public engagement.

This guidance should rely on the deep experience of community-based organizations that serve the households most in need of LIHEAP benefits.¹¹³

Recommendations could include best practices such as:

- consulting with LIHEAP-eligible households about their barriers to public participation and how to overcome them;
- ensuring that hearings and other comment opportunities are well advertised in accessible formats to communities with high percentages of eligible households; and
- publishing a timely record of how comments from community members were addressed.

From there, ACF can promote consistent peer learning that uplifts exemplary states. One area of opportunity is in the presentation of state draft plans.



ACF could provide website users with filters to sort plans according to their performance on each of the assurances in the LIHEAP statute. Currently, reviewed state draft plans are available annually in the LIHEAP Clearinghouse Library but are sorted only alphabetically.¹¹⁴

**RECOMMENDATION 4:
Develop and Implement Holistic Heat Resilience Plans**

Even with more funding, LIHEAP can and should be just one part of the solution to increasingly extreme heat. In addition to minimizing the climate-changing pollution that is pushing temperatures ever higher, all levels of government must act swiftly to protect public health by:

- developing and implementing heat action plans.¹¹⁵
- cooling down entire neighborhoods through equitable deployment of green space, shade structures, heat-resilient building materials and design, and other heat mitigation measures.^{116, 117, 118} The optimal combination of measures for a given place will depend heavily on local climate and land use patterns.¹¹⁹
- ensuring that households have access to affordable in-home cooling (including cooling measures that use little to no electricity, where appropriate) while maximizing energy efficiency. This includes maximizing the deployment of heat pumps—which can cool homes more cleanly than conventional air conditioners—and developing electricity affordability policies to complement LIHEAP.^{120, 121}
- improving access to climate-informed health and social services that can both reduce the likelihood of heat-related illnesses and provide timely, appropriate treatment in the case of unavoidable harm.^{122, 123}

CONCLUSION

LIHEAP has been a tried and tested lifeline for many U.S. households that have struggled to pay their energy bills. However, the 50-plus-year-old program needs to evolve to respond to the realities of human-caused climate change and its consequences: more extreme weather, higher energy costs, and hotter temperatures. As summers become increasingly deadly, more households will need to turn to LIHEAP for survival. A multilayered approach that expands and improves LIHEAP's cooling capacity will be essential for frontline communities that are right now unprotected from the impacts of the hottest months of the year. It is past time for Congress to bolster the ability of LIHEAP grantees to adapt to the changing energy needs of vulnerable households.



ENDNOTES

- 1 The Administration for Children and Families (hereinafter ACF), “History of LIHEAP,” accessed March 28, 2024, https://liheapch.acf.hhs.gov/sites/default/files/webfiles/docs/History_of_LIHEAP.pdf.
- 2 The White House, “Fact Sheet: Biden-Harris Administration Takes Action to Protect Communities from Extreme Heat Fueled by the Climate Crisis,” July 11, 2023, <https://www.whitehouse.gov/briefing-room/statements-releases/2023/07/11/fact-sheet-biden-harris-administration-takes-action-to-protect-communities-from-extreme-heat-fueled-by-the-climate-crisis/>.
- 3* The federal fiscal year runs from October 1 through September 30 of the following year and is named for the ending year. For example, FY2022 ran from October 1, 2021, to September 30, 2022.
- 4 FY2022 data are preliminary. NRDC calculations using ACF, “Custom Reports: Service Loss Restoration & Prevention, All Grantees, FY2022,” LIHEAP Data Warehouse, accessed July 3, 2024, https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.
- 5 ACF, “HHS Announces Nearly \$3.7B to Help Lower Home Energy Costs, Launches National LIHEAP Eligibility Tool,” October 24, 2023, <https://www.acf.hhs.gov/media/press/2023/biden-harris-administration-announces-nearly-37b-help-lower-home-energy-costs>.
- 6 National Council on Aging, “What Is the Low-Income Home Energy Assistance Program?” January 29, 2024, <https://www.ncoa.org/article/what-is-the-low-income-home-energy-assistance-program-liheap>.
- 7 Office of Senator Jack Reed, “As Congressional Negotiators Seek to Finalize FY23 Spending Bill, Reed & Collins Lead Call for Additional \$500M for LIHEAP,” December 9, 2022, <https://www.reed.senate.gov/news/releases/as-congressional-negotiators-seek-to-finalize-fy23-spending-bill-reed-and-collins-lead-call-for-additional-500m-for-liheap>.
- 8 Gabriel Pacyniak, “Keeping All the Lights On: A Roadmap to Affordable, Universal Electricity Service in the Clean Energy Transition,” *Ecology Law Quarterly* 50, no. 93 (2023): 93–180, https://digitalrepository.unm.edu/law_facultyscholarship/937/.
- 9 See, e.g., Yasmin Romitti et al., “Inequality in the Availability of Residential Air Conditioning Across 115 US Metropolitan Areas,” *PNAS Nexus* 1, no. 4 (2022): pgac210, <https://doi.org/10.1093/pnasnexus/pgac210>.
- 10 National Aeronautics and Space Administration, “NASA Announces Summer 2023 Hottest on Record,” September 14, 2023, <https://www.nasa.gov/news-release/nasa-announces-summer-2023-hottest-on-record/>.
- 11 National Centers for Environmental Information, “Statewide Mapping: Contiguous U.S., Average Temperature, July 2023,” accessed March 29, 2024, <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/mapping/110/tavg/202307/1/rank>.
- 12 Jacob Knutson and Andrew Freedman, “Heat Wave Puts Over Two-Thirds of U.S. Population Under Heat Alerts,” *Axios*, updated July 28, 2023, <https://www.axios.com/2023/07/26/heat-wave-us-midwest-northeast-great-plains>.
- 13 Intergovernmental Panel on Climate Change, “Summary for Policymakers,” in *Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change*, H. Lee and J. Romero, eds., https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf.
- 14 Alexa K. Jay et al., “Overview: Understanding Risks, Impacts, and Responses,” chapter 1 in *Fifth National Climate Assessment*, A. R. Crimmins et al., eds., U.S. Global Change Research Program, 2023, <https://doi.org/10.7930/NCA5.2023.CH1>.
- 15 National Weather Service, “Weather Related Fatality and Injury Statistics,” accessed March 29, 2024, <https://www.weather.gov/hazstat/>.
- 16 Kristie L. Ebi et al., “Hot Weather and Heat Extremes: Health Risks,” *Lancet* 398, no. 10301 (2021): 698–708, [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(21\)01208-3/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(21)01208-3/fulltext).
- 17 Robert D. Meade et al., “Effects of Daylong Exposure to Indoor Overheating on Thermal and Cardiovascular Strain in Older Adults: A Randomized Crossover Trial,” *Environmental Health Perspectives* 132, no. 2 (2024): 027003, <https://ehp.niehs.nih.gov/doi/10.1289/EHP13159>.

- 18 Rebecca H. Walker, Bonnie L. Keeler, and Kate D. Derickson, “The Impacts of Racially Discriminatory Housing Policies on the Distribution of Intra-urban Heat and Tree Canopy: A Comparison of Racial Covenants and Redlining in Minneapolis,” *Landscape and Urban Planning* 245 (2024): 105019, <https://www.sciencedirect.com/science/article/pii/S0169204624000197>.
- 19 Jeremy S. Hoffman, Vivek Shandas, and Nicholas Pendleton, “The Effects of Historical Housing Policies on Resident Exposure to Intra-urban Heat: A Study of 108 US Urban Areas,” *Climate* 8, no. 1 (2020): 12, <https://www.mdpi.com/2225-1154/8/1/12>.
- 20 Zoé A. Hamstead, “Thermal Insecurity: Violence of Heat and Cold in the Urban Climate Refuge,” *Urban Studies* 61, no. 3 (2024): 531–48, <https://journals.sagepub.com/doi/pdf/10.1177/00420980231184466>.
- 21 Climate Central, “Urban Heat Hot Spots,” July 26, 2023, <https://www.climatecentral.org/climate-matters/urban-heat-islands-2023>.
- 22 Angel Hsu et al., “Disproportionate Exposure to Urban Heat Island Intensity Across Major US Cities,” *Nature Communications* 12 (2021): 2721, <https://www.nature.com/articles/s41467-021-22799-5>.
- 23 J. C. Whitehead et al., “Northeast,” chapter 21 in *Fifth National Climate Assessment*, A. R. Crimmins et al., eds., U.S. Global Change Research Program, 2023, <https://doi.org/10.7930/NCA5.2023.CH21>.
- 24 U.S. Energy Information Administration (hereinafter EIA), “Nearly 90% of U.S. Households Used Air Conditioning in 2020,” May 31, 2022, <https://www.eia.gov/todayinenergy/detail.php?id=52558>.
- 25 Rebecca Mann and Jenny Schuetz, “As Extreme Heat Grips the Globe, Access to Air Conditioning Is an Urgent Public Health Issue,” Brookings Institution, July 25, 2022, <https://www.brookings.edu/articles/as-extreme-heat-grips-the-globe-access-to-air-conditioning-is-an-urgent-public-health-issue/>.
- 26 Juanita Constible and Joe Vukovich, “Safe Indoor Temperatures Should Be a Right, Not a Luxury,” NRDC, August 17, 2022, <https://www.nrdc.org/bio/juanita-constible/safe-indoor-temperatures-should-be-right-not-luxury>.
- 27 Minji Kwon et al., “Forgone Summertime Comfort as a Function of Avoided Electricity Use,” *Energy Policy* 183 (2023): 113813, <https://www.sciencedirect.com/science/article/pii/S0301421523003981>.
- 28 Kathryn Lane et al., “Extreme Heat and COVID-19 in New York City: An Evaluation of a Large Air Conditioner Distribution Program to Address Compounded Public Health Risks in Summer 2020,” *Journal of Urban Health* 100 (2023): 290–302, <https://link.springer.com/article/10.1007/s11524-022-00704-9>.
- 29 New York City Department of Health, “2024 NYC Heat-Related Mortality Report,” accessed July 3, 2024, <https://a816-dohbesp.nyc.gov/IndicatorPublic/data-features/heat-report/>.
- 30 Ibid.
- 31 Maricopa County Department of Public Health, *2023 Heat Related Deaths Report*, last updated April 2024, <https://www.maricopa.gov/ArchiveCenter/ViewFile/Item/5820>.
- 32 American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands get a total of 0.1 to 0.5 percent of total program funding each year. Territorial allocations are based on population size. Funding for tribes comes out of the allocation of the respective states in which they are based. Libby Perl, LIHEAP: Program and Funding, Congressional Research Service, 2018, <https://crsreports.congress.gov/product/pdf/RL/RL31865>.
- 33 Andrea Nishi, Diana Hernández, and Michael B. Gerrard, *Energy Insecurity Mitigation: The Low Income Home Energy Assistance Program and Other Low-Income Relief Programs in the US*, Columbia University, 2023, https://scholarship.law.columbia.edu/faculty_scholarship/4196/.
- 34 ACF, “LIHEAP Statute and Regulations,” current as of August 21, 2020, <https://www.acf.hhs.gov/ocs/law-regulation/liheap-statute-and-regulations>.
- 35 Nishi, Hernández, and Gerrard, *Energy Insecurity Mitigation*.
- 36 Grantees using the state threshold cannot exclude households solely on the basis of income if 60 percent of the state median income is less than 110 percent of the federal poverty level.
- 37 Nishi, Hernández, and Gerrard, *Energy Insecurity Mitigation*.

38 Libby Perl, *LIHEAP: Program and Funding*, Congressional Research Service, 2018, <https://crsreports.congress.gov/product/pdf/RL/RL31865>.

39 For example, New York State provides bill assistance through its heating component but furnishes air conditioners and fans through its cooling component. New York Office of Temporary and Disability Assistance, “Home Energy Assistance Program (HEAP),” accessed March 28, 2024, <https://otda.ny.gov/programs/heap/>.

40 ACF, “Custom Reports: Average Benefits per Household—Cooling, All Grantees, FY2022,” LIHEAP Data Warehouse, accessed July 3, 2024, https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.

41 ACF, “Custom Reports: Average Benefits per Household—Summer Crisis, All Grantees, FY2022,” LIHEAP Data Warehouse, accessed July 3, 2024, https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.

42 ACF, “LIHEAP Statute and Regulations: Section 2605,” current as of August 21, 2020, <https://www.acf.hhs.gov/ocs/law-regulation/liheap-statute-and-regulations#Section2605>.

43 Note that weatherization benefits under LIHEAP are separate from the Weatherization Assistance Program (WAP), which is administered by the U.S. Department of Energy. However, WAP and LIHEAP are often managed by the same state or local benefits office. U.S. Department of Energy, “Weatherization Assistance Program,” accessed March 28, 2024, <https://www.energy.gov/scep/wap/weatherization-assistance-program>.

44 Data are unavailable prior to FY2011. FY2021 and FY2022 data are preliminary. NRDC calculations using ACF, “Custom Reports: Percent of Income-Eligible Households Served by Any Type of LIHEAP Assistance, All Grantees, FY2011 to FY2022,” LIHEAP Data Warehouse, accessed July 3, 2024, https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.

45 Jeffrey A. Adams, Sanya Carley, and David M. Konisky, “Utility Assistance and Pricing Structures for Energy Impoverished Households: A Review of the Literature,” *Electricity Journal* 37, no. 2 (2024): 107368, <https://www.sciencedirect.com/science/article/abs/pii/S1040619024000034>.

46 The White House, “Justice40 Initiative Covered Programs List, Version 2.0,” November 2023, https://www.whitehouse.gov/wp-content/uploads/2023/11/Justice40-Initiative-Covered-Programs-List_v2.0_11.23_FINAL.pdf.

47 Margaret A. Walls, Sofia Hines, and Logan Ruggles, *Implementation of Justice40: Challenges, Opportunities, and a Status Update*, Resources for the Future, January 2024, <https://www.rff.org/publications/reports/implementation-of-justice40-challenges-opportunities-and-a-status-update/>.

48 University of Arizona, “The Invisible Threat of Nature’s Deadliest Weather,” *Focus on Environment and Ecology*, Summer 2022: 12–13, <https://research.arizona.edu/sites/default/files/data/Focus-on-Environment-and-Ecology.pdf>.

49 Ladd Keith et al., “Deploy Heat Officers, Policies, and Metrics,” *Nature* 598 (October 2021): 29–31, <https://www.nature.com/articles/d41586-021-02677-2>.

50 The White House, “Fact Sheet: Biden Administration Mobilizes to Protect Workers and Communities from Extreme Heat,” September 20, 2021, <https://www.whitehouse.gov/briefing-room/statements-releases/2021/09/20/fact-sheet-biden-administration-mobilizes-to-protect-workers-and-communities-from-extreme-heat/>.

51 The White House, “Fact Sheet: President Biden’s Executive Actions on Climate to Address Extreme Heat and Boost Offshore Wind,” July 20, 2022, <https://www.whitehouse.gov/briefing-room/statements-releases/2022/07/20/fact-sheet-president-bidens-executive-actions-on-climate-to-address-extreme-heat-and-boost-offshore-wind/>.

52 The White House, “Biden-Harris Administration Takes Action to Protect Communities from Extreme Heat.”

53 The White House, “President Biden’s Historic Climate Agenda: Strengthening Climate Resilience,” accessed March 31, 2024, <https://www.whitehouse.gov/climate/#:~:text=More%20on%20Climate%20Resilience&text=Announced%20a%20coordinated%20federal%20response,%2FC%20equipment%2C%20and%20more>.

54 National Integrated Heat Health Information System, “Welcome to HEAT.gov,” accessed March 31, 2024, <https://www.heat.gov/>.

- 55 ACF, "LIHEAP and Extreme Heat," 2022, <https://liheap-and-extreme-heat-hhs-acf.hub.arcgis.com/>.
- 56 ACF, "LIHEAP Cooling Assistance (Yup'ik Dub)," YouTube, accessed April 2, 2024, <https://www.youtube.com/watch?v=9mzR-PV5gxE>.
- 57 ACF, "LIHEAP Eligibility Tool," accessed April 2, 2024, <https://liheapch.acf.hhs.gov/eligibility-tool>.
- 58 Office of Community Services (hereinafter OCS), "LIHEAP IM-2022-06 Heat Stress Flexibilities and Resources FY2022," July 19, 2022, <https://www.acf.hhs.gov/ocs/policy-guidance/liheap-im-2022-06-heat-stress-flexibilities-and-resources-fy2022>.
- 59 OCS, "LIHEAP FAQs for Consumers," January 19, 2016, <https://www.acf.hhs.gov/ocs/faq/liheap-faqs-consumers>.
- 60 FY2021 and FY2022 data are preliminary. NRDC calculations using ACF, "Custom Reports: Average Benefits per Household, FY2011 to FY2022," LIHEAP Data Warehouse, accessed March 23, 2024, https://liheapppm.acf.hhs.gov/datawarehouse/custom_reports.
- 61 ACF provides data only on the percentage of eligible households served, not the percentage of eligible applicants.
- 62 FY2021 and FY2022 data are preliminary. NRDC calculations using ACF, "Custom Reports: Percent of Income-Eligible Households Served by Cooling Assistance, FY2011 to FY2022," LIHEAP Data Warehouse, accessed March 23, 2024, https://liheapppm.acf.hhs.gov/datawarehouse/custom_reports.
- 63 FY2021 and FY2022 data are preliminary. NRDC calculations using ACF, "Custom Reports: Percent of Income-Eligible Households Served by Summer Crisis Assistance, FY2011 to FY2022," LIHEAP Data Warehouse, accessed March 23, 2024, https://liheapppm.acf.hhs.gov/datawarehouse/custom_reports.
- 64 NRDC calculations based on CDC and ACF data. ACF data for FY2021 and FY2022 are preliminary. Centers for Disease Control and Prevention (CDC) National Environmental Public Health Tracking Network, "Weekly Rates of Heat-Related Illness Associated Emergency Room Visits, National by HHS Regions," <https://ephtracking.cdc.gov/DataExplorer/> (accessed January 9, 2024); ACF, "Custom Reports: Percent of Income-Eligible Households Served by Cooling Assistance," LIHEAP Data Warehouse, accessed May 23, 2024, https://liheapppm.acf.hhs.gov/datawarehouse/custom_reports.
- 65 J. Vogel et al., *In the Hot Seat: Saving Lives from Extreme Heat in Washington State*, University of Washington Climate Impacts Group et al., 2023, <https://cig.uw.edu/projects/in-the-hot-seat-saving-lives-from-extreme-heat-in-washington-state/>.
- 66 Rachel H. White et al., "The Unprecedented Pacific Northwest Heatwave of June 2021," *Nature Communications* 14 (2023): 727, <https://doi.org/10.1038/s41467-023-36289-3>.
- 67 Sjoukje Y. Philip et al., "Rapid Attribution Analysis of the Extraordinary Heatwave on the Pacific Coast of the US and Canada June 2021," World Weather Attribution, July 7, 2021, <https://www.worldweatherattribution.org/western-north-american-extreme-heat-virtually-impossible-without-human-caused-climate-change/>.
- 68 Oregon Health Authority, *Climate and Health in Oregon, 2021–2022 Report*, 2023, https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/le-105251_23.pdf.
- 69 Washington State Department of Health, "Heat Wave 2021," accessed March 31, 2024, <https://doh.wa.gov/emergencies/be-prepared-be-safe/severe-weather-and-natural-disasters/hot-weather-safety/heat-wave-2021>.
- 70 Joan A. Casey et al., "Excess Injury Mortality in Washington State During the 2021 Heat Wave," *American Journal of Public Health* 113, no. 6 (2023): 657–60, <https://ajph.aphapublications.org/doi/10.2105/AJPH.2023.307269>.
- 71 Multnomah County, "Final Report: Health Impacts from Excessive Heat Events in Multnomah County, Oregon, 2021," June 2022, https://www.opb.org/pdf/multco-heat-report-final-06262022_1656296951051.pdf.
- 72 Environmental Law Institute, *Wildfire Smoke: State Policies for Reducing Indoor Exposure*, January 2024, <https://www.eli.org/research-report/wildfire-smoke-state-policies-reducing-indoor-exposure>.
- 73 Washington State Department of Commerce, "2024 LIHEAP Draft State Plan," accessed April 2, 2024, <https://www.commerce.wa.gov/growing-the-economy/energy/low-income-home-energy-assistance/>.

- 74 NRDC calculations based on National Centers for Environmental Information (hereinafter NCEI), “Climate at a Glance Statewide Time Series: Cooling Degree Days,” accessed December 21, 2023, <https://www.ncei.noaa.gov/access/monitoring/climate-at-a-glance/statewide/time-series/>.
- 75 U.S. Energy Information Administration, “Units and Calculators Explained: Degree Days,” last updated August 21, 2023, <https://www.eia.gov/energyexplained/units-and-calculators/degree-days.php>.
- 76 Scott Bechler, *How a Decades-Old Federal Energy Assistance Program Functions in Practice: A Deep Dive into LIHEAP*, Duke University Nicholas Institute for Environmental Policy Solutions, April 2021, <https://nicholasinstitute.duke.edu/sites/default/files/publications/How-a-Decades-Old-Federal-Energy-Assistance-Program-Functions-in-Practice-A-Deep-Dive-into-LIHEAP.pdf>.
- 77 Mark Kear et al., “Home Thermal Security, Energy Equity and the Social Production of Heat in Manufactured Housing,” *Energy Research & Social Science* 106 (2023): 103318, <https://www.sciencedirect.com/science/article/abs/pii/S221462962300378X>.
- 78 Grantees receive fund according to a complicated, congressionally determined formula that favors cold-weather states. Libby Perl, *LIHEAP: Program and Funding*, Congressional Research Service, 2018, <https://crsreports.congress.gov/product/pdf/RL/RL31865>.
- 79 FY2022 data are preliminary. ACF, “Custom Reports: New York, FY2022,” LIHEAP Data Warehouse, accessed March 23, 2024, https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.
- 80 Minutes of the HEAP Block Grant Advisory Council Meeting, August 4, 2022, <https://otda.ny.gov/news/meetings/attachments/2022-08-04-HEAP-BGAC-Minutes.pdf>.
- 81 Minutes of the HEAP Block Grant Advisory Council Meeting, August 4, 2022, <https://otda.ny.gov/news/meetings/attachments/2022-08-04-HEAP-BGAC-Minutes.pdf>.
- 82 Minutes of the HEAP Block Grant Advisory Council Meeting, August 3, 2023, <https://otda.ny.gov/news/meetings/attachments/2023-08-03-BGAC-Minutes.pdf>.
- 83 Jay et al., “Overview: Understanding Risks, Impacts, and Responses.”
- 84 Office of Management and Budget, *Budget Exposure to Increased Costs and Lost Revenue Due to Climate Change: A Preliminary Assessment and Proposed Framework for Future Assessments*, March 2023, https://www.whitehouse.gov/wp-content/uploads/2023/03/climate_budget_exposure_fy2024.pdf.
- 85 FY2021 and FY2022 data are preliminary. NRDC calculations using ACF, “Standard Reports: National LIHEAP Program Reports, Sources of LIHEAP Program Funding,” LIHEAP Data Warehouse, accessed July 5, 2024, <https://liheappm.acf.hhs.gov/datawarehouse/>. ACF, “Custom Reports: Sources of Funds, ARPA Allotment (FY2021),” LIHEAP Data Warehouse, accessed July 5, 2024, https://liheappm.acf.hhs.gov/datawarehouse/custom_reports.
- 86 Adjusted funding levels for inflation to FY2022 dollars using Bureau of Labor Statistics, “Consumer Price Index for All Urban Consumers (CPI-U), Energy,” accessed December 19, 2023, <https://beta.bls.gov/dataViewer/view/timeseries/CUUR0000SAOE>.
- 87 Phillip Oliff, Rebecca Thiess, and Brakeyshia Samms, “Federal Funding for Low-Income Energy Assistance Highest in New England, Upper Midwest,” Pew, February 21, 2018, <https://www.pewtrusts.org/en/research-and-analysis/articles/2018/02/21/federal-funding-for-low-income-energy-assistance-highest-in-new-england-upper-midwest>.
- 88 ACF, “LIHEAP Emergency Contingency Funding History,” accessed April 4, 2023, <https://liheapch.acf.hhs.gov/Funding/emrgfund.htm>.
- 89 ACF Office of Community Services, “LIHEAP Fact Sheet,” 2023, <https://www.acf.hhs.gov/ocs/fact-sheet/liheap-fact-sheet>.
- 90 ACF, “LIHEAP Emergency Contingency Funding History.”
- 91 Kim Knowlton et al., “The 2006 California Heat Wave: Impacts on Hospitalizations and Emergency Department Visits,” *Epidemiology* 19, no. 6 (2008): S323, https://journals.lww.com/epidem/FullText/2008/11001/The_2006_California_Heat_Wave_Impacts_on.895.aspx.
- 92 Megan L. Christenson, “Heat-Related Fatalities in Wisconsin During the Summer of 2012,” *Wisconsin Medical Journal* 112, no. 5 (2013): 219–23, <https://wmjonline.org/wp-content/uploads/2013/112/5/219.pdf>.

- 93 Joan A. Casey et al., “Excess Injury Mortality in Washington State During the 2021 Heat Wave,” *American Journal of Public Health* 113, no. 6 (2023): 657–60, <https://ajph.aphapublications.org/doi/10.2105/AJPH.2023.307269>.
- 94 Maricopa County Department of Public Health, *2023 Heat Related Deaths Report*.
- 95 ACF, “LIHEAP and WAP Funding,” accessed April 3, 2024, <https://liheapch.acf.hhs.gov/Funding/funding.htm>.
- 96 Nishi, Hernández, and Gerrard, *Energy Insecurity Mitigation*.
- 97 Heating and Cooling Relief Act, H.R. 893, 118th Congress (2023), <https://www.congress.gov/bill/118th-congress/house-bill/893>.
- 98 New York State Office of Temporary and Disability Assistance (hereinafter OTDA), “Home Energy Assistance Program (HEAP),” accessed March 28, 2024, <https://otda.ny.gov/programs/heap/>.
- 99 Minutes of the HEAP Block Grant Advisory Council Meeting, August 4, 2022.
- 100 OTDA, *Home Energy Assistance Program Manual*, 2021, <https://otda.ny.gov/programs/heap/heap-manual.pdf>.
- 101 Marian Negoita et al., “Administrative Burden in Older Adults: A Look at SNAP,” *International Journal of Social Welfare*, Early View (March 13, 2024): 1–10, <https://onlinelibrary.wiley.com/doi/10.1111/ijsw.12665>.
- 102 CDC and Office of Minority Health, “CDC and OMH Minority Health Social Vulnerability Index,” updated June 2023, <https://minorityhealth.hhs.gov/minority-health-svi>.
- 103 Council on Environmental Quality, “Climate and Economic Justice Screening Tool,” updated November 2022, <https://screeningtool.geoplatform.gov/en/#3.55/26.18/-101.42>.
- 104 Ariel Dreihobl et al., *An Examination of District Residents’ Experiences with Utility Burdens and Affordability Programs*, prepared by the American Council for an Energy-Efficient Economy for the Department of Energy and Environment of the District of Columbia, March 2021, https://doee.dc.gov/sites/default/files/dc/sites/ddoe/service_content/attachments/Report_An%20Examination%20of%20District%20Residents%E2%80%99%20Experiences%20with%20Utility%20Burdens%20and%20Affordability%20Programs.pdf.
- 105 Georgia Department of Human Services, “Detailed Model Plan (LIHEAP) Revision #1,” accessed April 7, 2024, <https://dfcs.georgia.gov/document/document/final-ffy23-liheap-state-plan/download>.
- 106 CDC, “Quick Start Guide for Clinicians on Heat and Health,” last reviewed April 22, 2024, <https://www.cdc.gov/heat-health/hcp/quick-start-guide-for-clinicians.html>.
- 107 ACF, “LIHEAP Assurances,” accessed April 7, 2024, <https://liheapch.acf.hhs.gov/Tribes/assurances.htm>.
- 108 Melissa Torgerson, “So You Think You Know Your Assurances?” National LIHEAP Grantee Training Conference, April 30, 2019, https://liheapmm.acf.hhs.gov/sites/default/files/private/training/nat_training_2019/GS_So-You-think-You-Know-Your-Assurances.pdf.
- 109 OCS, “ACF-OCS-LIHEAP-IM-2024-01 Compliance Monitoring Process Overview and Trends,” information memorandum, January 30, 2024, <https://www.acf.hhs.gov/ocs/policy-guidance/liheap-compliance-monitoring-process-overview-and-trends>.
- 110 North Carolina Department of Health and Human Services, “Public Notice: LIHEAP Block Grant Plan,” 2023, <https://www.ncdhhs.gov/2024-liheap-block-grant/open>.
- 111 Arati Prabhakar, *How Are Federal Agencies Harnessing Artificial Intelligence?*, testimony before the Subcommittee on Cybersecurity, Information Technology, and Government Innovation of the House Committee on Oversight and Accountability, 118th Congress (2023), September 14, 2023, <https://oversight.house.gov/wp-content/uploads/2023/09/Testimony-of-Arati-Prabhakar.pdf>.
- 112 “Transforming Federal Customer Experience and Service Delivery to Rebuild Trust in Government, Executive Order 14058 of December 13, 2021,” *Federal Register* 86, no. 239 (December 16, 2021), <https://www.govinfo.gov/content/pkg/FR-2021-12-16/pdf/2021-27380.pdf>.
- 113 See, e.g., WE ACT for Environmental Justice, “Community Engagement Brief: Ensuring Environmental Justice Communities Participate in Decision-Making on the Justice40 Initiative and Beyond,” 2022, <https://www.weact.org/wp-content/uploads/2022/12/Community-Engagement-Brief-092322-FINAL.pdf>.
- 114 ACF, “LIHEAP State and Territory Plans, Manuals and Delegation Letters,” LIHEAP Clearinghouse, accessed June 3, 2024, <https://liheapch.acf.hhs.gov/stateplans.htm>.

115 Vivek Shandas, Grace Wickerson, and Autumn Burton, “Preparing and Responding to Extreme Heat Through Effective Local, State, and Federal Action Planning,” Federation of American Scientists, April 5, 2024, <https://fas.org/publication/preparing-and-responding-to-extreme-heat-through-effective-local-state-and-federal-action-planning/>.

116 Ladd Keith and Sara Meerow, *Planning for Urban Heat Resilience*, American Planning Association, PAS Report 600, 2022, <https://www.planning.org/publications/report/9245695/>.

117 Hanqing Chu et al., *Equity-Focused Heat Adaptation Strategies for Los Angeles County*, prepared by the UCLA Luskin Center for Innovation for the Los Angeles County Office of Emergency Management, June 2021, <https://innovation.luskin.ucla.edu/wp-content/uploads/2021/06/Equity-Focused-Heat-Adaptation-Strategies-for-LA-County.pdf>.

118 Larissa Larsen et al., “Safe at Home? A Comparison of Factors Influencing Indoor Residential Temperatures During Warm Weather Among Three Cities,” *Journal of the American Planning Association* 89, no. 3 (2023): 363–75, <https://www.tandfonline.com/doi/full/10.1080/01944363.2022.2087724>.

119 Larissa Larsen, “Urban Climate and Adaptation Strategies,” *Frontiers in Ecology and the Environment* 13, no. 9 (2015): 486–92, <https://esajournals.onlinelibrary.wiley.com/doi/10.1890/150103>.

120 Alejandra Mejia Cunningham and Alex Hillbrand, “What Are Heat Pump Air Conditioners?” NRDC, August 25, 2023, <https://www.nrdc.org/stories/what-are-heat-pump-air-conditioners>.

121 Jeffrey A. Adams, Sanya Carley, and David M. Konisky, “Utility Assistance and Pricing Structures for Energy Impoverished Households: A Review of the Literature,” *Electricity Journal* 37, no. 2 (2024): 107368, <https://www.sciencedirect.com/science/article/abs/pii/S1040619024000034>.

122 AmeriCares and Harvard Chan C-CHANGE, “Climate Resilience for Frontline Clinics Toolkit: Heat,” accessed April 7, 2024, <https://www.americares.org/what-we-do/community-health/climate-resilient-health-clinics/>.

123 Kari Nadeau and Nile Nair, “Enhancing Public Health Preparedness for Climate Change–Related Health Impacts,” Federation of American Scientists Extreme Heat Ideas Challenge, April 4, 2024, <https://fas.org/publication/climate-heat-public-health/>.