

Voices that Matter

**Boston Area Residents of Color
Discuss Climate Change**



Authors

Lorena M. Estrada-Martínez
Paul Y. Watanabe
Katsyris Rivera-Kientz

University of Massachusetts Boston

About the Sustainable Solutions Lab

The Sustainable Solutions Lab (SSL) is an interdisciplinary research institute at UMass Boston that is a partnership among six colleges and four institutes within the university: the College of Education and Human Development, the College of Liberal Arts, the College of Management, the College of Nursing and Health Sciences, the McCormack Graduate School of Policy and Global Studies, the School for the Environment, the Institute for Asian American Studies, the Institute for New England Native American Studies, the Mauricio Gastón Institute for Latino Community Development and Public Policy, and the William Monroe Trotter Institute for the Study of Black History and Culture.

SSL's mission is to understand the disproportionate impacts of climate change on historically marginalized communities and work with them to develop sustainable and equitable solutions.

Photo Credits

Front Cover: Adobe Stock/Monkey Business
Page 4: Adobe Stock/Andrew
Page 7: Adobe Stock/ Cultura Creative
Page 9: Adobe Stock/Ken
Page 11: Institute for Asian American Studies/Nicole Filler
Page 13: Adobe Stock/nd700
Page 17: Adobe Stock/Cultura Creative
Page 19: Adobe Stock/Tupungato
Page 22: Adobe Stock/Keith
Page 25: Adobe Stock/Wangkun Jia
Page 27: Adobe Stock/Sergey Novikov
Back cover: Adobe Stock/mandritoiu

Acknowledgments

First, we would like to thank the Barr Foundation and the Hyams Foundation for their continued support, even when the COVID-19 pandemic delayed and changed our work timelines. Without them, this research would not have been possible. Of the many individuals from the two foundations who assisted us in carrying out this study, we want to give special recognition to Kalila Barnett and David Moy, who were with us throughout the entire journey, and Sergio Marín Luna, who was along for most of the ride.

We appreciate the support of the Sustainable Solutions Lab, its Director Rebecca Herst, and Associate Director Gabriela Boscio Santos, who provided resources, project management, and help with editing and design. We benefited as well from the contributions of personnel from UMass Boston's Institute for New England Native American Studies, the Mauricio Gastón Institute for Latino Community Development and Public Policy, the William Monroe Trotter Institute for the Study of Black Culture, and the Institute for Asian American Studies including Cedric Woods, Lorna Rivera, Fabián Torres-Ardila, Shauna Lo, Carolyn Wong, Quito Swan, and Denise Patmon.

We also want to thank Carole Bernard for editing and finalizing the report, and Terry Greene and Sarah Finnie Robinson for reviewing the full draft.

Finally, our sincere gratitude goes out to several community partners for assisting and, in some cases, conducting the focus groups, including the Chinese Progressive Association, Mujeres Unidas Avanzando, Quincy Asian Resources, Inc., and Sociedad Latina. Our profound thanks go to the 70 Boston area residents of color whose insights and voices are chronicled in this study. We are grateful for their willingness to join with fellow community members to share their experiences with us. They truly demonstrate the wisdom of the adage “not about us without us.”

*Paul Y. Watanabe
Lorena Estrada-Martínez
Katsyris Rivera-Kientz*

DECEMBER 2022

© 2022 Sustainable Solutions Lab, UMass Boston
DESIGN: David Gerratt/NonprofitDesign.com

CONTENTS

- 4 **Chapter One**
Introduction

- 6 **Chapter Two**
Health Impacts of Climate Change
 - 6 Specific Health Impacts
 - 10 Whose Health? “Our Nonhuman Relatives”

- 11 **Chapter 3**
Preparedness for Climate Change
 - 12 Asian Americans
 - 13 Black Americans
 - 14 Latinos/as
 - 14 Native Americans

- 16 **Chapter 4**
Addressing Climate Change: Individuals, Groups, and Government
 - 16 Tragic Experiences, People of Color, and Individual Responsibility
 - 18 The Case for Government Leadership
 - 22 Limits of Government: Misinformation, Interests, and Structural Racism
 - 24 A United Front and Common Ground
 - 26 A Hope and a Vision

- 27 **Chapter Five**
Conclusion
 - 28 Reference

- 29 **Appendix**
Focus Group Moderator Guide Questions

CHAPTER ONE

Introduction

RACIAL AND ETHNIC INEQUALITIES in climate impacts have become increasingly apparent. Our work's focus has further indicated a strong relationship between negative consequences, the ability to respond to climate change, and the racial makeup of communities dealing with or preparing to deal with those impacts. In short, the burden falls heaviest on people of color.

This report amplifies the voices of Greater Boston's Asian American, Black, Latino, and Native American residents of color, who often provided deeply personal insights on climate change in focus group discussions. Although the COVID-19 pandemic caused considerable delays in the timing and structure of these discussions, the opportunity to build upon the phase one comprehensive survey of residents completed earlier has proven to be crucial.

In the earlier survey of 964 Boston area residents, including at least 200 respondents from each of the major racial/ethnic communities in the area, we asked a series of questions on the existence of climate change, its causes, manifestations, preparations for its impacts, and the policy and personal responses needed to address it. In late 2020, our report *Views that Matter: Race and Opinions on Climate Change of Boston Area Residents* presented critical responses from that survey (Estrada-Martínez, Watanabe, and Rivera-Kientz 2020).



The survey was not intended as the only way to capture the views of the area's residents of color; therefore, the survey was followed by in-depth focus group discussions in the communities we surveyed. While we were unable to get enough responses from the local Native American community in our initial survey, we made sure to conduct focus groups with this community for this follow-up report. Our main objective in this report is to highlight residents' insights and personal experiences, talking about some of the questions in the survey but with a deeper understanding and richness. We want to give voice to those talked about in climate change discussions but seldom heard from. Our approach when it comes to the selected issues in this report is to let the residents' words speak for themselves.

Our main objective in this report is to highlight residents' insights and personal experiences, talking about some of the questions in the survey but with a deeper understanding and richness. We want to give voice to those talked about in climate change discussions but seldom heard from.

Our discussion here will examine areas raised in the survey and discussed at some length in the focus groups:

- The health impacts of climate change
- Climate change preparedness
- The ways that individuals and government can address climate change

ABOUT THE FOCUS GROUPS

Between March and August 2021, in this second phase of our mixed methods study, we conducted eight focus groups using Zoom to examine climate change perspectives among Asian American, Black, Latino, and Native American communities in the Greater Boston area. The groups ranged from five to 10 participants, and a total of 70 residents participated in the focus groups (49 female, 18 male, 2 gender variant, and 1 transgender male). In addition, the research team developed and piloted the moderator guide to examine critical topics from the Views that Matter survey data (see Appendix).

The team partnered with the Institute for Asian American Studies, the Mauricio Gastón Institute for Latino Community Development and Public Policy, the Institute for New England Native American Studies, and the William Monroe Trotter Institute for the Study of Black Culture at the University of Massachusetts Boston to recruit participants for the focus groups and, in most cases, moderate as well. These institutes are well known for their strong community ties. In partnership with community-based organizations, the institutes recruited participants using convenience and nonprobability sampling methods. Group moderators shared the same ethnic/racial background as the participants. Most focus groups were conducted in English, except one in Spanish with Latinos and one in Cantonese with Chinese Americans.

The focus group data analysis followed a systematic inductive approach to qualitative data, including data reduction, pattern identification, and framework development. The focus groups were recorded, translated into English when needed, and transcribed. Pseudonyms identify respondents. We conducted two rounds of line-by-line open coding, guided by the initial topics of the moderator guide and other topics as they emerged. Three rounds of focused coding followed this. This report discusses the following key themes: health impacts, preparedness, and government and individual actions.

CHAPTER TWO

Health Impacts of Climate Change

OUR SURVEY DEMONSTRATED THAT climate change and its possible effect on people's health is a critical issue for residents of Greater Boston, irrespective of race or ethnicity. Over 80% of all residents said they have thought about the impact of climate change on health (Estrada-Martinez, Watanabe, and Rivera-Kientz 2020).

The respondents also overwhelmingly shared the views that climate change would worsen existing health conditions and would add new health conditions as it intensifies. Indeed, in no other area was there such broad agreement about the impacts of current and future climate changes as there was about health.

The focus group discussions consistently affirmed the concerns about climate change and health. For example, a Latino resident stated:

I believe that climate change is the world's greatest health threat in this century. Because with everything we're talking about here, health will definitely be affected by climate changes through direct impacts.

— GRACE (LATINA/F)

For a Native American resident, the link between the environment and health was clear:

I feel like a lot of the things that I think about specifically as it relates to health, it always goes back to the environment, whether I'm afraid of swimming in a pond or where my food is coming from. I feel like it all is directly related to climate change.

— NAVIDAH (NATIVE/F)

SPECIFIC HEALTH IMPACTS

The focus groups generated considerable specific information on the health conditions that the survey could only address in a general way. Across the board, discussions signaled an understanding of the complex interactions between climate change, environmental changes, and health/illness. For example, every group mentioned air quality, respiratory illnesses, physical health, and the impact of climate change on food production and availability.

Physical Health

The impact of climate change on air quality and health was discussed in all groups. For example, an Asian American resident stated:

Yes, such as asthma. It is more troubling now because even if you don't have asthma, there are negative consequences on your respiratory tract when you breathe in polluted air for an extended period of time. There are more people diagnosed with cancer, asthma, emphysema, pneumonia, and so on than before.

— CAROL (ASIAN/F)



Another Asian American talked explicitly about the health impact of climate change on heavily concentrated neighborhoods like Chinatown:

Climate change affects the air. Many parents in Chinatown have reflected that their children have asthma. This is a very serious effect (of climate change).

—CHLOE (ASIAN/F)

A Black woman commented on the impact of rising rates of asthma on the present and future:

I see so many children who suffer from asthma and suffer from other issues related to the quality of the air, then that's also affecting not just adults, but the future. It's very scary.

—LEAH (BLACK/F)

Finally, a Native American woman described the deterioration of her health because of climate change. She noted:

I have asthma now that I didn't have years ago, and it's directly related to pollution, as my doctors have told me. So, I feel that my health has been impacted directly by climate change and everything that's wrapped up in it.

—KATE (NATIVE/F)

Food Production and Availability

All the groups often brought up issues of water and food availability. For example, a Latina resident added how water could be negatively impacted by climate change:

Water contamination with gases, oils, you know?... It affects people.

— CECILIA (LATINA/F)

Participants noted the impact of climate change on food production and prices. A Black woman said:

With all of the rain, the fire, and this and that, the scarcity of fresh produce is an issue that continues to drive up the cost.

— BRIANNA (BLACK/F)

A Native American resident indicated how climate change could negatively impact the availability of healthy foods:

Climate change really is affecting food sources. If you have farms that can't produce produce, then you can't deliver produce to people, and produce is, especially like fruits and vegetables, I think, are really important to healthy communities.

— MIKE (NATIVE/M)

Climate change really is affecting food sources. If you have farms that can't produce produce, then you can't deliver produce to people, and produce is, especially like fruits and vegetables, I think, are really important to healthy communities.

— MIKE (NATIVE/M)

Some equated the loss of food production to the demise of humanity. A Chinese American immigrant noted:

It seems that (global warming) will cause floods, then crops will not grow, which inevitably leads to natural disasters. When food cannot be grown in nature, it will lead to a human crisis. On a more serious note, human beings are facing destruction.

— SAMANTHA (ASIAN/F)

Other Health Concerns

Although discussions across racial and ethnic groups had many commonalities, there were some notable observations and concerns within each group.

Several Black Americans noted the impact of heat and the sun on skin conditions. One Black woman remarked:

Talk about the impact of the changes in the power of the ultraviolet rays coming from the sun. A few years ago, my arms broke out in these red bumps, and they were itchy and inflamed, and it was just horrible. I had to go to the doctor and get it checked out. . . . Yeah, I was getting them, too, for a while. And it went away. But one summer, it did not go away, and it just got worse and worse. Like I said, now I just don't even play with it.

— ARLENE (BLACK/F)

Asian Americans and Native Americans discussed emergent pathogens because of climate change, raising the risk for future diseases and pandemics. For example, an Asian American man said:

I say there's something about the insect population, which is another public health impact of the warming temperature. . . . Then one had to ask the big question—is that COVID or some other viral problem that had emerged from climate change? Well, that's a big question because we see those natural habitats being lost. The animals and the virus will emerge and get closer and closer to the human habitat. When they mingle, that's what you get, you get this unknown virus that is suddenly a fight, a huge reservoir of food, so to speak, and they would just spread anyway. So, I think that is a long-term issue that the government will have to investigate. What is the relationship between some of those epidemics and a

loss of the natural habitat for both the animals and the virus due to climate change?

— IRVIN (ASIAN/M)

Similarly, Native Americans discussed the changing climate patterns' direct impact on the presence of new or increased insect vectors in the area. For example, a Native American man said:

. . . even when there's too much rain, I mean, I just saw a byline this morning which was like, okay, with all this rain, that means we're getting more mosquitoes, which means we have to worry about Triple E, which means we're going to have to worry about other sort of like airborne disease, not airborne but insect-driven diseases. I think that's the flip side of that. That's the part I see too.

— MIKE (NATIVE/M)



Health Care Access and Transportation

Native Americans had a robust discussion of transportation problems during severe weather in cases of medical emergencies as well as general care. For example, a Native American man noted the impact of extreme weather on physical infrastructure by stating:

[T]hink you've seen it in the city, right, with the really bad snow and ice storms and the infrastructure of the public transportation being so poor. Again, families that don't have cars and easy transportation, any type of medical emergency or medical situation, they may not be able to get to the healthcare if they need it.

— CHARLIE (NATIVE/M)

A Native American woman described the ordeal and the dangers present when extreme weather conditions and medical emergencies coincide:

When my son was quite young, he had a seizure, and we had such a bad snowstorm, and it was a November Thanksgiving Day blizzard, which was very rare for this area, right?... We were snowed in so badly that the ambulance couldn't even get into the apartments that we were living in, so we did have quite an emergency.

FIONA (NATIVE/F)

Another participant described how difficult it was to provide regular medical care to elders in their community because of limited transportation options during wintertime or heatwaves. They said:

[W]orking with clients, especially elders, and trying to get them to their appointments in a snowstorm is very difficult. Because one, they can fall. Number two, no money, no transportation at all, especially with the MBTA. So, connecting those services is just hard during

the wintertime, especially during a heatwave, because you don't want to bring them all day and get sunstroke or heat stroke. So, there's like if the weather plays a lot of factors and connecting everyone to healthcare services. It's very difficult.

— BRENDA (NATIVE/F)

Mental Health

In their focus group comments, community members were clear about identifying not only the physical but also the mental health consequences of climate change. For example, an Asian American resident effectively explains a possible connection between concerns about maladies such as asthma and pneumonia and the mental well-being of residents.

I would also like to add that while we all talked about the impact of climate change on physical health, the impact on mental health is also important. I had an experience once when I was chatting with others about the increasing number of cases diagnosed with asthma and pneumonia. For those who were not infected said, "I don't know when it will be my turn." I said, "Don't panic like that!" When he said that, it was evident that it had a negative impact on the person. It is a kind of mental burden.

— CHLOE (ASIAN/F)

A Native American expressed some of the mental pressure imposed on him in dealing with the impacts of climate change and environmental degradation.

I think sometimes it can lead me to feel a little helpless, just because sometimes, especially on social media, it's a big deal to put the emphasis on individuals to fix everything. . . . It gets really disheartening and really overwhelming to think about how little of a change I can make on my own . . . so I would say that there's a mental health part for me.

— FREYA (NATIVE/F)

WHOSE HEALTH? "OUR NONHUMAN RELATIVES"

A member of the Native American community offered an interesting perspective that challenged the broad human-centric focus when considering the impact of climate change

When you were talking about health issues, it took me a minute to be like, he means human health issues. And I was really busy thinking about some of the health issues of our non-human relatives. How much climate change is changing our landscape, especially I think about basket makers, and like the spread of the Emerald beetle, wood-boring beetle that's killing the ash trees. And it's really changing what's accessible to artists and traditional makers, what kind of things that we have accessible to us to continue doing the things that we traditionally do. And so, I think I am really concerned about the health of our non-human relatives, that really bothers me a lot, and how that's going to impact us culturally."

— NADYA (NATIVE/F)

CHAPTER THREE

Preparedness for Climate Change

PREPAREDNESS FOR SHORT- AND LONG-TERM CLIMATE-CHANGE EVENTS is of significant concern among greater Boston residents. Approximately half of the survey respondents reported having taken specific actions in preparation for extreme weather. However, less than 15% felt their regions, neighborhoods, and families were “very prepared” to withstand a significant climate-change-related extreme weather event. In addition, they indicated a large disparity in the level of preparedness between low-income and affluent areas (Estrada-Martínez, Watanabe, and Rivera-Kientz 2020).

The focus group discussions generally confirmed residents’ preoccupation with their own and their communities’ level of preparedness for extreme emergencies. In addition, they emphasized the need for collective action of various forms to address climate change. As a Native American stated:

[I]f there were something catastrophic, is the town prepared? No way, and that’s why I feel like there’s a certain responsibility that my household has to take around. . . . I do believe there are disparities in terms of communities that are more prepared than others, and a lot of that I think, has to do with financial resources.

— FRANCES (NATIVE/F)



The survey responses indicated that an area in which some notable differences were displayed based on race was in levels of preparation. Our discussion below organizes our presentation of focus group voices along racial lines.

ASIAN AMERICANS

Many Asian American participants felt unprepared and were highly concerned with their ability to secure food, water, and other essentials. They attributed the lack of preparation to financial constraints, space to store things, and feeling that there was nothing of monetary value in their homes. The Chinese American group discussed the lack of emergency preparedness, with members emphasizing they had no extra food, water, or medications in their homes. One Chinese American explained:

I don't stock up on anything; I usually buy only when I need them.

— CHELSEA (ASIAN/F)

While another stated,

I don't have any assets in my house, so I don't buy it [home insurance].

— CAMI (ASIAN/F)

They noted the unique vulnerability of Boston's Chinatown concerning disaster preparedness. For example, one participant stated:

People in Chinatown are even less prepared [than in other parts of Boston].

— CECE (ASIAN/F)

She pointed out the location's convenience of shops as a possible reason for why community members do not prepare for emergency events:

No, how can we be prepared, especially those living in Chinatown? Shopping is so convenient; there is no reason to buy more things to stock up because shopping is so convenient.

— CECE (ASIAN/F)

Participants also discussed the unpredictability of such events, which made it a waste of resources since they would have to toss out stored food. As one Asian American man remarked:

Because it happens so suddenly! Such an unexpected typhoon, flood, etc., there is no way we can be prepared for it.

— CHASE (ASIAN/M)

The discussion suggests that several Asian Americans responded somewhat practically to the issue of preparedness. For example, some regarded stockpiling and storing food and other items when residents predominantly live in small apartments in locales like Chinatown as physically impossible to do. They also reflected a fundamental but perhaps false and dangerous notion that the availability of food and other retailers would remain accessible during crises and in normal times. An unfortunate result that the focus group comments indicate is that the lack of preparation may be accompanied by a false sense that an emergency could be addressed by ready access to food and supplies from stores and suppliers who might be adversely affected by a climate event.

Many Asian American participants felt unprepared and were highly concerned with their ability to secure food, water, and other essentials. They attributed the lack of preparation to financial constraints, space to store things, and feeling that there was nothing of monetary value in their homes.



BLACK AMERICANS

Black Americans emphasized the importance of the community and the collective good in their opinions on combating climate change. For example, a Black woman noted that:

There are certain things that we know that it's not just about me or just about you. It is about all of us. If we don't all work together to fight this and to turn it around or even to slow it down, because we can't turn it around entirely, but to give ourselves time to hopefully put it in check somehow, it doesn't make any difference who you are; we are all going to feel the effects of this.

— LEAH (BLACK/F)

The role of structural inequalities regarding environmental health and justice was central to the discussion among Black Americans. This mistreatment and these painful experiences create a lack of trust that limits the ability to prepare effectively. As one Black man stated:

It pisses me off. I worry that it's a deliberate way to minimize. ... I mean, so I think it's a justice issue. It's an environmental justice issue to address this stuff because we will end up being disproportionately impacted regardless of when the rest of the country wakes up. It's scary, and it's aggravating. I also know it's really, really dangerous because we drank the water with lead pipes. We live on sites where the absolute filters were polluted. We live in neighborhoods where they were dumping all kinds of chemicals all over in certain neighborhoods, and Hyde Park is one of them. I think that these things, and there are parts of Roxbury that we're dumping grounds for town. If you don't live in a house that's 102 years old, then you've got to worry about where you live in, and that's where they'll also build a lot of new housing on these sites.

— OSCAR (BLACK/M)

They also noted the continuous financial investment they must provide to protect themselves from extreme weather events. A participant noted:

It's not going to get better because each summer gets hotter and hotter. As I said, I don't know how long the air conditioning is going to last, but I'm spending my last dollar on it.

— LEAH (BLACK/F)

Many Black residents described disinvestment driven by racism that impacts the community's relative lack of readiness and frustrations related to their community's climate change preparedness. Residents identified a connection between racism, wealth disparities, and disinvestment exacerbating vulnerability to various physical, social, and economic problems.

LATINOS/AS

Latinos felt the need to be highly prepared for any eventuality. They acknowledged the experience of the COVID-19 pandemic in driving those decisions. For example, a Latina stated:

I was going to say that we do a little bit....I have candles, a small battery light, and flashlights in case we lose electricity. As do things like this, so you are prepared in case anything happens. I also have a bag with stuff like a first aid kit, water, a couple of cans, but it's very basic. . . . About the pandemic, now we learned you have to prepare for the worst...

— CECILIA (LATINA/F)

Several Latino participants referred to their homelands to explain the differences between themselves and U.S.-born persons and their understanding of risk. As a Latina noted

The news you see are so sad, especially in our countries. And that makes me very stressed. I say that if one day there is extreme weather, it should take me while sleeping, so I don't feel anything. And I just feel we should be more prepared.

— CECILIA (LATINA)

As a diasporic group that often maintains close relationships with countries beyond the United States, Latinos often referenced climate-related events that happen in those countries as indicators for what might happen in the U.S.

The observations of Latino participants gave a sense of how for many, the notion of community and their frames of reference extended beyond the confines of their homes in the Boston area. As a diasporic group that often maintains close relationships with countries beyond the United States, they often referenced climate-related events that happen in those countries as indicators for what might happen in the U.S. The dilemma was reflected in the comments of one resident who dutifully tries to do some small things—like purchase candles, flashlights, and water—but then seems overwhelmed as others did by the enormity of challenges like the COVID-19 pandemic in preparing for tragic circumstances without resources to match their will to fight.

NATIVE AMERICANS

Discussions in the Native American focus groups noted the general sense of preparedness, the importance of social relationships and safety nets, community-level goals in emergency preparedness, and the inequity in communities' ability to prepare for climate change. Social

relationships were key for accessing real needs, such as food and water. As a Native American woman stated:

Really investing and building up some of my personal relationships with people close to me are going to make all the difference in the world. Because I mean, who knows what the next nightmare is going to be? It's hard to gauge what the issues are going to be that we face. So, I think for this last one, that was really kind of my take-home message on preparedness.

— NADYA (NATIVE/F)

Native Americans also noted that having extended family in the general area was instrumental in cases of emergency. A Native American man stated:

Let's see, we had extreme freezing one winter, and that froze some of our pipes, and that was an issue, but again, having family close by, the impact was minimalized because of it. We could just go to another family member's home.

— MIKE (NATIVE/M)

A distinct point of view that emerged from these focus group discussions was the centrality of the community in its efforts to adapt and mitigate the effects of climate change and other emergencies. For example, a Native American woman remarked:

[I]n our tribe, we're talking about how to prepare for many pandemics because things haven't gotten better with the environment. And so, this is more of a pattern of how our lifecycle is going to be.

— NIA (NATIVE/F)

She also noted the importance of being part of an established system:

I got more networked with Native systems than I did before when relying on Western systems. And I also recognize that I got that wonderful Native American lifeline kit.

— NIA (NATIVE/F)

Participants in these focus groups also detailed structural inequalities and specifically mentioned environmental racism as a root cause of the inequities in preparedness for different communities. One participant noted:

[H]ere's the environmental racism aspect where certain communities can't protect themselves or resource themselves against the impacts in the same way that others. And I've been watching that play out quite a bit in our community. It's been really hard to watch how some people are; some families and communities are much more impacted than others.

— NIA (NATIVE/F)

The comments of residents from the area's oldest and smallest community of color reflected themes prevalent throughout the discourse by other non-white groups: the historical patterns of dis- and under-investment; the impacts of systemic racism resulting in fewer resources for individuals and groups to combat and prepare for climate change; and the reliance on community responses and close personal relationships to weather the storms, despite poverty and neglect. Native American perspectives on the entirety of the nation's experience dealing with traumas of human and natural origins reflected the unfortunate prevailing reality—climate change preparedness reflects fundamental inequities. In these circumstances, close community-based relationships have been vital in enhancing preparedness and strengthening responses.

CHAPTER FOUR

Addressing Climate Change: Individuals, Groups, and Government

IN THIS SECTION, we follow the previous discussion on the disparate capabilities of various groups and communities to prepare for the impact of climate-related occurrences with a discussion of how individuals, groups, and communities, envision responding to the threats of climate change. Here the debate focuses primarily on responsibility for addressing climate change and on the government's promoting policies that may prevent or mitigate the harmful impacts on health, safety, and the environment.

The focus group participants were mainly engaged and animated in discussing issues related to individual and collective responses. They were passionate, highly opinionated, and creative in their thoughts and reactions.

TRAGIC EXPERIENCES, PEOPLE OF COLOR, AND INDIVIDUAL RESPONSIBILITY

Virtually all the focus group participants expressed a genuine desire and need to do what was necessary and possible as individuals to recognize and tackle the challenges of climate change. For these residents of color, many of whom were immigrants, their painful personal experiences with disaster shaped their approaches. For example, a Latina recounted the trauma of her mother barely surviving a flood as a basis for calling for governmental vigilance and action:

Twenty-five years ago in my country, there was a river overflow. The sea withdrew and caused a river overflow with a strong current. That's called a flood. It wiped out an entire sector, and neither the authorities, the red cross, nor anyone was prepared for a situation like this with so many deaths. . . . What would be the government's position to avoid this kind of thing? A flood is an atrocious event. It's horrible because my mom lived it. My mom is a survivor of that [flood]. And one of the reasons my mom survived was that she climbed to the third floor of her house and held on. The river couldn't drag her as it did drag many who couldn't climb. One of the measures that could be implemented is to create infrastructure, building type, with high levels, where you have a rooftop where you can escape.

—ALBA (LATINA/F)

Virtually all the focus group participants expressed a desire and need to do what was necessary and possible to tackle the challenges of climate change. For these residents of color, many of whom were immigrants, their painful personal experiences with disaster shaped their approaches.

People of color, according to a Black resident, should be leaders in developing and helping to lead climate change responses. These communities have a great deal of experience in dealing with tragedies:

[N]ot only as a city of Boston, but as people of color. Because we have always pulled ourselves out of some tough situations, right? Not all the time were we given the resources to succeed, and this is no different. I think we have the power to change because government doesn't control your household when it comes to what you eat, right? Because there is a choice, do you want to go to the corner store, or do you want to go to the grocery store? And we have, unfortunately, people in our community that will spend a lot of money on material things such as phones, cable, and different things like that, but they're lacking nutrition and support for academics. So, we do have the power to change.

—BARBARA (BLACK/F)

Some respondents expressed a lack of trust in the government when it comes to addressing the needs of regular folk, particularly those of color, especially given their track record with dealing with these needs in the past.

I understand revolution has to come from the people, but America's watching Black people getting slaughtered in the street, so what makes you think the government is going to act over some plastic bottles when the baseline of waste is keeping it the most cost-efficient way? The government doesn't want us to get more money. They want to keep their citizens working assets. We, the American people are working, leaving assets for the U.S. government. I don't understand where the action is going to come from, unless it's, like I said, financial, they're going to implement solar energy and whatever they do, but you're going to have to pay for it. You know what I mean? It's going to be an asset to be green efficient like that. It's not just going to be like, "Oh, here's a solar panel for this low-income family." No. First, the aristocrats are going to get it, then the upper middle class and so on and so on. For a point



where everybody's to see this global change where it's accessible to everybody and it's, I don't know if it's going to be "free" or not, but especially if there were to just be some free system, that would take so much time, especially the American government. I can't speak for anyone else in the world. We take our sweet time with everything. I'm just confused on that point.

—LIAM (BLACK/M)

In terms of the general question of whether individuals or the government should take the lead on climate change, another Black resident makes a clear case for individual action:

I disagree with the point that it's up to the government to change it. I think it's up to us to change it. I do understand that change is slow and it's a process. I think that every little bit helps, but I think that the revolution has to happen below. I agree with Speaker 5 and that sort of low-income working people are working day and night trying to survive. That's a priority for them and for us. I mean they contribute a significant amount to our society and it's important that we help, but I think that it's up to individual people to do their part and to change where you can. I think it's an ongoing and important thing, but I'm not waiting on the government because I know that if we wait on them, then I'll be back on a plantation in Georgia picking cotton. I think it's up to us and I think it's up to the people start pushing back and pushing their elected officials and everybody else to make them accountable because they're not, they could care less about it. I agree with the young people that they don't care and that capitalism contributes to it, the pursuit of a dollar contributes to it. But there's something even more important that contributes to it, it's the fear of the people power that we have. They're scared to death if we ever got together and started pushing back, they know they're in trouble. I think it's up to us because they're not going to do it.

— OSCAR (BLACK/M)

THE CASE FOR GOVERNMENT LEADERSHIP

The central role of different levels of government taking the lead in addressing climate change was argued by several residents:

It really has to come from the direction, leadership of our government and they have to make policy choices that really protect the environment. There's only so much that individual consumers can do that is really influencing climate change. It really has to be federal, state and local communities coming together to say these are the actions that are going to take place and kind of help guide our planet to have a healthy future.

— MIKE (NATIVE/M)

An exchange between a Latino and a Latina indicates that, in their view, the governmental responses must be comprehensive:

I guess it's the system, the government, the president. We want people to vote for president so they need to do something. You know, they're focusing a lot on health insurance, on making a Bill for this, and they need to focus more on "What are we going to do in the event of an emergency, a storm? How are we going to help our people?" You know, American people. I feel that I would be amazed and happy that they focus on that as well.

— AMANDA (LATINA/F)

I agree with that, but you have to start with the city councilors, the city council, the governor we have, or the governor or mayor. . . . Because they are the ones you have the most . . .



the change is going to be more directly for us because they are the ones who are representing our city, and I believe that the more we knock on their office doors and the more calls we make, the more changes they can make if they see many people focused on making this change. So, we have to start with the city councilors, knock on their door and let them know how this is affecting us and our children.

— ANDRES (LATINO/M)

A Black resident made a similar observation:

I do believe... that it is top-down and bottom-up. Remember all the flack poor Michelle Obama got for having the garden there at the White House? But she was illustrating ways in which we could engage our communities in healthier eating. . . . So it's really scary how this weather, we see the weather changing and the climate change, even in Boston, this year the weather has been so strange. It's been either really hot or just off a lot of rain here. It's just really scary what we're seeing. I'm hoping that the government will be more, at least with this new president, and will start to put more money into climate change and global warming because, as we all know, our former president talked about there is no such thing. We have a lot of people who don't believe in climate change. It's just so much that is affected by it. Our climate, like Speaker 4 was saying, is the haze coming from all the fires and is really scary.

— LILLY (BLACK/F)

A Native American respondent argued for the State of Massachusetts to take some active and ambitious initial steps:

I think national policy can sometimes get influenced by local policy. So, I would really advocate that if you can change it here first in Massachusetts, then it just makes it easier

for somebody on the national level to say, look, here's one state who's making this sort of change, and maybe there are two states that are making a little bit easier. . . . I really feel like it's important to make local-wise priorities because I do know that they affect national decision making. So, on a policy level, I think there's sort of those sorts of things to keep in mind. And then, I think it's the job of the government to take care of people. If you want to take care of people and want to make a difference.

— MIKE (NATIVE/M)

Residents had a number of specific ideas calling for governmental support or action to address the impact of climate change. For example:

[I]n a coastal area with beaches they should place blockades, right? Like, preventing the future, whether it's a flood and those blockades or high walls around it that prevent flooding in the community. These walls can be a contribution from the governments for coastal areas to prevent flooding—being caused by us [humans] after altering the planet.

— ALBA (LATINA/F)

We must tell the Boston Planning & Development Agency (BPDA) that all developers must follow environmental protection rules when they apply for permits to build high-rise buildings. These environmental protection rules, they should not just focus on making money but to retain greenery for green spaces on the roof.

—ALBA (LATINA/F)

This is when we have to make our voices heard. We must tell the Boston Planning & Development Agency (BPDA) that all developers must follow environmental protection rules when they apply for permits to build high-rise buildings. These environmental protection rules, they should not just focus on making money but to retain greenery for green spaces on the roof. I know that in China, there are a lot of buildings with roofs where you can plant things . . . Green spaces.

— ALBA (LATINA/F)

Generally, the places in Southeast Asia are very hot, I came from Myanmar. There are fire hydrants on the streets. When the weather is hot, they would turn on the fire hydrants to spray water on the streets. Children would go there to play with water happily. With much water on all the streets, it cools down quickly. If the weather is too hot, people would turn it . . . the government will come to turn it on. In short, children can play with water on the streets.

— CATHY (ASIAN/F)

Putting some restrictions on development, putting some protections in that environmentally, that they keep as much land in place, making a plan to plant more trees and do certain things. I'm sure there's a lot of things that they can do that I'm sure I'm not smart enough to figure out. But statewide, to make healthier air and protect wetlands and protect waterways and restrict development a little bit, I think.

— CHARLIE (NATIVE/M)

Well, first I think a clinic-like should be established in every area, during heat waves. The group in each clinic should be attentive, checking in, and controlling the data. The information on the computers control will indicate people at risk, who have affected them the most the change of climate or the high temperature climate. And so oversee people's health, the hypertensive, the diabetics, everything to do with it so that they can control the population.

— ALBA (LATINA/F)

An Asian American resident made a connection between strong and healthy economies and the ability to respond to climate change:

No, I believe the governments have some responsibilities to take care of people who are more vulnerable. But I go back for, [as] I said earlier, economics is number one in my mind. Without economics, you can't do anything. If you have a good economy, local government can have some budget for these, prevention of these disasters or prevention of the sea level. You can have some time, some kind of prevention thing can do to help those people, to help those people who are vulnerable. For example, people, the rich people probably have a generator at home. . . . But poor people probably can't afford a generator, so you can lose your power. Also, I think the government is responsible for, they can do more. They can do better.

— ISAAC (ASIAN/M)

Role of Education

A considerable amount of attention was given to the idea that more education on climate change and its effects was a major response. A Black resident spoke effectively about the value of education and accurate information:

But as a retired teacher and educator, the day after the election of 2016, I said we've got to put civics education back in schools. First of all, not only does it help you to learn about how your government works, but it also makes you a part of how that government should work and to know that you have access. I used to work with the kids that used to take over the State House once a year. And those kids understood how to get stuff done. How to get grassroots actions and things going. So, education's going to be the key, first and foremost. I do believe that we need to have education in our schools about the environment and the science of the environment. Because as the Bible says: "A little child shall lead them," and we're really depending on this next generation behind us to be able to pick this up and run with it. I'm hoping at this point in time, those of us who are older are able to insight this next group and infect them with a passion to go at this thing, because we know that we're going to be kaput before the [inaudible 01:15:45] gone. But that's it. Education and that. And I'd also like to recommend with Speaker 1 made the point about Black history and learning about how we worked with the earth and cultivate, there is a film out on Netflix called High on the Hog, are you familiar with that? But I recommend that if you're able to access Netflix. This sister goes back to the home country and she talks about all of the farming things that some of the slaves, when they came over they embedded seeds and things within their hair and within their bodies so they could go [inaudible 01:16:23] and plants. But that is a part of our history that's very important and very key. So with that, I will rest my case.

— BEA (BLACK/F)

Another vote for the value of education came from a Native American resident.

Education, I think is one. I think being a parent and having family here, education is very important, because my kids are still in the K-12 school system. I also think that our impact as humans on the environment is really important in all aspects, whether that's the usage of land, how the land is zoned. Basically, how we use the land and essentially map out what a future vision looks like is really, I think, important to me.

— MIKE (NATIVE/M)

A Black resident offered a rejoinder citing the limits of education:

I guess I have two answers to this question. The PC, politically correct, answer is we need to do more education. We need to teach people more about climate change and global warming

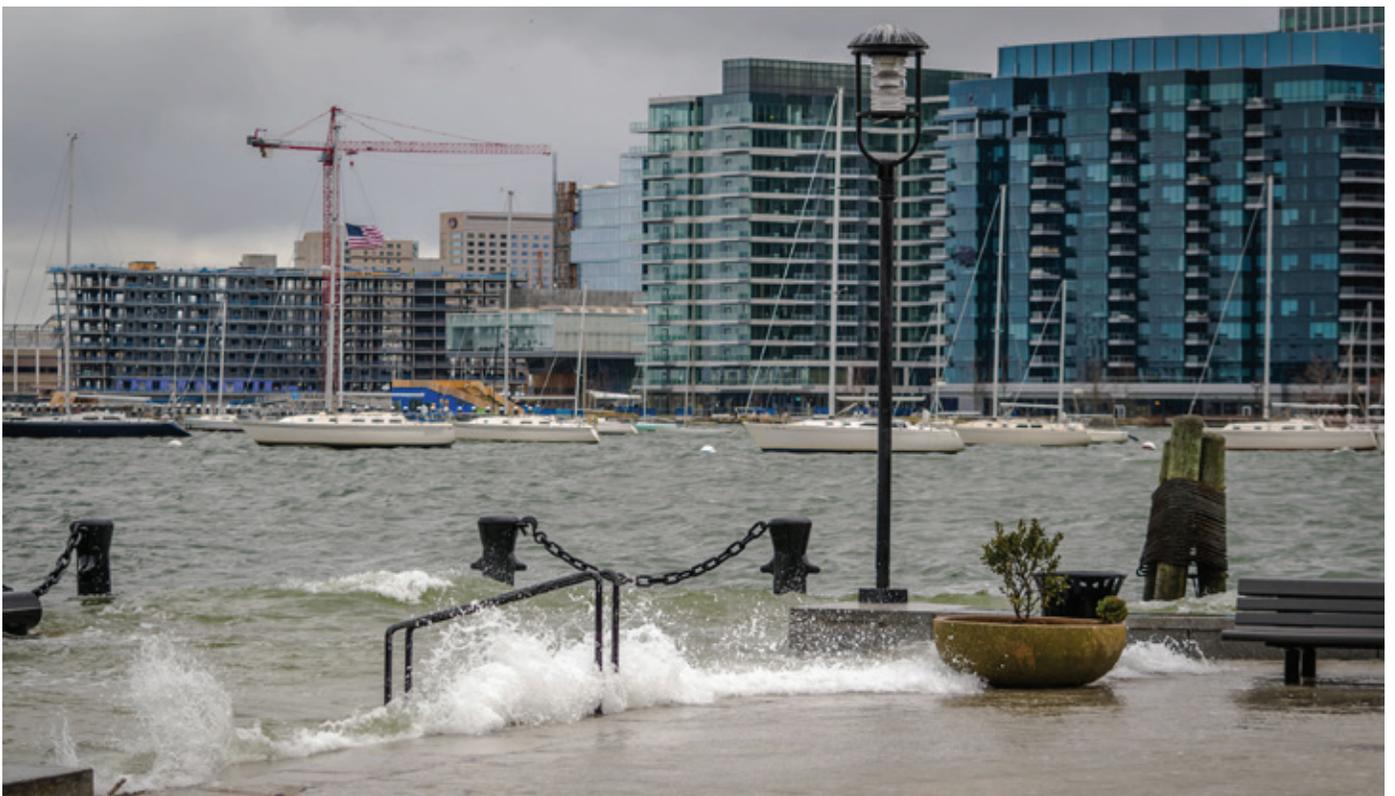
and blah, blah, blah. But at the end of the day, I think we're all old enough to know how to be green eco citizens. Don't litter, recycle, or other things like that. But how are you going to stop? Just, for example, the MBTA, every time the gas exhaust on the bus, you see black smoke up in the air. Companies like Amazon are just dumping their waste and bullshit in the ocean and other stuff. And you've seen it outside of global warming. . . . At the end of the day, I'm trying to say that you can educate people all you want. I'm sure the government will make efforts to educate people more or make more green solutions accessible. Still, it's just not going to be easy. It's solar power and thermal power, that's going to be expensive. The first people to have it, it's going to change a lot for sure, but everything's going to be a slow process. I just don't think nobody cares. To be honest, the real thing is nobody cares. As long as it's financially fiscal and going to make people money. I don't know, like if you can tell Jeff Bezos a cleaner way or more cost-efficient way than dumping waste in the ocean if you want to mass produce a product for that or something, that costs money and money runs the world, unfortunately. That's my conclusion to it. We can help and make people in the community aware, but at the end of the day, I think some of the other people were saying it depends on the politics and the demographics because you need the people up top to really make decisions.

— LANE (BLACK/M)

LIMITS OF GOVERNMENT: MISINFORMATION, INTERESTS, AND STRUCTURAL RACISM

The commonplace promotion of lies by leaders at the highest levels of government was not lost on our residents of color. Providing accurate information is difficult when the government is complicit in promoting lies about climate change. A Black resident well articulates this view:

I think Oscar mentioned the sociological and environmental impacts of global warming, but I think a piece is missing, the criminal aspect. Many of our major corporations were well aware that they were harming the environment when they were doing the things they were doing and continue to do them. The government is just as much, if not more so, responsible for the



global warming that has gone on. In our communities, we have all felt the 27 or 19, whatever days of rain we have had with unprecedented rain that we've had during July. We all know the environment is changing. Everyone knows it. We know that snowstorms are different. They're different. When we have heat wave after heat wave, 90-plus degree days, elderly people know something is going on because if you don't have an air conditioner, you may die. That's why they try to get the elderly people to centers or whatnot if they don't have air conditioners. But one day, the air conditioning isn't going to work. We know these things. Donald Trump lied and said, no global warming. Everyone knows he's lying. He knows he was lying. January 6 did happen, and it wasn't the patriots coming together. We all watched it as the world watched it. The country has got to stop lying about this if we survive it because it will cause a lot more harm as time goes on. It's not going to get better because we see each summer it gets hotter and hotter. As I said, I don't know how long the air conditioning is going to last, but I'm spending my last dollar on it.

— LEAH (BLACK/F)

We all know the environment is changing. Everyone knows it. We know that snowstorms are different. They're different. When we have heat wave after heat wave, 90-plus degree days, elderly people know something is going on because if you don't have an air conditioner, you may die.

— LEAH (BLACK/F)

Another Black resident offered an enlightening perspective on the narrow interests of those who peddle misinformation. The respondent argues that broader interests beyond self-interests should guide our responses; that sacrifice may be required to promote the common good:

And that general misinformation is all about self-entitlement, which does not care about the rest of us. And we have to become expansive and think in terms of not just our own self-interests, how much you're willing to give up, to be onboard to advance this, but it's really all about us. And like we said before, we're a global village now. What happened over there is definitely impacting us.

— BEA (BLACK/F)

As is true when considering any issue involving race and its differential impacts in American society, systemic and institutional racism impede the ability to muster effective responses.

An Asian American resident made a case for this perspective:

I agree with a lot of people that have mentioned things like education, the economy, jobs, healthcare, and all that good stuff. But when you look at just the microscopic, it doesn't paint the whole picture for me. And plenty of evidence and research shows that it's a much larger issue. And echoing another speaker's point in the chat, I think all these things are interconnected with systemic racism. And so ultimately, at the end of the day, when we're talking about issues that deal with the local communities and the state government, it still ends up being an issue with systemic racism and institutional biases and stereotypes that we need to combat to really be able to address some of these disparities and issues that we're facing and challenges that we're facing at the local community when it to individual and family education, economic statuses, struggled with unemployment, etcetera.

— IMANI (ASIAN/F)

A UNITED FRONT AND COMMON GROUND

In the end, it is reasonable to conclude, as many residents did, that it is not primarily a question of individuals or the government taking on these issues but rather needing to work together to tackle the challenges of climate change. Accordingly, we conclude this section with clear, articulate, and insightful comments from Boston residents of color on the need to join as communities to address the challenges.

A Black resident describes the need to build from small steps, based on values and experience, and that while change is slow and incomplete, it is possible:

I don't underestimate small beginnings. That's all I can say. I think it's important to begin somewhere. I think that it's important for us to be accountable for our health and our well-being, and it's also important for us to think collectively that little pieces fit together. If you look at some of the major public health that has existed, they all took time. It didn't take overnight to change. We still work on HIV and AIDS, and we still have the highest percentage of people of color who end up with AIDS. Still, 35 years later. I think that we need to continue to do the work. I do think that if we continue to help people understand how directly linked to their own survival these things are, that there will be change. You might not see it for a while, but there will be change. That's the kind of person I am. That's a value system. I believe that people change.

— OSCAR (BLACK/M)

Another Black focus group participant noted that there is little time to bicker about who should or should not take the lead in responding to climate change. Instead, this person emphasized the importance of the community and the collective good:

There are certain things that we know that it's not just about me or just about you. It is about all of us. If we don't all work together to fight this and to turn it around or even to slow it down, because we can't turn it around entirely, but to give ourselves time to hopefully put it in check somehow, it doesn't make any difference who you are; we are all going to feel the effects of this.

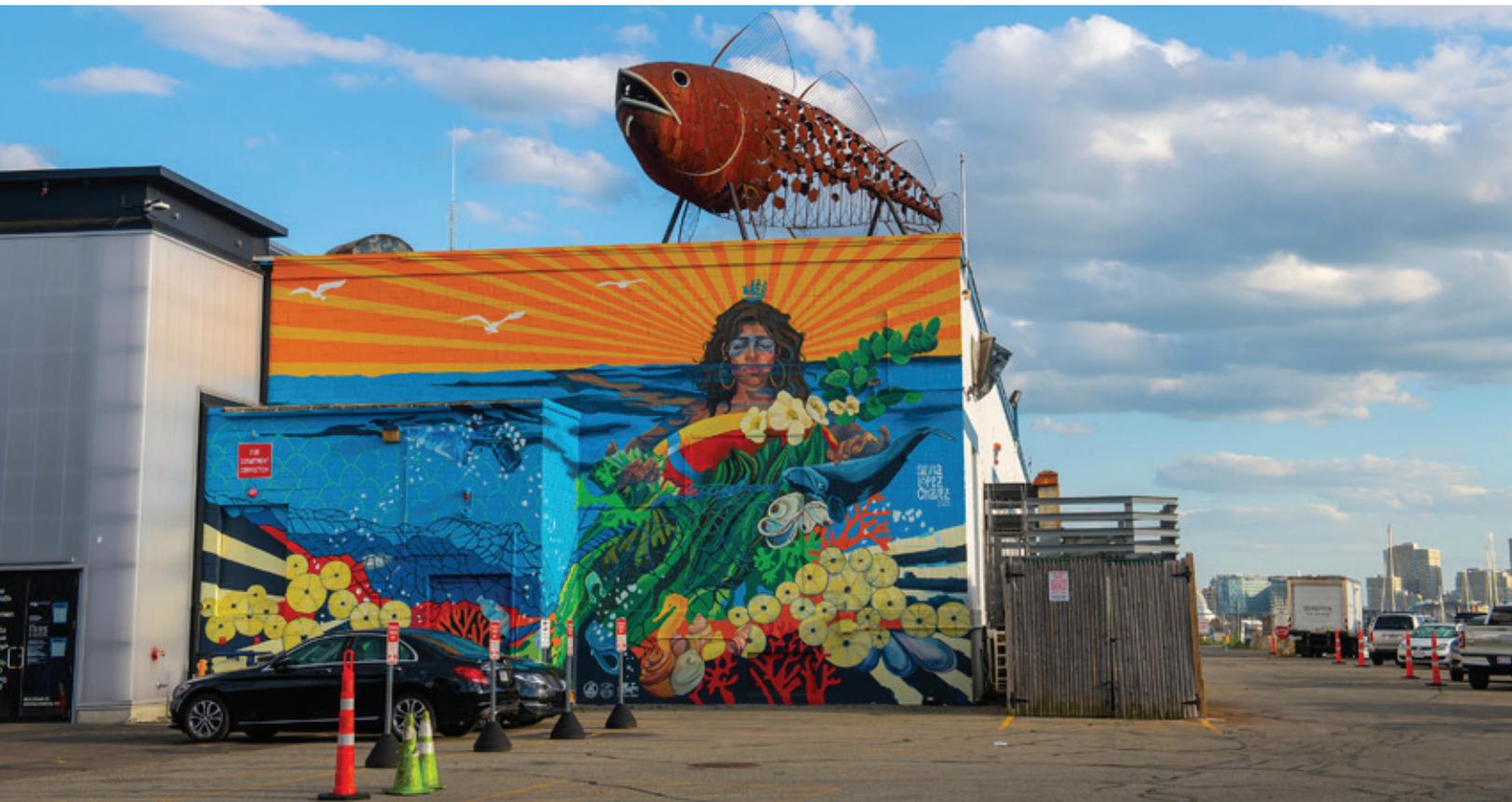
— LEAH (BLACK/F)

Two Native American voices were raised to implore us to think of the land and environment as our family.

Just one more thing. If they could switch to, we've been talking about this, this idea of land as our family, if they could switch their idea of the extractive economy to understanding and treating land and water and our air as our family, that would completely change the way they make policies, it would completely change the way they do development. I mean, it would just turn everything upside down in a way that would be so positive. . . . We can think really big that we have to change this whole relationship, the way that the *government* develops policies and thinks about development and water and land. If we can put something really big out there, then maybe we'll get something a little smaller. But one change, if they could make that one change, that would be huge.

— KATE (NATIVE/F)

To be sure that they have adequate housing, adequate health, and adequate means of living, you have to pay attention to the environment because you don't want people displaced, you don't want people getting diseases, you don't want people being adversely affected by weather changes or impacts from the environment. That's just as simple as saying our



community needs a hospital. It's like our community needs an environment or climate land. Those things are basically the same thing, and I think as Americans and people. . . . Even in Massachusetts, everybody thinks short-term, zero, one, two, three, four, five, 10 years max. There's just not this foresight to say what our community will look like in 50 years. What's our community going to look like in 100 years? And how can we use that vision to impact the type of decisions we're going to make today?

— MIKE (NATIVE/M)

Another Native American resident made a similar observation that local action is vital and that in taking on climate-related challenges, we must resist the tendency to focus policy on recent and near-term problems and solutions:

Boston really has the capacity, I agree and should be at the forefront of doing this, [...] and I think one of the things would be to really look at stuff in the long term. There are so many things that are going on in terms of thinking about how do we deal with this in the next 20 years? Or how do we deal with this in the next 25 years? And instead of looking at on a larger level what needs to happen over a long period of time, and not just over what happens in a long period of time, but what needs to happen for different communities, for different constituencies, and not solely looking at "value dollar-based assets," because that tends to be how folks start looking at how you mitigate the loss of money, as opposed to the loss of land, the loss of opportunities, the loss of places for people who are low income to live. Really not looking at it in the traditional way that most governments do. Like, okay. I have a problem right in front of me. I'm going to think about that problem, and I'm not going to think about anything else. That's not the way to go about doing it.

— FRANCES (NATIVE/F)

I think it's natural for people to feel a responsibility for your own family first. However, I strongly feel that we, as a neighborhood and community, owe it to other people to help them out. I'm not talking about sheltering them. I'm talking about inclusive, all things. It includes racism as well because if you really want to seek change, you have to be aware and active.

— IVY (ASIAN/F)

A HOPE AND A VISION

We end this section with two observations. The first discusses the gains made through the sustained efforts to educate and inform people about the harmful consequences of climate change and the hope that this attention will result in action. The second commentary is from an Asian American resident who elucidates a vision based on the idea of individuals and government working together with steady progress over time, promising the best outcomes.

A lot of the people are learning more about it and they do something about it because we cannot go by a day without hearing in the news, at least I don't, and that people don't talk about like clean energy or this is good for the environment. I hear about those a lot in comparing to 10 years ago. So at least we are doing something about it and going at that direction and the education level. So I actually feel better about now than 10 years ago.

— IAN (ASIAN/M)

And do you have any specific concerns about the impact on your neighborhoods?

I miss those plastic bags I get from my shopping and my kids, but I'm happy they don't do that anymore. So I guess those are the little neighborhood changes.

— IAN (ASIAN/M)

I think it's natural for people to feel a responsibility for your own family first. However, I strongly feel that we, as a neighborhood and community, owe it to other people to help them out. I'm not talking about sheltering them. I'm talking about inclusive, all things. It includes racism as well because if you really want to seek change, you have to be aware and active.

— IVY (ASIAN/F)

CHAPTER FIVE

Conclusion

The community-based discussions presented in this study added a critical dimension of voices to the views expressed in the earlier survey.

Although this report includes the voices of 70 residents of color and many of their quotations, we do not claim that this represents more than a portion of the views expressed on a broad range of topics beyond the three areas we chose to focus on in this report.

Some of the general observations that emerged from listening closely to the comments of focus group participants were:

1. The focus groups added to and deepened our understanding of the perspectives of residents of color. The details with which some of the issues raised in the survey were explored could not have been provided utilizing the survey alone. For example, while survey respondents across the board indicated that the health impacts of climate change now and in the future would be considerable, the focus groups allowed residents to specify which health impacts they are seeing. These included the effect on asthma and respiratory conditions, stress, mental health impacts, and so forth.
2. The responses from several residents of color, particularly those from an immigrant background, indicated an interesting range of ways to deal with concepts such as community.



Several immigrants saw their community as a frame of reference that went well beyond the confines of the city, town, or neighborhood they occupied in the Greater Boston area but also included experiences from their native lands. When talking about the impact of climate change, these residents often indicated consequences on a community larger than themselves and their families but to which they felt a personal attachment.

3. Several of these residents also spoke about how geographic location shaped how they perceived a particular issue and its impact. For example, Chinatown residents often talked about their specific housing arrangements and geography as a basis for thinking about climate change, its effects, and ways to address it. Similarly, some Black residents talked explicitly about the impact and need to cope with climate change in their specific streets and neighborhoods.
4. In several instances, participants responded to inquiries about climate change with broader environmental concerns. While ecological degradation does connect to climate change, these discussions indicate that residents of color are concerned about both ecological and community health beyond climate change.
5. It was also interesting to note that on several occasions, respondents of color, when asked to assess the impact of climate change, often quite naturally thought about the result not just on human life but on that of insects and animals as well.
6. While many residents presented their answers to questions about climate change and how to address the impacts of climate change in terms of a more significant critique of how inequities (particularly wealth inequities) defined and often limited their ability to respond and prepare, many of these residents generally did not seem paralyzed by the weight of these economic limitations. They saw a need for themselves as individuals and as communities to take the initiative and lead in addressing the challenges of climate change. In other words, these residents of color, many of whom face economic challenges, did not use their difficult circumstances as an excuse for inaction.
7. Another insight was how some residents saw that poor communities have often dealt with dire situations and thus can call on their tenacity, knowledge, and resilience as assets. The damaging and unequal impact of climate change on communities of color is far from the first area in which those communities have had to rely on their abilities to respond to often tragic circumstances. Given this reality, these communities have a substantial stake in our communal ability to respond to climate change effectively.

Given the insights that emerged from these conversations, it is clear that communities of color can contribute significantly to addressing climate change challenges if their views and voices are accounted for properly.

REFERENCE

Lorena Estrada-Martínez, Paul Y. Watanabe, and Katsyris Rivera-Kientz, *Views that Matter: Race and Opinions on Climate Change of Boston Area Residents* (Boston: Sustainable Solutions Lab at the University of Massachusetts Boston and the Hyams Foundation, 2020)

Appendix

FOCUS GROUP MODERATOR GUIDE QUESTIONS

Introduction to group discussion

1. When you think about the issues that are most important to you, that you would want your state or local government to care about, what comes to mind?

Concerns about climate change

1. When you think about global warming, what comes to mind?
2. Do you think about the following terms: global warming and climate change? Do these mean the same?
3. Some say that climate change is being caused by humans, while others think it is part of natural environment changes. What do you think has been driving climate change?
4. How concerned are you about climate change in general?
 - a. What precisely concerns you about climate change?
 - b. Have you always felt this level of concern, or has it shifted with time?
 - c. Do you have any specific concerns about how it may impact your neighborhood?
5. We talked a bit about the general issues that are important to you. Where does climate change fall compared with those other issues?

Impacts

1. First, do you think climate change is currently impacting us?
 - a. PROBE *yes*: How do you think it impacts us as individuals? How about impacts as a society?
 - b. What could be an example of these impacts?
 - c. PROBE *no*: Do you think climate change hasn't caused any effects yet or that it will probably never impact us?
 - d. If *never impact*: Can you elaborate on why you think it will never affect us?
2. Now let's think about the future. In what ways do you believe climate change will impact us?

Health

1. First of all, do you think climate change is causing or will cause harmful effects on people's health? Why and in what ways?
 - a. *If necessary*: what about allergies, cancer, respiratory conditions, heart conditions, infectious diseases, or even mental health? Could those be caused or worsened by climate change?

2. Do you believe that people living in your community are vulnerable to the potential health impacts of climate change?
3. What about access to health services during a severe weather event, such as a storm or heatwave? Have you—or someone you know—ever had difficulty accessing health services due to the weather? (e.g., getting to a hospital safely, medicine supply, or heat waves that may make it unsafe to be outdoors, etc.)

Preparedness

1. How prepared do you think you and your family are for extreme weather, such as a storm?
 - a. Do you have a plan to evacuate your home? Do you have enough food, medicine, and other necessities in stock? What about having insurance for your home and belongings?
2. Do you think your neighborhood is well-prepared for extreme climate events?
 - a. Why or why not?
3. Do you think neighborhoods in Greater Boston are equally prepared for an extreme weather event?
4. Can you provide an example of a neighborhood in Greater Boston that you consider to be more or less prepared than your neighborhood? (If necessary: Why?)

Range of impacts

1. Do you think climate change will have a more severe impact on some people than others, or will it impact everyone equally?
2. Do you think everyone in your region is equally able to face those changes?
3. IF GROUP HAS NOT ALREADY DISCUSSED: We know that people who have lower levels of education or income or are part of a minority group face a wider variety of challenges. Do you think climate change may impact these groups differently? *If so, how?*

Actions (individual)

1. Have you found yourself doing anything to lessen the impacts of climate change?
 - a. PROBE *haven't*: Have you seen people in your community/neighborhood engaging in any of these practices?

Actions (state/local level)

1. Do you think Boston should be a leader on climate change?
2. What about Massachusetts? At the state level, should we be leading?
3. What are some things you think the city and/or the state governments should be doing to lead in the fight against climate change?



Sustainable Solutions Lab
University of Massachusetts, Boston
100 Morrissey Blvd, Boston, MA 02125

www.umb.edu/ssl