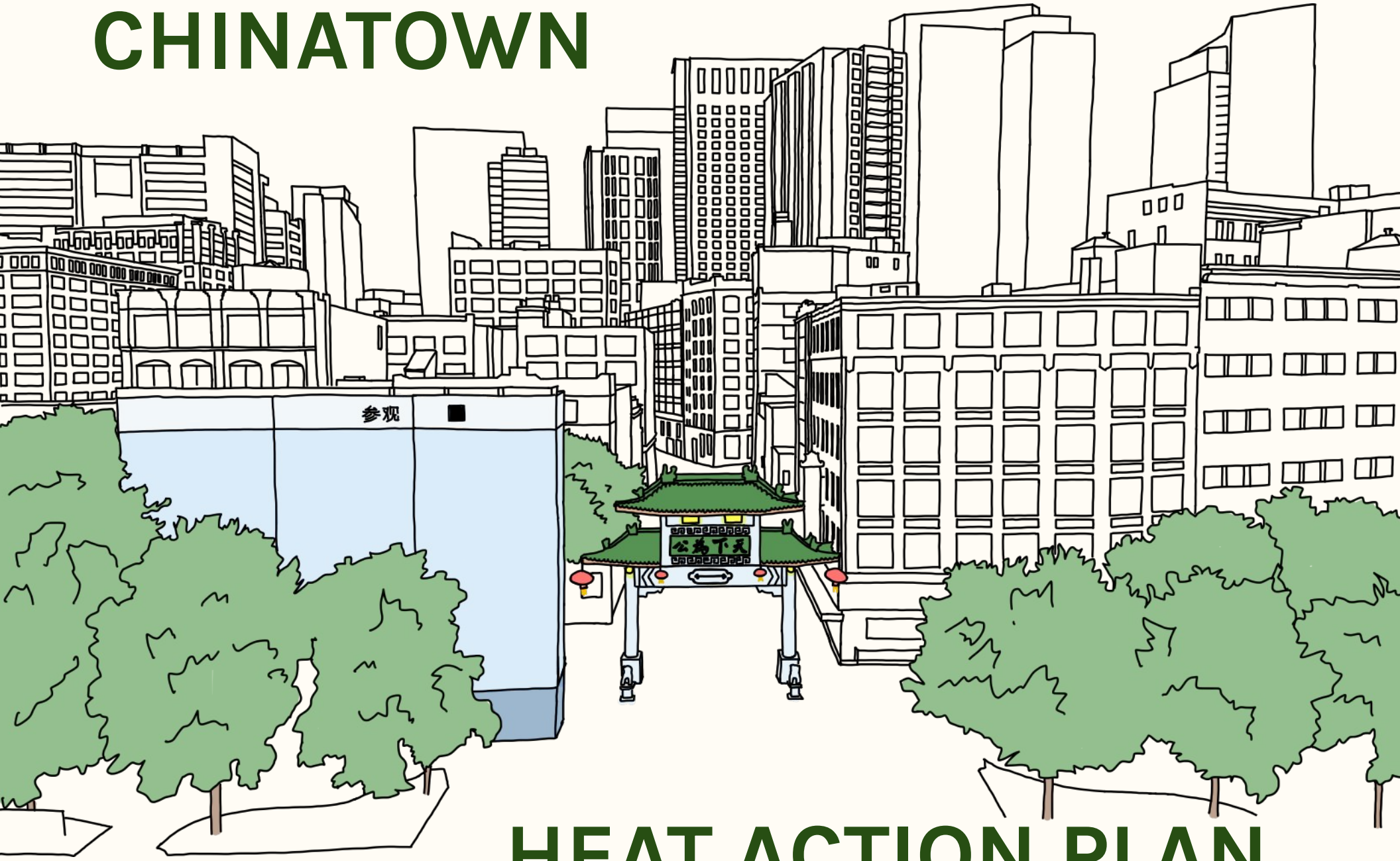
CHINATOWN



HEAT ACTION PLAN

Imprint

Description :
Boston Chinatown Community Heat Action Plan

Authors:
Heang Leung Rubin
MyDzung Chu

Graphic Design and Illustrations:
Architecture for Public Benefit

Supported by :
Resilient Cities Network,
Z Zurich Foundation
Zurich North America.

Acknowledgements:
Thank you to all the community members who developed this plan together with us!

Welcome Letter from the Climate Resilience Office, City of Boston

July 2, 2025

Boston is already experiencing longer and hotter summers. As climate change progresses, the risks of extreme heat will continue to grow. In Chinatown, limited tree canopy and dense development create some of the hottest environments in the city. This puts residents at greater risk, especially elders, children, and those with health conditions. Addressing these challenges and responding to the impacts of extreme heat requires an all-hands, all-of-city approach rooted in care for community well-being. Together, we are rising to the challenge by advancing community-centered solutions that reflect the lived experiences and priorities of those most affected.

The Heat Action Plan presents a community-led strategy to ensure cooling resources and information effectively reach residents. The plan builds on the framework of Heat Resilience Solutions for Boston (the Heat Plan), by applying its citywide goals at the neighborhood level. It focuses on practical, people-centered approaches so that existing resources are accessible, timely, and provide the necessary support needed for residents to stay safe during extreme heat events.

This plan was developed by and for Chinatown residents, in deep collaboration with community-based organizations, local leaders, and City departments. It reflects a shared commitment to accessibility, transparency, and preparedness. The Office of Climate Resilience and our colleagues across partnering City departments are excited and encouraged by the leadership and dedication of the Chinatown community. Learning from community knowledge, building new collaborations, and strengthening existing relationships is core to building resilience grounded in local context.

As we continue working together to prepare for hotter summers and future climate challenges, we remain committed to building partnerships that are rooted in trust and responsive to community needs. Readiness to take on emergencies is an important part of this work and a key step in building long-term, sustainable resilience. Chinatown faces unique extreme heat challenges, and together we are laying the foundation to help strengthen local capacity and build lasting collaboration.

Zoë Davis
Senior Climate Resilience Project Manager with the City of Boston

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About the Chinatown Heat Action Plan

The Chinatown Heat Action Plan is a roadmap for how Boston Chinatown can prepare for and respond to heat emergencies. This plan was developed in collaboration with residents, local community partners, local institutional partners, and staff from key City agencies. It is the culmination of eight months of collaborative discussions with a dedicated advisory group committed to ensuring climate and heat resilience for Chinatown. Cool Down Chinatown is funded by the Resilient Cities Network with the support of Z Zurich Foundation and Zurich North America and grew out of a community engagement process which identified three indicators for improving climate resilience: heat risk investment, heat response planning, and emergency infrastructure and supplies. The three core pillars of Cool Down Chinatown are:

- Monthly working group tasked with coordinating and aligning City resources with community needs
- Heat education workshops for older residents in Chinatown to educate them about the risks of extreme heat on their health
- Micro-grant program for restaurants to supply them with air-purifying equipment.

The Chinatown Heat Action Plan is a model of urban resilience. We hope that it can serve as a scalable model for other cities globally to enhance community-led climate adaptation. Cool Down Chinatown is aligned with the City of Boston's heat resilience plan (City of Boston, 2022, page 186). The City of Boston's goal is to reduce heat vulnerability for Bostonians and address heat-related challenges impacting their quality of life, including negative health outcomes and physical or mental distress. The three core strategies include:

- Reduce Heat Exposure: Reduce residents indoor and outdoor exposure to extreme heat, both in intensity and duration, by enhancing the capacity of the built environment to recover from daytime heat.
- Adapt to Heat: Increase residents' awareness of strategies to stay safe and cool during heat waves, and expand cooling resources available to residents.
- Foster Healthy, Connected Communities: Create more connected neighborhoods that promotes health and addresses underlying social determinants of health associated with increased heat vulnerability.

Extreme Heat in Boston Chinatown

Boston's Chinatown faces significant environmental injustices. Compared to other neighborhoods in Boston and statewide, **Chinatown has the hottest temperatures, high air pollution levels, and high flooding risks** (City of Boston, 2022). In addition, Chinatown is designated as an environmental justice community due its high percentage of residents who are racially-minoritized, linguistically isolated, and low-income compared to the statewide median household income (Mass EEA, 2014).

These injustices are generated by racist urban planning policies and practices, such as the construction of major highways (Interstates 93 and 90) cutting through Chinatown; placement of transportation terminals (train, bus, airline) and industrial activities in close proximity; the lack of green spaces and parks; and high density of dark and impervious surfaces (i.e., asphalt, concrete). In addition, as climate change progresses, Chinatown will experience even hotter temperatures, higher air pollution, and increased risk of flooding and other extreme events (City of Boston, 2022).

Based on the past two community health needs assessments, **residents report significant health issues** such as high asthma rates, heart disease, diabetes, and lung cancer mortality - all of which can be triggered and/or exacerbated by environmental hazards such as heat stress and poor air quality (TMC, 2019 and 2022). In addition, many residents face economic challenges amidst rapid gentrification and related increases in housing and living costs. Approximately 74% rent their homes compared to the 65% citywide average, and 28% of households are living below the federal poverty level compared to the 18% citywide average (TMC, 2019 and 2022).

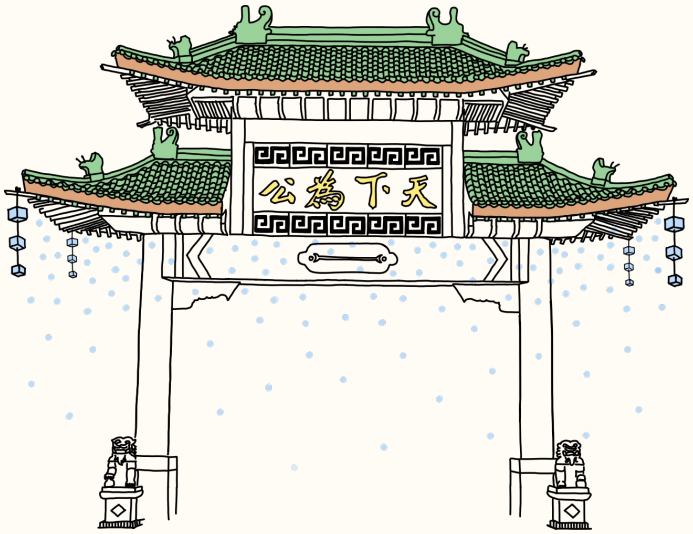
Rising temperatures in Chinatown can affect the health and wellbeing of residents, especially among vulnerable groups like children, pregnant persons, older adults, and those with existing health complications (e.g., obesity, asthma). Children are particularly vulnerable to climate and environmental stressors, due to more time outdoors and physical activity, greater volume of air intake, and reliance on adults for their needs (Xu et al., 2014). Persons over the age of 60 are also very vulnerable, with approximately 80-90% of heat-related excess deaths occurring in this group (Kenny et. al., 2010). In addition, low-income and limited English, foreign-born residents are also vulnerable as they have less access to resources and information to respond during heat emergencies (Hansen et. al., 2013). In Chinatown, environmental conditions like heavy traffic, the abundance of concrete and asphalt pavements, and the limited amount of trees and parks (i.e. green spaces) all worsen these health issues (City of Boston, 2022; Harvard GSD, 2018; US EPA 2008).

Key Messages of the Heat Action Plan

- **Chinatown is Proactive:** Through the Cool Down Chinatown working group, resident education workshops, and the Heat Action Plan, our community is taking a leading, collaborative role in addressing extreme heat.
- **Accessible Cooling Resources:** Reliable and designated cooling centers are available, with improved hours and engaging programming open to the public.
- **Enhanced City-Community Coordination and Partnership:** The City of Boston is actively partnering with Chinatown to ensure seamless communication and resource deployment during heat emergencies.
- **Empowering Residents with Information:** Residents have multiple channels to learn about heat resilience strategies and receive timely, multi-language information on heat preparedness, resources, and emergency alerts.
- **Innovative Resilience Solutions:** We are piloting solutions to enhance community cooling.
- **Community Voice is Central:** This plan was built with residents, and their input continues to shape our approach to heat resilience. Great care was paid to reaching those most vulnerable during heat emergencies.

Strategy One:

Build a local resilience team of community partners, City agencies, residents, and neighborhood institutions

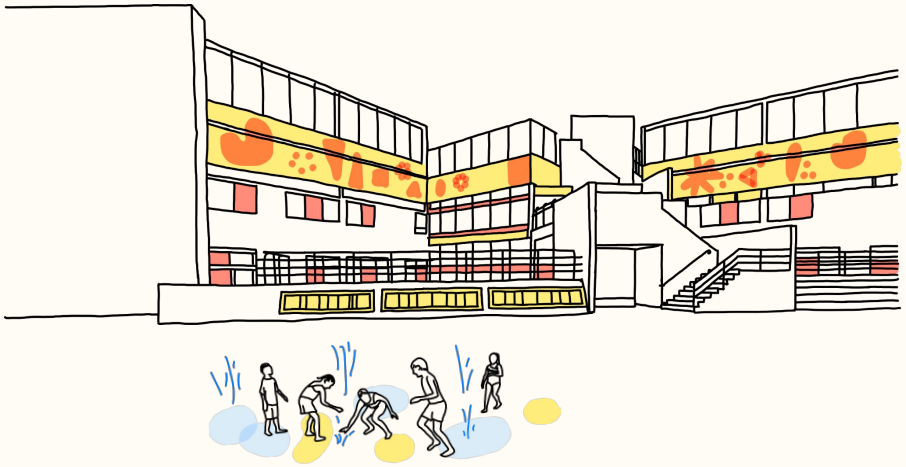


组建由社区伙伴、市政府机构、居民和社区机构组成的本地抗暑团队。

- **Action 1:** Meet regularly to identify problems and develop solutions well in advance of the summer
- **Action 2:** Ensure relevant City agencies are at the table so communication happens between the community and the City and between City agencies
- **Action 3:** Identify champions in the City and the community who are committed to moving this work forward

Partnership between the community and the City and regular communication is critical to aligning City resources with the needs of the community. A regular, ongoing working group of key stakeholders: residents, community partners, City agencies, and neighborhood institutions was key to discussing community concerns and developing innovative solutions to address these problems. The first working group featured several residents who spoke about their experiences during moments of extreme heat and what kind of response they would like to see from the City. The working group met in-person and over Zoom. In-person assisted with relationship-building. Zoom meetings helped to ensure regular participation of a diverse array of stakeholders. It is vital that City agencies partner with community-based organizations that support the health and wellness of the community. The community has innovative solutions to the problems it is facing and conversation with the City can help to identify the processes and resources so residents are protected during times of extreme heat. A regular meeting was also important for City agencies to coordinate and collaborate. City agencies can be siloed from each other and need structure for better coordination and communication within City Hall. Finally, it is helpful to have champions to move this work forward. Chinatown Main Streets is a key agency in Chinatown and central point of communication with residents and businesses. The Office of Climate Resilience served as an important focal point in the City.

Strategy Two:
Reduce heat exposure and promote adaptive measures



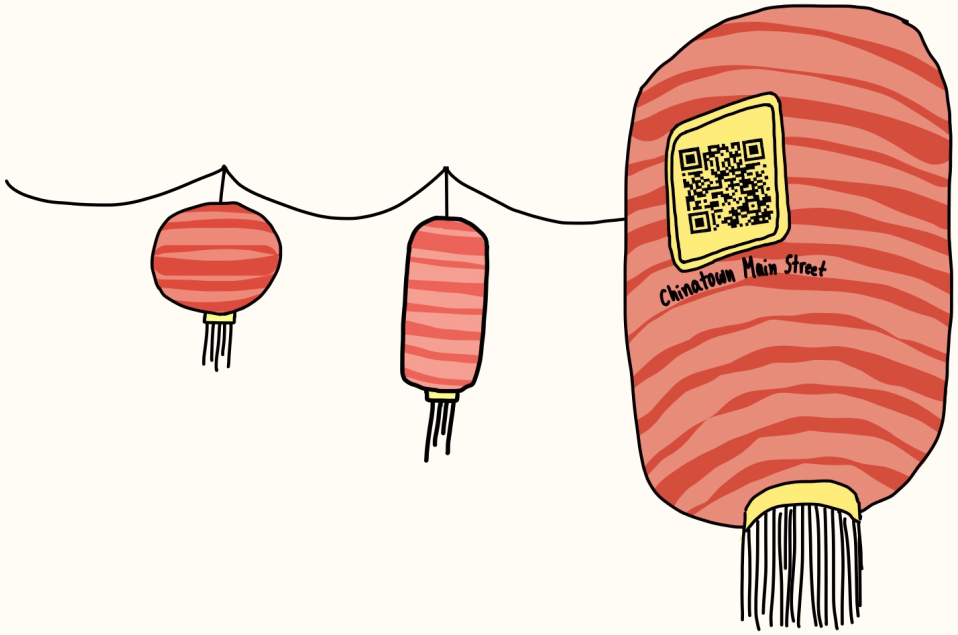
减少高温暴露并推动适应性措施。

- **Action 1:** Identify and prepare for specific cooling centers before summer
- **Action 2:** Ensure availability of cooling center locations for every day of the week
- **Action 3:** Develop fun, accessible activities for cooling centers to attract residents
- **Action 4:** Utilize CERT volunteers and the medical corps as staffing for emergency heat responses

The Cool Down Chinatown working group arose out of community frustration over poor City preparation in Summer 2024. That summer the standard cooling center location was under construction and the City did not find an alternative until the heat emergency was impending, leaving community leaders and residents frustrated. With ample time for planning, the working group confirmed the location of the Chinatown cooling center for Summer 2025 and ensured that Boston Centers for Youth and Families (BCYF), which staffs the cooling centers, was at the table during these discussions. The working group also made sure that there was a cooling center available when the BCYF was not open. Several other institutions indicated an interest in being alternatives for cooling centers and the City and community will continue to have conversations with these institutions for later summers. OEM will continue to research viable and alternative locations for emergency shelters and cooling centers. The working group also discussed what features are important for cooling centers. During these discussions, it also became apparent that residents and community leaders also want cooling centers to be places with fun, engaging, family friendly activities in order to attract residents to use them. Because of limited City staffing, the working group identified a potential pool of volunteers: Community Emergency Response Teams (CERT) volunteers and the Boston Medical Reserve Corp. They have gone through the necessary background checks and are certified by the Office of Emergency Management.

Strategy Three:
Develop a multi-prong, multilingual communications strategy

制定多元化、多语言的传播策略



- **Action 1:** Co-develop a communications strategy across platforms
- **Action 2:** Make multilingual resources available and accessible
- **Action 3:** Use QR codes for rapid access to safety info
- **Action 4:** Leverage local organizations to share and activate community networks

Fifty-nine percent of residents in Chinatown speak English “less than very well” according to the U.S. Census. Because of this language barrier, monolingual Chinese residents can be isolated from City resources and planning processes. Therefore it is imperative to ensure that all communications are bilingual in English and Chinese and that there are multiple ways of sharing information. A multi-pronged communications strategy, using different channels, can ensure a broad range of stakeholders. The working group was particularly concerned with how monolingual residents who do not have access to the internet would get information. Community leaders informed City staffers that WeChat is a robust communications platform for many of the Chinese-speaking residents. These leaders agreed to be the point person to send out information through WeChat once they are informed by the Office of Neighborhood Services.

Strategy Four:

Align City resources to increase access to nature-based solutions

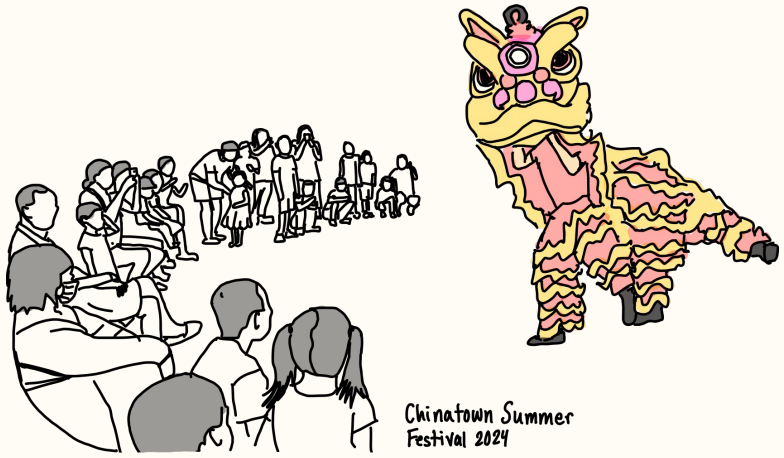
协调市政府资源，增加自然解决方案的可获取性。

- **Action 1:** Ensure that communities know how to access nature-based resources provided by the City
- **Action 2:** Increase the tree canopy in Chinatown

The City of Boston has access to nature-based solutions, such as a water truck and water misters, which can help to mitigate the effects of extreme weather conditions. To maximize usage, it is imperative that the City communicate the availability and location of these resources to the community. The working group agreed that OEM would contact ONS, who in turn would inform the community. The City informed the community that they want to partner with groups in the City to locate them in frequented places and work with the community to help staff the misting tents. The City also asked Chinatown to identify locations in the neighborhood where a pop-up misting station could have access to water. It is helpful for OEM to know these locations prior to the summer. OEM is also investing in portable water tanks that can be attached to the misting tents. Through the working group, the City realized that they needed to have a system for deployment and therefore developed an application process for community groups to apply for misting tents. In addition to misting tents, increasing tree canopy in the neighborhood can help reduce temperatures because it provides more shade for residents. There are challenges of planting trees in Chinatown due to underground infrastructure. Trees often get damaged and lift up from the sidewalk due to the lack of root space. Therefore, the City is exploring planters with self-watering systems and a watering contract with parks to ensure the trees' survival. The Department of Parks and Recreation worked with the Office of Climate Resilience and is going to pilot four tree planters in the neighborhood. They have coordinated a walk through with residents and community leaders to identify potential spots for these tree planters.

Strategy Five:

Promote ongoing coordination and communication between Chinatown and key City agencies to strengthen safety nets, deploy resources, and build community capacity



- **Action 1:** Inform City agencies early on about summer events in the community
- **Action 2:** Invite City staff to attend summer events to speak to the community about heat resources from the City
- **Action 3:** Advocate for additional resources

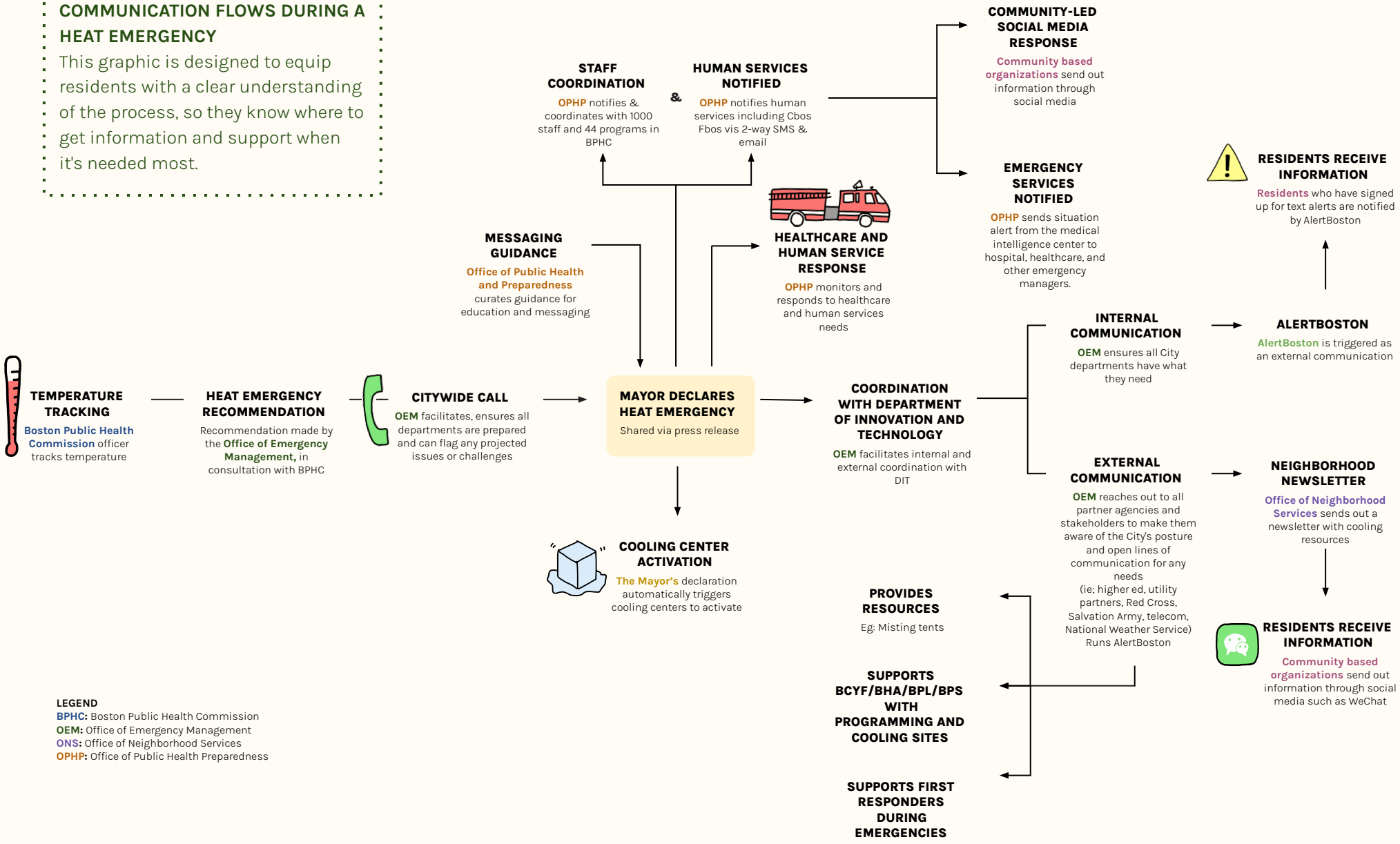
促进唐人街与市政府关键部门的持续协调与沟通，强化安全保障网络，调配资源，提升社区能力。

On-going communication between Chinatown and key City agencies is important for coordination of resources so that local leaders and City staff are working together to address the needs of residents. Aligned efforts have the potential for the biggest impact and addressing the divide between the City and its residents. It is helpful for the City to know about upcoming community events in the Summer so that it can plan how to best deploy its limited resources, such as misting tents and cooling resources. Summer events also provide an important opportunity for City staff to speak to the public about the heat adaptation resources that the City has to offer.

Boston Heat Emergency Response

COMMUNICATION FLOWS DURING A HEAT EMERGENCY

This graphic is designed to equip residents with a clear understanding of the process, so they know where to get information and support when it's needed most.



LEGEND
BPHC: Boston Public Health Commission
OEM: Office of Emergency Management
ONS: Office of Neighborhood Services
OPHP: Office of Public Health Preparedness

Working group

The **Cool Down Chinatown** working group was formed to address the lack of communication and coordination between Chinatown and the City in preparation for heat emergencies. This working group met for eight months, providing the opportunity for the City and Chinatown community partners to come together to hear the concerns of residents and collaborate in the development of feasible solutions to build heat and climate resilience in the neighborhood. Each month the group had a structured meeting with an agenda that focused on key issues such as cooling centers, nature-based solutions, and communications. This working group has led to better communication between the community and the City, and improved coordination and alignment between City agencies as well. The Cool Down Chinatown Working Group consisted of the following partners.

Lead agency
Chinatown Main Street
Debbie Ho

Facilitator and Project Manager
CHIC Community Engagement Consulting
Heang Leung Rubin

Funder:
Resilient Cities Network
Jordana Vasquez
Kavyaa Rizal

Working Group members from the City of Boston
Boston Centers for Youth & Families
Helen Wong

Boston Transportation Department/Streets Cabinet
Wenzheng Wang

Mayor's Office of New Urban Mechanics
Caroline Filice Smith

Office of Climate Resilience
Zoe Davis

Office of Economic Opportunity and Inclusion
Abigail Furey

Office of Emergency Management
Chief Adrian Jordan
Matthew Kearney
Brett Napier
Ky'Ron Owens

Office of Neighborhood Services
Christopher Breen
Ciara D'Amico

Office of Public Health Preparedness
Courtney Grey
Adanarys Barragan

Community-based organizations
Asian Community Development Corporation
Angela Soo Hoo

Rose Kennedy Greenway Conservancy
Natalie Ng

Institutional Partners
Tufts Medical Center
MyDzung Chu

Tufts University
Liza Perry

Key Partners

CHIC Community Engagement Consulting: CHIC is a small, local, woman and minority-owned business that focuses on community engagement processes through facilitation, training, storytelling and creative healing. CHIC uplifts the beauty of communities through its core values of compassion, harmony, imagination, and celebration. Community engagement involves a process of involving people in decisions that impact their lives, whether it be involving students in curriculum development, residents in the type of art in their neighborhood, or communities in development decisions. Using design thinking, applied research, creative community engagement and asset-based approach, CHIC works with clients to build spaces for communities to be together, to learn from one another, to create the conditions for synergy and harmony so innovative, collective work can happen.

Dr. MyDzung Chu, PhD, MSPH, is an environmental epidemiologist and education consultant for the Cool Down Chinatown Project. She brings over a decade of experience leading community-based research on environmental hazards such as air pollution, extreme heat, and household chemicals. Dr. Chu works closely with community partners in Boston's Chinatown to better understand and address environmental and climate-related health challenges. Her work combines resident education, local exposure monitoring, and multisector engagement. Key projects include Chinatown HEROS (Heat Equity and Resilience in Open Spaces), Cumulative Impacts of Reggie Wong Park, and Cool Down Chinatown. She is an assistant professor at Tufts Medical Center and Tufts University School of Medicine, and directs the ADAPT Coalition at the Tufts CTSI, which aims to promote health and wellbeing for underserved Asian communities through community-driven research and engagement.

Key Partners

Chinatown Main Street (CMS) is a 501(c)(3) non-profit organization committed to making Boston's Chinatown district a thriving cultural and commercial center for businesses and people. For visitors and residents alike, we elevate the Chinatown experience by beautifying, promoting, strengthening the community, and keeping the streets as clean, safe, and friendly as possible. We also host various food programs and events with entertainment, made possible with volunteers and fundraisers, creating a rich Chinatown experience for everyone

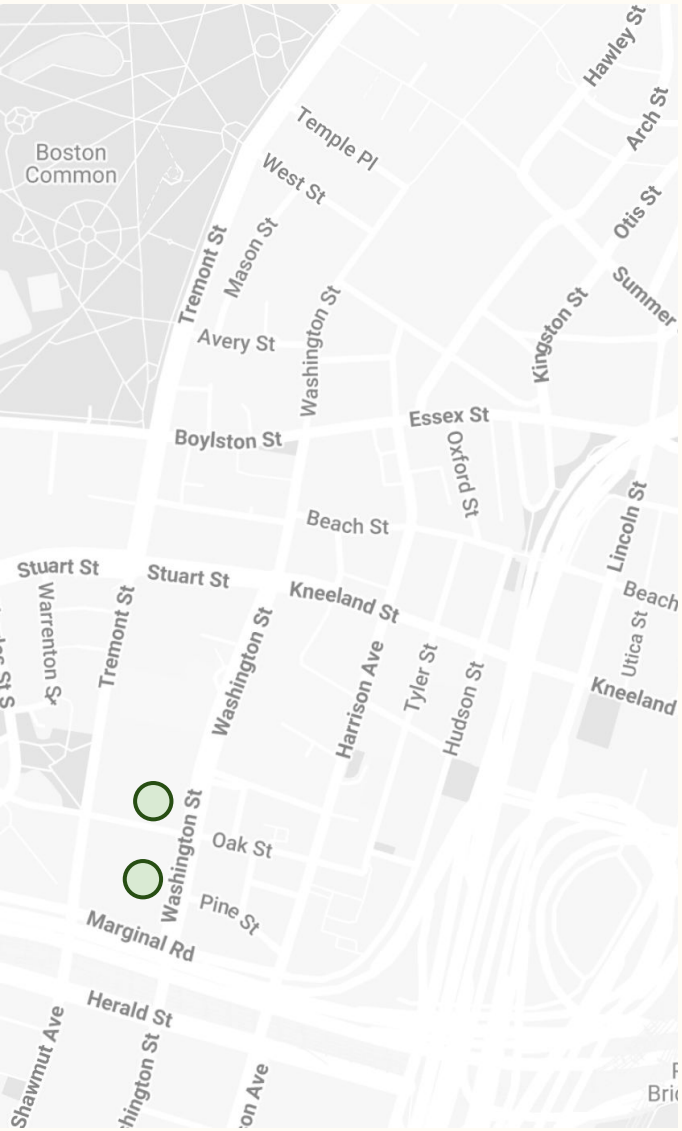
The Resilient Cities Network (R-Cities) is the world's leading urban resilience network. It brings together global knowledge, practice, partnerships, and funding to empower its members to build safe and equitable cities for all. At work in nearly 100 cities worldwide, the Resilient Cities Network supports on-the-ground projects and solutions to build climate resilient, circular and equitable cities.

Through the Resilience for Communities program, R-Cities is supporting local leaders in Boston and Houston to break down silos, build trust and deliver bold, community-led resilience projects.

Z Zurich Foundation & Zurich North America
Resilience for Communities in Boston, Houston and beyond is supported by the Urban Climate Resilience Program (UCRP), a global initiative led by the Z Zurich Foundation to support urban communities impacted by climate change.

Zurich has 150 years of experience managing risk and supporting resilience for customers around the world. Reflecting its purpose to create a brighter future for everyone in the communities it operates in, Zurich aspires to be one of the most responsible and impactful businesses in the world.

Resources



Location and Hours of Cooling Centers

BCYF Quincy
Hours: Monday - Friday, 11 am - 9 pm
Saturday 9 am - 5 pm.
885 Washington Street
Contact: Helen Wong.
helen.wong@boston.gov

Wang YMCA
Hours: Mon-Thus: 6am-9pm
Friday: 6am-10pm
Sat: 7am-5pm
Sun: 9am-5pm
Contact: Marion Kelly:
Mkelly@ymcaboston.org

Other possible cooling centers
Tufts Medical Center
Tufts University Community Commons
Josiah Quincy Upper School

Community Emergency Response Team (CERT): boston.gov/cert

Residents can receive certification as a member of the Community Emergency Response Team. CERT members are volunteers who are deployed during emergencies to aid in the City's response.

Boston Heat Resilience Plan - focus on Chinatown beginning page 84

Office of Emergency Management (OEM) is conducting an audit of locations to find additional sites of what could be a cooling center. To be a cooling center, please keep in the mind the need for the following: Bilingual staff, bilingual signage, water, cooling resources, volunteers certified by OEM, child-friendly activities, accessibility, food, places for pets.

Resources

Communication Channels

Sign up for the text, phone call, or email alerts through AlertBoston at boston.gov/heat (Office of Emergency Management)

Send informational resources to residents at their homes and businesses (Office of Climate Resilience)

Distribute materials at local community centers like libraries and events (Office of Climate Resilience)

Send out climate-related information through emails (Office of Public Health Preparedness and Office of Neighborhood Services)

WeChat: Community leaders and connectors will distribute information via WeChat once they are informed.

City of Boston Resource and Safety Page

Boston.gov/heat

- Lists resources, heat safety tips, and facts for residents.
- Consolidated dashboard to show all heat resources available to residents, which will include the locations of misting tents.
- Under the Resource section, residents can scroll down, type in their address, and see what resources are nearby.

From problem-solution

The online sign up form to receive emergency alerts through the City (AlertBoston) is not accessible when the website is translated into any language other than English, including Chinese. The City's Department of Innovation and Technology (DoIT) discovered that this issue would take time to fix. OEM developed a temporary solution: creating a google form where residents can input their information in their native language and then OEM transfers that information to the text alert sign-up.

Contact: Ky'Ron Owens, kyron.owens@boston.gov

Resources

Misting Tents

How to apply for a misting tent

Possible sites for pop-up misting tents:

- Rose Kennedy Greenway Conservancy
- Phillips Square
- 8 Harrison Avenue

Building community capacity:
Chinatown Main Streets purchased three misting tents to be used by the community.
Contact Debbie Ho
bostoncmsed@gmail.com

Where to find pools and splash pads:

To access cooling resources
Contact: Kyron.owens@boston.gov

Office of Neighborhood Services

ONS plays a critical role in centralizing information from across the City department and ensuring that information is relayed to the community in a timely manner. ONS can:

- Keep resident informed during a heat emergency
- Activate community-based organizations to leverage their social networks to reach residents
- Amplify resources available in the City, such as misting tents rental and location of pop-up misting tents.

Speakers For Community Events
Zoe Davis: zoe.davis@boston.gov
Courtney Grey: cgrey@bphc.org
Adanays Barragan: abarragan@bphc.org
Ky'Ron Owens: kyron.owens@boston.gov

Future Work

While Cool Down Chinatown has helped to move the needle on heat preparedness, there is still work to be done to ensure that all members of the community are reached in the event of a heat emergency. For long-term planning, there is the need for a multi-pronged approach to address heat emergencies, focusing on the needs of vulnerable populations such as the medically frail and those without access to cooling resources. There is the need to train residents on emergency preparedness, including heat-related emergencies and other disasters.

Report Authored by:
Heang Leung Rubin
MyDzung Chu

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Architecture for Public Benefit
www.apbdesign.org

References & Additional Information

Access resources
via boston.gov/heat
(Office Emergency Management)

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English

Extreme Heat One-pager:
Simplified Chinese

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